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School of Education
Educational Management Development Unit**

Ph.D in Educational Management

Thesis

**Effective Six-year High Schools:
Stakeholders' Views**

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Abstract

The research is a school effectiveness study dealing with stakeholders' perceptions. It addresses six-year high school effectiveness, as it is perceived by key stakeholders in Israel: school principals, teachers, students, and parents. Stakeholders were asked to consider their attitudes towards characteristics that cause them to be satisfied or dissatisfied with the school. The research was undertaken during 2000-2001 in three Israeli six-year high schools.

The six-year high school is a new kind of institute in Israel and it does not exist all over the country. This kind of school has two main components – a three-year junior high school and a three-year secondary school. In places having no six-year high schools, there are four-year secondary schools.

The study includes three main research questions relating to the perceived characteristics of an ideal Israeli six-year high school, the perceived effectiveness of stakeholders' schools and the satisfaction they have with their own schools. The research is based on three case studies including a survey and interviews. 2 principals and 12 teachers in each school were interviewed (42 interviewees overall) whereas students and their parents were given questionnaires.

One of the main things examined was the extent to which this new kind of school enables greater academic and curricular continuity. The study reveals that according to staff's attitudes, six-year continuity does not exist in all schools and there are institutions in which there is no integration between the junior high school and the secondary school. Furthermore, according to stakeholders' perceptions, six-year high schools are ineffective concerning teachers' quality, class size (classes are too crowded), resources' management, students' motivation and parental involvement. The school principal has a direct and indirect influence on most characteristics and therefore schools managed by better principals are likely to be more effective. Nevertheless, lack of resources might limit the principal's impact on the whole six-year high school's effectiveness.

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Chapter 1: Introduction

Introduction

The study is a school effectiveness research dealing with perceptions of Israeli key stakeholders: principals, teachers, students and parents. Rather than examining all kinds of Israeli schools, the focus was on a special kind - the six-year high school. That approach enabled the writer to undertake a study of general school effectiveness with the advantage of examining a unique type of school that was not yet examined in Israel. Because of that, the research is a study of innovation as well as a more general study of effectiveness.

All stakeholders were asked to consider their attitudes towards characteristics of school effectiveness and to consider their satisfaction with their own school (chapters 5-7, pp. 144-248). Attitudes and perspectives relating to effectiveness are based on values and criteria that differ between different groups or individuals. Thus, principals, teachers, students, and parents do not necessarily agree about what the major constituents of an effective school are. The basic hypothesis is that school effectiveness may not be an absolute term but rather relativistic - it might look different in the eyes of different viewers. Furthermore, the same school can impact differentially on different groups and different people within these groups. Thus schools seem to be differentially effective for specific groups of stakeholders or for different individuals within these groups.

The research was conducted during 2000-2001 (from August 2000 to February 2001) in three six-year Israeli high schools located at Holon (a city of 120,000 citizens, close to Tel-Aviv). Although all three schools are located in the same city they are differentiated in some aspects. Schools A and B are bigger (about 1,500 students and 115-140 teachers each) than school C (about 700 students and 70 teachers). Only school B is located in two separated campuses whereas schools A and C have only one campus each. School B has special courses of study for technology and school A has special classes for gifted students. School C is newer (it was established 8 years ago as a six-year high school) in comparison to the other two schools (they were established about 40 years ago as four-year secondary schools. 8 years ago, they were changed to six-year high schools). Another difference is related to the ownership: schools A and C are owned by the local municipality whereas school B's ownership is a technological Israeli network.

The study includes three main research questions:

1. What are the characteristics of effective six-year high schools according to stakeholders' points of view?
2. In what aspects are stakeholders' own schools regarded as effective/ineffective (from the same points of view)?
3. What is the level of satisfaction of stakeholders with their own school?

The research included a pilot study conducted in school A (designated to examine and refine the research instruments) and three case studies conducted in schools A, B and C. The case studies (and the pilot study) included a survey and interviews. 2 principals and 12 teachers in each school were interviewed (the questions were the same) whereas students and their parents were given identical questionnaires (six whole classes from each school were surveyed). The issues that were examined in both interviews and questionnaires are based on the international research literature that is discussed in detail in chapter 2 (p. 13).

Chapter 1 addresses the following themes:

1. **The Israeli six-year high school:** general background relating to this new kind of institution in comparison to the old system.
2. **The importance of the study:** the study is important because the six-year system is relatively new and its effectiveness has not yet been examined. The study also compares the findings to what exists in the literature including differences and similarities.
3. **Israeli policy relating to school effectiveness:** this section includes a description of the Israeli Ministry of Education's policy towards the effectiveness of six-year high schools. It includes also unique issues that are perceived as very important by the Ministry such as parental involvement, advanced technology and prevention of violence. It is important to compare this policy to the study's findings (chapter 9, p. 348).
4. **Purpose of the research:** this section describes briefly the aims, objectives and research questions of the study. The research is intended to answer three key research questions dealing with stakeholders' attitudes towards six-year high schools' effectiveness. A more detailed discussion is introduced in chapter 3 (p. 101).
5. **Organisation of the thesis report:** this section describes the structure of the whole thesis report including nine chapters, bibliography and appendices.
6. **Summary.**

The Israeli six-year high school

The six-year high school is a new kind of institution in Israel and it does not exist all over the country. In the cities that have this kind of school there are also six-year elementary schools. This kind of school has two main components – a three-year junior high school and a three-year secondary school. In the cities where there are no such schools there are eight-year elementary schools and four-year secondary schools. Figures 1.1 and 1.2 demonstrate the two systems.

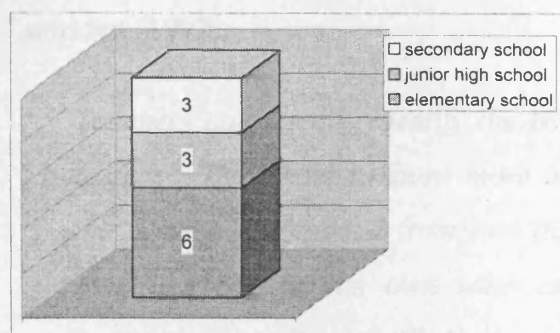


Fig. 1.1: New system - six-year elementary school and six-year high school (divided to three-year junior high school and three-year secondary school).

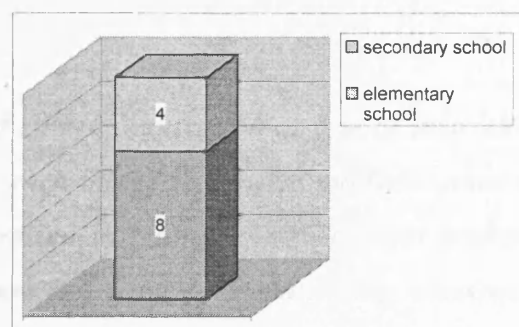


Fig. 1.2: Old system - eight-year elementary school and four-year secondary school.

The great advantage of the six-year high school ought to be a continuity of studying from the 7th grade until the 12th grade so the students can become accustomed to high school standards from the beginning of their studies.

The importance of the study

Because the six-year system is relatively new and its effectiveness has not yet been examined, it is very important and interesting to understand what key stakeholders think about school effectiveness. Such a study might also show if there are different views among different groups of stakeholders relating to the same reality. The importance of the study is in trying to examine the Israeli six-year high school effectiveness as perceived subjectively by different stakeholders in three different schools. The results of the study might help to create a basis of knowledge needed to improve Israeli six-year high schools and stakeholders' satisfaction. Such an approach can help the Ministry of Education, school principals and

teachers to understand the causes for stakeholders' satisfaction and dissatisfaction and to initiate change if necessary.

Another very important issue is the comparison between Israeli stakeholders' attitudes towards six-year high school effectiveness and the international research literature dealing with school effectiveness in general. For example, according to the literature (Lumsden, 1997), students' motivation is a very important factor influencing school effectiveness and it is thought to be school dependent.

To Lumsden (1997),

“Teachers consistently identify the issue of student motivation as one of their chief concerns. They want to know more about such things as how to motivate students who appear disengaged from and disinterested in learning, how to help students value learning for its own sake, and how to develop a motivating classroom ‘personality’ or climate” (P. 4).

Israeli policy

Introduction

The following sections describe the Israeli governmental policy towards six-year high schools' effectiveness and also general issues that are to be important such as parental involvement, technology and prevention of violence. The importance of this review is to summarise the main characteristics of effective schools according to the Israeli formal policy and to compare this later on (chapter 9, p. 348) to the study's findings. The establishment of the six-year high school was designated to overcome many problems detailed in the next sections. The study intends to examine the success of the six-year reform to handle these problems according to stakeholders' views.

The coming subsections address the following themes:

- Policy towards six-year high schools.
- Parents and the school.
- The importance of advanced technology.
- Youngsters' violence.

Policy towards six-year high schools

The Ministry Directive no. 20. (1996) stresses that the Ministry of Education looks upon the six-year high school as one institution. It acts according to the Israeli parliament decision from 1976 to establish six-year high schools in order to make the reform of transferring from eight-year elementary schools and four-year secondary schools to a new model of six-year high school. The main policy is to raise teaching standards and students' achievements and to lessen the gap in educational standards and in the chance to socialise in society. The main aims of the Ministry were as follows:

- To give schools autonomy by including optional subjects so students will have many alternatives for choosing subjects.
- To reduce the number of subjects being taught simultaneously.
- To encourage the existence of school teaching programmes including inter-disciplinary.
- To use new and diverse ways of teaching instead of the conservative frontal style.
- To use new ways of monitoring and evaluation of students and to employ alternative methods of evaluation as well as the external matriculation examinations.
- To assimilate advanced technologies relating to teaching methods, ways of studying and work in secondary schools.
- To fit the curriculum for six-year continuity.

(Ministry Directive 20, 1996).

Parents and the school

The Israeli Ministry of Education has a definite policy relating to school effectiveness. According to literature and experience gained by the Ministry, it supposes that students can study more effectively if there are good and respectful relations between school and home and there are open channels of communication between parents and the school. According to Ministry Directive no. 59/10 [a], (1999), the educational system in Israel looks upon parents as full partners of the educational process taking place at school. Continual contact between parents and teachers may change school to a familiar institute for parents, which can enable them to influence its character and to be influenced by it.

According to Ministry Directive no. 59/10 [a], (1999),

“Parental involvement is an important phenomenon. Increased parental involvement in the educational system is based on parents' right to influence their children's education. This right is based on democratic principles. It is desirable to encourage parental involvement at school and develop an organisational structure enabling parents' partnership in decision-making processes” (p. 4).

Nowadays, parents are aware more than ever of their place at school and their part relating to processes taking place in it. Parents have knowledge and experience, which might improve and enrich the activity done in each educational institute. However, the teachers and the educational staff are professionals of education and therefore they are responsible for the educational, sociological and emotional advancement of students at school. In order to enable them to fulfil this complicated mission it is necessary to respect their professional autonomy and to let them have professional consideration without external interference. It is important to remember that dialogue with parents does not limit teachers' professionalism but on the contrary, requires a higher level of professionalism (Ministry Directive no. 59/10 [a], 1999).

The Ministry of Education thinks that the relationships between parents and teachers are good model for students. Therefore it is very important it will be a model of mutual respect and effective communication because the educational system is interested in continuous good interrelations between school and parents. In order to make those intentions practical, each Israeli school has to elect every year in each class three parents who represent the class. Those members have the responsibility for representing students' interests towards school management while involving all other parents in their decisions and activities (Ministry Directive no. 59/10 [a], 1999).

The importance of advanced technology

The Ministry of Education looks upon students' achievements as a very important parameter for determining the effectiveness of the educational system. Therefore it established an Israeli system for collecting data of students' achievements, habits of learning, teaching quality and quantity, teaching organising and teachers' and students' attitudes towards the examined subjects. The main aim is to follow up continuously students' achievements in the examined subjects in order to give the decision makers in the Ministry a

full and up-to-date picture which would help them to improve the educational system (Ministry Directive no. 22, Special report, 1998).

The Israeli Ministry of Education is aware of rapid technological changes, data explosion and intensive exposure to new channels of communication and changes in teaching and learning methods. In such an environment there is great emphasis on the adoption of new technologies by schools, especially those related to data and communication. According to the Ministry's vision, it is vital to use data technologies in the educational system that would help to educate and teach tomorrow's citizens to function in a changing world and compete in the new millennium. The use of data technology helps to develop an autonomous learner who has self-motivation. It also helps to develop cognitive skills, learning abilities and high self-image. The technology can help students to study actively, to get help, to have access to many computerised resources and to communicate with others. The use of new technology at schools is dependent on investment of financial resources and the Ministry of Education has decided to allocate the budgets needed. The Ministry is about to create a new intranet for the educational system in Israel which will enable it to make pedagogic applications additionally to what exists in the global Internet (Ministry Directive no. 22, Special report, 1998).

Youngsters' violence

The purpose of the Israeli school is not only to enable students to study but also to educate them so they will be good, honest and non-violent citizens. The hypothesis is that schools that experience violence cannot be seen as effective by stakeholders even if their students have high achievements. During the last few years the Israeli public and decision-makers have become much more aware of the necessity to reduce the violence of children and youngsters. Data collected by police, researchers and internal reports of the educational system showed a severe picture relating to the size and severity of the phenomenon. The most worrying phenomenon is that hard violence has become a part of students' life all over the state. Therefore, the Israeli Ministry of Education decided to establish a public committee intended to reduce the violence of children and youngsters. The chairman of the committee, Minister of Culture, Sport and Science, Matan Vilnai, has published recommendations for reducing violence in the Israeli educational system (Vilnai, 1999). From the very beginning it was clear to members of the committee that there is no single solution to the problem. The phenomenon of youngsters' violence is complicated and is influenced by many factors in the environment of family, society and system in which the young generation grows up. The committee examined the ways of handling youth violence in a few countries that succeeded

to reduce school's violence. A clear conclusion is that it is possible to reduce significantly youngsters' violence but in order to do so, it is necessary to fulfil a systematic and long-term strategy (Vilnai, 1999).

The committee published many recommendations based on scientific data and the experience of hundreds of professionals. They proposed a nation-wide programme for reducing the violence of youngsters in the Israeli educational system during the next few years.

School violence is a major problem in Israeli schools and leaving this problem unsolved can disturb school functioning and lower its effectiveness.

Purpose of the research

Introduction

The next sections describe briefly the aim, objectives and research questions of the proposed research and the characteristics that were examined. A more detailed discussion is presented in chapter 3 (p. 101).

Aim

The main aim of the research is to study all aspects of stakeholders' expectations about the effective six-year high school and the gap (if one exists) between those expectations and the reality in their schools.

Objectives

The objective is to draw a profile of the Israeli effective six-year high school as seen from the point of view of principals, teachers, students and parents. Such a profile may help local and global management to make decisions in order to make progress.

Research questions

The research is intended to answer three key questions that are divided to sub-questions as detailed in chapter 3 (p. 102).

The research questions are as follows:

1. What are the characteristics of effective six-year high schools according to stakeholders' points of view?
2. In what aspects are stakeholders' own schools regarded as effective/ineffective (from the same points of view)?
3. What is the level of satisfaction of stakeholders with their own school?

First research question: characteristics of effective six-year high schools

The study deals with characteristics of effective Israeli six-year high schools from the point of view of stakeholders. The purpose of the first research question is to discover the attitudes of principals, teachers, students and parents towards the 'ideal situation', namely, how in their views ought to be an effective six-year high school (regardless of the situation in their specific school). Some questions relate to general characteristics of effective schools whereas others are more specific to effective six-year high schools. Particular issues are such as the existence of six-year continuity, the relations between the junior high staff and the secondary staff, the differences and similarities between both schools, the physical location of both schools, the school principal as a leader of a whole six-year high school, the allocation of financial resources for both schools and so on. A very important issue that is specific to six-year high schools is the comparison of stakeholders' attitudes to the objectives of the Israeli Ministry of Education. Such a comparison is described in chapter 9 (p. 348).

Second research question: stakeholders' views towards their own schools

According to the second research question, the intention was to find out the attitudes of stakeholders towards the real advantages and disadvantages, namely, what in their view are the effective and ineffective characteristics of stakeholders' schools. The questions for stakeholders address the same issues as those relating to the ideal characteristics described previously.

Third research question: stakeholders' satisfaction with their own school

After examining the first two research questions the intention was to assess the gap (if one exists) between the ideal and real situation as seen by stakeholders' views and to compare it to their perceptions relating to their satisfaction. The intention was to reach conclusions about what has to be done in order to reduce this hypothetical gap and to improve satisfaction.

Characteristics that were examined

The literature review (chapter 2, p. 13) was the basis for developing and refining the questions for the tools of the proposed research.

The research deals with the following characteristics of effective schools that were found in the research literature:

- Collaboration among stakeholders.
- School principal's characteristics.
- Teachers' characteristics and rewards.
- Management of resources.
- Parental involvement.
- Teamwork.
- Motivation and students' achievements (including teachers' expectations towards students).
- Organisational culture and climate.
- Discipline.
- School reputation in community.
- School and class size.
- The physical environment (buildings, furniture, equipment, etc.).
- School's flexibility for students.

Organisation of the thesis report

The thesis includes nine chapters, a bibliographical list and twenty-two appendices as follows:

1. Chapter 1- Introduction (p. 1).

2. Chapter 2 - Literature review (p. 13):

Definitions of school effectiveness, factors influencing school effectiveness, the magnitude of school effects, research relating to effective schools' characteristics, school and class size, leadership, stakeholders' attitudes towards school effectiveness, parental involvement, school culture and climate, school discipline, teamwork at schools, motivation and culture, resources and criticism of the school effectiveness approach.

3. Chapter 3 - Methodology (p. 100):

Detailed description of the aim, objectives and research questions, introducing and justifying the research approaches and tools based on the literature, the population and

samples of the study and statistical views designated to examine significance of the quantitative results and correlation between variables.

4. Chapter 4 - Pilot study (p. 132):

The pilot study was designated to try out the research methods and instruments and refine them if necessary. It was conducted in school A during June 2000 and included surveying of 3 classes (students and parents) and interviewing one teacher. After undertaking the pilot study, the questionnaires were slightly changed and the interview schedule remained as it had been before.

5. Chapter 5, 6 and 7 - schools A, B and C case studies (pp. 144-248):

The main study's findings include results of principals and teachers' interviews and students' and parents' questionnaires (2 principals, 12 teachers and students/parents of six whole classes representing six grades in each school). These three chapters address also preliminary conclusions and comparison of the findings to the research literature.

6. Chapter 8 - Analysis (p. 294):

The chapter includes analysis of the findings and comparisons among different schools and different groups of stakeholders. It also compares the findings to the literature.

7. Chapter 9 - Conclusions (p. 348):

This chapter includes a comparison of the findings and the Ministry of Education's aims while established the reform of six-year high schools, recommendations for improvement, evaluation of the research and directions for further research.

8. A bibliographical list (p. 366):

The list contains all the bibliographical items mentioned in the thesis sorted in an alphabetic order.

9. Appendices (p. 391):

The appendices include the research instruments (interviews and questionnaires relating to the pilot and main study), all questionnaires' results and their statistical validity and examples of interviews.

Summary

The proposed research is a study of perceptions intended to draw a profile of the Israeli six-year high school's effectiveness according to stakeholders' views, namely, principals, teachers, students and parents. School effectiveness may be influenced by many factors and it was necessary to map all possible factors according to the research literature, to build research tools and then to establish stakeholders' responses reflecting their attitudes towards six-year high schools' effectiveness.

The Israeli Ministry of Education has a clear policy relating to school effectiveness and parents are perceived as full partners of the educational process. Therefore, the Ministry encourages continuous contact between school and parents. The proposed research examined stakeholders' attitudes towards parental involvement. Another important issue relating to effective schools (as described in the literature) is how to increase members' motivation. The motivational factors can be intrinsic or extrinsic and it is very important to fully understand them.

The study was intended to give answers to three key research questions relating to the characteristics of Israeli six-year high schools, in what aspects schools are effective/ineffective and if and why stakeholders are satisfied or dissatisfied with the school. The answers to those questions might help the local and state educational systems to assess progress and it can also influence schools' improvement all over the country.

Chapter 2: Literature Review

Introduction

Chapter 2 includes a review of the international research literature dealing with school effectiveness and stakeholders' attitudes towards it (American, British, European, Australian, Asian, South African and Israeli). In order to answer the three research questions (chapter 1, p. 9), it was required to develop research tools - interviews and questionnaires. The literature review was the basis for developing and refining the questions of the interview schedule for principals and teachers and the questions being included in the questionnaires for students and parents. In order to develop relevant questions related to attitudes towards effective schools, it was required to map all known characteristics. The questions were designated to examine stakeholders' attitudes towards the Israeli six-year high school effectiveness and their satisfaction with their own school. Furthermore, the literature has a special importance in comparing it to the main study's findings. That could have helped to learn in what aspects the Israeli six-year high schools reality is similar or different in comparison to what exists in the international research. This comparison could help to understand the weaknesses of the Israeli six-year educational system and the reasons for it. Such an understanding may help to improve the Israeli six-year high school system. A comparison between each case-study findings and the literature is described in chapters 5-7 (p. 192, 242, 287).

Chapter 2 addresses the following themes that were found as relevant to the discourse of school effectiveness and stakeholders' attitudes towards it:

1. Definitions of school effectiveness (p. 14)
2. Introduction to school effectiveness research (p. 15).
3. The magnitude of school effects (p. 17).
4. Research relating to effective schools' characteristics (p. 23).
5. School and class size (p. 28).
6. Leadership (p. 34).
7. Stakeholders' attitudes towards school effectiveness (p. 41).
8. Parental involvement (p. 58).
9. School culture and climate (p. 64).
10. School discipline (p. 69).
11. Collaborative teamwork at schools (p. 72).

12. Motivation (p. 74).
13. Management of resources (p. 87).
14. Criticism of the school effectiveness approach (p. 93).
15. Summary (p. 97).

Items no. 1-3 are intended to be introductory for the whole subject of school effectiveness. Items no. 4-6 and 8-13 are characteristics that are perceived by the international literature as typical parameters of school effectiveness. Item no. 7 includes a review of literature dealing with stakeholders' attitudes towards school effectiveness' characteristics. The tools of the proposed research include questions that cover all these characteristics. For each characteristic, stakeholders were asked to express their views relating to the three key research questions, namely, the importance of it, the situation in their own school and their satisfaction with each characteristic (chapter 1, p. 9).

Item no. 14 deals with limitations of the school effectiveness paradigm according to the literature. That is intended to discover possible limitations of the proposed research.

Definitions of school effectiveness

There is no single definition for the term effectiveness. Sometimes, it is defined as 'goal achievement' and an effective organisation is one that achieves its goals. However, it is not certain that there is an agreement relating to school's objectives among stakeholders.

It is possible to conceptualise effective schools in terms of goal achievement by 3 different alternatives:

- Outcomes.
- Process factors (culture, ethos or staff and student satisfaction).
- School's success in acquiring inputs (pupils or financial/staff resources).

Judgements about effectiveness are based on values and criteria that differ between different groups or individuals. Thus, principals, teachers, students and parents do not necessarily agree about what the major constituents of an effective school are. Furthermore, schools' impact might be different for different groups or different individuals. Thus schools seem to be differentially effective for different stakeholders. Additionally, approaches to effectiveness change in response to changing circumstances (Preedy, 1992).

The Israeli Friedman (1989b) defines the effective school as follows:

"An effective school is an educational institution that acts systematically and continuously for self improvement in order to achieve its goals. This is done by optimal use of school's physical and human resources, while keeping the welfare of teachers and students" (p. 87).

Goodlad (1984) stresses the need not only for higher scores but also happier and more committed pupils and better prepared to lead satisfying and productive lives.

Wehlage et al (1989) define good schools in affective or emotional terms; such schools reach students on the basis of relationships, not through the promise of academic success.

Introduction to school effectiveness research

According to Teddlie and Reynolds (2000), school effectiveness research has emerged from virtual obscurity to a now central position in the educational discourse. From the position in 1966 that '*schools make no difference*' that was assumed to be the conclusion of Coleman et al (1966) study, there is now a widespread assumption internationally that schools do make difference and affect students' development. The task of educational policies is to improve all schools in general, and the more ineffective schools in particular, by transmission of this knowledge to educational practitioners.

There have been three major strands of school effectiveness research:

- School effects research - the term 'school effects' is used to describe what is known about the ability of schools to affect the outcomes (usually achievements) of the students that they serve (Good and Brophy, 1986).
- Effective schools research, which focuses on the processes associated with successful schools.
- School improvement research, which focuses on processes involved in school change.

To Harris and Bennett (2001), the school effectiveness paradigm tries to answer a fundamental question: "*What do effective schools look like?*" (p. 7). Such a question is focused mainly on the outcomes of schooling and the characteristics of schools that are effective. On the other hand, the school improvement philosophy is intended to answer another question: "*How do schools improve and become more effective?*" (p. 7).

Sammons (1999) claims that school effectiveness is a relative term, which is dependent upon time, outcome and student group. In that sense, the proposed research which is a study of stakeholders' perceptions, looks upon school effectiveness as being relative rather than absolute: it examines four kinds of stakeholders' attitudes towards an effective six-year high school. Furthermore, school effectiveness studies have continuously shown that effective schools are structurally, symbolically and culturally more tightly linked than less effective ones (Harris and Bennett, 2001; Murphy, 1991).

The research tradition of school effectiveness is complementary to that of school improvement and of late the two traditions have learned much from each other. The school effectiveness research besides articulating the characteristics of effective schools, has demonstrated unequivocally that given the right conditions all students can learn. Recent years have seen a growing enthusiasm for combining the perspectives, approaches and findings of school effectiveness and school improvement in various ways. What is now emerging is a group of individuals trying to combine elements of both traditions into a new paradigm intended to describe and explain phenomena (Hopkins, 2001). Harris and Bennett (2001) add that the opportunities for closer collaboration between the two fields include developing theory, measuring differential school effectiveness and generating case studies. They claim that within the school effectiveness and school improvement research traditions, finely grained case studies of either effective or ineffective schools or improving of failing schools are not prevalent. The case study evidence that does exist has concentrated mainly on effective or improving schools. Detailed accounts of schools in difficulty have only just begun to emerge (Stoll and Myers, 1997). To Harris and Bennett (2001), rich case study explanations combining the expertise from both fields are much needed. In that sense, the proposed study which is a school effectiveness research, has a unique and important purpose - it contains three case studies intended to examine three six-year high schools and to map their deficiencies according to stakeholders' views. The case studies are focused on stakeholders' satisfaction/dissatisfaction and gaps between desire and reality at the schools. It is mainly intended to find out difficulties existing in these schools, to compare among them and to explain what are the reasons for that and what might be done in order to have a change. Furthermore, the proposed research sets a foundation for development of theory and analytical models (chapter 8, p. 318). In these aspects, the proposed research is important because it may contribute to better integration between the school effectiveness and the school improvement research.

Effectiveness research in the classroom

Usually, even in effective schools there might be less effective sub-units such as grades, classes or even individual students (Gray, 1998). The Israeli Yair (1997) examined primary schools in Jerusalem. He claims that in maths and reading, even while students' background is taken into account, classrooms and grades do matter. The reason for this phenomenon is differential effectiveness or productivity on the part of teachers. According to Yair (1997), variability within schools was more significant than variability between schools.

The coming section summarises the literature dealing with the magnitude of school effects.

The magnitude of school effects

The international research literature concerning the magnitude of school effects include the following studies:

The well known Coleman report (Coleman et al, 1966), which is perceived as the study that initiated school effectiveness research in the USA, concluded that schools have little effect on students' achievements that is independent of their family background and social context. Madaus et al (1980) concluded that the Coleman Report “...denies the efficacy of schooling as a powerful equaliser in American society” (p. 28).

Coleman's findings were criticised as follows:

- The study did not include the types of variables that would measure the true effect of the school, which was later called as school climate variables by Brookover et al (1979) and others.
- The unit of analysis in Coleman's study was the individual student. Other researchers have chosen the school as a unit of analysis (Brimer et al, 1978; Brookover et al, 1979; Rutter et al, 1979; Schweitzer, 1984; Teddlie and Stringfield, 1993; Teddlie et al, 1984; Wolf, 1977).
- Coleman et al (1966) used verbal achievement as the outcome variable. Others such as Madaus et al (1979) argued that such tests are less sensitive to differences in school characteristics than are curriculum specific tests.

The UK Plowden Report had similar conclusions to the Coleman report: “*Differences between parents will explain more of the variation in children than differences between schools*” (Plowden Committee, 1967, p. 35). Jencks et al (1972) arrived at similar results

claiming family background characteristics largely determined students' success and their future incomes.

Ainsworth and Battern (1974) conducted a longitudinal four year follow up study to the Plowden Report and reported very high correlation between achievements and social class.

To Murname (1975), both class and school assignment did have a significant effect upon student achievement.

Madeus et al (1979) concluded that classroom factors explained a larger proportion of the variance on curriculum specific tests than on standardised measures. They argued that *“our findings provide strong evidence for the differential effectiveness of schools: differences in school characteristics do contribute to differences in achievement....”* (p. 223).

The Rutter et al (1979) longitudinal study of school effects occurred in twelve secondary schools in London. They found out that *“children at the most successful secondary school got four times as many exam passes on average as children at the least successful school”* (Rutter et al, 1979, p.19).

Scheerens (1992) examined reviews of two sets of studies that included estimates of the size of school effects: twelve UK and USA studies of school effects and sixteen Dutch studies of school effects. Scheerens (1992) concluded that:

“When we look at school effectiveness in the Netherlands, for example, it seems that the average variance between schools amounts to 11 or 12 percent of the total variance. This percentage hardly deviates from the results of the American and British studies discussed...”. (p. 70).

Many other studies reached similar conclusions, namely, the variance due to between-school factors is low (0%-25%). In some research the results relate to the adjusted variance (the net influence of school excluding the influence of student background) whereas others indicate the unadjusted variance. (Aitkin and Longford, 1986; Bosker and Scheerens, 1989; Bosker and Witziers, 1996; Brandsma and Knuver, 1989; Creemers et al, 1996; Daly, 1991; Fitz-Gibbon, 1991; Mandeville and Kennedy, 1991; Reynolds, 1992; Scheerens and Bosker, 1997; Scheerens and Creemers, 1995; Smith and Tomlinson, 1989; Tymms, 1993; Willms, 1987; Witte and Walsh, 1990).

Mortimore et al (1988) conducted a longitudinal study of 86 classes drawn from 50 schools in London. They found that:

“School attended is responsible for nearly a quarter of the variation in pupils’ reading progress between the first and third year of junior education. In other words, the school was roughly four times more important in accounting for differences in pupil progress than background factors” (p. 186).

In the USA, Lee and Bryk (1989) concluded that Catholic schools somehow weaken the relationship between social background and student achievement, and therefore lead to a more equitable distribution of achievements among students.

In the USA, Bryk and Raudenbush (1988) concluded that:

“Over 80% of the variance in mathematics learning is between schools! These results constitute powerful evidence of school effects that have gone undetected in past research. As we would expect, the between-school variance in reading rates is somewhat less, 43.9%, although still substantial” (pp. 731-732).

Tymms et al (1997) studied 1700 students’ early mathematics and reading achievements scores at the start and end of their reception year at the primary school. They reported a very large school effect of about 40% after controlling for student background characteristics. This research demonstrates dramatically the potential effect that school has on students of a very young age.

In Australia, Hill and Rowe (1996) claimed that schools do make a difference but they do so mainly at the level of the class.

Tables 2.1-2.3 summarise the magnitude of school effects according to research divided to three generations: 1966-1979, 1980-1992, 1993-2000.

Author	Year	Main results
Coleman et al, 1966	1966	Schools have little effect on students' achievements that is independent of their family background and social context.
Plowden Report (UK)	1967	Differences between parents will explain more of the variation in children than differences between schools.
Jencks et al	1972	Results similar to those of Coleman: schools do not matter much with regard to either student achievement or economic success in later life.
Ainsworth and Battern	1974	Very high correlation between achievement levels at the two time points and that social class was basically determinate
Murname	1975	Both class and school assignment did have a significant effect upon student achievement.
Madeus et al	1979	They estimated the between class variance in student performance on curriculum specific tests at 40%. Differences in school characteristics do contribute to differences in achievement.
Rutter et al	1979	Children at the most successful secondary school got four times as many exam passes on average as children at the least successful school.

Table 2.1: The magnitude of school effects - 1966-1979

Author	Year	Main results
Aitkin and Longford	1986	The UK: Unadjusted school effects were 10% while the intake-adjusted figure was only 2%.
Willms	1987	The Scottish education: around 8% of the adjusted variance in the students' examination results were due to school effects.
Mortimore et al	1988	A longitudinal study in London: the school was roughly four times more important in accounting for differences in pupil progress than background factors.
Bryk and Raudenbush	1988	The USA: Over 80% of the variance in mathematics learning is between schools. The between-school variance in reading rates is somewhat less, 43.9%.
Lee and Bryk	1989	Catholic schools weaken the relationship between social background and student achievement (USA).
Brandsma and Knuver	1989	The Netherlands: School level differences accounted for 12% of the variance in arithmetic achievement and 8% of the variance in Dutch language achievement.
Smith and Tomlinson	1989	The UK: The overall percent of variance in achievement predictable at the school level was around 10%. The effect of the school varied mainly by the ability of students and subject taught and there was a minor effect of ethnic groups.
Bosker and Scheerens	1989	In Dutch studies, the average total variance in individual student achievement due to between-school factors was 12 percent.
Witte and Walsh/ Mandeville and Kennedy	1990/ 1991	They reported virtually zero school effects. Both employed teacher ratings of the school effectiveness climate variables was very strongly related to student achievement (USA).
Daly	1991	Northern Ireland: Between 7%-11% of the adjusted school variance was accountable for by the school level. This varied by type of test with mathematics having the highest variance and English, the lowest.
Fitz-Gibbon	1991	The UK: assessment of performance at age 18 - an average school effect of around 15%.
Reynolds	1992	The UK literature: 8%-15%.
Scheerens	1992	The average variance between schools amounts to 11 or 12 percent of the total variance.

Table 2.2 : The magnitude of school effects - 1980-1992

Author	Year	Main results
Tymms	1993	Departmental effects at the secondary level in the UK: 7% of the variance in examination performance could be attributed to the school. When dropping school from the model and nesting student within class within department, proportions of variance due to class ranged from 9%-25% and by department, from 8%-24%.
Scheerens and Creemers	1995	Examining 42 Dutch studies: 9.5% of variance is due to between-school factors in primary schools and 13.5% in secondary schools
Bosker and Witziers	1996	Summarising 103 studies (1966-1986) conducted in different countries: (8% of the unadjusted variance and 8% of the net variance.
Creemers et al	1996	The longitudinal ISERP (a nine nation study that involved schools in the UK, the USA, the Netherlands, Canada, Taiwan, Hong Kong, Norway, Australia and the Republic of Ireland) which indicated that more variance in student achievements was attributable to the school level in the USA sample (16%-17%) than in the sample from Great Britain (8%-11%) or any of the other industrialised countries in the study (0%-11%). These findings are basically in alignment with those reported by Scheerens and Bosker (1997).
Hill and Rowe	1996	Australia: Schools do make a difference but they do so mainly at the level of the class.
Tymms et al	1997	The UK: mathematics and reading achievements scores at the start and end of the first year at the primary school. A very large school effect of about 40% after controlling for student background characteristics. This research demonstrates dramatically the potential effect that school has on students of a very young age.

Table 2.3: The magnitude of school effects - 1993-2000

Research relating to effective schools' characteristics

Introduction

As mentioned earlier, recent studies stress the important influence schools have on students' development. Based on the assumption that schools do make difference, it is important to examine the relevant characteristics that influence school effectiveness. The next sections describe international researches concerning characteristics of effective schools. The following themes are addressed:

- Principal's leadership.
- Teaching quality.
- Collaboration among stakeholders.
- Climate and atmosphere.
- Physical environment.
- Parental involvement.
- High expectations towards students.

The study's interview schedule and questionnaires include questions examining stakeholders' attitudes towards these characteristics and that was helpful for answering the research questions. Furthermore, the research was intended to examine relevant links among the aspects mentioned above or gaps between reality and importance of these parameters. That was done by calculating correlation factors between pairs of variables (for the quantitative part of the study) and asking the interviewees to point out relevant links.

USA

Brookover et al (1979) and Teddlie and Stringfield (1985, 1993) found the following characteristics of effective schools:

- Time allocation on instruction, active learning involved in direct instruction and team games.
- Teachers' high expectations and commitment towards their students.
- Reinforcement practices.
- Heterogeneous groupings.
- Principal's involvement in academic matters.
- Collaboration among teachers and between teachers and parents.
- Positive climate at school.

The UK

The early Reynolds et al (1976, 1979) studies revealed the following factors characterising the effective school:

- High level of student involvement in authority positions and social life.
- Low levels of institutional control of pupils by the school management.
- Positive expectations of what students should be able to achieve.
- High levels of involvement of teachers in the running of the school.
- 'Truces' on the imposition of rules regarding dress, manners and morals.

The Rutter et al (1979) study in London also revealed relevant data relating to effective schools:

- Ample use of rewards, praise and appreciation.
- Good physical environment.
- High level of students in responsibility positions.
- Academic press and high expectations.
- Good models of behaviour provided by teachers.
- Effective classroom management (preparing of lessons, discipline).
- A combination of firm leadership and teacher involvement.

Mortimore et al (1992) developed a framework of supportive and key factors as follows:

Supportive factors

- Voluntary versus compulsory schools.
- Curricular versus extracurricular activities.
- Physical environment.
- Teaching force stability.

Key factors

- **School and class size** (small/big, feelings and attitudes, social behaviour, educational equity, school within a school).
- **Leadership** (purposeful, transformational, deputy head's involvement in decision making, instructional leadership by principal and staff).
- **Parents, students, teachers and leaders' attitudes:**
 - Students' commitment.

- High standards and expectations of students' achievement.
- Maximum communication between teachers and students.
- Parental involvement.
- Effective monitoring and evaluation.
- **Teaching quality:**
 - Teachers' involvement.
 - Teachers' collaboration and communication.
 - Teachers' high expectations towards students.
 - Consistency among teachers.
 - Structured sessions.
 - Limited focus within sessions (only one particular curriculum area).
 - Intellectually challenging teaching.
 - Work-centred, safe, orderly learning environment.
 - Positive home-school relations.
- **School culture.**
- **Resources:**
 - The staff.
 - Budget and curriculum.
 - Information.

(Mortimore et al, 1988, 1992; Poster, 1999).

Two important reviews of studies of effective schools are those of Levine and Lezotte (1990) conducted on behalf of the National Centre for Effective Schools (USA) and that of Sammons et al (1995) conducted on behalf of the British schools inspectorate OFSTED. According to these reviews, in effective schools there is effective leadership, effective monitoring and evaluation, high quality teaching intended to improve students' learning, productive school culture, high expectations towards students and effective parental involvement.

Focusing on learning

As mentioned above, in effective schools there is effective teaching causing better learning.

This can be seen in such factors as:

- High entry rate for public examinations in the United Kingdom (Reynolds, 1976; Reynolds and Sullivan, 1979; Sammons et al, 1994; Smith and Tomlinson, 1989).
- Use of homework with regular checks (Rutter et al, 1979; Sammons et al, 1995).
- The possession of a student culture in which academic emulation is encouraged (McDill and Rigsby, 1973).
- A commitment to the mastery of central learning skills, in some cases involving a formal mastery learning approach utilising a sequence of teaching, testing and re-teaching as necessary (Levine and Lezotte, 1990). High curriculum coverage or opportunity to learn, since both Bennet (1992) and Tizard et al (1988) show wide variations in children's exposure to curriculum areas within and between subject areas.

Also maximising available learning time and protecting learning time from leakage has been the characteristic of effective schools in many studies (Anderson, 1982; Teddlie and Stringfield, 1993; Teddlie et al, 1989).

According to the Israeli research, there is an advantage to active and collaborative learning in comparison to the regular passive and didactic style. In collaborative learning the students are located in the centre and they have more responsibility for the learning process. The teacher in such an environment has to supervise, to foster communication, collaboration and creativity in learning groups and to give-up the power existed in regular teaching. Furthermore, Israeli students prefer to have grouping than to learn in heterogeneous classes (Eshel and Korman, 1994; Id and Ibrahim, 1997; Sharan, 1994).

Monitoring and evaluation

The monitoring of student progress is a factor found in school effectiveness studies. The positive effects may improve teaching and learning and increase students' motivation (Edmonds, 1979a, 1979b; Mortimore et al, 1988; Werf, 1995).

Descriptions of effective schools often mention school site based staff development as one of their important characteristics (Austin and Holowenzak, 1985; Hallinger and Murphy, 1985; Mortimore et al, 1988).

Table 2.4 summarises the research relating to effective schools' characteristics. These characteristics found in the literature helped the author to build and refine the questionnaire

and the interview schedule intended to answer the research questions (chapter 1, p. 9).

Questions relating to the following characteristics were included:

- Principal's leadership.
- Teaching quality.
- Collaboration among stakeholders.
- Atmosphere and climate at the school.
- Physical environment (buildings, furniture, laboratories, equipment, library, computers). It is linked to the issue of resources management, which is a necessary condition for having effective physical environment.
- Parental involvement.

Characteristic	Year	Author
Principal's leadership.	1979 1988 1990 1995	Rutter et al Mortimore et al Levine and Lezotte (USA) Sammons et al (UK)
Teaching quality (teachers' involvement, high expectations, monitoring and evaluation, homework, high curriculum coverage, challenging teaching).	1979 1979 1985/93 1979 1982 1985/93 1988 1988 1989 1990 1993 1992 1995 1998	Brookover et al Edmonds Ingfield Rutter et al Anderson Teddlie and Stringfield Rutter et al Mortimore et al Teddlie et al Levine and Lezotte (USA) Teddlie and Stringfield Bennet Sammons et al (UK) Tizard et al
Collaboration among stakeholders.	1985/93 1988	Teddlie and Stringfield Mortimore et al
Positive climate and atmosphere.	1985/93 1988 1990 1995	Teddlie and Stringfield Mortimore et al Levine and Lezotte (USA) Sammons et al (UK)
Good physical environment.	1979	Rutter et al
Parental involvement.	1988 1990 1995	Mortimore et al Levine and Lezotte (USA) Sammons et al (UK)
High entry rate for public examinations in the United Kingdom.	1976 1979 1989 1994	Reynolds Reynolds and Sullivan Smith and Tomlinson Sammons et al

Table 2.4: Effective schools' characteristics

School and class size

Introduction

According to the literature, school and class size are characteristics influencing school's effectiveness. The following sections discuss this linkage and stakeholders' attitudes towards it. Because of that, the author's study examines stakeholders' attitudes towards the six-year high school size and class size. This subject is relevant to the research questions because recent literature stresses the advantage of small classes. It is important to examine stakeholders' views and to see if there are differences between different groups of stakeholders and also how Israeli stakeholders view this issue in comparison to the literature.

The next subsections address the following themes:

- Research on school size.
- Research on feelings and attitudes relating to school size.
- Research on the linkage between social behaviour and school size.
- School size and educational equity.
- School within a school plans.
- Class size.

Research on school size

Decades of research show that students' achievements in small schools are at least equal and often superior to achievements in large schools (Fowler, 1995). Moreover, although it is often assumed that large schools are cheaper to operate and provide richer curricula than small schools, studies show that neither of these things is necessarily true (Gregory, 1992). In addition, a large body of research definitely affirms the superiority of small schools.

On the other hand, there is also opposite evidence to the superiority of large schools. Howley (1994) reports that students in high socio-economic status communities perform better in larger schools. Small size seems to benefit minority and low-income students more than middle and upper-class students, claim Lee and Smith (1996). Many of the nation's largest high schools are in urban areas having high concentrations of disadvantaged students, who are ill served by large school size.

Another view is introduced by Stevenson and Pellicer (1998) review of a number of studies concluding that neither small nor large schools have a decisive advantage. The real issue is what happens inside a school, not the number of students that are served by a school. The

Israeli Dror (1995) has a similar view claiming that school size is not quite important for school effectiveness - what is more relevant is its uniqueness, autonomy, social integration and diverse learning.

While there is no universal agreement about the numerical limits of small and large schools, *"on average, the research indicates that an effective size for an elementary school is in the range of 300-400 students and that 400-800 students is appropriate for a secondary school"* (Williams 1990, pp. 7-8). Fowler (1992) and Howley (1994) consider the potential for curricular adequacy to be reached at 400 students. Meier (1995) defines small schools as enrolling 300 to 400 students. Lee and Smith (1996) conclude that high school students learn best when enrolment is between 600 and 900. Cotton (1996) reviewed 103 studies that found some relationship between school size and some aspect of schooling; most found that small size had positive effects. Definitions are flexible, some researchers put the upper limit at 200, others as high as 1,000.

Cotton (1996) notes several other characteristics of the research on school size: research on the affective and social effects of school size is extensive and highly consistent in its findings. Thus, assertions about these effects are offered with a high degree of confidence. Since many small schools are in rural areas, some researchers have designed studies to find out whether it is the size or the location of these schools that accounts for their positive effects. These studies reveal that it is the size of schools, regardless of setting, that is beneficial to students.

Research on feelings and attitudes relating to school size

Student attitudes: Considerable effort has gone into studying the relative effects of large and small schools on student attitudes toward school in general and toward particular school subjects. This research overwhelmingly favours small schools (Fowler, 1995; Howley, 1994; Rutter, 1988). In addition, compared to students in large schools, both the personal and the academic self-concepts of students in small schools are more positive (Rutter, 1988; Stockard and Mayberry, 1992).

Research reveals that, compared to students in large schools, those in small schools experience a much greater sense of belonging and sometimes lower level of alienation (Fowler and Walberg, 1991; Gregory, 1992; Stockard & Mayberry, 1992). Closely related to this finding is the higher quality of interpersonal relations found in small schools (Fowler and Walberg, 1991; Rutter, 1988). Rutter (1988) is representative in citing *"evidence of*

increases in social bonding to teachers and school, self-esteem, academic self-concept, locus of control, and sociocentric reasoning" (p. 31).

Teacher and Administrator attitudes: While less school size research has concentrated on teachers and administrators than on students, findings seem to favour small schools (Gottfredson, 1985; Gregory, 1992; Stockard and Mayberry, 1992). These studies focused on administrator attitudes toward work; teacher attitudes toward work, administration, and one another; and incidences of cooperation and collaboration among colleagues. Gottfredson (1985) notes that *"large schools appear to promote negative teacher perceptions of school administration and low staff morale"* (p. 39).

Research on the linkage between social behaviour and school size

- **Extracurricular participation:** Students participate in extracurricular activities at significantly higher levels in small schools than in large ones (Cotton, 1996; Fowler, 1995; Stockard & Mayberry, 1992). Students in small schools are also more likely to participate in a greater variety of activities and to hold important positions in the activities in which they are involved. Researchers point out that, in small schools, everyone is needed to populate teams, offices, and clubs; thus, even shy and less able students are encouraged to participate and made to feel they belong. In large schools, a greater proportion of students does not participate in extracurricular activities, because they are not needed to fill the available participation slots (Cotton, 1996; Fowler, 1995; Stockard and Mayberry, 1992).
- **Attendance and dropouts:** Not only do students in small schools have higher attendance rates than those in large schools, but students who move from large schools to small, alternative secondary schools generally exhibit improvements in attendance (Fowler, 1995; Fowler and Walberg, 1991; Rutter, 1988). Regarding dropouts, the holding power of small schools is considerably greater than that of large schools.
- **Social disruption:** Stockard and Mayberry (1992, p. 47) report that *"Behaviour problems are so much greater in larger schools, that any possible virtue of larger size is cancelled out by the difficulties of maintaining an orderly learning environment."* Social research reaches the same conclusion: small schools have far fewer behaviour problems than large schools (Gottfredson, 1985; Gregory, 1992; Rutter, 1988).

School size and educational equity

It is well known that in U.S.A the states with the largest schools have the worst achievement, affective, and social outcomes (Jewel, 1989; Walberg, 1992). The students who stand to benefit most from small schools are economically disadvantaged and minority students (Cotton, 1996; Fowler, 1995; Howley, 1994, 1996; Lee and Smith, 1996). Large schools are more likely in urban areas where there are also more social problems and this complicates the comparison of the effectiveness of small and large schools (Jewell, 1989; Lee and Smith, 1996).

School within a school plans

In an attempt to reap at least some of the benefits of small schools, some educators and parent groups have launched school-within-a-school arrangements, in which large schools are divided into two or more sub-units. A growing body of research suggests that school-within-a-school plans have potential for producing results like those associated with small schools provided they are distinct administrative entities within the buildings that house them (Raywid, 1985).

Israeli six year-high schools have different sizes. There are big schools having about 1,500-2,000 students (such as schools A and B) and small ones with only 500-700 students (school C). Following some of the American studies, there might be hypothetical advantage for small Israeli six-year high schools. Stakeholders' attitudes are about to be examined concerning the issue of Israeli six-year high school size.

Class size

The debate on class size is marked by disagreement in the interpretation of the often-mixed results from research on the topic and the economics of implementing reduced class size. Because research results have been uneven, researchers and policymakers proclaim that reducing class size is not a solution for improving public schools. However, supporters of reduced class size believe that smaller classes provide teachers with the opportunity to give students more individual attention, leading directly to improved academic achievement.

Thompson (1978) concluded that the relationship of class size to educational effectiveness involves too many complex issues to be reduced to a single testable hypothesis. Later on, Glass and Smith (1979) employed sophisticated statistical methods to correlate the findings of 80 studies that yielded over 700 comparisons of smaller and larger classes with respect to student achievement, classroom processes, and teacher and student attitudes. Their

unequivocal conclusion was that a positive correlation could be drawn between smaller classes and all these variables. Glass and Smith (1979) came under attack almost immediately by the American Educational Research Service (ERS) (1980), which published an extensive critique of their methods and findings proclaiming that the findings do not justify general class size reductions. The latter objection was based on Glass and Smith (1979) studies themselves, showing that improvement in student achievement and other educational variables does not become significant until class size is reduced below 20 pupils. Such a goal was simply not financially feasible in most school districts.

Since ERS (1980) published its critique, others have arrayed themselves for or against Glass and Smith (1979), whose studies have become a point of reference in nearly everything written on the subject.

Ornstein (1995) review of the literature, concludes that smaller class size brings about only modest gains in student achievement. Ornstein (1995) recommends dividing large classes into small groups, with the teacher focusing on helping groups containing lower-achieving individuals. The Israeli Moshel-Ravid (1995) examined the linkage between class size and school effectiveness considering the financial investments needed for decreasing classes size. He claims that although there is an advantage to class size, it is not the only relevant variable influencing students' achievements but it is one of different characteristics having interaction among them. Because the price is so high, he is not sure that it justifies the benefit of decreasing classes' size.

From 1997 there was a change in the results of British and American research concerning class size and there was also a beginning of change in 20 states in the U.S.A. In the U.K, Hargreaves et al (1997) measured changes in expert teachers' behaviours in classrooms ranging in size from 30 students to 15 students. Outcomes showed that in smaller classes the teachers interacted more effectively with the entire class, had more sustained interactions (25 seconds or more) with individual students. The researchers concluded that the teachers' behaviours in smaller classes were associated with improved student achievement. They recommend that professional development efforts should focus on improving teachers' small-class behaviours before they teach in reduced-sized classes.

Reducing the average number of students in America's classrooms is picking up pace, according to a recent report from the U.S. Department of Education (1999). In the U.S.A, 20 states (Iowa, Maryland, Minnesota, New York, Wisconsin and others) recently initiated programmes to reduce class size, primarily in the early grades. A \$1.2 billion budget has been made available in order to hire 100,000 qualified teachers to achieve a national average

of 18 students per class in grades 1-3. The report claims that "*a growing body of research involving large-scale, carefully controlled experiments shows that lowering class size in the early grades will produce significant lasting benefits for students*" (U.S. Department of Education, 1999, p. 1).

Picus (2000) stresses the financial expense of reducing class size. The enormous cost of reducing class size is an important factor, regardless of whether the efforts are mandated or voluntary. The grade-level focus of class size reduction is also an issue; almost all state-sponsored efforts at reducing class size are currently aimed at the K-3 grades. Shortages of qualified teachers have occurred in some states, as have building and facility shortages when class size is reduced across school districts and states. Picus (2000) also provides an overview of important research on class size, noting the inconsistent outcomes investigators have found. The results call into question the positive impact of reduced class size on increased student achievement and the frequency of changes in teachers' behaviours in the classroom. Picus (2000) concludes that even if there are improved student outcomes brought about by class size reduction, they occur at a quite high cost in per-student expenditures, the profitability of which is not clear. Furthermore, there is no fully agreed-upon optimal size for smaller classes, certainly less than 20, perhaps as low as 15 (Achilles, 1997).

Another issue concerns the difference in teachers' behaviours in smaller classes versus larger classes. Thus far, research has shown that without training, many teachers do not change their behaviours to take advantage of the reduced number of students in smaller classes (Bohrnstedt and Stecher, 1999).

One of the more notable efforts in the U.S.A to reduce class size is Tennessee's Project STAR (Student-Teacher-Achievement-Ratio). Finn (1998) reports that the STAR Programme enjoyed positive results in most areas generally perceived as benefiting from a reduction in class size: academic achievement, engagement, and behaviours.

Following the research literature dealing with class size, the author's study intends to examine stakeholders' attitudes towards class size in six-year high schools. Principals and teachers are also asked about the perceived optimal class size in comparison to reality.

Leadership

Introduction

One of the most important characteristics of effective schools is leadership. The leader has a great influence on the school and it is important to examine stakeholders' attitudes towards school leadership. It is very important to examine how different stakeholders look upon the principal and if they see his/her influence on many characteristics of school effectiveness. Because the aim of the proposed research is to find gaps between expectations and reality, it is very important to examine stakeholders' gaps concerning this central issue. If such gaps are significant, it might be helpful to examine the linkage between principal's leadership and other relevant parameters.

The next subsections address the following themes:

- School leadership.
- Effective leaders and effective schools.

School leadership

Excellent leadership has invariably emerged as a key characteristic of outstanding schools. Outstanding leaders have a vision for their schools - a mental picture of a preferred future - which is shared with all in the school community and which shapes the programme for learning and teaching as well as policies, priorities, plans and procedures.

There are many definitions in American literature to leadership/leader such as:

- *"The exercise of authority and the making of decisions"* (Dubin, 1968, p. 385).
- *"The individual in the group given the task of directing and coordinating task-relevant group activities"* (Fiedler, 1967, p.8).
- *"The process of influencing the activities of an organised group toward goal setting and goal accomplishment"* (Stogdill, 1950, p.4).
- *"The initiation of a new structure or procedure for accomplishing an organisation's goals and objectives"* (Lipham, 1964, p. 122).

The difference between the third definition and the first two is that it argues that leadership can be exercised even without formal authority. The fourth definition focuses only on change - in this view, a principal will not be a leader at all if his/her activity is limited to maintenance.

Hopkins and Lagerweij (1996) define the leader's attributes as follows:

"The school leader has to show leadership and innovation. He has to be able to tell how change can be applied practically, to determine the scope of change, to determine the capacity of support and stimulation, and to be able to develop skills to foster a learning organisation" (p. 69).

Transformational and transactional leadership should be preferred rather than only transactional. The transactional leader deals only in exchange of one thing for another while the transforming leader seeks to satisfy higher needs and engages the full person of the follower. Such a leadership can change attitudes and bring about commitment to 'a better state', which is embodied in a vision of excellence for the school. However, unless transactional practices are in place, transformation will be difficult to achieve. Transformational leadership can create and sustain an integrated school environment in which students and parents are seen as full members of the school community. As mentioned earlier, better schools are more tightly linked - structurally, symbolically and culturally - than the less effective ones (Harris and Bennett, 2001; Murphy, 1991) and the leader has an important role in ensuring these tight links. Bass and Avolio (1994) argue that transformational leadership may exist alongside transactional leadership ensuring that the normal course of events runs smoothly. Bass and Avolio (1994) write that transformational leadership is seen when leaders stimulate interest and awareness of the missions and motivate colleagues. Studies in educational institutions (Leithwood, 1992) have indicated that transformational leaders appear to continuously develop collaborative professional culture, foster teacher development and help them to solve problems together more effectively. To Leithwood et al (1996), transformational leadership is strongly related to satisfaction with the leader, staff's motivation for extra effort and teacher's perceptions of effectiveness and improvement. Further, a transformational leader is perceived to have charisma, vision, inspiration and individualised consideration.

The importance of the personal qualities of school leaders is reinforced by the view that, to transform their schools, school leaders must use facilitative rather than authoritarian power and they do so by the following (Leithwood, 1992):

- Helping staff members develop a collaborative professional school structure.
- Fostering teacher development.
- Helping staff solve problems together more effectively.

Hord (1992) points out that leaders in U.S.A are change makers and transformers, and they guide the organisation to a new vision.

School leadership should have vision - a vision is a "*mental image of a possible and desirable future state of the organisation*" (Bennis and Nanus, 1985, p.89). Outstanding school leaders have such a vision that they succeed in communicating it in a way that secures the commitment of others in the school and its community. The commitment relates to a set of values, which then become the heart of the culture of the school. This commitment can be achieved in a number of ways especially with collaborative approaches to decision-making and with placing at the school level high responsibility and authority for making decisions relating to the allocation of resources in the school. That vision must be institutionalised so that it shapes the everyday activities in the school (Bennis and Nanus, 1985).

Effective leaders and effective schools

The most recent comprehensive reviews of studies dealing with the relationship between leadership and school effectiveness are these of Hallinger and Heck (Hallinger and Heck, 1996a, 1996b, 1997; Heck and Hallinger, 1999). Their reviews of over 40 research projects conducted within 11 different countries since 1980 have stressed the relationship of leadership and school effectiveness. The findings are divided into two sections: avenue of leader influence and the context of school leadership.

Avenue of leader influence: There is evidence that leadership influences the organisational system through three primary avenues:

- **Purposes:** The literature exhorts leaders in all sectors to articulate their vision, set clear goals and create shared mission. There is a wide variety of operational measures under the heading of goal-setting: teachers' educational expectations, the framing of educational purposes, principal's clear vision, the substance of the school's mission, consensus on goals and the principal's role in goal-setting processes (Andrews and Soder, 1987; Bamburg and Andrews, 1990; Brewer, 1993; Cheng, 1994; Goldring and Pasternak, 1994; Hallinger and Murphy, 1986; Heck, 1990; Leithwood, 1994; Scott and Teddlie, 1987; Silins, 1994).
- **Structure and social networks:** That involves the interplay between organisational structures and social networks in and around the school. Ogawa and Bossert (1995) define social structures and networks as the regularised aspects of relationships existing among participants in an organisation. The principal's role involves creating structures that facilitate communication and collaboration among staff around the school's

valued purposes. This approach includes shared mission, teacher participation in decision-making, scheduling, use of teaming, principal stimulation of staff learning, patterns of collaboration and team learning (Leithwood et al, 1997).

- **People:** There is evidence that administrative activity is largely directed at influencing people in the school organisation (Bridges, 1977; Bossert et al, 1982; Leithwood, 1994; Ogawa and Bossert, 1995). It reinforces the image of school leadership as a people-oriented activity. Strategy, planning and resource management are important aspects of educational manager's role. Leadership involves working with and through people (Bridges, 1977; Cuban, 1988).

The context of school leadership: Socio-economic factors in the school and community appear to influence principal leadership and its impact on school effectiveness (Andrews and Soder, 1987; Hallinger and Murphy, 1986; Rowan and Denk, 1984). For example, Andrews and Soder (1987) reported that principal leadership affected reading and maths outcomes in elementary schools. However, the effects of principal leadership on these outcomes tended to disappear in high socio-economic status schools and remained significant in low socio-economic status schools. Another feature of context is the cultural context in which leaders act. It is possible that differences in the social construction of the leadership role enacted in organisations differs across societies. Because leadership is a cultural phenomenon, it may be expected that differences in leadership prototypes should be linked to dimensions of national culture (Gerstner and O'Day, 1994).

Evidence from an English study of schools which have 'failed' (Riley and Rowles, 1996) suggests that a combination of pressures pushes schools along the downward spiral. Some of those pressures relate to weak leadership and isolated and disaffected staff. The study also demonstrated that many such schools served areas of deprivation and high unemployment and most of the secondary schools were in competition with selective grammar schools, or grant-maintained schools. Raven (1997) derived criteria of effectiveness from perceptions of the goals of education held by students, parents, teachers and employers. He argued that these give us better measures for differentiating 'more' from 'less' effective performance in occupational and life roles.

Deriving definitions of 'effectiveness' in leadership from the views of stakeholders proved to be a useful starting place. The school leadership paradigm, which emerges from Riley and Macbeath's (1998) study, emphasises the capability of the school leader to sustain relationships. It is a model which ties in closely with much of the thinking about school

improvement and which puts the heart and emotions of teaching at the centre (Hargreaves, 1997). The paradigm rests on the assumption that schools are constantly changing; the challenge is to be able to respond to the school's inner life. School leaders have to manage contested notions about achievements and to cope with multiple interests and demands.

Riley and Macbeath (1998) argue that the school leadership paradigm is also one of shared leadership. Good school leaders are those who are able to maximise the diverse leadership qualities of others and they lead by managing, motivating and inspiring people. Good leaders who operate in this way recognise that teachers are more likely to become engaged in making changes within their own schools when more collaborative leadership models are the norm. As Gammage (1985) implied in his account of the good school, good leaders recognise the importance of relationships, enrichment and an interactive community. The style is also an inclusive one, for the reasons suggested by the findings from Smylie's (1992) study in North America: *"Teachers' willingness to participate in school decision-making is influenced primarily by their relationships with their principals"* (p. 63).

A Canadian review of school leaders concluded that 'effective' leaders are good role models in their school who set an example by working hard, having lots of energy, being genuine in their beliefs, modelling openness, having good people skills and by showing evidence of learning by growing and changing themselves (Leithwood et al, 1997).

Riley and Macbeath's (1998) analysis suggests that good principals are able to recognise how they spend their time, with whom and for what purposes, and then link their behaviour to their priorities. Thus, effective leadership is about making the appropriate choices and about managing the fit between the external world and the internal world of school.

'Firm and purposeful' leadership has been frequently cited as the first requirement of effective leadership, noted in Rutter et al's (1979) study, Mortimore et al (1988), the Louisiana studies (Teddle and Stringfield, 1993) and the work of Sammons et al (1997). Case studies of improved schools, in both Britain and the USA shows the importance of individual leaders with 'mission' (Louis and Miles, 1992; National Commission on Education, 1995) and there is a considerable literature concerning transformational leaders who build school organisations characterised by simultaneous 'top down-ness' and 'bottom-up-ness' (Murphy and Louis, 1994).

Another characteristic of effective leadership has been noted as ensuring that others are related in the process. Mortimore et al (1988) noted the importance of involving the deputy in the life of the school. Rutter et al (1979) noted the importance of ensuring that all teachers

felt represented and that their views had been taken into account. Of particular importance is likely to be the principal's motivation and use of a senior management team (Sammons et al, 1997). Sharing of academic leadership with faculty in a school was also the characteristic of the effective principals in the Louisiana studies (Teddle and Stringfield, 1993). Another characteristic of effective leadership is the exhibiting of instructional leadership. In part, this is related to the belief of the principal that instruction is the purpose of the school (Levine and Lezotte, 1990).

Murphy's (1990) review gives detail on four major areas of this instructional leadership:

- Developing well-defined goals and communicating them to all school constituencies.
- Managing the educational production function through supervising instruction and monitoring students' progress.
- Promoting an academic learning climate with high expectations.
- Developing a supportive work environment.

Two other components of effective leadership are personal monitoring of staff performance and the proactive selection and replacement of staff. The personal monitoring has, as Levine and Lezotte (1990) note, emerged in every study where it has been included as a variable. The selection and replacement of teachers has also been picked out in many studies (Austin and Holowenzak, 1985; Wimpelberg, 1987; Stringfield and Teddle, 1987, 1988; Teddle et al, 1987), involving the head hunting of good recruits, and the pressuring of less competent staff to either improve or move on to another school. Bridges (1988) provided detailed information on how to manage, and then dismiss if necessary, incompetent teachers.

Israeli research relating to effective leadership

The Israeli Goldring (1991) claims that the effective leader should direct the teachers and instruct them in all matters related to teaching and learning with the requirement to report their work processes and teaching outcomes. The leader should demand the teachers to have high expectations towards their students.

The Israeli researches dealing with school effectiveness stress the central role of the principal. The effective school principal is described as a '*pedagogical leader*' and not just an administrator who takes care for managing school activity, supplying resources and solving problems (Pasternak and Goldring, 1991; Friedman, 1989b). There is a debate concerning the question what style of leadership would increase school effectiveness - people oriented or task oriented. On one hand, 'people oriented' style might be interpreted as the principal's

weakness or as a response for teachers' professional expectations. On the other hand, an assertive style, dedicated for goal achievement, might create professional relations between the principal and the staff but it can also disturb goals' achievement. The research shows that leaders of high achieving schools tend to nurture the relations with the teachers, but they let the staff to be less independent professionally (Pasternak and Goldring, 1991). To Barkol (1997), good interrelations between the principal and the staff can also lead to success in initiating organisational change at the school. When there are good relationships, the principal is more likely to motivate the staff and to implement changes.

The principal influences students and school atmosphere with teachers' help (Gavish, 1982). In a school where the principal was perceived as acting efficiently, the teachers had positive attitudes towards their work, what had high correlation with students' achievements. Gavish (1982) argues that the way in which the principal makes decisions and the communication he/she has with the staff, might influence substantially on what happening in classes. Goldring and Pasternak (1994) found too that school leadership has an influence on school effectiveness. A research conducted in Israel, examined principals, teachers and students in elementary schools. The research reveals that direct and clear management style focusing on specific learning goals is positively correlated with higher students' achievements.

Friedman (1992) claims that a principal of an effective school should adopt changing leadership styles according to the changes taken place at the school and its environment. The leader should manage the school and at the same time should be aware of changes in and out of school.

Avi-Yizhak and Ravid (1985) examined leadership and management styles of Israeli principals. According to this research, there is no significant communication between the teachers and principals concerning the curriculum. The principals prefer to receive feedback from surveys and from the district manager (of the Ministry of Education) and not from the teachers. The researchers conclude that it is required to create an effective communication between principals and teachers concerning curricular issues.

Linkage to the six-year high school study

The research literature dealing with principals' leadership helped the author to word and refine the questions of the survey and interviews intended to give answers to the three key research questions (chapter 1, p. 9).

Stakeholders were asked to describe their attitudes towards the following characteristics of six-year high school principal's leadership:

- Principal's vision and ability to lead changes: the literature stresses the importance of shared vision, innovation and practical implementation of changes.
- The relations between parents/students and the school.
- The creation of school culture based on common values, commitment and high expectations towards students.
- Nurturing collaboration and participation among stakeholders.
- The principal's ability to deal with complex and difficult issues.
- The principal's motivation and ability to motivate the staff.

Stakeholders' attitudes towards school effectiveness

Introduction

The study is intended to deal with stakeholders' attitudes towards effective six-year high schools. Therefore it is very important to describe the literature dealing with parents, students, teachers and principals' attitudes towards different aspects of effective schools.

The next subsection addresses the importance of the collaboration amongst the triad: parents, teachers and students. The literature stresses how highly students may be influenced by their parents concerning their motivation to study. On the other hand, the parents can be influenced by the teachers and if the teachers are collaborative, there might be helpful parental involvement and the educational process might become much more effective. Stakeholders' perceptions towards the school have a great influence on the collaboration among them. Because of that, the study examines stakeholders' attitudes towards collaboration at the Israeli six-year high school.

The importance of teachers, students and parents' attitudes

The inclusion of stakeholders' views, students, teachers and parents, in a research was an important feature of Improving School Effectiveness Project (ISEP) conducted recently in Scotland (Macbeath and Mortimore, 2001). It enabled the collection of a rich body of information on effectiveness and improvement in Scottish schools, providing insights into

school cultures as viewed from three quite different vantage points and perspectives. SooHoo (1993) stresses the importance of students' attitudes for school effectiveness research:

"The student perceptions are valuable to our practice because they are authentic sources; they personally experience our classrooms first hand...As teachers, we need to find ways to continually seek out these silent voices because they can teach us much about learning and learners" (p. 389).

Pickering (1997) argues that the voice and involvement of pupils is essential for improving school effectiveness because it is their learning that is under discussion. Researchers should take systematic account of pupil views in order to broaden the scope of how we evaluate effectiveness.

To Macbeath and Mortimore (2001), teachers' views touch on some of their students' themes but come at these from a quite different vantage point. Beyond that, parents' views of their children's educational experience supply a further important perspective on a school's educational quality (Bastiani, 1997; Coleman, 1998; Macbeath et al, 1986). Therefore it is very important that the proposed research would collect students, teachers and parents' views.

Davis (1989) has described parents and teachers as being co-producers of education when they are consciously working together on instructional matters. Within the classroom setting there are in fact three actors ever present - the teacher, the student and the parent(s). The beliefs, attitudes and habits of mind of the family are thoroughly embedded in the mind of the student. The interactions amongst these three actors largely determine the students' motivation to learn, their satisfaction and commitment to school and the level of the students' achievement. The 'reachability' of the student (in teacher's eyes), the collaboration in learning between student and teacher (in student's eyes), and the effectiveness of the classroom (in parents' eyes) are all largely derived from interactions within the triad. Furthermore, these interactions are all alterable, largely but not exclusively through the initiatives of teachers.

In order to achieve improvement of student learning or functioning of a classroom or school, it is important to know what kinds of triad interactions are most productive, and are to be encouraged. Each member of the triad establishes an instructional relationship with each of the others and it affects the others (Coleman, 1998).

A study by Coleman (1998) conducted in the U.S.A shows that when parents are satisfied with school they may influence their children's attitudes towards school and it can affect

pupils' functioning. Parents can be more satisfied with school if there is collaboration between them and the teachers. Collaborative teachers act on a belief that when parents are brought into the relationship, it makes education easier.

Coleman's study (1998) gave the following results:

- Communication with parents about school issues leads to their satisfaction with the school. The level of collaboration between student and teacher is shaped by how he/she has been prepared for schooling by the parents.
- On the parental side, the basic element is the parents' perception that the teacher is concerned about parent involvement. This leads to parents' having greater satisfaction with the school.

A conclusion from these findings is that two kinds of changes in teacher practices are critical to improving student and parent attitudes to school:

- Any teacher activity that raises the level of parent/student communication.
- Any teacher practice change that strengthens the student perception of collaboration with teacher in a learning partnership.

Therefore, there should be a reconsideration of school effects upon the home, and the home effects upon school, and treat these interactive effects as essential alterable variables.

Because stakeholders' attitudes are so important for school effectiveness research, the coming subsections deal with the literature concerning attitudes of all four kinds of stakeholders that are examined in the proposed research. The following themes are addressed:

- Teachers' attitudes (p. 43).
- Students' attitudes (p. 50).
- Parents' attitudes (p. 52).
- Leaders' attitudes (p. 55).
- Teachers' and principals' misconceptions on regarding students and parents (p. 56).

Teachers' attitudes

This section addresses the following teachers' attitudes:

- Attitudes towards collaboration.
- Expectations towards parents.
- Attitudes towards the principal.
- High standards and expectations of student achievement.

1. Attitudes towards collaboration

Chrispeels' (1992) study in the U.S.A reveals that collaborative teachers create a classroom setting that reflects many of the characteristics of the effective school mentioned previously. They convey to students and parents alike the message that in their classrooms students work hard and have lots of opportunities to learn. They do this in an environment that is perceived to be conducive to learning and in which students are kept informed of what is expected of them and how well they have achieved those goals. The collaborative teacher extends learning opportunities beyond the school by keeping parents informed of what students are learning, how well they make progress and how parents can support learning. All this is done in a way that conveys to students and parents that they are engaged in a mutually beneficial relationship that is working toward a common goal – student learning and success.

Collaborative teachers in U.S.A, then, nurture the kind of 'proximal variables' that Wang et al (1993) describe as having a strong effect on student learning. For them *"the home environment includes not only the educational characteristics of the home but also parent activities and attitudes that support student learning"* (p. 278). The second variable is the relationship between teacher and student. Both academic interactions and teacher and student social interactions are important. Collaborative teachers demonstrate an ability to focus on and maintain a balance between both aspects of the teacher-student relationship. They do so with a positive effect upon students' and parents' attitudes. Collaborative teachers act on a belief that when parents are brought into the relationship, it makes education easier.

According to the literature, the issue of collaboration was found to be very important for school effectiveness. Therefore, the proposed research is about to examine attitudes towards collaboration among stakeholders.

2. Expectations towards parents

Smilansky et al (1986) checked Israeli teachers' expectations regarding parents. Teachers were asked what they expect of parents who are interested in optimal development of their children. Teachers think that when parents have good relations with the school and they act according to the instructions of principals, teachers and other professionals, the outcome is students' success and effective development. Other teachers' expectations deal with the relationships of parents and their children. They suppose that those relations are important for children's general development (not only at school).

To Smilansky et al (1986), Israeli teachers' expectations can be divided as follows:

Parents as human beings and having family: they see the importance of family climate, mutual relations between parents, family's conversational routines and children's socialisation processes.

Parent-child's relations: to teachers, the family is an educational and instructional framework that is responsible for areas, which the school does not focus on and for areas that are not handled by the school. Parents have to provide their children with enriching experiences, to nurture the child cognitively, to contribute to valued education and to give emotional support.

The relationship between parents and school: Most teachers looked upon good parenthood according to the parental relations with the school and their activities which are intended to help the school. Parents themselves are not happy with these teachers' expectations. Teachers think that parents have to know the educational system and to assist it and there must be trust towards the teacher. Additionally, parents have to control their children's learning and to teach them at home.

3. Attitudes towards the principal

Moos et al (1998) examined teachers' attitudes towards effective leadership in England, Denmark and Scotland. Teachers mentioned 'Vision' in all three countries but its meaning differed. English and Scottish teachers were more inclined to see it as the heads' clarity of direction. Danish teachers understood 'vision' to mean an on-going dialogue between the principal and staff and other involved groups, about the future direction of the school. Other characteristics found were as follows:

Denmark: maintain an overview, inspire, listen, loyal to staff and pupils, able to delegate, visible to pupils and staff, humane, be engaged and has pedagogical insight.

England: good organiser, communication skills, accessible, vision, assertive, supports colleagues, motivates others, maintain discipline, manages budget and delegates.

Scotland: communication skills, motivates, clear direction/vision, accessible, finance/administration, empathy/caring, strong leadership, pedagogical insight, consistency and fairness and commands respect.

In UK there is a greater stress on the need for 'strong leadership' while in Denmark the emphasis is on school leaders maintaining and preserving the school culture through collaborative effort.

An Australian study (Dempster and Logan, 1998) shows a high level of agreement among teachers that principals should demonstrate loyalty to staff and maintain high levels of trust with them, encourage them to use their initiative, interact personally on important issues, and be involved directly in conflict resolution. Teachers also expected principals to be responsible for setting priorities for change, for improvements and upgrading.

The resolution of conflict is part of a communication theme linked with the expectation that principals express their vision clearly and communicate effectively with everyone in the school. Dempster and Logan's (1998) research shared three main findings:

Personal qualities: most teachers and parents want the principal to respect the power of his/her position, to show personal values and to participate with others.

Management of the school: Delegation of authority, acquisition and allocation of resources are important.

Vision, values and future orientation: The principal should have a clear vision for the school, be public about the school's values and plan strategically to achieve the vision

To Dempster and Logan (1998), most teachers expect the principal not to respond consistently to the demands of politicians. However, most changes in schools, whether on the curriculum or structural fronts, come from political initiatives. Teachers want principals to choose what is good for the school and children. When teachers are involved in formal school structures, they believe they should be allowed to operate free from manipulation or control by the school principal. They expect the principal to protect the school from unrealistic external demands and, if not possible, they expect sound management of the demands within the school. They see the principal as the agent responsible for priorities change.

Teachers attach greatest importance to good management of the school, followed by sound staff and community relations, the principal's personal qualities and a commitment to concern for students. Their expectations are focused on enhancing the learning experience and environment, sound and supportive staff relationships and the creation of a well-managed, happy school (Dempster and Logan, 1998).

An Israeli research (Golan, 1995) intended to examine the linkage between teachers' autonomy at the school and the perceptions they have towards their principal's leadership. This study revealed that there is variance among schools relating to teachers' attitudes towards their autonomy which is dependent on the principal. Teachers think that the principal has a central role in defining their professional autonomy. It is strengthened as they

feel that the principal is an educational figure with whom they can consult regarding to professional and personal issues.

Based on the research literature, the six-year high school study includes questions relating to stakeholders' attitudes towards the following characteristics of the school principal:

- Vision, values and the ability to initiate changes.
- Accessibility.
- Ability to deal with difficult situations.
- Communication.
- Management of resources.
- Initiation of motivation.
- Trust.
- Collaboration with parents.
- Sharing leadership.

The coming subsection deals with another important aspect of teachers' attitudes towards their students – standards and expectations of student achievement that ought to be high.

4. High standards and expectations of student achievement

High expectations of students have been among the most consistent of findings in the literature, ensuring that students know them, being shown in the original effective schools literature (Brookover et al, 1979; Edmonds, 1979a, 1979b, 1981; Venezky and Winfield, 1979; Weber, 1971) as well as in more recent American research (Stringfield and Teddlie, 1991; Teddlie and Stringfield, 1993) and in the major British empirical studies (Mortimore et al, 1988; Reynolds and Sullivan, 1979; Rutter et al, 1979; Tizard et al, 1988). Every review on the topic mentions the importance of this factor, whether British (Reynolds and Cuttance, 1992; Reynolds et al, 1994; Sammons et al, 1995), Dutch (Creemers, 1992; Scheerens, 1992) or American (Levine and Lezotte, 1990; US Department of Education, 1987). Teddlie et al (1989) note that effective principals guard the integrity of the classroom. Ensuring that all staff expect the very highest levels of attainment and behaviour from pupils is clearly part of that guarding, in effective schools.

Many American educators believe that schools must implement high standards for student achievement that stress performance. Standards are a means of translating broad visions of

improvement into more specific parameters for outcomes. Expected outcomes encourage students to strive for higher levels of achievement and provide a benchmark for measuring the success of reform efforts (Conley, 1993).

To Conley, (1993), there is consensus that expectations for achievement should cut across subject areas and support active learning and critical thinking, not memorisation. Standards should be based on what is truly important for students to know, not what is easiest to assess.

Part of the difficulty in devising standards for performance is deciding who will participate in creating them and how they will be implemented. To Sizer and Rogers (1993), standards should not be developed by experts but rather by a communal process involving many voices.

Most American educators believe that adopting such standards is the guarantor of excellence and equity in education. Standards tell students, "*We respect you and are confident that you can learn*" (Ravitch, 1992, p. 27). Thus, poor students are given the same educational opportunities as the richer.

There is evidence that when students are encouraged to work with challenging content under optimum teaching conditions, they will make far greater progress than those students who receive basic skills instruction. High standards guard against the self-fulfilling prophecy of low achievement that low standards produce (Brophy, 1986; Welsh, 1992; Omotani and Omotani, 1996).

To Lumsden (1997), most schools claim to hold high expectations for all students but in reality it is not always practised. Although some schools and teachers maintain uniformly high expectations for all students, others have "great expectations" for particular segments of the student population but minimal expectations for others. To Hilliard (1991) and Bishop (1989), expectations are too low in comparison to students' ability.

Evidence suggests that schools can improve student learning by encouraging teachers and students to set their sights high. The expectation teachers have for their students and the assumptions they make about their potential have a tangible effect on student achievement (Bamburg, 1994). Students tend to internalise the beliefs teachers have about their ability (Raffini, 1993). Conversely, when students are viewed as lacking in ability or motivation and are not expected to make significant progress, they tend to adopt this perception of themselves. Regrettably, some students, particularly those from certain social, economic, or ethnic groups, discover that their teachers consider them "*incapable of handling demanding work*" (Gonder, 1991, p. 18).

Teachers often behave differently toward students based on the beliefs and assumptions they have about them (Bamburg, 1994). Students who are perceived to be low in ability may also be given fewer opportunities to learn and praised less frequently (Cotton, 1989).

In the U.S.A, many subscribe to what Bamburg (1994, p. 25) dubs a philosophy of "*educational predestination*". That is, innate ability is viewed as the main determinant of academic success. The role of effort, amount and quality of instruction, and parental involvement is discounted. Poor performance in school is often attributed to low ability, and ability is viewed as being immune to alteration. Therefore, poorly performing students often come to believe that no matter how much effort they put forth, it will not be reflected in improved performance (Denis, 1991).

Tracking and ability grouping can also affect expectations. A criticism of traditional tracking is that expectations for students as well as pace of instruction are reduced in lower ability groups (Stockard and Mayberry, 1992).

Although students may appear to accept teachers with low standards, they have more respect for teachers who believe in them enough to demand more and they equate hard work with success (Public Agenda, 1997; Wasserstein, 1995).

In 1993 Hammersmith and Fulham established the '*Schools Make a Difference*' project to help 8 British secondary schools to raise student levels of achievement and morale (Myers, 1995). This project's results show also that students' intellectual, personal and technical abilities have to be recognised and valued, and that expectations of progress and performance should be high.

The Israeli research supports these findings. Yafa (1994) claims that there is a direct linkage between teachers' expectations and students' achievements. When teachers have high expectations, they tend to create supportive atmosphere, give effective feedback to students, teach more material and give more opportunities to the students towards whom teachers have high expectations. In such a way, teachers nurture performance and enable the students to make progress.

To sum-up, the literature stresses the great importance of teachers' expectations towards their students and the necessity they would be high relating to all students. Because of that, the author's study examines stakeholders' views of teachers' standards and expectations towards their students.

Students' attitudes

Macbeath and Mortimore (2001) conducted recent research in Scotland, which shows that pupils enjoy expressing their views about the school. Students claim they do not participate in decision making processes, they like the school and usually believe their teachers try their best to help them.

Students' commitment to schooling is primarily shaped by parents but this parent involvement is an alterable variable, which can be influenced by school and teacher practices. The most important outcomes of a good school are not social levelling but rather student commitment to education and learning, resulting in later success as defined by the family and the student (Coleman, 1998). Teacher/student collaboration is vital to student commitment especially when the collaboration is supported by the home.

Goodlad (1984), on the basis of a large-scale study in U.S.A summarises the typical classroom thus: students are passive in a limited space, the teacher is dominant, most of the time it is either frontal teaching or evaluating students. Marx et al (1988) prefer a collaborative model of student-teacher relationship: teaching methods must require that students be active.

To Coleman (1998), for students, the notion of collaboration might include such things as accepting responsibility for their own learning, active participation in the classroom and positive relationships with teachers. Family attitudes to schooling, might strongly influence student attitudes towards accepting responsibility. To Coleman (1998) the most important variables in the U.S.A schools are a combination of home and school variables; how much each student values his/her school and how effective student/teacher collaboration is. The experience of the student with respect to collaboration with the teacher had an impact on student rating of school. To Coleman (1998), teachers' behaviour was dominant in shaping students' attitudes. Another aspect that influences students' attitudes towards their school is their belief in school's worth. In the Hammersmith and Fulham British project, "*Schools Make a Difference*" (Myers, 1995) a guiding principle was that students need to believe that schooling can be worthwhile and relevant in order to hold positive attitudes towards the school.

An Israeli study by Dahan (1995) examined emotional and cognitive attitudes of junior high students concerning the preparation of homework. The study reveals that Israeli students have a medium or beneath agreement for the functional value of the homework as assisting to understand the material studied and to succeed. Further, there is difference

between boys and girls. The girls think that the homework help to understand the material whereas the boys think it helps them to succeed in examinations.

Students' attitudes towards their principal

According to an Australian study (Dempster and Logan, 1998), students appear to expect leadership responsibilities to be shared across the school and have a strong interest in student leadership. Of their principals they expect friendly contact, to be caring about their students, to be responsible for their safety and to maintain discipline. Students are concerned about issues of equity, particularly the perception of unfair treatment and bias in the selection of students for leadership positions.

Students' responsibility

Acceptance of responsibility by students helps to account for student engagement with school and for student achievement (Finn, 1989). Family attitudes to schooling, and particularly the extent to which the family values schools and schooling, might strongly influence student attitudes towards accepting responsibility. Students' relationships with teachers are often shaped by parents' attitudes. Actually, student responsibility will be shaped by teachers and parents, but neither influence will be independent.

As found in Coleman's (1998) research, the development of student responsibility is influenced by the attitudes and practices of them, their parents and teachers.

Students' perspectives of good teachers

Relationships between students and teachers, mediated through families, contribute to positive student perception of the school. The Americans Erickson and Shultz (1992) suggest that there must be a genuine conversation between pupils and teachers. To Coleman (1998), students perceive the good teacher as one who has technical skills together with good personal relationships with students. Many teachers are technically qualified but only few of them have very good relationships with their students. The main characteristics of good relationship include respect to students, chance to participate in class, fair treatment of students and caring about how well each student does in class. Another finding shows that student attitudes to teachers are clustered by classroom, so that many of the students in the class share perceptions. To students, only a few teachers were found to be very good - they were excellent practitioners who combine technical skills with caring about students. The preferred teachers listen to students, know student needs, empathise with students, are

serious about teaching, have high expectations and help students individually. In successful classrooms teachers have consistent positive impacts upon many students and their parents. These teachers shape both home-based and school-based attitudes (Coleman, 1998). This view is supported by Israeli research. Goldberg (1994) reveals that secondary school students perceive the good teacher as one who is supportive and teaches in an interesting and understood way. Again, to students' views, an effective teacher should combine collaborative style with technical skills.

Linkage to the six-year high school study

This section stresses that according to the literature, the collaboration between teachers and students is very important and good teachers should combine professional qualifications with so good relationships. In students' view, only few teachers were found to be such good. Because students are very important customers of the school, their attitudes towards their teachers are also important. Therefore, the proposed research is intended to examine stakeholders' attitudes towards teachers' characteristics: on one hand, technical skills (knowledge, instructional ability, monitoring and evaluation) and on the other hand, caring about students (communication, personality, collaboration). Further, students' attitudes towards the school principal stress the importance of sharing leadership, keeping in touch with the students, maintaining discipline and good treatment towards students. Therefore, the proposed research deals with issues such as principal's accessibility, common management, personal relationships of the principal and his/her ability to deal with discipline. Other aspects of school discipline are discussed later on (p. 69).

Parents' attitudes and perspectives

Parents have a great influence on their children's motivation to study and their chances to succeed in studying. Therefore, parents' attitudes and perspectives towards school and schooling are very important. The parents have a task as mediators - if they think school is important they will find a way to explain their children why school is important and how to succeed. Parents have the task to shape the children's attitudes and responses to school environment that will help them to understand the school.

To Macbeath and Mortimore (2001), parents look upon communication, pupils' work and learning, teacher/student relationships and student's experience at school as important variables having an impact on school effectiveness.

To Epstein (1985), parents are most concerned about certain aspects of teacher work. They consider the good teacher to be one who collaborates with them; this has a positive effect on the parents' perception of the teacher and consequently of school quality. Parental involvement is critical to school quality and that involvement depends on teacher willingness to collaborate (Coleman, 1998).

The characteristics of parents' rating of school are as follows:

- Teacher concern about parent involvement.
- Student/teacher communication.
- Parental efficacy.
- Teacher/parent communication.
- High standards and expectations determined by teachers towards students.
- Individual attention given to students at class.
- Respectful treatment towards students.
- Prevention of negative classroom consequences arising from parents' complaints.
- Prevention of discipline problems in class – such problems may cause difficulties for studying.
- Perception of student/parent communication.

(Coleman, 1998).

To Coleman (1998), parents' experience with a particular teacher affects various attitudes towards school; these are those, which reflect most directly teacher practices of communication with the home. Concerning the school principal, parents have different perspectives in comparison to the students. They expect him/her to treat the students as individuals, to settle students' disputes, to be a role model for students and to know the students personally.

Israeli research by Smilansky et al (1986) shows that most Israeli parents look upon their children's success at school as very important. The child's status at home is determined mostly by the success at school.

Harpaz et al (1985) report that Israeli parents who are dissatisfied with their children's achievements tended to define their relationship with them as worse relatively to those who are satisfied. This finding indicates that low achievements at school may be a reason for bad relations between parents and children.

Israeli parents think that education is of crucial importance in the Israeli society. They look upon school as one of the main factors for making economical progress and improving children's social status (Smilansky et al, 1986). Many Israeli parents look upon school as a symbol of authority. The great power associated with knowledge and professionalism cause parents to feel helpless in their relations with the school. A child's success gives parents feeling of security because the child is likely to grow up and succeed. On the other hand, failure in studies is associated with great fear of their future potential integration in society.

Stern (1981) found out that, in Israel, disadvantaged children and their parents expect that the teacher would be involved in their life more than did wealthy parents and their children. They expect that teachers' involvement would be directed not only for pure learning but also for mentoring students and solving general problems.

To Smilansky et al (1986), Israeli parents think that their involvement is important, including giving their children help at home, encouraging them and talking with them about what happens at school. On one hand, parents have emotional involvement in their children's success at school, but on the other hand, some of them have limited ability to respond to the requirements of the school system. This situation often causes the meetings between parents and school staff to be problematic. The problems, as seen by Israeli parents, are divided into five main aspects:

1. Many parents think that school has too many financial requirements.
2. School asks direct help from parents and it disturbs them.
3. School dictates the family's life sequence at home (checking homework, giving punishments because of studying problems and so on).
4. School expects parents to help their children in learning.
5. The meeting between school and parents is focused mainly on students' failures (Noy, 1984). Therefore, it also causes parents to focus mainly on children's failures, it does not contribute to children's advancement, it enlarges parents' fears and adds tension to their relationships with their children.

Friedman and Brandes (1990) proclaim that Israeli parents' expectations of the school are focused on learning and getting values. To Shvartsvald (1979), there is a linkage between parental involvement and their satisfaction. Their participation in what is done at school with the activating of educational prestigious programmes may increase parents' satisfaction with the school.

To sum-up, because parents might have great influence on their children, it is very important to study their attitudes towards the effective school and the way they rate the school. According to the literature they are concerned about teachers' collaboration and communication with them and with their children, teachers' high standards and expectations and parental involvement. The author's study examines stakeholders' attitudes towards parents' collaboration with the six-year high school and their attitudes towards high standards and expectations.

Leaders' attitudes

Principals' attitudes towards their task were examined by a multinational (Denmark, England and Scotland) research (Reeves et al, 1998). Principals perceived the following qualities as most important:

- Resolving conflicts.
- Establishing expectations.
- Upholding standards.
- Being accessible.
- Having vision.
- Courage and the ability to confront difficult issues.
- Helping people to develop professionally and personally.
- Evaluation and making judgements.
- Being able to handle/manage people well.
- Being knowledgeable (what's going on out of school).
- Being able to delegate.
- Using resources to achieve objectives.

(pp. 33-34).

This study shows that the effectiveness of the school leader needs to be defined not only in terms of the qualities of the individual. It should be but in terms of their fitness to a context which itself is subject to continuities as well as change and development both from forces 'within' and in the wider school's environment (Reeves et al, 1998).

According to Riley (1998, p. 122), the effective school leader is characterised as follows:

- Has a good education and can solve problems.
- Is experienced as a teacher.

- Is able to understand children and to treat them equally.
- Takes care after the physical environment.
- Takes responsibility and does not blame others.
- Provides a good example.
- Is not racist.
- Keeps in touch with the local community.

Research in Israel by Smilansky et al (1986) suggests three main characteristics of effective leadership, according to principals' views, concerning relations between school and home:

- The principal is responsible for creating teamwork at school.
- Directing students to self-responsibility and autonomy.
- Giving parents training so they can assist their children.

The literature concerning leaders' attitudes helped the author to examine stakeholders' attitudes towards the following characteristics:

- Principal's vision and way of thinking.
- Principal's ability to control, acquire and manage resources and budgets.
- Principal's ability to deal with difficult situations.
- Principal's accessibility.
- Teamwork at school.
- Principal's collaboration with other stakeholders.
- School's physical environment.

Teachers' and principals' misconceptions on regarding students and parents

Following the last discussion focusing on stakeholders' attitudes towards effective schools, it is worth introducing another attitudinal aspect, namely, misconceptions which teachers and principals have concerning students and parents.

Coleman (1998) describes four myths relating to teachers' and principals' attitudes towards parents and students, existing in many countries:

1. ***Some parents (and their children) do not care about school:*** This attitude is held by educators in U.S.A, U.K and Canada and its immediate consequences might be low expectations for student achievements and for parental involvement. A strong

conclusion from Coleman's (1998) work is that **all parents care**. In the U.K, amongst ethnic minorities, parents are aware of the linkage between education and future success employment (Tomlinson, 1989). Because all parents care, **all students care**. In the U.K *"behind the public mask of nonchalance that some pupils wear to hide their anxiety about the future is a concern to succeed and some realisation of the consequences of not making the grade"* (Rudduck et al, 1996, p. 3). According to Coleman (1998), whilst students cared about school, **school did not care about them**.

2. ***Some parents cannot help their children to be successful in school:*** In the U.K the importance of parental attitudes was demonstrated long ago - an investigation for the Plowden Committee (1967) *"showed conclusively that it was not material home circumstances but parental attitudes which accounted for the greatest amount of variance in pupil achievement"* (Solomon, 1994, p.565).
3. ***Parents are involved and influential in schools at present:*** There are schools where teachers have barred parents from school. In the U.K, Vincent and Tomlinson (1997, p. 366) argue that *"there are few opportunities for collective parental participation at any level of the education system"*. The evidence gained by Coleman (1998) strongly resembles the European norm for relations between parents and schools. The universal perception of 'distancing' is matched by universal desire for a more productive relationship between home and school.
4. ***Parental involvement is a way for parents to control schools:*** There are scholars who believe that the only way to change schools is to bring parents into positions of control. In the U.K, parent governors rely heavily upon educational professionals, notably heads. Filling parent-governor positions is difficult for schools (Macbeth, 1989). British parents are primarily focused upon the quality of relationships in the school, and the general climate, rather than on control issues (Hughes et al, 1994).

The last discussion stresses the necessity to examine teachers' and principal's perceptions towards Israeli parents and students. Negative attitudes may hypothetically be regarded as a reason for decreasing Israeli six-year high schools' effectiveness. The next section deals with parental involvement and its linkage to school effectiveness.

Parental involvement

Introduction

The literature stresses the great importance of parental involvement to school effectiveness. This section describes the research of parental involvement and its advantage to school stressing its dependence on teachers' and principals' attitudes. If the school invites the parents to participate, there is a greater chance that they will be involved. Therefore, in order to answer the key research questions, the author's study examines stakeholders' attitudes towards parental involvement. The intention is to find out if there is effective parental involvement or on the contrary, there is school's objection or low parents' motivation. Studying these aspects might help to map difficulties in fulfilling real parental involvement and suggest changes for improvement if required.

The next subsections address the following themes:

- The importance of parental involvement for school effectiveness.
- Parental involvement in Israel.

The importance of parental involvement for school effectiveness

The partnership construct is based on the premise that collaborating partners have some common basis for action and a sense of mutuality that supports their joint ventures. That can be done by engaging in joint learning activities, supporting each other in their respective roles, carrying out classroom and school improvement activities, conducting collaborative curriculum projects in the classroom, participating together in various decision-making activities and being advocates for children (Swick, 1991). Integral to these activities are the various parent and teacher roles and behaviours that make for successful partnerships.

There are findings, which suggest that, when parents sense an inviting school climate, they emphasise nurturing and supporting behaviours in their interactions with teachers; their participation in the school environment also increases (Comer and Haynes, 1991). Together, parents and teachers can foster their partnership through such behaviours as collaborating, planning, communicating and evaluating (Epstein and Dauber, 1991; Swick, 1991).

Another aspect of parental involvement relates to an action-oriented philosophy of family-school support and nurturing which is a powerful force in creating a positive learning environment. Teacher actions that promote such a philosophy include the sensitive involvement of parents from cultural, ethnic, and racial backgrounds (Lightfoot, 1978). It has

been noted that parents, when given the opportunity, are quite active in setting programme goals (Powell, 1989). Swick (1992) notes that the availability of teachers and the offering of such services as transportation and childcare to parents increase participation in programme planning significantly.

A plethora of strategies have proved effective in promoting strong partnerships. Home visits, conferences, parent centres, telecommunication, involvement in the classroom, participatory decision-making, parent and adult education programmes, home learning activities, and family-school networking are some of the many strategies that have effectively engaged parents and teachers in supportive and collaborative roles (Swick, 1991). Creative uses of technology offer new possibilities for building partnerships with parents that reach beyond traditional limits (Bauch, 1990).

Parents have great influence upon instructional relationships that impact directly on student commitment to and success in school. Epstein (1987) summarises this aspect as follows:

"The evidence is clear that parental encouragement, activities and interest at home and participation in schools and classrooms affect children's achievements, attitudes, and aspirations, even after student ability and family socioeconomic status are taken into account" (p. 120).

The great advantage of parental involvement is obvious but nevertheless there might be teachers' resistance towards collaboration with parents because of teachers' desire to work alone, teachers' feeling of threat or unawareness why parents are educationally central to their work (Coleman, 1998).

Macbeth (1989) argues that there are some signs that proclamations of parent-teacher partnership are difficult to implement. Parental involvement in the U.K cannot be done professionally unless it initiates a definite minimum programme. Macbeth's (1989) accepts a philosophy that parents, not schools, are primarily responsible for their child's education. Secondly, all the concepts are already operating somewhere to some degree. They are all practicable, and most are familiar to British teachers. Thirdly, the programme is a basic minimum, not a professional optimum. Fourthly, although an education authority may wish to adopt such a programme, most of the actions can be introduced by an individual school without waiting for guidelines. Indeed, an individual teacher can adopt much of the programme as personal practice.

All researchers, practitioners and policymakers regard the parental/family dimension as a powerful 'alterable variable' (Wolfendale and Bastiani, 2000). Bloom (1979) first identified how the influence of the home is one of five 'alterable variables' which can enhance educational achievement. An alterable variable is one that is not fixed or static, can be altered or manipulated. To Wolfendale and Bastiani, (2000), the parental contribution to education come from dimensions such as:

- The formulation and transmission to children from adult carers of beliefs, values, and attitudes towards education.
- The 'home curriculum': what opportunities, activities and conversations take place at home.
- Parental engagement with school life, its routines, its learning opportunities, and the reciprocal extension of these into the home.

Each of these dimensions and their many constituent parts, as current reviews affirm (Dyson and Robson, 1999; Hallgarten, 1999) have been operationalised into practice in thousands of school settings, and exemplify the power of this one alterable variable. Alexander (1997) perceives families as being the foundation of education and family learning refers to the vast amount of learning that takes place in and around families. Therefore, the part that effective schools have to play should go beyond the older model of a community school to one wherein a school is part of partnership in learning.

As mentioned above, parents have a very important role in the educational process. Therefore, the proposed study intends to examine if Israeli teachers and principals support or object to parental involvement and why. It is of importance to know if they fully recognise the importance of parental involvement to school effectiveness. Furthermore, the study intends to examine how parental involvement takes place in six-year high schools and how it should be according to stakeholders' views. It is required to assess what kinds of involvement does exist and what should be: just technical issues such as finance and helping social events or rather real involvement as the literature details. A special focus was on teachers and principals who have great impact on parental involvement while creating inviting or uninviting school atmosphere.

Parental involvement in Israel

Parental involvement in Israel has become a social phenomenon. There are several reasons for that (Brandes, 1996; Friedman, 1989a; Goldberger, 1991):

- Increase in parents' level of education with the understanding of education's importance and their ability and necessity to improve defects in the educational system.
- Increased democratic processes in Israel. As long as the governmental system becomes less centralised, citizens want more influence and involvement.
- Parents' dissatisfaction of alienation between school and them.
- Reduction of state budget.
- Increase in the availability of public's time and money - people want to invest time in education.
- Financial involvement causes desire for increasing involvement in the curriculum.
- As Israeli society became more competitive and parents understood that education is a key factor for success, parental involvement increased and so did their willingness to influence the educational process.
- The relationship between parents and children has become more open.
- Students criticise school and demand parents' help.
- The increase of educational frameworks influenced students to get assistance from their parents in order to choose the right direction.

To Friedman and Brandes (1990), the increased involvement of Israeli parents at school is based on their right to influence their children's education, which in turn, is based on the principles of democracy. Parents' partnership realises their democratic right to do so and to experience democratic processes (Friedman and Brandes, 1990). Following the Israeli findings, the author's study is about to examine parents' attitudes towards their involvement in six-year high schools and to compare it to teachers' and principals' attitudes.

Goldring (1988) found three possible strategies to form the basis of relationships between schools and parents in Israel:

- **Cooperational partnership** - efficient especially for achieving a single goal.
- **Co-option** – adopting parents to school and formalising the connection between them and the school.

- Socialisation - an attempt to shift parents' attitudes to those of school and to cause them to be identified with them.
- Barring - an attempt to reduce as much as possible the relationship between parents and the school.

Parental partnership in Israeli schools is dependent on their participation in all stages of educational processes (Hituv, 1989).

Noy (1992) proclaims some general principles for the cooperation process between school and parents:

- The principal should involve parents as an integrated part of schools' goal fulfilment.
- An ability to contribute - between parents and teachers there should be bilateral relationships in which each side believes in the other.
- Significance - each activity being done by teachers and parents should be significant to all partners.
- Mutuality - during the cooperation process there should be mutuality so that the side that contributes also gains and vice-versa.
- Sharing responsibility.
- Keeping the autonomy of the teacher, the family and the student.

At the beginning of the eighties, new kinds of schools were established in Israel - community schools. The main goal of these schools was to formalise the relationships between school, parents and community. The principles mentioned above guide the Israeli administration of community education to have cooperative processes in the community schools in Israel.

There are four categories of parental involvement in Israeli schools (Friedman, 1990; Hituv, 1989; Noy, 1984; Shapira, 1988; Stein and Harpaz, 1995):

- Passive involvement: the parent is exposed by school to information about student's advancement but he/she is passive. This kind of parental involvement is the most common in most schools.
- Giving and obtaining of services: Parents should be much more active, they give school services voluntarily or according to teachers' requests. These activities are not an essential part of the educational process.

- Active involvement in the educational process: the parent should have a special skill such as the ability and knowledge to run social activities.
- Involvement in policy making: This is the highest level of parental involvement in determining institutional policy and participation in defining goals and targets. This area of involvement is the most problematic and often parents want to do much more than the school can accept.

The main factors that determine the position of parents within these categories are school policy and educational goals, amount of parents' activity and school activity (Friedman, 1990; Shapira, 1988; Stein and Harpaz, 1995).

Israeli studies show that another factor determining the rate of parental involvement is the principal's attitude towards parental involvement (Barak, 1996; Gibton and Zilberstein, 1989; Marian, 1991; Minervi, 1996). In Israel there is awareness and openness towards parental involvement at school and the Ministry of Education policy is to encourage parents to be active in policy making, determination of goals, contents and activating educational programmes - not only in giving technical and organisational assistance (Arnon and Harel, 1988; Friedman, 1990; Ministry Directive no. 17, 1996). However, in reality, there is still a disconnection between home and school and even in those schools having cooperation with parents, the partnership is ineffective. Sidkiyahu (1988) proclaims that parental involvement in Israeli schools is limited and there is no real partnership. To Friedman and Bar (1987), in most Israeli schools parents participate mainly in technical and financial issues. In relation to issues of curriculum and policy making, parents are not asked to be active or to express their opinion. Goldring (1989) examined principals' views and concluded that only a few Israeli school principals agree to run common activities with parents concerning decision making and policy making.

To Noy (1990), many parents avoid being involved and feel that their visits to school do not match their expectations and cause them to be disappointed.

Peres and Pasternak (1993) also found a low level of parental activity and although there is a tendency of schools to involve parents in decision making - usually the authority and initiation is kept in the staff's hands.

Minervi (1994) found that parental participation in developing programmes and curriculum is very rare. He also reports that Israeli principals do not enable parents to deal with the professional and educational area. However, Israeli researchers claim that there is an

increasing trend of parental involvement at schools during the last few years (Friedman, 1990; Goldberger, 1991; Stein and Harpaz, 1995).

There are different motives for parental involvement in Israeli schools. Hen (1997) argues that the main motive that influences parental involvement is the concern for their child and his/her advancement in studying. Another motive that influences parental involvement comes from themselves - the involvement may help parents to nurture and realise skills and personal tendencies (Hituv, 1989; Michalovitz, 1988; Noy, 1984). Shapira and Goldring (1990) divide the motives for parental involvement into three areas: The child's favour, the community's favour and the desire to contribute.

The proposed research examines stakeholders' attitudes relating to parental involvement. The staff's expectations towards parental involvement might have direct influence on it and therefore it is so important.

The next sections deal with additional characteristics of school effectiveness: school culture, discipline, teamwork, and students' motivation.

School culture and climate

Introduction

School culture and climate have an influence on the institution and that might influence stakeholders' norms of behaviour and the whole school effectiveness. Therefore, it is important to examine Israeli stakeholders' attitudes towards cultural aspects of the school and to examine the principals' influence on it and culture's influence on school's effectiveness. That might be helpful in order to achieve the aims and objectives of the proposed research intended to examine if there are gaps between stakeholders' expectations concerning school culture and reality. In order fulfil the aim of the study it is also essential to understand the linkage between school culture and principal's leadership and if the three schools examined are significantly different and why.

The next subsections address the following themes:

- The meaning of school culture.
- The importance of school culture and climate.
- The relationship between vision and cultural change.
- The principal's role.

- The principal and school culture.
- Generating a positive school culture.
- Social life at the school.

The meaning of school culture

The field of education lacks a clear and consistent definition of school culture. The term has been used synonymously with a variety of concepts, including "climate," "ethos," and "saga" (Deal, 1987). The concept of culture came to education from the corporate workplace with the notion that it would provide direction for a more efficient and stable learning environment. For the anthropologist Geertz (1973), culture represents a historically transmitted pattern of meaning. Those patterns of meaning are expressed both through symbols and in our taken-for-granted beliefs. A review of the literature on school culture reveals much of Geertz's perspective. Deal and Peterson (1990, p. 10) note that the definition of culture includes *"deep patterns of values, beliefs, and traditions that have been formed over the course of [the school's] history."* Heckman (1993, p. 20) states that school culture lies in *"the commonly held beliefs of teachers, students, and principals."* These definitions go beyond the business of creating an efficient learning environment. They focus more on the core values necessary to teach and influence young minds.

Successful leaders have learned to view their organisations' environment in a holistic way. This wide-angle view is what the concept of school culture offers principals and other leaders. It gives them a broader framework for understanding difficult problems and complex relationships within the school. By deepening their understanding of school culture, these leaders will be better equipped to shape the values, beliefs, and attitudes necessary to promote a stable and nurturing learning environment. School culture can be defined as the historically transmitted patterns of meaning that include the norms, values, beliefs, ceremonies, rituals, traditions, and myths understood, maybe in varying degrees, by members of the school community (Stolp and Smith 1994).

The importance of school culture and climate

Researchers have compiled some impressive evidence on school culture and climate. A study by Brookover et al (1978, 1979) was conducted in 68 elementary schools in Michigan. The study indicated that school climate factors could be powerful predictors of student achievement. Healthy and sound school cultures correlate strongly with increased student

achievement and motivation, and with teacher productivity and satisfaction. Fyans and Maehr (1990) looked at the effects of five dimensions of school culture: academic challenges, comparative achievement, recognition for achievement, school community and perception of school goals. In a survey of 16,310 students from 820 public schools in U.S.A Illinois, they found support for the proposition that students are more motivated to learn in schools with strong cultures.

An American study by Thacker and McInerney (1992) checked the influence of academic culture on improving student achievement. They focused on creating a new mission statement, goals based on outcomes for students, curriculum alignment corresponding with those goals, staff development, and building level decision-making. The number of students who failed an annual statewide test dropped by as much as 10 percent. These results are consistent with other findings that suggest the implementation of a clear mission statement, shared vision and schoolwide goals promote increased student achievement.

Israeli research stresses too the importance of school climate to its effectiveness. Yasur (1978) found a high correlation between school effectiveness and the organisational climate. This correlation is extremely high in schools in which the principal is task oriented. The organisational climate has dominant contribution for school effectiveness and staff's satisfaction even more than the principal's leadership style. The study reveals that schools having task oriented principals tend to be more effective and the teachers are more satisfied when there is positive organisational climate.

The last subsection stresses the linkage between school culture and climate and its effectiveness. There is also evidence correlating school culture with teachers' attitudes toward their work. In Hong-Kong, Cheng (1993) found that stronger school cultures had better-motivated teachers. In an environment with strong organisational ideology, shared participation, charismatic leadership and intimacy, teachers experienced higher satisfaction and increased productivity.

The relationship between vision and cultural change

A coherent vision specifies the particular values and beliefs that will guide policy and practice within the school. Ideally, the school board and superintendent set a broad vision for all schools in the district, and, within that context, the principal coordinates the process of arriving at a particular vision for each school. The creation of a vision is not a static event, because the vision must change as culture changes (Senge, 1990). The principal who is able

to adapt a vision to new challenges will be more successful in building strong school cultures.

A vision for creating a healthy school culture should be a collaborative activity among teachers, students, parents, and the principal. It is useful to create a shared vision that allows for collaborative school cultures (Fullan, 1992).

The principal's role

The most effective school's culture exists when principals, teachers, and students model the values and beliefs important to the institution. The actions of the principal are noticed and interpreted by others as 'what is important'. A principal who acts with care and concern for others is more likely to develop a school culture with similar values. Likewise, the principal who has little time for others places an implicit stamp of approval on selfish behaviours and attitudes.

Besides modelling, Deal and Peterson (1990) suggest that principals should work to develop shared visions - rooted in history, values, beliefs of what the school should be, hire compatible staff, face conflict rather than avoid it, and use story-telling to illustrate shared values. More practical advice comes from Jane Arkes, an American principal interviewed by Stolp and Smith (1994): the principals should have team-building, put their agenda second, know they do not have all the answers, learn from students and staff and put people before paper. Principals should also nurture the traditions and symbols that already express and reinforce positive school culture.

Generating positive school culture

Research shows effective schools as possessing a vision that is shared by staff. Hopkins et al (1994) note the importance of a sense of community that is related to cooperation and communication between staff. Many other studies suggest that agreement upon school goals is associated with effectiveness (Edmonds, 1979a, 1979b; Lightfoot, 1983; Rutter et al, 1979; Stoll and Fink, 1994).

Consistency in practice is also important, and Mortimore et al (1988) noted that where teachers adopt a consistent approach to school curriculum this was associated with a positive impact upon pupil progress. Rutter et al (1979) noted that consistency in the applications of rules and in disciplinary sanctions was present in more effective schools.

Collegiality and collaboration between staff are also important. The importance of 'ownership' of staff of the school is mentioned by many studies and reviews (Fullan, 1991;

Hopkins et al, 1994). To Teddlie and Reynolds (2000), the generation of a learning community amongst staff in which all members share good practice and engage in a process of mutual education, is clearly essential in the creation and continuation of a positive school culture over time.

Order within the school is also important in the creation of a positive climate. Without order, discipline and social control at school level it would be very difficult for staff to attain high levels of student attention and engagement within classrooms (Edmonds, 1979a; Lezotte, 1989).

Within the school also, a positive climate for pupils is essential. The Reynolds and Sullivan (1979) studies noted the generation of a hostile pupil culture through use of harsh punishments, overly strict control and a resulting tense and negative pupil attitude towards their teachers. Such findings have been extensively replicated (Mortimore et al, 1988; Rutter et al, 1979). To Teddlie and Reynolds (2000), rewarding good behaviour, achievement, effort and attributes is by contrast highly likely to be more productive.

Social life at the school

The existence of students' social life at the school might hypothetically have a certain impact on students' satisfaction so it may influence school's effectiveness. The school culture may or may not encourage social activities and it is relevant to examine Israeli stakeholders' attitudes towards this aspect too.

According to Stevenson and Nerison-Low (1995), conducted a research in U.S.A, Germany and Japan, school occupies a significant portion of the everyday lives of adolescents. For many, school is not only about classes, but is also the hub of an active life, it is where they meet friends and socialise, participate in sports, pursue personal interests through extracurricular activities, try out various social roles, and express themselves through their appearance and behaviour. After-school time fits into a complex schedule of social life, studying, jobs, and leisure activities. The centrality of school in the daily life of adolescents is greatest in Japan. German students, in contrast, are expected to be at school during specified hours of the day, but the relationship of school to a student's social life may be tenuous. For U.S. students, the time spent at school and the importance they assign to this time in their life varies greatly among schools and among individuals within the schools.

An Israeli study (Gvaram, 1996) examined the integration of social activity and the educational activity in primary schools. According to this study, teachers and students perceive social life at the school as influencing teaching and learning, norms of behaviour,

the interrelationships among the educational teams and the supportive social climate. Social activities influence the students to be more involved, caring and responsible. Teachers and students think that the school should encourage socialisation and the social activity should be combined with the regular teaching processes.

The next section deals with students' discipline, which is important for school effectiveness. Without reasonable discipline, no school can function efficiently and the school should keep this carefully.

School discipline

Introduction

The existence of school discipline is perceived by the literature to be a necessary and insufficient condition for school functioning and having no reasonable discipline may disturb studying.

The Israeli six-year high school might have hypothetically unique discipline problems especially concerning the young students in the junior high school who are in the same school with grown up students. Therefore it is important to examine stakeholders' attitudes towards school discipline. In order to achieve the study's aim and objectives it is essential to understand the reasons for discipline problems in the six-year system, to check existing differences between schools and the reasons for them. That might have helped to initiate a process for improvement.

The next subsections address the followings themes:

- The importance of school discipline.
- Parameters influencing discipline
- Increasing positive behaviour.
- Administrative leadership.

The importance of school discipline

According to Moles (1989), school discipline has to ensure the safety of staff and students and to create an environment conducive to learning.

Discipline problems affect negatively the learning environment. Disruptions interrupt lessons and disruptive students lose even more learning time. Duke (1989) claims that the goal of good behaviour is necessary, but insufficient to ensure academic growth. Effective

school discipline strategies seek to encourage responsible behaviour and to provide all students with a satisfying school experience as well as to discourage misconduct.

Parameters influencing discipline

The following school characteristics were associated with discipline problems:

- Rules were unclear or perceived as unfairly or inconsistently enforced: it is recommended periodically to restate the rules and to enforce them consistently. Consistency will be greater when fewer individuals are responsible for enforcement. Providing a hearing process for students and establishing an appeal process will also increase students' and parents' perceptions of fairness.
- Teachers and administrators did not know the rules or disagreed on the proper responses to student misconduct: teacher-administration cooperation should be improved and the administration should be active.
- Teachers tended to have punitive attitudes or on the other hand, to ignore misconduct: discipline policies should distinguish between categories of offences. Minor infractions may be treated flexibly, depending on the circumstances, while nonnegotiable consequences are set for serious offences. Actual criminal offences may be reported to the police as part of a cooperative anticrime effort.
- Schools were large or lacked adequate resources for teaching: that can be improved by creating smaller schools or dividing large ones into several schools within schools.

(Gaustad, 1992; Gottfredson, 1989a; Kenneth and Pawlas, 1989).

An Israeli research examined personal and curricular variables that might have an influence on school discipline (Ben-Yakov, 1995). The research compared two groups of students - disciplined and undisciplined (according to their mark in 'behaviour'). It points out a significant negative correlation between discipline breaches and the following variables: self-learning effectiveness, the need for achievement and exams' fear.

Increasing positive behaviour

Research has shown that social rewards such as smiling, praising, and complimenting are extremely effective in increasing desirable behaviour. Gottfredson (1989a) recommends that schools should increase academic success for low-achievers, although, this alone is not enough. Sometimes problematic behaviour occurs because students simply do not know how to act appropriately. Black and Downs (1992) urge administrators to regard disciplinary

referrals as opportunities to teach students valuable social skills that will promote success in future employment as well as in school.

Administrative leadership

Gaustad (1992) argues that the principal plays an important leadership role in establishing school discipline, both by effective administration and by personal example. Principals of well-disciplined students are usually highly visible models. They engage in what Duke (1989) describes as management by walking around, greeting students and teachers and informally monitoring possible problem areas. Effective principals are liked and respected, rather than feared, and communicate caring for students as well as willingness to impose punishment if necessary.

Duckworth (1984) found that teachers' satisfaction with school discipline policy was related to their relationship with the principal. Good communication and shared values are important elements in this relationship. Ideally, a principal should be able to create consensus among staff on rules and their enforcement. In practice, some principals create consensus by recruiting like-minded staff over the course of years, or by arranging transfers for teachers whose views don't fit in with goals and plans for their school (Duckworth, 1984).

Gottfredson (1989b) concluded that stable and supportive administrative leadership was the factor determining whether a discipline programme was effective. Schools that successfully implemented a pilot programme experienced distinct improvements in discipline.

The Israeli six-year high school might have hypothetically unique discipline problems especially concerning the young students in the junior high school who are in the same school with grown up students. Therefore it is important to examine stakeholders' attitudes towards school discipline.

The next section deals with collaborative teamwork at schools, which has an influence on school's effectiveness. It might be especially important for six-year high schools effectiveness because there is a unique importance to the cooperation between the junior high and the secondary school teachers.

Collaborative teamwork at schools

Introduction

Collaborative teamwork is an important characteristic of schools in general but its importance may be even greater for the Israeli six-year high school. Because this institution is actually a combination of two schools it is hypothetically important to have six-year continuity, which is dependent on effective teamwork and collaboration among the staff. That might help to examine the study's aim intended to find existing gaps between expectations and reality. If such gaps do exist it is important to examine their size, differences and similarities between schools and the reasons for them. In such a way it is likely to find solutions intended to improve the six-year continuity, which is based on effective and collaborative teamwork.

The next subsections address the following themes:

- The importance of teamwork
- Characteristics of collaborative teamwork at school.
- Collaborative teamwork and the principal's role.
- The role of school districts

The importance of teamwork

To Oswald (1996), teams are said to build stronger relationships among those involved in education and, ultimately, to benefit students because more people with broader perspectives help to shape a stronger educational programme.

Schools having collaborative teamwork encourage teachers to cooperate with one another and with administrators on school improvement. The primary goal is to achieve effective teaching and learning. Other objectives are that teachers will be accorded respect as professionals and that staff harmony will increase (Scott and Smith, 1987).

Characteristics of collaborative teamwork at school

Collaborative teamwork exists while administrators and teachers routinely work together to promote effective teaching and learning. It includes the following characteristics:

1. Teachers engage in frequent, continuous, and increasingly concrete and precise talk about teaching practices.
2. Teachers are frequently observed and provided with useful critiques of their teaching.

3. Teachers plan, design, research, evaluate, and prepare teaching materials together.
4. Teachers teach each other the practice of teaching.

(Little, 1982).

Collaborative teamwork and the principal's role

In most professions, practitioners work together for their mutual benefit. In contrast, many teachers work in isolation, neither helping nor being helped by their colleagues (Goodlad, 1984). Given these circumstances, it is not surprising that educational leaders are calling for closer professional interaction among teachers and between teachers and administrators.

Principals can promote collaboration by such simple expedients as involving school members in setting the agenda for school's meetings, giving institution's committees a meaningful role in matters of curriculum and instruction. They can also help teachers to coordinate their schedules so that they have time to observe each other and provide feedback on their observations.

Although formal structures and strategies can facilitate collaboration, collaboration ultimately depends on the development of norms of cooperation among the school's personnel. In this area the principal can lead by example. When teachers see the principal actively seeking their help and helping them to improve in their profession, they are likely to work with one another to improve their teaching (Scott and Smith, 1987).

Because the principal plays such a crucial role in promoting norms of collaborative teamwork, he or she must actually exercise stronger leadership than would be necessary where norms of isolation prevail. Principals in collaborative schools are more actively involved in observing and evaluating teachers and in working with teachers on curriculum and scheduling than are principals in schools where teachers traditionally are isolated in their classrooms (Scott and Smith, 1987).

The Israelis Peshier and Ish-Shalom (1989) suggest a new way intended to improve the effectiveness of management teams. Instead of having an authoritarian way dictating procedures and regulations they prefer to have a collaborative democrat way. This suggestion is based on decentralisation of authority, participation of more role-holders in decision making process and rotation in the management teams.

The role of school districts

School boards and district administrators can encourage collaboration by providing individual schools with the resources in time and finance needed for collaborative activities.

For example, in the U.S.A, there are schools pay for replacement teachers so that teachers in the system can take several weeks away from their classroom activities to improve their teaching skills in a collegial setting. This kind of activity takes place in specific teaching centres (Davis, 1986).

However, district officials cannot expect to successfully impose collaborative teamwork on a school. By its very nature, collaborative teamwork is a school-site reform that depends for its success on the willing participation of personnel within the school. It is likely to work only when the principal and a significant number of teachers at a school become convinced that it will actually lead to improved teaching and learning (Scott and Smith, 1987).

The Israeli six-year high school is based on a combination of a junior high school and a secondary school. According to the literature, effective teamwork is important and its importance might be even greater for a six-year high school because of the need to have effective cooperation between the staff of these two schools. Therefore it is extremely important to examine stakeholders' attitudes towards six-year high school's teamwork.

The next section deals with motivation, which has an extraordinary influence on school's effectiveness. Students' motivation, which might be influenced by other stakeholders' motivation, is important because it has an influence on students' achievements.

Motivation

Introduction

This section deals with one of the most important characteristics of effective schools: motivation and factors influencing it. The author's study examined stakeholders' attitudes towards students' motivation and studied the reasons for low motivation. In order to answer the study's key research questions, it is very important to examine existing gaps between desire and reality and to see if different stakeholders and schools have significant different gaps. Because motivation is so essential to school's effectiveness, it is very important to fully understand the reasons for low motivation and all the parameters influencing it. It is well known by the literature that staff's expectations have an influence on students' motivation and therefore it is so important to examine stakeholders' attitudes towards it.

The next subsections address the following themes:

- Principals' motivation.
- Motivation and school culture.

- Culture and climate in academically effective schools.
- The effect of school leadership on motivation and achievements.
- School's organisational culture and motivation.
- Grade/age and motivation.
- The importance of implicit motivation.
- School restructuring and motivation - American research.
- Motivation in response to situations.

Principals' motivation

To Renchler (1992), faced with the complexity of the subject and the difficulty of knowing how to generate higher levels of motivation among students in their schools, principals and other educational administrators might be forgiven if they feel daunted at the prospect of tackling this particular educational problem. Actually, it is perhaps fittingly ironic that principals should feel discouraged, which is precisely the way students might feel when their teachers ask them to summon up their motivation and improve their academic performance. Perhaps the most obvious place for principals to begin addressing the problem of inadequate student motivation is to examine the role of motivation in their own lives.

Students face many of the same difficulties, real or perceived, that principals face. If school leaders are equipped with the wisdom that comes from humility, sensitivity, and a constant reflection on the way that motivation functions in their own lives, it will probably be much easier for them to find ways to motivate their students. An atmosphere or environment that nurtures the motivation to learn can be cultivated in the home, in the classroom, or, at a broader level, throughout an entire school. Much of the research on educational motivation has rightly centred on the classroom, where the majority of learning takes place and where students are most likely to acquire a strong motivation to gain new knowledge (Ames, 1987; Brophy, 1987; Grossnickle, 1989; Wlodkowski and Jaynes, 1990).

Motivation and school culture

Achieving the goal of making the individual classroom a place that naturally motivates students to learn is much easier if students and teachers function in a school culture where academic success and the motivation to learn is expected, respected, and rewarded. An atmosphere where students learn to love learning for learning's sake, especially insofar as it

evolves into academic achievement, is a chief characteristic of an effective school (Renchler, 1992).

Over time, a school leader can, in conjunction with other stakeholders in the school, change its culture by discarding old values and beliefs, establishing new ones, or modifying elements that need to be changed (Maehr and Fyans, 1989). Thus, a principal interested in establishing the motivation to learn and academic achievement as central features of a school's culture must first persuade everyone - students, teachers, parents, staff, and school board - that goals related to those areas are desirable, achievable and sustainable. School leaders have a number of channels through which they can shape a school's culture or climate. Good communication is central to achieving goals successfully, but actions must demonstrate what the words convey (Deal, 1987).

The culture can be embodied and transformed, through such channels as the school's shared values, heroes and rituals. If motivation and academic achievement are to be a definitive part of a school's culture, they must be communicated and celebrated in as many forums as possible (Renchler, 1992).

In the USA, Davis (1989) cites several studies that indicate that school leaders can communicate their goals by using a wide variety of concrete and symbolic tools. An extremely important component of the climate of the effective school is the presence of visible symbols, which illustrate and confirm what is considered to be important in the school. School newsletters, statements of goals, behaviour codes, rituals, symbols, and legends are all part of the culture of the organisation and convey messages of what the school really values. Johnston (1987) echoes this point when he says that values are the bedrock of any institution. They articulate the essence of the organisation's philosophy about how it goes about achieving success. He points out that a school's values are communicated through familiar means. In most schools, the principal cannot over-see the motivational needs of each student. Nevertheless, groups of people can be affected by the culture in which they participate, and this domain is under the control of the principal.

Culture and climate in academically effective schools

Effective schools have a culture characterised by a well-defined set of goals that all members of the school value and promote. If a principal can establish and clearly communicate goals that define the expectations of the school regarding to academic achievement, and influence teachers and students to support those goals, then the motivation to achieve the goals is likely to follow (Johnston, 1987).

Most reviews of the effective school literature point to the consensus that school culture and climate are central to academic success (Mackenzie, 1983). Typical of the findings in U.S.A is the review of Purvey and Smith (1983), who found correlation between positive school culture and academic quality.

The effect of school leadership on motivation and achievements

The work of Leithwood and Montgomery (1984) is especially helpful in understanding the relationship of motivation to effective leadership and school goals because it addresses the principal's motivation to become a more effective leader as well as the student's motivation to learn. One of the chief characteristics of highly effective principals is the ability to transfer their own desire and motivation to achieve valued goals to other participants in the educational process:

"Highly effective principals appear to understand that school improvement goals will only direct the actions of staff, students and others to the extent that these people also adopt them as their own. Increases in principal effectiveness can be explained as increases in opportunities, provided by the principal, for all relevant others to agree upon and internalise approximately the same set of school improvement goals".

(p. 31).

To Leithwood and Montgomery (1984), as principals become more effective, they come to understand that people will not be motivated unless they believe in the value of acting to achieve a particular goal. Motivation on the part of the principal translates into motivation among students and staff through the functioning of goals: *"Personally valued goals are a central element in the principal's motivational structure— a stimulus for action"* (p. 24).

In a related study, Klug (1989) claims that school leaders can have both direct and indirect impact on the level of motivation and achievement within two of the three areas shown in figure 2.1:

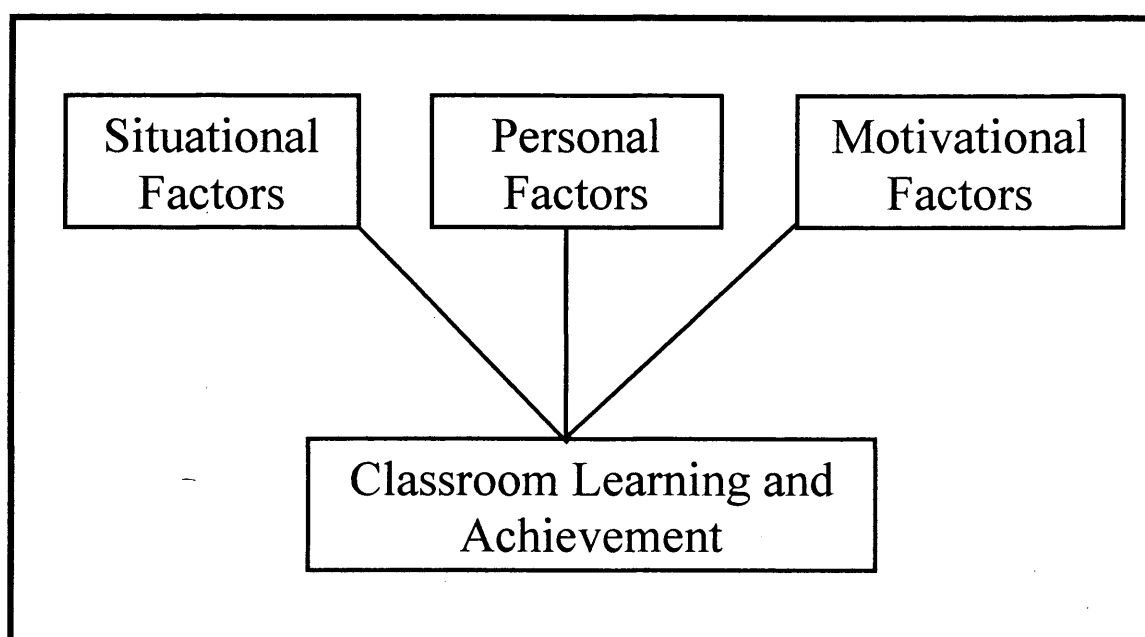


Figure 2.1: A conceptual model for understanding classroom learning achievement

Although the personal factors, differences in ability levels and personalities of individual students, usually fall outside a school leader's domain of influence, the other two categories, situational factors and motivational factors, are to some degree within a school leader's power to control.

Klug's (1989) summary of the model describes how these two areas can be a source of influence:

"School leaders enter the achievement equation both directly and indirectly. By exercising certain behaviours that facilitate learning, they directly control situational (S) factors in which learning occurs. By shaping the school's instructional climate, thereby influencing the attitudes of teachers, students, parents, and the community at large toward education, they increase both student and teacher motivation and indirectly impact learning gains" (p. 253).

There are many strategies school leaders can use to reward motivation and promote academic achievement. For example, Huddle (1984) cites a study in which principals in effective schools used a variety of methods to publicise the school goals and achievements in the area of academic work.

The next subsection discusses the relationship between organisational culture and motivation.

School's organisational culture and motivation

Maehr and Braskamp (1986) claim that there is a relationship between organisational culture and personal investment. Maehr (1990) has turned his attention to the relationship between motivation and the organisational culture of schools. His work centres on the “psychological environment” of the school. School administrators, are in the best position to shape a school's psychological environment. Drawing parallels between the school environment and the classroom environment, Maehr (1990) points to the similarities between teachers' and principals' leadership roles, as shown in figure 2.2:

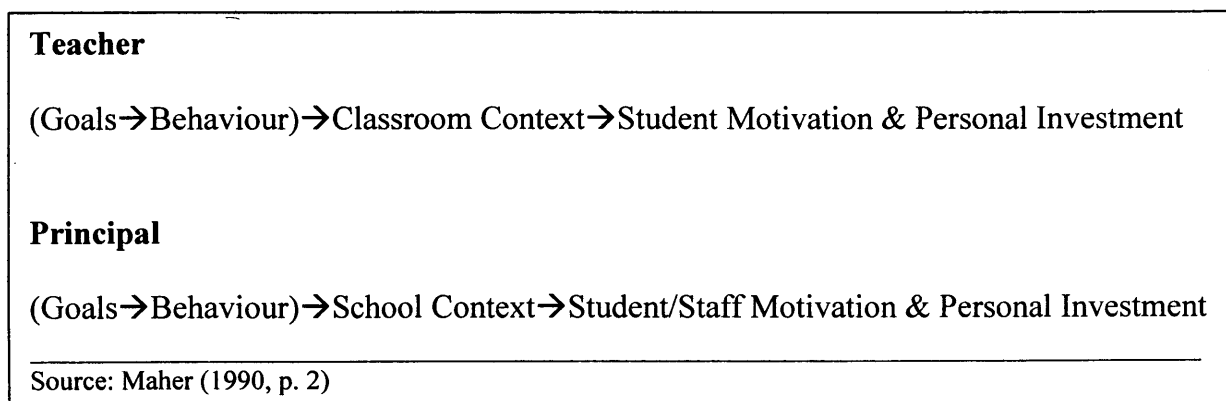


Figure 2.2: Parallel leadership roles extant in schools

The dimensions Maehr (1990) includes in his model of the psychological environment of the school include:

- **Accomplishment** - excellence and pursuit of academic challenges.
- **Power** - interpersonal competition, social comparison, achievement.
- **Recognition** - social recognition for achievement and the importance of school for attaining future goals and rewards.
- **Affiliation** - perceived sense of community, good interpersonal relations among teachers and students.
- **Strength/Saliency** - the perception that the school knows what it is about and that students know what is expected.

Maehr (1990) describes how the school's psychological environment shapes a student's motivation:

"Motivation can be characterised by a student's personal investment in a given task. The magnitude of motivation is influenced by the psychological environment of a school, that is, by the meaning given to the overall education experience" (p. 2).

To test the effectiveness of his model, Maehr (1990) conducted an analysis of a data set collected from more than 16,000 students in 800 public schools in Illinois. He concluded that goals stressing motivation and achievement did have an impact, and that school leadership qualities did have an influence on school's psychological environment.

The next subsection addresses the relationship between students' motivation and grade/age and the environment that the school should provide in order to increase motivation.

Grade/age and motivation

It is generally recognised that motivation and academic achievement among younger children are contingent to some degree on grade-and age-related factors. American research on the relationship between a student's age and his/her achievement, beliefs and motivational orientation indicates that children's confidence in their achievement generally declines as they grow older (Stipek 1984). This decline is most pronounced at the age of about 6 and again at age 12 or 13. In the U.S.A, Eccles et al (1984) have sought to measure the impact of school environment on these changes. Although the results of their studies were confounded by age-related changes among their student subjects, they reported "*a causal link between grade-related changes in educational environments and age-related student attitudes*" (Eccles et al, 1984, p. 321).

Their suggestions for managing these changes include some criticism of current school environment practices:

"One would hope that with increasing grade level, students would assume greater autonomy and control over their lives and learning... Unfortunately there is evidence that just the opposite is true. As students proceed through the grades, the classroom is characterised by a decrease in student autonomy and an increase in processes which enhance ego involvement at the expense of task involvement" (Eccles et al, 1984, p. 322).

Similar criticism is introduced by Raffini (1988) basing his arguments on Covington's (1983) construct of the self-worth motive. Raffini (1988) argues that students caught up in a system that dooms them to failure, channel their motivation into behaviours that cover up that failure and thus protect their sense of self-worth.

Raffini (1988, p. 27) proposes a four-fold approach that would remove motivational barriers and help students redirect their behaviours away from failure-avoiding activities toward academic applications:

- Individual goal-setting structures allow students to define their own criteria for success.
- Outcome-based instruction and evaluation make it possible for slower students to experience success without having to compete with faster students.
- Attribution retraining can help apathetic students view failure as a lack of effort rather than a lack of ability.
- Cooperative learning activities help students realise that personal effort can contribute to group as well as individual goals.

The next subsection deals with additional perspectives helping to improve students' motivation to study.

The importance of implicit motivation

Stipek (1988) makes a strong case for strengthening the degree of intrinsic motivation students feel for learning. She identifies four perspectives from which intrinsic motivation can be viewed: competency motivation, curiosity, autonomy, and internalised motivation. Competency motivation assumes "*that individuals engage in tasks, in part, for the purpose of developing competence and experiencing the positive feeling of efficacy associated with successful mastery attempts*" (p. 43). The second perspective, curiosity, assumes "*that individuals are innately curious about novel events and activities that are somewhat discrepant with their expectations*" (p. 39). Autonomy involves the idea that humans have "*a natural need to feel self-determining. They want to believe that they are engaging in activities by their own wish— because they want to— rather than to achieve some external reward or to avoid punishment*" (p. 44). Internalised motivation "*assumes that some children engage in tasks in the absence of external reinforcement because they learn to value academic work*" (p. 39).

Stipek (1988) describes some techniques that promote intrinsic motivation but suggests that they are rarely found in today's classrooms or schools:

"Students are intrinsically motivated to work when the threat of negative external evaluation is not salient and when their attention is not focused on extrinsic reasons for completing tasks. They will also feel more competent and proud, and thus more intrinsically interested in tasks, when they can take responsibility for their success. Allowing some student choice enhances intrinsic interest in school tasks, and it teaches self-management skills that are essential for success in higher grades and the workplace. It is impossible for children to develop autonomy and a sense of responsibility if they are always told what to do, and how, and when to do it" (p. 73).

Stipek (1988) recommends challenging but fair task assignments, the use of positive classroom language, mastery-based evaluation systems, and cooperative learning structures to foster intrinsic motivation toward academic learning. Another voice in matters related to student motivation belongs to Glasser (1990), who theorises that all motivation springs from an individual's desire to fulfil one of five basic needs: survival, love, power, fun, and freedom. Glasser (1990) condemns what he calls "*boss management*" in educational systems, which are behaviours that assume that students can be coerced into becoming motivated. Glasser (1990) argues in favour of "*lead management*", which involves empowering students to be responsible for their own needs and accomplishments and teaching them in cooperative groups.

School restructuring and motivation - American research

The term 'restructuring' goes with the term school effectiveness. It is defined by Sashkin and Egermeier (1992) as follows:

"Restructuring involves changes in roles, rules and relationships between and among students and teachers, teachers and administrators, and administrators at various levels from the school building to the district office to the state level, all with the aims of improving student outcomes" (p. 3).

Maehr (1991) argues that school administrators should seize the opportunity offered by the school restructuring movement to effect changes in the entire school environment as well as in the individual classroom environment. He notes that, because school leaders can establish,

promote, or ignore policies, they may have more effect on education than those generated at the classroom level. Maehr (1991) assumes that while motivation is increased there is much more probability to increase students' achievements and that may increase their and also their parents' self-satisfaction. He identifies six target areas and provides examples of goals and strategies for bringing about change in a restructured environment:

Tasks: Tasks refer to the nature of the work undertaken by students in the school. Such tasks should help students focus on the intrinsic value of learning.

Authority: Schools should delegate responsibility by focusing on student participation in learning/school decisions.

Recognition: There should be extensive use of recognition and rewards in the school setting. Goals should be established that would provide opportunities for all students to be recognised.

Grouping: Grouping refers to student interaction, social skills, and values. There should be goals that bring about an environment of acceptance and appreciation of all students, that broaden the range of social interaction among students, including at-risk groups, and that enhance social skills and humane values. Strategies should include programmes that provide occasions for group learning and problem solving and that foster development of subgroups.

Evaluation: Goals regarding the nature and use of evaluation and assessment procedures include increasing students' sense of competence and self-efficacy, increasing their awareness of their unique sets of talents, and encouraging them to understand failure as a natural part of learning and life. Strategies to accomplish these goals include a reduction in the emphasis on social comparisons of achievement by minimising public reference to normative evaluation standards such as grades and test scores.

Time: Time must be managed effectively to carry out plans and reach goals. Goals include improving the rate of work completion, improving skills in planning and organisation, and improving self-management ability. Strategies include developing programmes that teach time management skills and offering students the opportunity to progress at their own rate when possible. Maehr (1991) acknowledges that the successful implementation of new educational policies and practices depends upon school leaders who have the courage and motivation to seize the opportunity that restructuring offers.

In the Netherlands, Creemers (1996) argues that students' background, their motivation and their aptitudes strongly determine their achievement. As said earlier, high achievements are hypothetically linked with high self-satisfaction. Time on task is the time students are willing to spend on school learning and on educational tasks. Students' motivation to spend time on

task is influenced by factors at the school level and the classroom level. This time has to be filled with opportunities to learn which are dependent on learning materials' supply, experiences and exercises by which students can acquire knowledge.

Creemers (1996) also says that the quality of instruction determines the outcomes of education. It is dependent on three variables: curriculum (documents and materials), grouping procedures (mastery learning, ability grouping and cooperative learning) and teacher behaviours (effective class management, use of homework, high expectations, clear goal settings, structuring the curriculum content, frequent questioning, clarify of presentation, immediate exercise after new content and use of evaluation). Most effective school factors are reflections of the indicators of quality of instruction, time and opportunity to learn that operate at the classroom level. He defines conditions for the quality of instruction with respect to the following educational aspects:

- Rules and agreements about all aspects of classroom instruction.
- An evaluation policy and a system at the school level to check student achievement (regular testing, remedial teaching, student counselling and homework assistance).

With respect to the organisational aspects at the school level, important conditions for the quality of instruction are:

- School policy on coordination and supervision of teachers, departmental heads and school principals.
- A school culture inducing and supporting effectiveness.

Conditions for opportunity to learn at the school level are:

- Development of a curriculum plan.
- A consensus about the mission of the school.
- Rules and agreements about how to proceed and follow the curriculum.

(Creemers, 1996).

As the literature demonstrates, school restructuring influences school effectiveness and schools cannot be effective without leading processes of change and improvement. It is important to check stakeholders' attitudes towards school change and to compare them to previous research.

An Israeli research (Barak et al, 1994) examined an experimental plan taken place in secondary vocational schools and intended to improve low achieving students' motivation and success in the matriculation exams. The students had to run projects, to use computers and feedback was given to them currently. The study reveals that there was an improvement

in the class atmosphere, the students' self-image and motivation and their success in the exams.

Motivation in response to situations

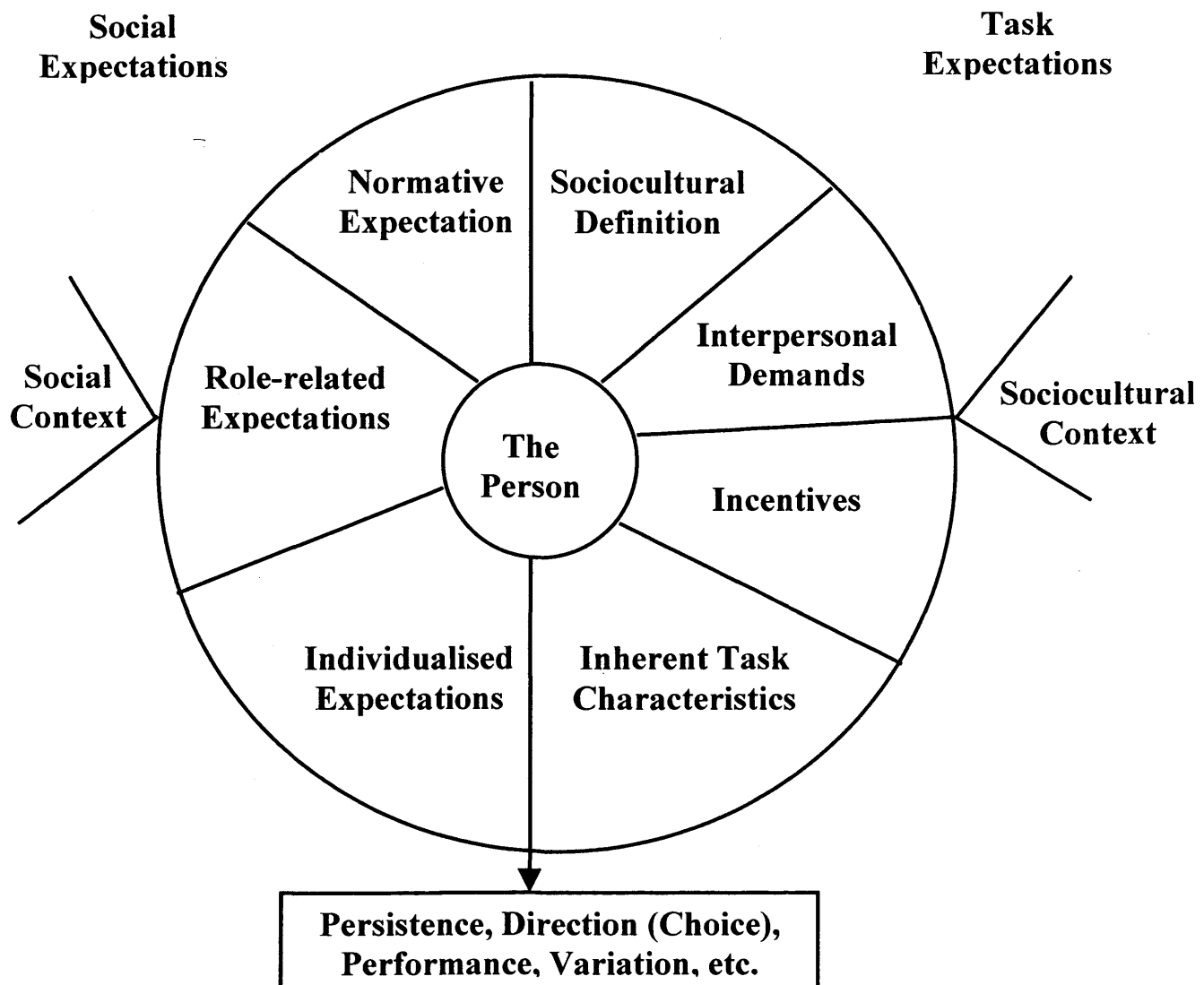
In a review of research on motivation as it is exhibited in specific contexts or situations, Maehr and Braskamp (1986) offer a different perspective to McClelland's (1985, 1961) focus on personality as a cause of motivation. Maehr and Braskamp (1986, p. 35) conclude that *"perhaps more than we realise, we are what we are expected to be and we do what the task and our significant others allow and demand"*.

A useful taxonomy for the study of situations that affect motivation is shown in figure 2.3. Several of the sectors in the taxonomy are especially important in school settings. Normative expectations apply to all group members; each member is expected to adhere to the established norms of the group. Such expectations can exist in very basic social units, including schools. Because individuals are influenced by these social groups quite early in life, they can acquire at young ages basic attitudes about what is worth achieving and how it can be achieved. Another important category is individualised expectations, that is, what significant people, such as teachers and principals, believe about a specific student. Some research in this area, as it relates to the workplace, indicates that an employer's belief about the effectiveness of an employee influences the productivity of that worker (Steers, 1981). Inherent task characteristics are especially important in the educational arena.

Maehr and Braskamp (1986) claim that it is likely that schools where the students feel appropriately challenged to be academically successful, and where the rewards of learning take the form of problem solving or successfully meeting challenges, will have a higher level of motivation among its students. Sociocultural definition involves the degree to which an individual's social or cultural group supports a particular task or goal. In this context, schools where academic achievement is emphasised and rewarded might logically be expected to have more highly motivated students.

The category of interpersonal demands in the taxonomy is also important. American research on cooperative learning has demonstrated that individuals react differently to different educational settings (Renchler, 1992). Some students succeed in groups while others seem to do best working alone. Schools in which learning situations where cooperation and personal interaction are operative, opportunities exist for all students to participate in ways that are best suited to their personal needs and preferences are more likely to have a larger number of motivated students.

Another category, incentives, is central to the study of motivation in schools. Grades are obviously an incentive of great importance to most students, but the use of grades as an incentive or as a form of punishment can have a long-term impact on student motivation (Maehr and Braskamp, 1986).



Source: Maehr and Braskamp (1986, p. 35).

Figure 2.3: Model of situational/contextual factors that influence motivation

This section describes the great importance of motivation for school's effectiveness according to the literature. Students' motivation has a direct impact on their achievements and their motivation might be influenced by the staff's motivation. The proposed research is intended to study stakeholders' attitudes towards students' motivation in six-year high schools and the influence of other stakeholders' motivation on them. If it appears that students' motivation is low, the proposed research is intended to find out the reasons for this. The next section deals with management of resources and its influence on school effectiveness.

Resources

Introduction

The management of school resources is considered in the literature as an important variable influencing school effectiveness. It includes the management of financial resources, human resources and information and it has an influence on the physical environment of the school. In order to answer the study's key research questions, it is important to examine if according to stakeholders' view there is a gap between desire and reality concerning management of resources and its influence on school's effectiveness. If the reasons for these hypothetical gaps and their influences on other variables would be understood, it would have been much easier to try to reach an improvement.

The next subsections address the following themes:

- The linkage between school inputs and educational outcomes.
- Human resources.
- Local management of schools (LMS)
- Budget and curriculum.
- Information.

The linkage between school inputs and educational outcomes

Determining the connection between school inputs and student outcomes is a challenging task, and researchers have arrived at conflicting conclusions. According to Kazal-Thresher (1993), some early studies showed a significant relationship between inputs, such as teacher quality, class size or per pupil expenditures, and student outcomes, while others did not. To Hanushek (1994), good teachers and performance incentives that reward schools and

teachers for improving student performance are two variables that lead to increased student achievement. School boards and superintendents must ensure that sufficient funds reach the classroom to improve learning. Subsequently, Hanushek (1997) concluded from about 400 studies that there is no consistent relationship between student performance and school resources. On the other hand, Laine et al (1996), argue that *“resource variables such as per pupil expenditure show positive, strong and consistent relations with [student] achievement”* (p.57). The Israeli Lavi (1995) reached similar conclusions after examining 900 primary schools in Israel during 1991-1992. The Committee for Economic Development (1994) concludes that money matters but only if schools are organised to use it effectively to promote achievement.

According to Coleman and Anderson (2000), in order to achieve their objectives, all educational organisations must both receive and manage finance and resources. Internationally speaking, there is inequity concerning per student expenditures in different countries. In developing countries there is a problem of inadequate resources and over-full classrooms. Christie and Potterton (1997) argue, according to a study of schools in South Africa that, even in the most difficult circumstances, the ways in which the resources are managed, as well as the amount of the resources are likely to impact on the students and their achievements.

To Levacic (2000), there are critics saying that increases in school expenditures are often applied toward vague administrative functions and goals instead of being directly targeted for improving student outcomes. U.S.A school district administrators are responding to such complaints in several ways. One method is streamlining administration and support-service costs (Committee of Economic Development, 1994).

A study that was undertaken in England and Wales by Levacic and Glover (1998) focused on the association between resource input and management process variables and educational effectiveness measures. The study showed evidence of positive association between educational effectiveness and rational decision making. Schools which are managed in ways consistent with rational decision making also appear to be more educationally effective.

Because there may be a linkage between students' achievements and resources, and there is a hypothetical linkage between achievements and stakeholders' self-satisfaction, great importance is attached to the whole issue of resources at school. Therefore, the author's study intends to examine stakeholders' attitudes towards the management of resources at the six-year high school.

The cost-effective school

To Thomas and Martin (1996), the delegation to schools of greater control over financial resources may give them the opportunity to allocate resources to meet their needs. It is necessary to establish clear organisational goals, agree means for achieving them, monitor progress, and then support the whole process by a suitable system of incentives. They argue that in the mean time there are no guidelines from research on the effects of spending different proportions of the school budget on teachers as against support staff. However, for the present we must recognise that much of our decision-making occurs in conditions of uncertainty. Thomas and Martin (1996, p. 20) ask *"how do we recognise a cost-effective school?"*. The question is whether schools are using their additional responsibilities over resources (costs) in ways that are educationally successful (effective). They claim that *"if two schools which are comparable in every respect are equally effective in terms of performance, the one that uses the smaller amount of resources is the more cost-effective"* (p. 20).

Thomas and Martin (1996) argue that resources should be matched to needs on the principle of fitness-for-purpose and the use of premises should be characterised by creativity and diversity. They found out that schools changed their senior management to take account of new responsibilities and to improve administrative and curriculum support. In three case studies conducted by Thomas and Martin (1996), data from governors, principals, staff, parents and pupils showed that decisions on resource priorities are largely consistent with their own assessment of needs. These shared assessments of priorities suggest that these are schools where there is a good evidence base informing decisions, a finding which is consistent with other attributes of the schools as cost-effective organisations.

Prager (1993) advises principals to establish goals that focus on student outcomes, beginning with a school mission statement and curricular content goals. Policies at the school site must be clear to students and teachers. Kliebard and Calvin (1992) suggest that excellent schools have a community mandate to strive for and achieve academic excellence. This mandate is carried out within the school through what types of courses are offered, the way students and teachers use time, the way academic problems are presented, and the availability of a network of support systems that prevents most students from failing.

To Barkley (1995), schools should select a specific content area or approach to improving achievement and then decide what the indicators of improvement will be. All people must know what those indicators are and devote their resources to it. He says that those schools that are effective are those that have reached a consensus in their school community.

Human resources

Gilbert (1992), referring to England and Wales, argues that the staff of a school are its most important resource and their commitment to decisions made is likely to be of major significance in ensuring effective implementation. Students too should be participating in discussions relating to decision making. Two major responsibilities can be managed by financial delegation and staffing delegation. Such delegations may enable governing bodies and principals to deploy their resources in accordance with their own needs and priorities and to make schools more responsive to parents, pupils, the local community and employers.

Hall (1997) notes that 75%-85% of the budget of any educational institution is spent on staffing costs. In 1985, a major government report in the UK concluded that to improve standards, action was necessary in four areas one of which was staff management (DES, 1985).

Staffing is an expensive resource and Hall (1997) suggests that strategies should be in place to manage that resource at six key stages: recruitment and selection, induction, deployment, development, promotion and exit. An effective school is one which deploys its resources in such a way as to match its results with its stated objectives (OfSTED, 1995).

To Sammons et al (1995), reviewing British and American literature, in order to support the staff and the students functioning, the learning environment is important. Similarly, Davies (1997) argues that school environment, buildings and working conditions are key factors related to educational effectiveness.

Local management of schools (LMS)

In England and Wales, local management of schools (LMS) allows schools to decide for themselves how to spend their money to meet their students' needs. By encouraging a shared and coherent approach to planning and decision making, LMS could be a means of enabling schools to concentrate more collaboratively on the quality of learning. A clear and agreed School Development Plan, which has the needs and interests of students at its core, should inform all major resourcing decisions. Such a plan allows schools to manage themselves and to keep the curriculum as the major focus. However, there is a fear that the size of the budget will not allow schools to manage effectively (Gilbert, 1992).

Decisions on resources are central to self-management and after a decade of reform, it is fair to ask about the extent to which there has been an impact on outcomes for students. To Summers and Johnson (1996), there is little evidence to support the notion that school based management is effective in increasing student performance.

Levacic (1995) found that, of four criteria associated with intentions for the local management of schools in England and Wales (effectiveness, efficiency, equity and choice), *“cost–efficiency is the one for which there is most evidence that local management has achieved the aims set for it by government”* (Levacic, 1995, p. 190). For effectiveness, she concluded that there is *“little evidence from this [case study] sample of schools of local management stimulating any significant changes in the way schools operate with respect to their core technology of teaching and learning”* (Levacic, 1995, p. 105).

Third generation self-management research in the U.K gave conflicting evidence. A study at Lancaster University found out that the greater the degree of competition between schools, the more efficient the schools tend to become. Therefore, in a case of closing a certain school, the gains from reduced public expenditure may be outweighed by the loss of efficiency in neighbouring schools because of the reduction in competition between schools (Bradely et al, 1999). On the other hand, a study by Levacic and Hardman (1999) reveals that the provision of choice between grant maintained schools and locally managed schools had yielded no significant difference between examination results of students attending the two types of schools once the students’ social backgrounds are taken into account.

Powerful evidence for the linkage between self-management and learning outcomes has emerged in longitudinal studies in Chicago (Bryk, 1998; Bryk et al, 1998). In those studies, principals claimed many times that funds were very important for their schools and they allowed them to make changes in their schools.

The linkage between LMS and school effectiveness was also found in the Israeli research. Hayman et al (1995) argue that Israeli autonomous schools have defined educational perception that is translated to effective curricular issues, ways of teaching and collaborative relations with parents. In such schools, the teachers seem to be more professional and they have better relations with the students and their colleagues. The Israelis Friedman et al (1997) claim too that such schools are more effective because they have better management, better staff functioning, the resources are more efficiently used and there are more collaborative relations with the external environment.

Budget and curriculum

To Weick (1989), schools are organisations in which some events may not be coupled. So, specific educational aims may be publicly espoused by the principal but not put into practice by the teachers. Unfortunately, in many schools the school's curriculum and its finances are separate entities. Schools have a lot of experience in managing the curriculum but limited

experience of budget management. It is worthwhile to ensure that a budget cut does least damage to the curriculum and, on the contrary, available funds are allocated in relation to curriculum priorities. That requires a deliberate coupling of financial and curriculum decision-making. Such coupling is not an easy undertaking but is quite feasible with careful reflection and time to develop the processes and structures required. One of the most common problems in achieving coupling is lack of experience and awareness in tracing out the resource implications of curriculum developments (Levacic, 1992). The analytical capacity to do this needs to be developed, as noted by Downes (1991a, 1991b).

In the U.K, Kennedy (1993) argues that many principals look upon LMS as a chore and see financial management as distracting matter - they are focused mainly on curricular and pastoral matters. The key is to mesh together financial and educational decisions rather than seeing them as belonging to separate compartments. This approach is helpful because if, for example, a school discovers that there are deficiencies in pupils' learning in a certain area it has to define a series of actions to respond to those deficiencies. For each action, it identifies the associated resource requirement and attaches a priority rating. If there are concerns in the area of teaching and learning, the school has to allocate resources in a form that can feed in usefully to financial decision-making. Levacic (1992) also proclaims that there should be an integration between financial and curriculum decision-making in schools. She says that schools are expected to adopt a rational approach to resource management by planning the use of resources so as to achieve observable educational outcomes.

Information

It is possible to recognise the increasing importance of information as a resource to be managed in a school. That implies that organisations need to develop strategies for managing information as a strategic resource. That might be done by formal management information systems. A management information system (MIS) has been defined as a network designed to provide the right information to the right person at the right time at minimum cost (Scholderbek et al, 1985).

In England and Wales, Lancaster (1990) says that using information has 3 purposes:

- School plan.
- Monitoring and control.
- Communication.

In any organisation, those who possess information typically exercise a degree of power or control over those who do not. How information is to be used will affect how data-collection initiatives are perceived and then implemented.

Outside resources can support efforts to collect and analyse data effectively (Blum et al, 1992).

As introduced in the literature just mentioned, there may be a linkage between resources and school effectiveness. Because of that, it may be important to check stakeholders' attitudes towards the management of school resources.

The next section, which ends this chapter, reviews a slightly different aspect of the school effectiveness' literature. It deals with criticism concerning the school effectiveness approach.

Criticism of the school effectiveness approach

Introduction

The proposed research deals with school effectiveness. It is based on the paradigm that school effectiveness research sets a theoretical framework, which is about to be the basis for having better schools. Nevertheless, there is no general consensus among researchers concerning this paradigm and there is criticism towards the school effectiveness approach and its applicability.

This section addresses criticism concerning the following themes:

- The relationships between school effectiveness and school improvement paradigms.
- Political, methodological and theoretical reasons for criticism.
- Relevance of school effectiveness criticism to the proposed research.

School effectiveness and school improvement

Weindling's (1999) review of Slee's (1998) publication, goes back to the early work of Jencks et al (1972) and Coleman et al (1966). Some of the chapters introduce the following opinion:

"Family background, social class, any notion of context are typically regarded as 'noise' as 'outside background factors' which must be controlled for and then stripped

away so that the researcher can concentrate on the important domain of school factors" (Weindling, 1999, p. 341).

Weindling's (1999) concludes that:

"This book admirably demonstrates the importance of context, which means that the process of school improvement needs to take different forms in different schools - there cannot be 'one size fits all' model. I share the authors' concerns about the usefulness of the list of effective factors approach to school improvement and the idea that a 'failing' school is the opposite of an 'effective' school. Whilst I found parts of the book an interesting and necessary addition to the debate about school effectiveness, I do not think practitioners will find much here to help them with school improvement" (p. 214).

The main reason for that is that *"although 'school improvement' is frequently used ... very little attention is given to it" (Weindling, 1999, p. 214).*

Ouston (1999) challenges the validity of much published research on differential levels of school effectiveness, disputes its worth as a means of enabling school improvement and questioned the merits of its impact on education generally. The school effectiveness research is based on debatable premises especially that:

- Schools are differentiated in their achievements.
- It is possible to adjust for prior attainment or social factors and rank schools according to how successful they are in promoting students.
- It is possible to relate these rankings to internal features of the schools.

If these conclusions are not valid, either conceptually or technically, then the whole approach of School Effectiveness/School Improvement is in trouble. If schools differ only a little, then the list characteristics of effective schools have little justification. Ouston (1999, p. 170) asks, *"given that differences between schools in their adjusted outcomes are small, and that most schools cannot be distinguished from each other, how does it come about that many different research groups come up with similar list of features?"*.

What might be even more important is the question what should be done in order to enable a less successful school to become more successful. In order to reach this goal there should be mutual contribution to school effectiveness and school improvements paradigms. Unfortunately, the possible mutual contribution of both paradigms to each other is minimised

because of lack of synchronisation between the effectiveness and the improvement enterprises.

Teddlie and Reynolds (2000) detail the following deficiencies in existing school effectiveness research:

- There are very few case studies of effective or ineffective schools that would show the interrelationships between school process variables and paint a picture for improvement practitioners of the reality of school processes. The absence of rich case study explanations reduces the practitioner relevance of the effectiveness research and makes the transfer of knowledge to improvement programmes difficult.
- School effectiveness studies are very deficient at the level of the study of 'processes' rather than factors, since effectiveness researchers have considerable more experience at the level of school organisational factors. School processes defined in terms of attitudes, values, relationships and climate have been somewhat neglected, although school improvement needs information on these factors within schools, because of their centrality to the process of improvement.
- School effectiveness studies usually show a picture of a school at a certain point in time, not an evolutionary over time. School improvement needs ideas about how schools came to be effective (or ineffective) in order to replicate the processes.
- Most school effectiveness studies have neglected the importance of other institutions above school level.
- Schools effectiveness knowledge also misses the chance of satisfaction of the needs of school improvement by being dated.
- Schools effectiveness research has rarely been 'fine grained' enough to provide information that is needed by school improvement. School improvement needs more than data on the relationships between school processes and outcomes for all schools. It needs knowledge of the factors that will generate improvement in particular schools, in particular socioeconomic and cultural context.

Ribbins (2000) adds that although school effectiveness research cannot offer reliable methods of making schools successful, the value of such information ought not to be underestimated.

Political, methodological and theoretical criticism

To Teddlie and Reynolds (2000), School Effectiveness research will always be politically controversial since it concerns the nature and purpose of schooling. However it is interesting that it has been criticised on contradictory grounds. In the USA, critics believed that effective school researchers were liberal reformers more interested in improving the lot of the poor children than in conducting good science.

In the UK, on the other hand, much recent criticism (Elliot, 1996), has come from 'progressive' educators. Critics from the UK perceive school effectiveness research as giving credence to a conservative ideology (Elliot, 1996):

"The findings of school effectiveness research have indeed been music in the ears of politicians and government officials. Currently, for example, they are being used to politically justify a refusal to respond to teachers' anxieties about the increasing size of the classes that they teach, the use of traditional teaching methods, such as whole class instruction, and a tendency to blame headteachers for 'failing schools' on the ground that that they lack a capacity for strong leadership" (p. 199).

To Teddlie and Reynolds (2000), methodological criticisms relates to lack of the following:

- Units of analysis (child, class, school) that gives sufficient discriminative power.
- Direct observations of process variables and mixture of quantitative and qualitative approaches.
- Longitudinal cohort based data, collected on individual children.
- Adjustment of outcome measures for any intake differences between schools.

School effectiveness research has also been criticised as having little or no theoretical basis. This criticism still has some validity, but researchers and theoreticians are busy working to address this perennial problem and appear to be making some progress (Teddlie and Reynolds, 2000).

Relevance of school effectiveness criticism to the proposed research

The proposed research has advantages and disadvantages while examining it according to the criticism mentioned above, as follows:

1. **Advantages:** the proposed research is a school effectiveness study dealing with a special kind of school, the six-year high school. In contrast to possible criticism, the case studies do show interrelations between school process variables and offer a picture for improvement (chapter 9). Further, according to the literature, school effectiveness studies are very deficient at the level of the study of 'processes' rather than factors. Nevertheless, the proposed research does deal with attitudes, values, relationships and climate and this is an important information for school improvement.

As mentioned above, school improvement needs more than data on the relationships between school processes and outcomes for all schools. It needs knowledge of the factors that will generate improvement in particular schools. In that sense, the author's study is unique focusing on a specific school in a particular cultural context.

Concerning methodological criticism, Teddlie and Reynolds (2000) claim that most school effectiveness studies lack units of analysis that give sufficient discriminative power and mixture of quantitative and qualitative approaches. In these respects, the proposed research is advantageous because it was conducted in specific schools and grades. Furthermore, it does combine quantitative and qualitative approaches and because of that, it may have richer data.

2. **Disadvantages:** on the other hand, the proposed research shows pictures of three schools at certain points in time, not an evolutionary process over time. In order to replicate the processes, school improvement needs ideas about how schools came to be effective/ineffective. In that sense, the proposed research has limitations. In order to tackle this obstacle, the author would have to conduct a longitudinal study and to sample each school several times along some periods of time. Further, similarly to most school effectiveness studies, the proposed research has also neglected the importance of other institutions above school level - it deals only with schools and not colleges or universities.

Summary

School effectiveness is defined in terms of goal achievements, the satisfaction level of stakeholders or in affective or emotional terms. The proposed research is an effective school study examining stakeholders' attitudes towards characteristics of effectiveness, comparing

reality to desire and exploring stakeholders' satisfaction with the school. Key factors influencing school effectiveness are school and class size, leadership, stakeholders' interrelations, teaching quality, parental involvement, motivation, discipline, teamwork, school culture and resources' management. Because the existing research literature does not deal with six-year high schools, the proposed research is a study of innovation based on school effectiveness paradigm and characteristics of primary and secondary schools found in the literature.

Different stakeholders may have different attitudes and perspectives towards school effectiveness. Stakeholders' self-satisfaction with the school might be influenced among other variables, by principal's leadership, students' achievements, teachers' and parents' communication and teachers' collaboration.

The literature stresses that in order to increase the likelihood to have high achievements, teachers should hold high expectations towards their students and schools must strive for high standards.

Another very important theme mentioned by the literature is students' commitment to school, which is influenced by parents' involvement. School and teachers have important roles in that respect, because they shape parental involvement practices.

Further, healthy school culture also correlates with increased student achievement and motivation. High students' achievements are hypothetically linked with stakeholders' self-satisfaction. Therefore, each factor that may influence students' achievements is relevant to this study and may influence stakeholders' satisfaction.

The literature review helped the author to map all possible characteristics of school effectiveness needed for achieving the study's aim and objectives and answering the three research questions. The aim defined by the research questions was to study stakeholders' expectations towards school effectiveness, the gaps (if existing) between them and reality and their satisfaction with the school. Therefore, it was required to have appropriate tools (questionnaires and interview schedules) including descriptions of school effectiveness characteristics. Stakeholders were asked to express their views towards list of relevant characteristics of school effectiveness that were found in the literature as follows:

- Collaboration among stakeholders.
- School principal characteristics.
- School and class size.
- Teachers' characteristics.

- High standards and expectations of students' achievements held by teachers.
- Parental involvement.
- School culture and climate
- Discipline.
- Teamwork.
- Motivation.
- Resources.

The next chapter (chapter 3: methodology) describes the methods chosen in order to conduct the study from possible alternatives. The questionnaires and interview schedule of the main study include questions based on the literature. Additional questions were added according to lessons gained by the open-ended questions of the pilot study survey (described in chapter 4).

Chapter 3: Methodology

Introduction

The proposed research deals with stakeholders' attitudes towards characteristics of effective six-year high schools in Israel. It compares ideal characteristics to reality at the schools and also deals with stakeholders' satisfaction with their own school. This satisfaction is hypothetically linked to the gap between desire and reality. Chapter 3 describes the methods chosen in order to conduct the study from possible alternatives. As Cohen and Manion (1994) claim, methods are supposed to be range of approaches used in educational research to gather data which are to be used as a basis for inference and interpretation. Chapter 3 addresses the methodology of the proposed research intended to describe and analyse these methods and their advantages/disadvantages in order to understand the process of data gathering.

Because the study is focused on attitudes and perceptions, the research instruments should include relevant questions, which principals, teachers, students and parents are to answer. There were two different basic alternatives for conducting such a study of perceptions:

- Large samples (lots of stakeholders in many schools) stressing breadth.
- Small samples in few schools stressing depth.

The preference was to choose the second alternative stressing depth and therefore to observe the characteristics of three individual units, namely three Israeli six-year high schools. The purpose of such an observation was to probe deeply and to analyse intensively the perceived characteristics and satisfaction in each six-year high school with a view to establishing fuzzy generalisation about the whole Israeli six-year system (the term 'fuzzy generalisation' is discussed in next sections). Therefore, the most appropriate alternative chosen is a case study approach based on interviews for the professionals, namely principals and teachers and questionnaires for students and parents.

This chapter intends to discuss the aim, objectives, research questions, research tools and the way the research was conducted. Chapter 3 includes also a review of research approaches drawing upon the methodological literature intended to describe and explain the chosen approach and its appropriateness.

The interview's schedule and questionnaires of the main study include questions based on the research literature (chapter 2). Additional questions were added to the main study questionnaires according to lessons gained by the open-ended questions of the pilot study survey (discussed in chapter 4).

Chapter 3 addresses the following themes:

- The purpose of the research.
- Research in education and studies of singularities.
- The case study approach.
- Surveys.
- Research tools.
- Analysing the data.
- Ethics.
- Additional methodological aspects of the proposed research.
- Summary.

Purpose of the research

Introduction

The next subsections detail the aim, objectives, research questions and relevant details concerning the conducting of the research (dates, people involved, instruments, etc.). These themes have been mentioned briefly in chapter one.

Aim

The main aim of the research is to study all aspects of stakeholders' expectations about the effective six-year high school and the gap (if one exists) between those expectations and the reality in their schools. Gap size may be an indication for stakeholders' satisfaction or dissatisfaction. Principals, teachers, students and parents may have different opinions about the characteristics of the effective six-year high school. In an era of customer responsiveness it is necessary to know and fully understand what attitudes stakeholders have towards six-year high schools. It is valuable to study those attitudes and perspectives because it can help to recognise ineffective processes in the six-year system and understand the reasons for such deficiencies. Further, finding disagreements between groups of stakeholders might help

understand the reasons for six-year high school ineffectiveness. For example, if teachers think they are collaborative whereas students think that teachers are absolutely not collaborative, that might have been a reason for ineffectiveness. Students' dissatisfaction which is unknown by the staff is unlikely to be improved unless the school would understand this is an issue that should be treated. Such knowledge might be helpful in order to improve the six-year educational system.

Objectives

The objective of the proposed research is to draw a profile of the Israeli effective six-year high school as seen from the point of view of principals, teachers, students and parents. There might be a contradiction between desire of different stakeholders being examined. In such a case, the intention was to analyse the different perceptions, reach conclusions and have relevant recommendations for making progress. For example, parents may think that their involvement at school is helpful. On the other hand, teachers or school leaders may think that parental involvement should be limited because it disturbs the regular functioning of the school. It is desirable to study all the different perspectives and to compare the findings to what exists in the research literature. Knowing stakeholders' perceptions towards the effective six-year high school would have helped local and global management to make decisions in order to reach advancement. That can be reached by doing all kinds of reforms. Such changes can improve schools, save budgets and cause stakeholders to be more satisfied.

Research questions

The research is intended to answer three key questions that are divided to sub-questions as detailed in the next subsections. The three key questions are as follows:

1. What are the characteristics of effective six-year high schools according to stakeholders' points of view?
2. In what aspects are stakeholders' own schools regarded as effective/ineffective (from the same points of view)?
3. What is the level of satisfaction of stakeholders with their own school?

First and second research questions: ideal and realistic characteristics

The study deals with characteristics of effective Israeli six-year high schools from the point of view of stakeholders. The purpose of the first research question is to discover the attitudes of principals, teachers, students and parents towards the 'ideal situation', namely, how in

their views ought to be an effective six-year high school. The second research question examines the same characteristics but concerning the situation in their specific school. The first and second research questions are divided into sub-questions that are included in the research tools as follows:

1. Interviews (principals and teachers): questions 1-13 (appendix E, p. 415) include the detailing of the first and second research questions. The characteristics examined are collaboration among stakeholders, principal's leadership, teachers' evaluation, school and class size, parental involvement, teamwork, motivation, organisational culture and climate, discipline, expectations towards students, teaching styles and social life. The interviewees were requested to give their opinion of the importance and how qualities of the effective six-year high school ought to be ideally (first research question). They were also asked to consider the situation of each question in their own school (second research question).
2. Questionnaires (students and parents): questions 1-40 detail the first and second research questions (students - appendix C, p. 403, parents - appendix D, p. 409). Questions 1-37 are closed and students and parents were requested to give two answers for each question. The first answer deals with the importance of the characteristic and it is part of the first research question. The second deals with the reality at school and it is part of the second research question. The main issues examined are collaboration, principal's leadership, teachers' evaluation, school and class size, six-year continuity, motivation, organisational culture and climate, discipline, expectations towards students and social life. Questions 38-40 are open ended and are intended to add new data which were not mentioned in the closed questions. Question 38 relates to the first research question (additional characteristics of effective six-year high schools) and question 39-40, to the second one (additional reasons causing stakeholders' own school to be effective/ineffective).

Third research question: stakeholders' satisfaction with their own school

After examining the first 2 research questions the intention was to assess the gap (if one exists) between the ideal and real situation as seen by stakeholders' views and to compare it to their perceptions relating to their satisfaction. Concerning the quantitative part of the research (students and parents), it was easier and more accurate to calculate the gap between desire and reality in comparison to the qualitative part. Nevertheless, this gap could have been found without mathematical values, in the interviews too. The third research question is covered directly by specific questions (included in the interviews and questionnaires) dealing with satisfaction and indirectly by the gaps between desire and reality which are

hypothetically linked to satisfaction (according to the gaps between answers that were given to the first and second research questions). As mentioned above, the quantitative part of the research (questionnaires: students and parents) enabled to calculate mathematical values of these gaps, to consider their statistical significance and correlation with satisfaction. The third research question is covered directly as follows:

1. Interviews (principals and teachers): questions 14-23 (appendix E, part B, p. 415) include the detailing of the third research question. The characteristics examined were teachers' rewards, students' achievements, relations among stakeholders, principal's leadership, teachers' quality, management of resources, school and classes' size, teachers' expectations towards students and school's flexibility for students. The interviewees were requested to express their satisfaction with their own school, relating to these characteristics.
2. Questionnaires (students and parents): questions 41-65 (students - appendix C, p. 407, parents - appendix D, p. 413). Questions 41-63 are closed and students and parents were requested to express their satisfaction with several characteristics. The main issues examined were teachers' rewards, students' achievements, relations among stakeholders, principal's ability to initiate, teachers' treatment, monitoring and evaluation of students, management of resources, school and classes' size, teachers' expectations towards students, school's flexibility for students and school's pressure. Questions 64-65 are open-ended intended to add reasons for satisfaction/dissatisfaction not mentioned in the closed questions.

Conducting the research

The research was taken place during 2000-2001 in three Israeli six-year high schools located at Holon. Holon is one of the biggest cities in Israel (after Tel-Aviv, Jerusalem and Haifa) and it is close to Tel-Aviv (about 120,000 citizens). Although the three schools examined are six-year high schools, they are not exactly the same: they are differentiated in size (school C is much smaller), course of studies and date of establishment (school C is newer). Only school B is located in two separated campuses whereas schools A and C have only one campus each.

Prior to starting the main study, a pilot study was conducted during June 2000 in school A whereas the main study commenced on August 2000 and ended on February 2001 as follows:

- August 2000 - November 2000: School A case study.
- September 2000 - January 2001: School B case study.

- December 2000 - February 2001: School C case study.

The classes examined in school A case study were totally different comparing to those examined in the pilot study (conducted also in school A).

The study started with interviewing 2 principals and 12 teachers in each school and then giving questionnaires to students and their parents. The principals' and teachers' interviews took place separately in their schools, home or in a public place according to their wish. Usually, the time needed for school interviewing was longer in comparison to external locations because at school there were lots of disturbances especially while interviewing principals. The interview schedule was translated to Hebrew and each meeting lasted 2-3 hours. The answers were transcribed in Hebrew and an effort was made to make the transcription as close as possible to the original answers. The Hebrew transcription was the basis for writing the interviews' results in English with the addition of relevant quotes (chapters 5-7). Further, out of 42 interviews conducted in three schools and transcribed in Hebrew, five were selected by the supervisor and translated by the author to English. In order to demonstrate how the 42 interviews were transcribed, two examples are introduced in appendix V, according to the supervisor's selection (p. 508).

Overall, 524 students and 524 parents answered a Hebrew version of the questionnaires in the three schools (school A: 190, school B: 167, school C: 167). The students answered them while seated in class during a lesson given by the homeroom teachers. Their parents received the questionnaires from their children, answered them at home and the students gave them back to the homeroom teachers after several days. There was no use of mail in order to send or receive questionnaires and the rate of response was 100%. Further, computerised applications were developed in order to receive questionnaires' data and make the required processes including numeric calculated results, diagrams and statistical calculations (detailed in chapter 3, p. 127). A special attention was given to ensure correct entering of data to the computer and prevent possible errors.

Research in education and studies of singularities

Introduction

The first decision that should have been made in order to design the methodological framework of the proposed research was to choose a relevant category of empirical research. Later on, it was required to choose an adequate approach for the research (qualitative, quantitative or combined). Finally, the proposed research was conducted in three six-year

high schools only out of hundreds existing in the state of Israel. It was required to explain what kind of significance the study may have towards the whole six-year system.

The next subsections address themes intended to give answers to the above questions by introducing alternatives existing in the literature and describing those that have been preferred and why.

The themes addressed are as follows:

1. Categories of empirical research.
2. Paradigms and approaches in educational research.
3. Generalisations and a study of singularities.

Categories of empirical research

Bassey (1999) describes the term 'education' as having different meanings such as "*acquiring useful knowledge and skills in order to achieve a high quality of life*" or "*developing personally and socially as good people*" or "*creating wealth in order to increase the gross national product*" (Bassey, 1999, p. 37-38). He defines the term 'educational research' as "*critical enquiry aimed at informing educational judgements and decisions in order to improve educational action*" (Bassey, 1999, p. 39). Empirical research in education is research which focuses mainly on data collection. To Bassey (1999), there are three different categories of empirical research:

- Theoretical research - enquiry intended to understand.
- Evaluative research - enquiry intended to understand and evaluate.
- Action research - enquiry intended to understand, evaluate and change.

The proposed study relates to the second category - it is intended to understand stakeholders' attitudes towards the effectiveness of Israeli six-year high schools and to evaluate the existing situation.

Paradigms and approaches in educational research

Researchers seem to work from different beliefs or research paradigms about the nature of reality. A research paradigm is a network of coherent ideas about the nature of the world and the functions of researchers, which adhered to by a group of researchers, conditions the patterns of their thinking and underpins their research actions. To Bassey (1999), there are two basic paradigms: the positivist and the interpretative. The positivists look upon the world

as rational and they do not see themselves as significant variables in their research. To the positivist, the purpose of research is to advance knowledge by understanding and describing the phenomena of the world. It enables to explain how particular events occur and how they are linked in a theoretical structure. To the interpretative researcher, concepts of reality can vary from one person to another. The observers are part of the world, which they are observing and can change it. The data collected by interpretative researchers are usually verbal and richer in a language sense.

To Middlewood et al (1999), there is an obvious connection between the gathering of quantitative data and a positivistic approach, and qualitative data and an interpretative approach. In practice, the two approaches need not to be mutually exclusive and are often used together. Research may encompass elements of the two paradigms. This theme is linked to another important term called triangulation.

Cohen and Manion (1998) define triangulation as follows:

"The use of two or more methods of data collection in the study of some aspects of human behaviour.....triangular techniques in the social science attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint and, in so doing, by making use of both quantitative and qualitative data" (p. 233).

Indeed, the proposed research uses triangulation by combining two kinds of methods for data collection, qualitative and quantitative: interviews for principals and teachers and questionnaires for student and parents. The combination of questionnaires with detailed interviews might provide an opportunity of obtaining a large amount of quantitative data, as well as rich qualitative data. Nevertheless, such an alternative might be also disadvantageous because both methods, qualitative and quantitative, have advantages and disadvantages. The quantitative approach can give accurate data describing the reality but it is less effective trying to explain reasons for it. The qualitative approach tends to be less accurate but it is more effective in explaining the reasons for findings. In the proposed research, triangulation can be a useful technique. It is a study of perceptions, students and parents are examined by quantitative methods and principals and teachers are examined by qualitative methods. While examining students and parents, there might be a problem to understand the reasons for the phenomena found, although the findings are supposed to be accurate. On the other hand, qualitative research of principals/teachers might present less

accurate findings but explain the reasons better. For example, while examining motivation, the questionnaires would enable to have an accurate measure of students' motivation (and the gap between reality and desire). On the other hand, the interview of teachers and principals can describe their views towards the same phenomenon less accurately but with explanations relating to reasons for the level of motivation found.

Generalisations and a study of singularities

Following the discussion dealing with the different paradigms mentioned above, another important distinction should be made concerning the study's generalisation. Bassey (1999) draws a distinction between the search for generalisations and the study of singularities. There are three different kinds of generalisations arising from empirical study:

- **Scientific generalisation** - this is what the classical physicist looked for such as the linear relationship between gas pressure and volume. Such a generalisation is inappropriate for social findings because the complexity of social events.
- **Statistical generalisation** - social scientists have smaller populations and more variables and therefore while quantifying their results they have to use the concept of statistical generalisation. This expresses the chance that something will be the case and it comes from studies of samples. However, effective sampling of large populations is difficult and expensive and in the research literature there are few educational studies that have led to statistical generalisation.
- **Fuzzy generalisation** - because there are unlikely to be scientific generalisation of consequences to educators and only few statistical generalisation, there are two major forms of outcome of empirical educational research: predictions of what may happen in particular circumstances and interpretations of what has happened in particular situations. There are two arenas for conducting educational research: studies of samples and studies of singularities. The former can lead to statistical generalisation and the latter to fuzzy generalisation. Fuzzy generalisation is the kind of prediction, arising from empirical enquiry that something may happen, but without any measure of its probability.

A study of a singularity is research into particular events: it includes experiments, non-random survey and case study. An essential feature of case study is that sufficient data are collected for researchers to be able to explore significant features of the case and to put forward interpretations. Further, the study is conducted mainly in its natural

context. As such, case studies are the study of singularities conducted in depth in natural settings.

The proposed research of Israeli six-year high schools includes three case studies examining singularities. Data were collected from each school by interviews and questionnaires enabling to explore significant characteristics and to put forward interpretations. Because the proposed research is based on case studies, the next section reviews the literature dealing with the case study approach.

The case study approach

Introduction

Yin (1994) argues that for case studies, five components of a research are especially important:

- A study's questions.
- Its propositions, if any.
- Its unit(s) of analysis.
- The logic linking the data to the propositions.
- The criteria for interpreting the findings.

(Yin, 1994, p. 20).

Yin (1994) also claims that a good research design, covering those five components, requires the development of a theoretical framework for the case study that is about to be conducted. A good case study investigator should make the effort to develop this theoretical framework, no matter whether the study is to be explanatory, descriptive or exploratory. The use of theory, in conducting case studies, not only assists in defining the appropriate research design and data collection but also becomes the main vehicle for generalising the results of the case study (Yin, 1994, p. 32). The next subsections address the issue of generalisation of case study results.

Generalisation of case study results

Meaningful results from research undertaken by case study cannot be achieved only by describing a specific situation. It must illuminate some more general principle (Nisbet and Watt, 1984). There must be a conceptual analysis of the results, which can be used to create grounded theory (Glaser and Strauss, 1967) or be related to some existing knowledge.

Grounded theory is based on emerging data rather than on advance hypothesis. The coming subsections address the following themes:

1. The number of cases needed.
2. Kinds of generalisation.

1. The number of cases needed

Yin (1994) argues that there is a problem of knowing whether a case study's findings are generalisable beyond the immediate case study. For example, if a study of neighbourhood change focused on one neighbourhood, are the results applicable to another neighbourhood? This is the external validity problem and it can be a significant issue in case study research. Critics as Yin (1994) state that single cases typically offer a poor basis for generalisation. However, such critics are implicitly contrasting the situation to survey research, in which a "sample" (if selected correctly) readily generalises to a larger universe. This analogy is incorrect while dealing with case studies. This is because survey research relies on statistical generalisation, whereas case studies (as with experiments) rely only on analytical generalisation. In analytical generalisation, the investigator is striving to generalise a particular set of results to some broader theory. However, the generalisation is not automatic. A theory must be tested through replications of the findings in a second or even third neighbourhood, where the theory has specified that the same results should occur. Once such replication has been made, the results might be accepted for a much larger number of similar neighbourhoods, even though further replications have not been performed. This replication logic is the same that underlies the use of experiments and allows scientists to generalise from one experiment to another (Yin, 1994, p. 35-36). Because of that, the proposed research is based on three case studies and not less.

2. Kinds of generalisation

Adelman et al (1980) claim that generalisation might be an equivocal term and suggest that in relation to case study there are three kinds of generalisations:

"The first kind is from the instance studied to the class it purports to represent (e.g a study of comprehensivisation in one school may tell us about comprehensivisation in other schools). The second kind is from case-bound features of the instance to a multiplicity of classes. Studies which do not begin by asserting the instance-class relation, however, will be inclined towards the third kind of generalisation: generalisations about the case (p. 50).

Stenhouse (1980) distinguishes between predictive generalisation and retrospective generalisation. Predictive generalisation is that which arises from the study of samples and is the form in which data are accumulated in the sciences (what Yin [1984] calls 'statistical generalisation'). Retrospective generalisation is that which can arise from the analysis of case studies and is the form in which data is accumulated in history ('analytic generalisation' in Yin's terms).

Stake (1995) introduces the term 'naturalistic generalisation' which means '*conclusions arrived at through personal engagement in life's affairs*' (p. 86). He used the term 'generalisation' to refer to the learning processes through which we individually acquire concepts and information and steadily generalise them to other situations as we learn more. He also notes that naturalistic generalisation could be made through 'vicarious experience'. If it is so well constructed that the person feels as if it happened to themselves (p. 86).

Tripp (1985) wanted to show how research findings could be applied to classrooms by practising teachers during a cumulative process in bringing case studies together. He looked upon it as 'qualitative generalisation' (what Stake calls 'naturalistic generalisation') in which, by meeting facts of a new case, the individual applies them to his or her knowledge of similar cases (pp. 37-41).

Bassey (1999), as mentioned before, argues that case studies can have 'fuzzy generalisations' which have built-in uncertainty. With the scientific generalisation there are no exceptions - and indeed in science if any are found then the statement is abandoned or revised to accommodate the new evidence. But in the use of the adjective 'fuzzy' the likelihood of there being exceptions is clearly recognised and this seems an appropriate concept for research in areas like education where human complexity is paramount. A fuzzy generalisation reports that something has happened in one place and that it may also happen elsewhere. There is a possibility but no certainty. There is an invitation to "*try and see if the same happens for you*" (Bassey 1999, p. 52). It is important to stress the relationship between a fuzzy generalisation and the written report, which supports it. The fuzzy generalisation on its own may be memorable, but has little credence. But read in conjunction with the research report it may gain high credence and in consequence may encourage others to act on it in their own school and circumstances.

The proposed case studies conducted in six-year high schools are about to have fuzzy generalisation. There will be uncertainty about the generalisation of the results to the whole

Israeli six-year system but a broader theory might be created. The repetitions of the study in three schools may help to strengthen the general aspect of the gained theory.

As mentioned above, the proposed research includes case studies based on surveys. The coming sections describe surveys and the tools required for conducting them, namely questionnaires and interviews.

Surveys

Introduction

The survey is perhaps the most commonly used descriptive method in educational research. Johnson (1994) defines survey as follows: *"Eliciting equivalent information from an identified population"* (Johnson, 1994, p. 13). The information may be facts, attitudes or opinions relevant to the time in which the survey took place. The next subsections address the following themes:

1. The importance of surveys.
2. Stages in planning and processing a survey.
3. The survey of the proposed research.

The importance of surveys

To Cohen and Manion (1998, p. 83), *"surveys gather data at a particular point in time with the intention of describing the nature of existing conditions, or identifying standards against which existing conditions can be compared, or determining the relationships that exist between specific events"*.

Hoinville and Jowell (1978) claim that surveys are not reliable for making forecasts. They say that surveys should *"be regarded essentially as a means by which we can document, analyse and interpret past and present attitudes and behaviour patterns. By exposing trends they will certainly provide clues about the future, but they are only clues"* (Hoinville and Jowell, 1978, p. 184). The meaning of equivalent information, Johnson (1994) argues, is to collect the same information from all respondents in order to be able to make comparisons. 'Eliciting' means doing something proactive rather than just collecting information. The survey questions must be standardised in order to get equivalent information.

The meaning of 'identified population' is that the people being asked are the desired providers of information out of the whole relevant population (Johnson, 1994). A special kind of survey is a census, which approaches an entire identified population such as all

teachers in six-year high schools in Israel. Usually, in surveys there is an identified population (such as all principals of six-year high schools in Israel) and then a sample is approached from the whole population.

The survey approach has the following advantages (Johnson, 1994):

- Wide coverage: the research tools are standardised so once they are ready it is possible to approach large number of respondents.
- Generalisability and comparability.
- Descriptive power.

On the other hand, the survey approach has the following disadvantages (Johnson, 1994):

- No depth of the topic because of standardisation.
- Unsuitable for sensitive issues.
- Scope for bias: if the sample is flawed the generalisation can be seriously biased.

Stages in planning and processing a survey

Cohen and Manion (1998) suggest that a survey can be large-scale or small-scale - in both options the collection of information typically involves one or more of the following techniques: structured or semi-structured interviews, self-completion or postal questionnaires, standardised tests of attainment or performance and attitude scales. Usually, surveys proceed through well-defined stages as illustrated in figure 3.1, though not every stage is always necessary for a successful completion of a survey (Cohen and Manion, 1998, p. 84).

There are some procedures involved in processing and analysing the results of survey research. The sequential stages are shown in figure 3.1 (Cohen and Manion, 1998, p. 85-102):

Figure 3.1 contains the following elements:

- **The purpose of the enquiry:** The design of any survey demands three prerequisites: specification of the exact purpose of the enquiry, the population on which it is to focus and the resources that are available (Cohen and Manion, 1998, p. 85). At first, a survey's general purpose must be translated into a specific central aim. Having decided on the primary objective of the survey, the second stage is to identify and itemise subsidiary topics that relate to its central purpose (for example: location of courses, timing of courses, courses' finance, etc.). The third stage involves formulating specific information requirements relating to each of these issues. To

Hoinville and Jowell (1978), as these details unfold, consideration would have to be given to the most appropriate ways of collecting items of information (interviews, postal questionnaires, etc.).

- **The population upon which the survey is focused:** this affects decisions about sampling and resources. There is a variance in population accessibility and, moreover, in a large survey researchers usually draw a sample from the population to be studied.
- **The resources available:** The financial cost is very important. Davidson (1970) claims that sample surveys are labour-intensive and costs arise out of the interviewing time, travel time and transportation. Other expenditures are related to training and supervising the panel of interviewers, questionnaire construction, piloting, printing, posting, coding and computer programming.
- **Survey sampling:** Usually it is impractical to obtain measure from the whole population. Therefore it is needed to obtain data from a smaller group, called a sample that would represent the whole group. Sampling decisions must be taken early in the overall planning of a survey. There are two methods of sampling: probability samples and non-probability samples (the probability of selection is known or unknown). There is no guarantee that the sample being chosen will have identical characteristics to the total population or other samples which means there will be a sampling error (Cohen and Manion, 1998). In order to know how well the sample mean represents the population (whole school) mean, confidence intervals should be calculated as explained in the coming sections.
- **Designing of a self-completion questionnaire:** It can be helpful to use a flow chart technique to plan the sequencing of questions. By that, researchers are able to anticipate the type and range of responses that their questions are likely to elicit. A good questionnaire should not have leading or complex questions, irritating questions or instructions, questions that use negatives and open-ended questions.
- **Postal questionnaires:** Frequently this is the best form of survey in an educational enquiry. Hoinville and Jowell (1978) argue that a number of myths about postal questionnaires are not borne out by evidence. Response levels to postal surveys are not invariably less than those obtained by interview procedures. Frequently they equal and in some cases surpass those achieved in interviews. The questionnaire does not have to be necessarily short in order to obtain a satisfactory response level.

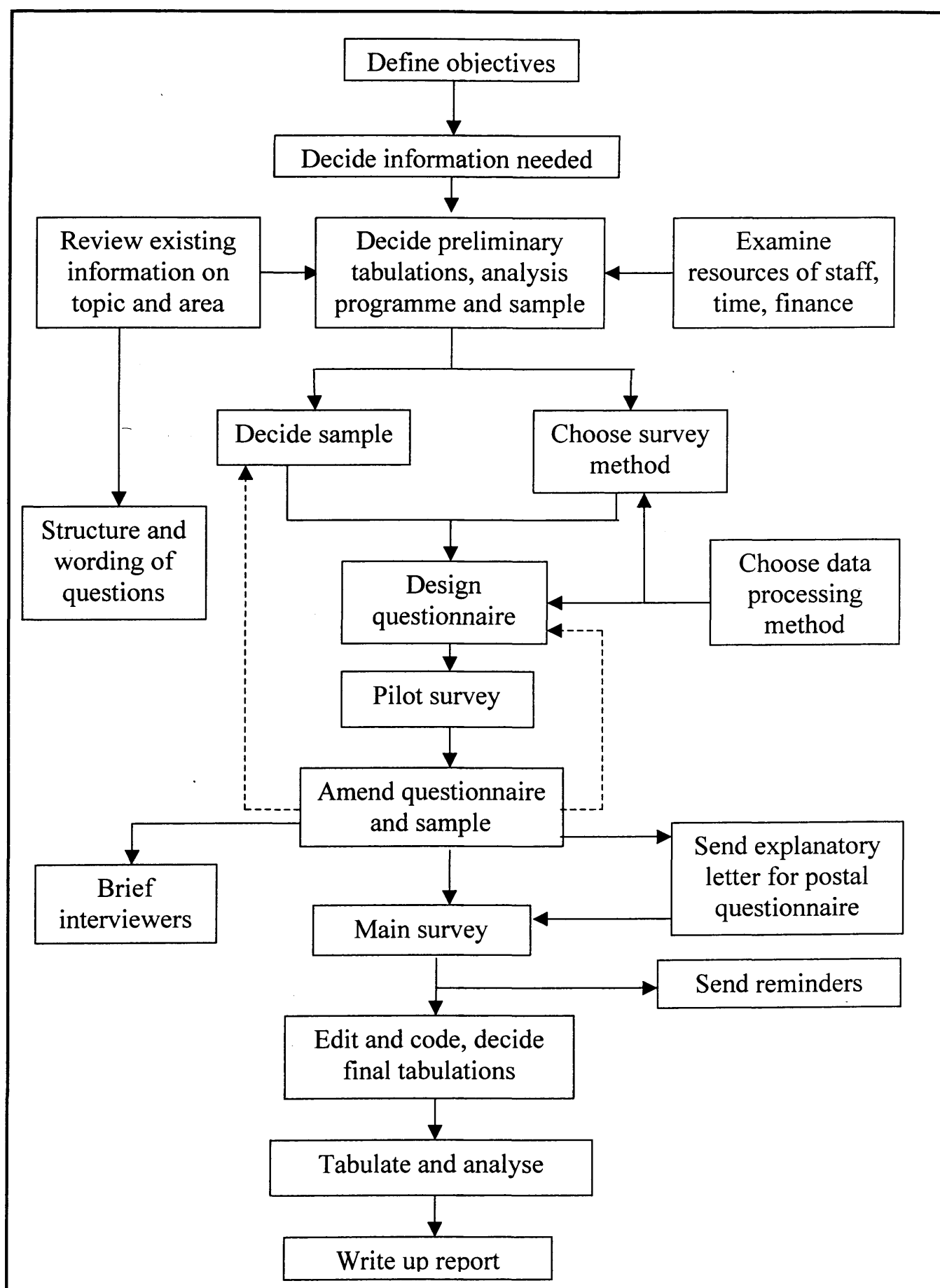


Figure 3.1: Stages in planning a survey
(Cohen and Manion, 1994, p. 84)

- **Processing survey data:** The task now is to reduce the mass of data obtained to a form suitable for analysis. 'Data reduction' consists of coding data in preparation for analysis, by hand (small surveys) or by computers (large numbers). Prior to coding, the questionnaires or interviews have to be checked in order to identify and eliminate errors made by interviewers or respondents - this is the editing stage. Moser and Kalton (1977) point to three central tasks in editing:
 1. Completeness: a check is made that there is an answer to every question.
 2. Accuracy: as far as possible, a check is made that all questions are answered accurately.
 3. Uniformity: a check is made that interviewers have interpreted instructions and questions uniformly.

The primary task of data reduction is coding, namely, assigning a code number to each answer to a survey question. Of course, not all answers to survey questions can be reduced to code numbers. Many open-ended questions are not reducible in this way for computer analysis. Coding can be built into the construction of the questionnaire itself- these are pre-coded answers. Where coding is developed after the questionnaire has been administered and answered, we refer to post-coded answers.

The survey of the proposed research

Following the last section, the survey of each case study of the proposed research enabled to elicit stakeholders' attitudes towards the characteristics of effective six-year high schools. Each survey is based on semi-structured interviews for principals and teachers and questionnaires for students and their parents. The design of the survey included the following stages as mentioned in the methodological literature:

1. **Purpose's definition:** examining stakeholders' attitudes towards effective six-year high schools.
2. **The population:** Israeli six-year high schools' principals, teachers, students and parents.
3. **Survey sampling:** principals, teachers, students and parents in each school were sampled. This theme is discussed in details in the next sections.
4. **Designing of self-completion questionnaires and interview schedules:** two kinds of questionnaires for students and parents were designed (appendices C-D, p. 403, 409) and one kind of interview for principals/teachers (appendix E, p. 415).

5. **Processing survey data:** data was examined to ensure completeness, accuracy and uniformity. Later on, data was coded and relevant computerised application was prepared in order to enable automatic data processing. The application enabled to calculate the mean scores of each questionnaire's question, gaps (such as between desire and reality, etc.), statistical calculations and diagrams.

As mentioned above, the proposed research includes three case studies based on surveys. The surveys include two research tools: questionnaires and interviews. The next sections deal with these two research tools.

Research tools

Introduction

Research tools are the means by which different approaches to research are operationalised (Johnson, 1994, p. 37). The main tools are questionnaires, interviews, observations and use of records or other documents. Because the proposed research includes questionnaires and interviews, the following subsections address these two tools only.

Questionnaires

As Johnson, (1994, p. 37) says *"The essence of a questionnaire as a research tool is that it is in the hands of the respondent, and is completed by him or her"*. This is the basic difference between the questionnaire and the structured interview which may be similar but remains in the hands of the interviewer. To Davidson (1970), a good questionnaire has similar qualities to good law:

"It is clear, unambiguous and uniformly workable. Its design must minimise potential errors from respondents . . . and coders. And since people's participation in surveys is voluntary, a questionnaire has to help in engaging their interest, encouraging their cooperation, and eliciting answers as closed as possible to the truth" (p. 35).

Johnson, (1994, p. 38) also argues that the questionnaire must be clear and it has to reach the appropriate respondents. It is also essential to motivate them to complete and return it. Evans (1984) writes, *"the only qualifications needed for success are the ability to think clearly and to ask plain questions in simple unambiguous terms"* (p. 49).

In the proposed research, students and parents are surveyed by questionnaires (appendices C-D, p. 403, 409). The questionnaires include statements for which the respondents are requested to express their opinions towards the importance of ideal characteristics of effective schools, the reality in their own schools and their satisfaction with their own schools. Each respondent marked a score (between 1 to 4) for each statement and it enabled to calculate mean scores and compare between them.

Piloting questionnaires

To Johnson, (1994, p. 39), questionnaires are a research tool which more than any other need a pilot run. A pilot study tries the research tool on respondents who will be eligible to take part in the main study, namely, they have the same characteristics as the population to be approached. The experience of pilot study respondents is used to improve and amend the questionnaire before sending it out to the main research population.

Because of that, the proposed research's questionnaires were tested by a pilot study on respondents having similar characteristics to those participated in the main study. Such a process helped to refine and update the questionnaires.

Interviews

Johnson (1994, p. 43) defines interview as follows: *"Any interview is a social encounter between two people, but any social encounter is not an interview. Interviews have a particular focus and purpose. They are initiated by the interviewer, with a view to gathering certain information from the person interviewed"*. To Johnson (1994, p. 43), interviews can be specialised or standardised. The use of interviewing is intended to gain access to ideas, thoughts and emotions that cannot be readily identified through observation alone (Bloland, 1992).

There are several types of interview that are particularly useful in qualitative research. In the unstructured approach the interviewer has no theory or presupposition about what to expect from the encounter and, consequently, does not formulate questions in advance but, after introducing the topic, allows the conversation to follow the interviewee's lead. Interviews may also be more structured with a set of predetermined topics used, or even with a standardised interview consisting of questions to be answered by each respondent. While interviewer flexibility and responsiveness is more limited when structured interviews are

employed, structuring reduces variability and makes more efficient use of time than does the unstructured approach (Bloland, 1992).

According to Johnson, (1994, pp. 44-45), in a structured interview there is a standardised stimulus to the respondent with the interviewer measuring and recording the responses. It is suited for a large-scale study with many interviewees in which the interviewees have no foreknowledge of the interviewer and the research. The prime aim of a structured interview is to get equivalent information from a number of interviewees. On the other hand, the semi-structured interview has a similar aim of collecting equivalent information from a number of people, but places less emphasis on a standardised approach (Johnson, 1994, p. 45).

Cohen and Manion (1998) identify four kinds of interviews that may be used specifically as research tools: the structured interview, the unstructured interview, the non-directive interview and the focused interview. The structured interview is one in which the content and procedures are organised in advance. On the contrary, the unstructured interview is an open situation, having greater flexibility. Although the research purposes govern the questions asked, their content, sequence and wording are entirely in the hands of the interviewer. The non-directive interview derives from the therapeutic or psychiatric interview and it has minimal direction or control exhibited by the interviewer and the respondent has to express subjective feelings spontaneously. The need to introduce rather more control into the non-directive situation led to the development of the focused interview. The distinctive feature of this type is that it focuses on a respondent's subjective responses to a known situation in which he/she has been involved and which has been analysed by the interviewer in advance.

In the proposed research, principals and teachers are interviewed by a semi-structured interview (appendix E, p. 415). The interview schedule includes statements for which the respondents are requested to describe their opinions towards an ideal situation, the reality in their own schools and their satisfaction with their schools. In such a way, each interviewee can give a very detailed description and the interviewer can ask additional questions in order to deepen in each theme.

Analysing the data

Introduction

The typical study results in a mass of information in the form of field notes, interview transcripts, documents, tape recordings, in short, a plethora of words. The researcher must somehow recast this information in a form that makes it more readily usable so that meaning can be teased out of it. The next subsections address two themes:

1. Data analysis according to the literature.
2. Data analysis in the proposed research.

Data analysis according to the literature

Miles and Huberman (1984) consider data analysis as consisting of "*three concurrent flows of activity: data reduction, data display, and conclusion drawing/verification*" (p. 21):

- **Data reduction** refers to the process of taking that mass of words and selecting some of it for summarising or paraphrasing so that the result is a more succinct and easier to handle representation of the whole. While it may be necessary at times to use numbers they should always be accompanied by the words behind the numbers.
- **Data display:** The organisation of the information in the form of graphs, charts, matrices and networks so that it is in a readily accessible and compact form.
- **Conclusions:** The researcher must decide what the data mean. At the same time the investigator is attempting to verify the conclusions, testing them for sources of error.

Data analysis of the proposed research

Data reduction: The raw material collected during the research included transcripts of 42 interviews (principals and teachers) and 1048 questionnaires (students and parents). After collecting all the very much raw material, it was required to summarise the qualitative data in order to be able to present it effectively. Concerning the quantitative data, it was necessary to build computerised applications, to enter the data to a computer and to process it.

Data display: The information was organised in the form of graphs, charts, tables and figures in order it would be in an accessible form (chapters 4-9 and appendices).

Conclusions: The data was analysed in order to explain its meaning (chapters 5-9).

The next section addresses ethical issues focusing on conducting research and moral considerations.

Ethics

Introduction

The proposed research is intended to examine stakeholders' attitudes by asking them questions. In conducting such a process there might be a contradiction between the desire to reach quality data and the rights of the respondents that might be threatened. Therefore, the intention was to collect data while consistently maintaining an ethical approach. The next subsections address the following ethical issues:

1. Theoretical aspects of ethics.
2. Ethical aspects relating to the proposed research.

Theoretical aspects

According to Cohen and Manion (1998), there is a growing awareness in recent years to moral issues implicit to the work of educational researchers and the need to meet their obligations with respect to those involved in, or affected by their investigations. While conducting a research, ethical dilemmas may be related to balance between the pursuit of truth and the subjects' rights potentially threatened by the research. This is known as the costs/benefits ratio. To Frankfort-Nachmias and Nachmias (1992), balancing benefits against costs can be very hard. Researchers make decisions in accordance with their personal and professional values in a context of often changing social and cultural values and the requirements of the law. The following are additional ethical dilemmas (Cohen and Manion, 1998):

Privacy: usually, individual right to privacy is contrasted to public right to know. Certain kinds of information are more sensitive and in these cases the researcher should protect the participant's privacy. As in the case with most rights, privacy can be voluntarily relinquished by research participants.

Anonymity: the essence of anonymity is that information provided by participants should not reveal their identity. Thus, a questionnaire that bears no identifying marks such as names, addresses or coding symbols - is ensured complete anonymity. A subject agreeing to a face to face interview, on the other hand can in no way expect anonymity. At the most, the interviewer can promise confidentiality.

Confidentiality: the second way to promise a participant's right to privacy is through the promise of confidentiality. This means that although researchers know who has provided the information, they will in no way make the connection known publicly.

Betrayal: this term is applied to those occasions where data disclosed in confidence are revealed publicly and cause embarrassment or anxiety.

Deception: this term is applied to that kind of experimental situation where the researcher knowingly conceals the true purpose and conditions of the researcher misinforms the subjects. The deception lies in not telling the whole truth. There are many problems that cannot be investigated without deception but it is important to check if the amount and type of deception is justified. Kelman (1967) has suggested ways to deal with this problem. First, we should always ask ourselves if the deception is necessary and justified. A second way for approaching the problem concerns counteracting and minimising the negative effects of deception. The third way of dealing with deception is to ensure that new procedures and techniques are developed in order to avoid the use of deception.

Ethical issues may stem from the kinds of problems investigated by the researchers and the methods they use to obtain valid and reliable data. Ethical problems may arise from the nature of the research, the context, the procedures, methods of data collection, the nature of the participants, the type of data collected (personal sensitivity) and the problematic issue of publishing the research's results.

An important principle relating to ethics is the '*Informed consent*' arises from the subject's right to freedom and self-determination. Being free is a condition of living in a democracy and when restrictions and limitations are placed on that freedom they must be justified and consented to, even in research proceedings. Another aspect of the right to self-determination is that the subject has the right to refuse to take part, or to withdraw once the research has begun. Diener and Crandall (1978) has defined 'informed consent' as the procedures in which individuals choose whether to participate in a research after being informed of facts that would be likely to influence their decisions. This definition involves the following four elements:

1. **Competence** – responsible, mature individuals will make correct decisions if they are given the relevant information.
2. **Voluntarism** – ensuring that participants freely choose to take part in the research and guaranteeing that exposure to risks is undertaken knowingly and voluntarily.
3. **Full information** – consent is fully informed, though in practice it is often impossible for researchers to inform subjects on everything.
4. **Comprehension** – the fact that participants fully understand the nature of the research even when procedures are complicated and entail risks.

Ethical aspects of the proposed research

The main problem that needed to be handled was negotiating access to schools A, B and C. These negotiations took place a few months before the study started and a re-negotiation was needed later, close to the study's commencement. All the three school principals received the questionnaires and interview schedules before deciding if they agree to run the study in their own school. Two principals agreed immediately whereas the third one hesitated but afterwards agreed to cooperate. They have got a promise for confidentiality as follows:

- The findings and conclusions of the research will be used only for the purposes of the author's doctoral research at the University of Leicester and the schools will be labelled A, B, C, omitting their real names or addresses.
- Each school principal was able to receive his/her school report and not the others' unless different schools' principals agreed to exchange data among them. Findings were given to staff members only by implicit authorisation of the school principal. According to principals' decisions, in school A, nobody could get the results except the six-year high school principal, in schools B - each homeroom teacher could get his/her class's results and in school C, only the co-principals were aloud to obtain the school's results.
- The interviewees in school A were chosen by the author without the principal's involvement and knowledge who was interviewed. In schools B and C the principals knew who were the teachers that were interviewed. However, the names of the teachers and principals that were interviewed in all three schools were not mentioned but rather numbered in a way that do not enable their identification. Each interviewee got a confidentiality promise before starting the interview and all of them were very coperative.

Each principal was told that his/her agreement to conduct the study in his/her school does not force the teachers, students or parents to cooperate and they do it voluntarily. Each teacher was told prior to the interview what is the research about and that his/her participation depends on his or her agreement. Each teacher knew that even after beginning the interview he/she might stop it if he/she wishes.

Before giving the questionnaire in each class, the homeroom teachers told the students about the research and explained them that they and their parents are asked to answer a questionnaire only if they agree. Nevertheless, there was no problem of refusal to write the

answers. The questionnaires for students and their parents were anonymous and this fact was mentioned clearly on each questionnaire with additional explanations relating to the goals of the study as shown in figure 3.2:

Dear student/parent,

You are requested to answer the following questions concerning your attitudes towards school effectiveness. The questionnaire is anonymous and global results are intended to serve only academic purposes dealing with attitudes towards school effectiveness in order to improve schools.

Thank you very much for your cooperation.

Figure 3.2: questionnaires' explanations including anonymity

Additional methodological aspects of the proposed research

Introduction

This section discusses and justifies the chosen methodology of the proposed research based on the methodological literature mentioned above. The proposed research is intended to give answers to three research questions (chapter 1, p. 9). In order to obtain effective answers to these questions it was necessary to select an appropriate research approach, to plan and prepare the research instruments, run a pilot study, develop the instruments and run the main study. The next sections address the following themes:

1. The approach selected and data collection.
2. Research tools.
3. Population and samples.

The approach selected and data collection

The first decision was to choose the most appropriate approach for the research. On one hand, using an approach having statistical generalisation is not feasible (as mentioned previously). On the other hand it was preferred to stress depth in order to understand reasons

and not only describe phenomena. The exclusive alternative was to interview a reasonable number of interviewees. Therefore, the decision was to conduct a study of singularity and the most appropriate one was a case study.

The main purpose was to describe human attitudes towards school effectiveness and their level of satisfaction. For that purpose, a combination of interviewing principals and teachers and surveying students and parents was appropriate. Such an approach may help understand the world as seen from the viewpoint of stakeholders being studied. The use of survey was appropriate because of the necessity to elicit equivalent information such as attitudes or opinions from a certain population, as Johnson (1994) suggests. The intention was to use a case study approach based on questionnaires and interviews in three institutions. The reason for running the research in three institutions is related to the necessity to obtain a certain generalisation to a broader population. On one hand, the case study approach enables the researcher to probe deeply and obtain much information about stakeholders' attitudes towards the effective school and their satisfaction. On the other hand, the decision to run the study in three schools may enable certain generalisation of the findings. According to Yin (1994), in a case study approach, the generalisation is not automatic and a theory must be tested through replication of the findings in a second or even third neighbourhood showing similar results. The different schools chosen in the author's study are equivalent to these different neighbourhoods discussed by Yin (1994). The kind of generalisation that is about to be obtained is close to what Bassey (1999) calls 'fuzzy generalisation' because there is an element of uncertainty. It means that what was found in the three schools examined may also be found elsewhere but there is no certainty of that.

Because the main purpose was to obtain stakeholders' attitudes and perspectives, the use of documentary research was not adequate. The only applicable possibility was to ask those people relevant questions, analyse them and then obtain conclusions and develop models and theory.

According to international literature on school effectiveness there are many possible characteristics of effective schools. The hypothesis was that stakeholders hold similar attitudes towards the effectiveness of Israeli six-year schools (e.g. they can identify similar characteristics for the effective Israeli six-year school). Additionally, the level of satisfaction of Israeli stakeholders relating to the present situation at their six-year high schools was unknown and was about to be examined. In order to understand stakeholders' attitudes towards the ideal situation and reality, they were asked relevant questions (based on the international literature) as mentioned above (chapter 3, p. 102-103).

To enable students and parents to add new and maybe unknown characteristics, the questionnaires included not only closed questions but also open-ended questions intended to collect new and unfamiliar data which stakeholders may think is relevant to Israeli six-year high schools' effectiveness. The interviews of principals and teachers included additional general questions asking them to discuss any other issues that have not been mentioned by the specific questions. That approach enabled also to distinguish between more important issues and those that have been perceived by stakeholders as less significant. It enabled to collect data about ideal effective Israeli six-year high schools and the existing reality. Concerning the quantitative research (students and parents), it was also possible to calculate the mathematical value of the gap between desire and reality whereas for principals and teachers it has been feasible to know if there is a gap but not to calculate its mathematical size. The hypothesis was that according to stakeholders' attitudes in different six-year high schools, there are about to be many similar identifiers and characteristics of effectiveness and satisfaction might be similar in some aspects but also different in others.

Research tools

The research tools selected were as follows:

- Semi-structured interviews for principals and teachers (appendix E, p. 415).
- Questionnaires given to students and parents (appendices A-B: pilot study, p. 391, 397, appendices C-D: main study, p. 403, 409).

Questionnaires were prepared for the larger populations. For the smaller and professional populations of principals and teachers, it was much better to conduct interviews rather than questionnaires. That method facilitates the collection of more qualitative data. The coming subsections address the following themes:

1. Interviews.
2. Questionnaires.
3. Statistical analysis for the questionnaires' results.

Interviews

Data collection for principals and teachers was done by semi-structured interviews containing open questions. A semi-structured style was preferred because it was possible to ask principals and teachers general questions and then record quite a lot of details from the answers. It has been possible to collect a wide range of full answers and explanations using

this method. Its disadvantage is that there must be a limitation on the number of questions asked. It is quite obvious that the availability of time might have been a problem from the point of view of stakeholders being interviewed. Another alternative could have been to use a questionnaire (with closed questions) similarly to students and parents. By that way there may be more questions but the answers would have been quite short. The preferred alternative was to ask fewer questions with more depth in order to be able to understand the perspectives of principals and teachers and the main reasons for them. However, the interview was intended to cover all issues that are hypothetically linked to Israeli six-year high-schools effectiveness as found in the international literature.

Questionnaires

Data collection for students and parents was done by questionnaires. That method enabled the participation of larger samples but with less depth. In order to overcome the problem of relevant issues that may not be included in the closed questions, there were added some open questions in which each respondent could write free text and add important extra data.

The questionnaires for students and parents were the same except for minor adaptations in wording for each population. The equity facilitated a clear comparison between those two groups of stakeholders. 60 questions were closed whereas 5 were open-ended.

Responses were sought on a four point scale as follows:

a. Importance or truth of qualities for effective six-year high school:

- 1 - very unimportant/not right at all.
- 2 - unimportant/not right.
- 3 - important/right.
- 4 - very important/very right.

b. Situation at stakeholders' school is:

- 1 - very bad.
- 2 - bad.
- 3 - good.
- 4 - very good.

Statistical analysis for the questionnaires' results

The results of the questionnaires were analysed as follows:

- For each question, a mean score (\bar{x}) was calculated (between 1 and 4). In order to know how each mean score represents each sample (school), a standard deviation

was calculated (appendix P, p. 466) for each question in each school (and also for all schools together) by the formula:

$$S.D = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n - 1}} \quad \begin{array}{l} x_i = \text{Question's score} \\ n = \text{Sample size} \end{array}$$

If the standard deviation is small, the value represents the sample effectively. The standard deviation is a measure for scattering and a high value is an indication of high variance. In such a case the mean score is not a typical measurement for the sample.

- In order to evaluate how effectively the samples represent the whole school population, a confidence interval (appendix Q, p. 470, $\alpha = 0.01$) was calculated for each mean score as follows:

$$s = \text{Sample variance} = \frac{\sum (x_i - \bar{x})^2}{n - 1}$$

$$\text{Confidence Interval} = z_{\alpha} \frac{s}{\sqrt{n}}$$

This interval is an indication for the maximal gap between the sample mean score and the population mean μ (the whole school) and as this interval is smaller, the sample represents the population better, as follows:

$$\mu = \bar{x} \pm z_{\alpha} \frac{s}{\sqrt{n}}$$

- Analysis of variance was conducted in order to examine the significance of differences among the six grades in each school (appendix S, p. 482, students and parents) and among the three schools (appendix T, p. 500, students and parents). Similarly, two-sample hypothesis test was used in order to examine the significance of variations between students and parents (appendix R, p. 474).
- In order to know if there was correlation between different variables (students and parents), correlation factors were calculated for pairs of questions (appendix U, p. 506).

Population and samples

The next subsections define, describe and explain the population and samples of the research.

Population

All Israeli six-year high schools - their students, teachers, parents and principals (about 390 six-year high schools all over the country).

Samples

After deciding to run three case studies in three six-year high schools, the next relevant decision was to choose the three schools and afterwards, the stakeholders' samples in each school. The idea was to select Israeli six-year high schools and their principals, to sample in each school classes and in each class to sample students, parents and teachers. Using an approach of clusters, there were selected three Israeli six-year high schools having between 700 to 1500 students each. The choice of schools was a direct outcome of possible access owing to the author's pre-knowledge of the schools' principals and their agreement to cooperate with the research. Gaining permission to enter a school in Israel and run a study is not a straightforward procedure and the only applicable option was to do it in schools where principals allowed access. The three six-year high schools chosen were schools A, B and C.

From each school there were selected principals, teachers, students and parents as follows:

Principals: In school A there are three principals who are responsible for the whole school, the junior high and the secondary school. Two of them were interviewed – the general principal and the secondary school principal. In schools B and C there are only two principals – a general principal and a junior high principal, so both of them were interviewed (6 principals overall).

Teachers: From each school there were taken samples of six classes from the 7th to the 12th grade. In each grade there are between six to ten classes (depends on school size) numbered from one to the last class. A systematic random sampling of one class from each grade was achieved by choosing from each grade, class number one. There were taken twelve teachers from each school: six teachers from the secondary school and six teachers from the junior high school. Each group of six teachers was divided to three homeroom teachers of the chosen classes (class no. 1 from each grade) and three subject leaders: maths, English and history (12 teachers in each school, 36 teachers overall). The reason for choosing subject leaders was that they are the most experienced, senior and professional teachers at school

and they have global insight for what is happening at the school. The homeroom teachers were chosen because they have the best knowledge concerning the chosen classes, they teach specific subjects but also have the experience of managing a class and dealing with all students' and grades' matters.

Students and parents: All students and their parents, from the six grades mentioned above were asked to participate in the study. From each class no. 1 in each grade, complete population was examined including one parent of each student. Every student in each class chosen received from the homeroom teacher a questionnaire during a lesson and everyone agreed to answer it. All the students got another copy for their parents and they were asked to return it in the next lesson. The homeroom teachers reminded the students to return the parents' questionnaire so the rate of response was 100% (for both students and parents in all three schools). There were no students or parents who refused to participate.

Summary

The study was conducted using case study approach based on study of singularities. The research conducted in three different six-year high schools and the aim was to examine stakeholders' attitudes towards characteristics of Israeli six-year high schools and their satisfaction with their own schools.

The case studies included the following tools: semi-structured interviews for principals and teachers and questionnaires for students and their parents. All questions for students and parents were the same, which helped to make effective comparisons between these groups of stakeholders. This was also the situation regarding the interview schedule for teachers and principals. The questions were based on the characteristics of effective schools described in the international literature (discussed in chapter 2).

The answers to the questionnaires' questions were analysed by calculating for each question statistical parameters such as mean score, standard deviation and confidence interval. Those parameters enabled the author to evaluate how well the mean score represents respondents' sample and the whole population of each six-year high school. Analysis of variance and two-sample hypothesis test was used in order to examine the significance of differences among schools, grades and students and parents. A pilot study conducted before the main study facilitated a check of the quality of questionnaires, interviews and samples' representation.

Three Israeli six-year high schools were selected, 6 principals and 36 teachers were interviewed and questionnaires were given to 524 students and their parents. In order to handle the issue of generalisation of the results, a fuzzy generalisation was made. The meaning of this is that similar findings may be found in other Israeli six-year high schools but there is uncertainty about it.

The next chapter (chapter 4) describes the pilot study conducted in school A. After running the pilot study and gaining lessons, the questionnaires were changed and the main study was conducted.

Chapter 4: Pilot Study

Introduction

Prior to the main study, a pilot study was conducted at school A. The reasons for undertaking a pilot study were to develop and refine the methodology if needed and to determine whether the research that was about to be conducted in the main study, was worthwhile and practical. The pilot also helped by obtaining preliminary results which may be strengthened, clarified and have more validity in the main study.

Chapter 4 addresses the following themes:

- Conducting pilot and main study in the same school.
- The aims of the pilot study.
- The interview.
- The students' and parents' survey.
- Worthiness and practicality of the main study.
- Summary.

Conducting pilot and main study in the same school

The first case study was conducted at school A which was the same institution where the pilot study had been taken place. There might have been a problem of contamination while conducting a pilot and main study in the same institute. The risk was that potential respondents of the main study could have had pre knowledge about the research what could have caused their answers to be biased. On the other hand, there might have been an advantage to such an alternative because it enabled the pilot to examine the appropriateness of the research tools to the specific institution and to make adjustments if necessary.

Nevertheless, in order to overcome potential contamination, the following measures were taken:

1. The pilot and school A case study included different classes and different teachers in order to ensure that the respondents were about to see the questions only once, to prevent potential bias.
2. Both studies were conducted in two different periods of time, namely, two different learning years. In such a way, there has been lower likelihood that relevant information would have been transferred from pilot's respondents to other potential participants.

3. The pilot study's sample was very small: one teacher and only 30 students and parents from three classes were surveyed in comparison to 12 teachers, 2 principals, 190 students and 190 parents in school A case study. Principals have not been surveyed at all in the pilot study. In such a way, the likelihood for having contamination might have been low too.

The aims of the pilot study

The key aims of the pilot study were to test the research methodology, to trial the key research instruments and to predict the worthiness and practicality of the main study. It was required to trial the questionnaires (for students and parents) and the interview (teachers/principals) on respondents eligible to participate in the main study.

The pilot study was very important as a preliminary stage before conducting the main study. It enabled the author to test the methodology and the research tools before beginning the main study. The pilot study might have revealed methodological errors or inappropriate research tools, and it was possible to make changes before starting the main study. Further, it might have shown if the main study was likely to be implemented effectively and answer the research questions reasonably. Because the main study required an investment of much effort and resources, it was very important to minimise possible risks that might have been a result of methodological errors, inadequate tools, lack of worthiness or impracticality. The price of such risks if existing in the main study might have been too high. The pilot study has examined a limited population relatively fast and with an investment of restricted resources. Its importance was to gain lessons from a small-scale study, to decide whether or not to go on with the main study and if required, to take all possible measures in order to have an improvement in the main study.

Following the discussion mentioned above, the main aims of the pilot study were as follows:

- To test the effectiveness of the semi-structured interview for obtaining staff views and attitudes before the main study.
- To test the effectiveness of questionnaires before administering them to the respondents of the main study. Inappropriate questions were to be changed or improved.
- To examine if the designated main study is worthwhile and practical. That could have been achieved by examining the way in which the restricted data was collected and processing it similarly to what has been likely to be in the main study. It means that a

small-scale study can give an indication if the main study is likely to deal effectively with the research questions and if it can be implemented practically.

- To calculate standard deviation and confidence interval for each question in order to evaluate how it can represent the respondents' sample and also the whole school population. Small values of these statistics might have been an indication for predicted small values also in the main study.

The pilot study included the following populations:

- Piloting the semi-structured interview: one maths teacher who was interviewed for about five hours (four meetings).
- Piloting the questionnaires: ten students and their parents in each of the following grades: 8th, 10th and 12th (thirty students and thirty parents overall).

The interview

Introduction

The aim was to trial the interview schedule intended to give answers to the three research questions relating to principals and teachers' attitudes (appendix E, p. 415). Therefore, one staff member was interviewed. A maths teacher who taught in all grades and all levels was chosen because she could well represent the six-year high school. Further, maths is considered as a problematic subject in which students' achievements are low. The teacher was asked to give her opinion relating to a list of qualities of the effective six-year high school as mentioned in appendix E (based on the research literature). For each characteristic, she was asked to describe its importance and how it ought to be ideally, the situation of each of them in her school and her satisfaction with her own school.

The following themes are addressed in the coming subsections:

1. An example of the results - the interviewee's attitudes towards collaboration among stakeholders.
2. Evaluation of the pilot interview.

Collaboration among stakeholders

Collaboration of students, teachers and parents is crucial for school effectiveness. The teacher argued that there is much importance to the collaboration of students, teachers and

parents. The relationship between teachers and students is crucial for success but the other elements of the triad are not less important. Teachers should support students and teach them learning skills but students must cooperate and behave properly. All three stakeholders should have good communication and teachers should be accessible to parents and update them on their child's status. Parents have to give their children assistance and communicate with them. The problem in School A was that most teachers had to work in more than one institution because the salary is too low. Therefore they were not able to invest appropriate time for individual students. Students do not think it is possible to ask teachers for private help when they have problems.

Relationships among stakeholders were partially good. There was a problem of lack of teachers' effective evaluation and it lowered their satisfaction. The interviewee added that usually there was no positive evaluation and teachers' self satisfaction was decreased. There were better and worse examples of cooperation between parents and teachers and there was high variation concerning this parameter.

Evaluation of the pilot interview

The interview was found to be an appropriate tool for eliciting the staff's perceptions towards an effective six-year high school. The only problem found was that it took too much time (about five hours). Such a long time might be problematic for the main study including interviews of 42 staff members. One alternative for saving interviewing time could have been to omit a few questions. This alternative was unacceptable because its possible influence on the data needed for the proposed research according to the research questions. Another alternative was to adopt a better and more focused interviewing style which would help to deal with relevant issues and not waste time for unnecessary discussion. The second option was preferred for the main study (chapters 5-7), and it really helped the author to decrease the interviewing time from 5 hours to only 2-3 hours per each interviewee without losing important data.

The students' and parents' survey

Introduction

In order to trial the students' and parents' questionnaire, a survey was conducted in school A. In each a questionnaire there were 58 questions as follows (appendices A-B, p. 391, 397):

- Questions 1-30: each question described a characteristic of six-year high school and the

respondent was asked to define its importance and the situation at his/her own school (a scale of 1-4).

- Questions 34-56: in each question the respondent was asked to define his/her satisfaction with each item (a scale of 1-4).
- Questions 31-33 and 57-58 were open ended questions designated to add data not included in the closed questions mentioned above.

The questionnaires were given to students and parents in three grades: 8th, 10th and 12th (class no. two from each grade). The questions were based on the research literature and the 10 first students (and 10 parents) of each class no.2 in each grade were sampled (30 students/parents overall). The questionnaires were given to the students during a lesson and were collected after about half an hour so the rate of response was 100%. Each student received another questionnaire for his/her parents and everyone gave it back to the homeroom teacher within a week, so the rate of response was 100% too.

Two examples for the results of this survey (students and parents) are shown in figures 4.1 and 4.2. The diagrams describe students and parents' attitudes towards collaboration, based on three grades together (8th+10th+12th grades).

In figures 4.1-4.2, the left grey column in each graph represents quality's "importance" and the white right column represents the "situation at my school". The maximal importance is 4 and the minimal is 1. The best "situation at my school" score is 4 and the worst score is 1. The figures show average scores calculated for each answer separately for the whole population. Appendices F-G (p. 416, 419) include average scores of all pilot's questions relating to the whole school A and also each grade separately.

A calculation of standard deviation and confidence interval was done for each question in order to evaluate how well it can represent the sample and the whole school population (appendix H, p. 422). All standard deviations of closed questions were small (0-1.2091 for students and 0-1.1146 for parents). The meaning of those results is that the scattering of answers' values is small which means that mean scores describe the sample well. The confidence intervals were in the range 0-0.6357 for students and 0-0.8288 for parents. They were likely to decrease in the main study (the sample increased).

Students' attitudes: collaboration among stakeholders

The issue of collaboration of students, teachers and parents was examined by questions 1-5. Appendices A (p. 391) and F (p. 416) include a complete version of questionnaires given to students and the results. These five questions and the findings are shown in figure 4.1.

According to figure 4.1, all kinds of collaboration are perceived as important by the students with the exception of 'collaboration between students and parents' which is perceived as less important (question 1: 2.73). The most important issue is the collaboration between students and teachers (question 2: 3.73). The most important issue is the collaboration

1. Collaboration between students and parents at school.
2. Collaboration between students and teachers at school.
3. Collaboration between teachers and parents at school.
4. Collaboration between parents and principals at school.
5. Teachers' agreement to parental involvement at school.

Students - School A: collaboration 8th+10th+12th grades

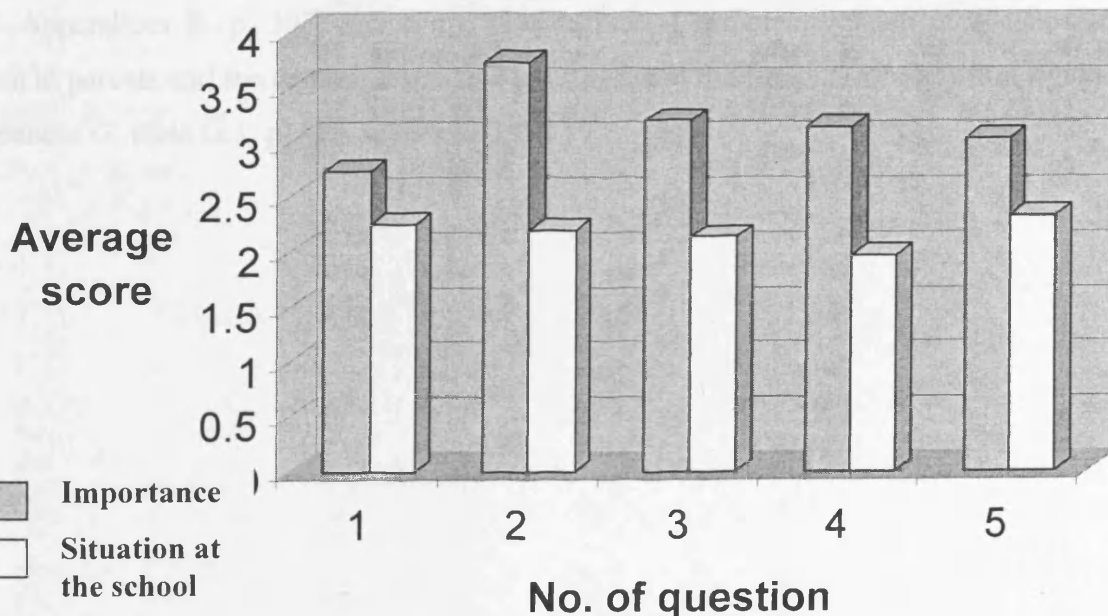


Figure 4.1: Students' view: Collaboration - Questions 1-5

In all aspects of collaboration there was a gap between the desired situation and the reality at the school. The greatest gap related to collaboration between students and teachers (question no. 2: 1.53) and the meaning of this finding is that according to students' perceptions, there was a great problem concerning the collaboration they had with their teachers. They perceived this issue as very important and the existing situation was quite ineffective. The smallest gap existed while comparing the difference between 'importance' and 'reality' concerning collaboration between students and parents (question 1: gap size is 0.47). To students, this issue was less problematic than all the others relating to collaboration.

While examining each grade separately (appendix F, table F.1, p. 416) there was a similarity to the total view. The phenomenon of highest importance of the collaboration between students and teachers existed in the 8th and 10th grades and the gap of this characteristic was also the highest. In the 12th grade, the most important issue was collaboration between teachers and parents and the highest gap existed relating to this characteristic (question 3: importance: 3.6, gap: 1.20).

Parents' attitudes: collaboration among stakeholders

The issue of collaboration of students, teachers and parents was examined by questions 1-5. Appendices B (p. 397) and G (p. 419) include a complete version of questionnaires given to parents and the results. These five questions and the findings are shown in figure 4.2 (appendix G, table G.1, p. 419, questions 1-5):

1. Collaboration between students and parents at school.
2. Collaboration between students and teachers at school.
3. Collaboration between teachers and parents at school.
4. Collaboration between parents and principals at school.
5. Teachers' agreement to parental involvement at school.

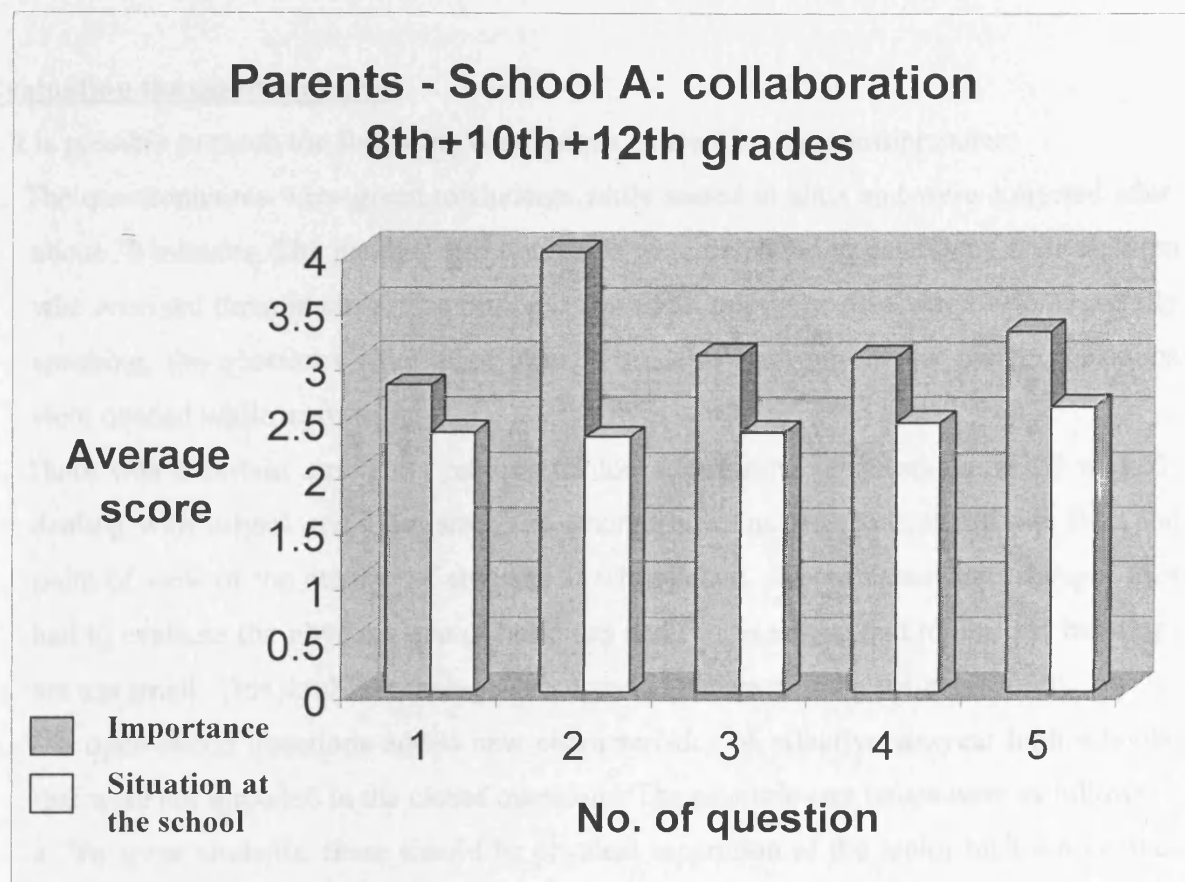


Figure 4.2: Parents' view: Collaboration - Questions 1-5

According to figure 4.2, all kinds of collaboration were perceived as important by the parents with the exception of 'collaboration between students and parents' which was perceived as less important (question 1: 2.79). The most important issue is the collaboration between students and teachers (question 2: 4.00).

In all aspects of collaboration there was a gap between the desired situation and reality at the school. The greatest gap related to collaboration between students and teachers (question no. 2: 1.68) and the meaning of this finding is that according to parents' perceptions, there was a great problem concerning the collaboration students have with their teachers. They perceived this issue as very important and the existing situation was quite ineffective. The

smallest gap exists while comparing the difference between 'importance' and 'reality' concerning collaboration between students and parents' (question 1: gap size is 0.42). To parents, this issue was less problematic than all the others relating to collaboration.

While examining each grade separately (appendix G, table G.1, p. 419), there was a similarity to the total view. The phenomenon of highest importance of the collaboration between students and teachers existed in all grades examined and the gap of this characteristic was also the highest in all grades separately.

Evaluating the questionnaires

It is possible to reach the following conclusions concerning the questionnaires:

1. The questionnaires were given to students while seated in class and were collected after about 30 minutes. The parents' questionnaires were delivered to parents by their children who received them in class. The response rate of all questionnaires was 100%. Generally speaking, the questions were quite clear to students and only a few oral explanations were needed while answering.
2. There was a certain ambiguity relating to double meaning of questions no. 51 and 52 dealing with school and class size. The desired meaning was to evaluate size from the point of view of the number of students at school/class. A few respondents thought they had to evaluate the physical size of buildings and rooms saying that rooms and buildings are too small. This double meaning was corrected before running the main study.
3. The open-ended questions added new characteristics of effective six-year high schools that were not included in the closed questions. The new relevant issues were as follows:
 - To some students, there should be physical separation of the junior high school and the secondary school (not at the same campus). To the secondary school students, the junior high students disturb them and are violent. Parents argued that a six-year high school is an 'unacceptable monster' and it is much better to separate those two institutions. On the other hand, there were students who thought there should be an effective cooperation between the junior high school and the secondary school thus students in the 7th to 9th grade should be better prepared to study at the secondary school (10th to 12th grade). According to these findings, it was required to improve questionnaires by adding questions, which relate specifically to Israeli six-year high schools and distinguish them from other kinds of schools. The tools should give special attention to characteristics of effectiveness which are unique to six-year high schools beyond general attributes of effective schools. The relations between the

junior high school and the secondary school should be treated in the main study: Should there be a separation or should there be a continuity and cooperation (physically, same teachers or different teachers, and so on).

- There is a gap between the junior high students and secondary school students' satisfaction with teachers' ability. The first group of students argue that the teachers do not know their subject properly, have low didactic ability and so on. On the other hand, the secondary school students are more satisfied with teachers' professional ability. That finding may hypothetically give an indication of an ability gap existing while comparing those two groups of teachers. The main study should give a special focus to exploring this gap (if it really exists).
 - The importance of the school counsellor was mentioned. A relevant question was added to the questionnaire.
 - There was a great problem of missing students, noise at classes and violence. Stakeholders have mentioned these factors as reducing school effectiveness dramatically. On the other hand, students think that there should be reasonable punishments – school punishments are not proportional. Because of that, the main study should examine the subject of school discipline that appeared to be problematic.
 - An effective school must have many studying opportunities for students and combine theoretical studying with practical work. There is also a desire for social activities in and out of the school. The issue of studying opportunities and social life should be stressed in the main study.
 - There should be special treatment for students with special needs - a relevant question was added.
 - There should be a special focus on homework (quantity, quality and checking homework) – a question was added.
4. The open-ended questions stressed the importance of the following characteristics of effective six-year high school, which were mentioned in the closed questions:
- The importance of motivation to study - there were complaints that school lowers students' motivation.

- Collaboration between teachers and students - stakeholders mentioned that many teachers do not treat students properly and do not really listen to them. Students do not take part in the decision making process at school.
- School buildings and classrooms are too small and old, there is out-of-date and not well maintained equipment (laboratories, computers, software, air-condition, toilets, garden). Stakeholders think that the whole issue of resources' management is crucial for school effectiveness.
- The pressure of examinations and assignments should be reasonable (to students, it is too high).
- Principal's ability to deal with difficult situations was found to be problematic.

Worthiness and practicality of the proposed main study

The pilot study revealed that the research tools were practical and convenient for use. They were also found to cover most characteristics of effectiveness. The open-ended questions of the questionnaires have helped to add extra data, which was not covered by the closed questions. The meaning of this is that such instruments are efficient for eliciting stakeholders' attitudes towards six-year high school effectiveness. The interview schedule seemed to be adequate for teachers and the assumption was that it would also be appropriate for interviewing principals. Further, the results of the pilot study showed that such a study is worthy and has a significant research value. For example, according to both questionnaires' and interview's results, it seemed that the collaboration between teachers and students is perceived as very important but reality at the school was problematic: there was a substantial gap between desire and reality especially according to parents' and students' views. The pilot has revealed that the hypothetical gap between the first two research questions (desire and reality) was likely to exist. It has helped to obtain such preliminary results which might have been strengthened, clarified or had more validity in the main study. Therefore, the pilot study was perceived as a necessary milestone that should have been done prior to the main study. The bottom line was that the research plan and methodology are adequate for implementing the thesis proposal and it was decided to start the main study after conducting minor revision to the questionnaires.

Summary

General assessments of the pilot study at school A showed the existence of a gap between desired and real characteristics of the school. That gap may be the reason for the dissatisfaction of stakeholders (students, parents and the staff). Gap size is different concerning different issues examined, different stakeholders and classes. In some issues, there were differences between the secondary school and the junior high school.

The questionnaires and interviews seem to be appropriate for undertaking the main study and minor changes were made in order to improve them prior to starting the main study. The changes included clarification of two questions and adding 7 new questions (appendices C and D, questions 31-37, p. 403, 409). The time needed for conducting the interview was too long. Nevertheless, the number of questions was not reduced and in the main study the interviews required considerable skill and discipline to complete in a reasonable time (not more than three hours for each interview). The pilot study has strengthened the assumption that the main study was likely to be worthy and practical. The next three chapters (5-7) describe schools A, B and C case studies' findings.

Chapter 5: School A case study

Introduction

Chapter 5 describes the findings of school A case study including the following:

1. Interviewing of two principals and twelve teachers (August 2000 until November 2000).
2. Surveying by questionnaires, 190 students and 190 parents from six grades as introduced in table 5.1 (during November 2000).

No.	Grade	No. of students/parents
1	7 th	32
2	8 th	28
3	9 th	28
4	10 th	35
5	11 th	35
6	12 th	32
	Total	190

Table 5.1: No. of students/parents in each grade

School A was established in the year 1963 and until 1993 it was a selective four-year secondary school, which accepted only high achieving students. In the year 1993, it became a six-year high school and started to accept all kinds of students including very low achieving, regular and also gifted students. In order to fulfil this change it was required to add buildings and floors in the same area which was not enlarged. In school A there are about 1500 students and 115 teachers and it is managed by three principals one of whom is responsible for the whole six-year high school. The other two principals manage the secondary school and the junior high school. School A is located in one campus and its staff room is common to the junior high and secondary school's teachers.

Chapter 5 addresses the following themes:

1. **Schools A, B and C case studies:** chapters 5, 6 and 7 describe the findings of three case studies, which have been conducted similarly and based on the same methodology. This section addresses the aims, structure and the way the interviews and survey were conducted in all three schools.
2. **School A findings:** this section relates to the attitudes of principals, teachers, students and parents towards the effectiveness of six-year high school as found in school A case study.

3. Summary and preliminary conclusions: it summarises the main findings of school A, compares them to the research literature and explains how they relate to the research questions.

Schools A, B and C case studies: chapters 5-7

Introduction

Chapters 5, 6 and 7 summarise the findings of three case studies conducted in schools A, B and C. The case studies intended to consider three key research questions (chapter 1, p. 9):

1. What are the characteristics of effective six-year high schools according to stakeholders' points of view?
2. In what aspects are stakeholders' own schools regarded as effective/ineffective (from the same points of view)?
3. What is the level of satisfaction of stakeholders with their own school?

The research questions were divided to relevant sub-questions included in research tools (interviews and questionnaires). The case-studies examined stakeholders' attitudes towards different aspects of school effectiveness such as teachers' characteristics, school and class size, stakeholders' motivation, organisational culture, collaboration among stakeholders, management of resources and so on.

Chapters 5-7 are intended to consider the research questions describing the characteristics of the effective six-year high school according to stakeholders' points of view, the reality in the schools from the same aspects and stakeholders' satisfaction with their own school. These three chapters describe and explain the findings of schools A, B and C case studies. Concerning the three research questions, the following themes will be addressed in each of these chapters:

- Principals' attitudes.
- Teachers' attitudes.
- Students' attitudes.
- Parents' attitudes.

The data regarding to principals and teachers were collected by a semi-structured interview (appendix E, p. 415). Both principals and teachers were asked exactly the same questions in order to enable effective comparison. The students and their parents were examined by questionnaires (appendix C-D, p. 403, 409) having the same questions for students and

parents in order to compare among them. The summary at the end of each chapter (5-7) includes a review of the main findings, a comparison to the literature and preliminary conclusions.

The coming subsections address the following themes:

1. The interview's schedule in schools A, B and C - chapters 5-7.
2. The questionnaires of schools A, B and C - chapters 5-7.

The interview's schedule in schools A, B and C - chapters 5-7

The interview's schedule for principals and teachers (appendix E, p. 415) seeks to give an answer to the three research questions relating to principals and teachers' attitudes (chapter 1, p. 9). The interviewees were asked to give their opinion relating to a list of qualities of the effective six-year high school (based on the research literature). For each characteristic, they were asked to describe its importance and how it ought to be ideally (intended to answer the first research question), the situation of each of them in their own school (second research question) and finally, their satisfaction with the school (third research question). The following qualities concerning interview's schedule are discussed in chapters 5-7:

- Collaboration among stakeholders.
- The principal.
- The teachers.
- School and class size.
- Management of school's resources and the physical environment.
- Parental involvement.
- Teamwork.
- Students' motivation.
- Students' achievements.
- Organisational culture and climate.
- Discipline.
- Teachers' standards and expectations towards students.
- Social life at school.
- School's flexibility for students.
- Teachers' intrinsic and extrinsic rewards.
- Additional issues.

The questionnaires of schools A, B and C - chapters 5-7

In order to examine students and parents' attitudes towards the characteristics of the effective six-year high school, a survey, based on questionnaires, was conducted in schools A, B and C.

In each questionnaire there were 65 questions as follows (appendices C-D, p. 403, 409):

- Questions 1-37: each question describes a characteristic of six-year high school and the respondent was asked to define its importance and the situation at his/her own school (a scale of 1-4). These questions were intended to answer the first and second research questions.
- Questions 41-63: in each question the respondent was asked to define his/her satisfaction with each item (a scale of 1-4). These questions were intended to answer the third research question dealing with stakeholders' satisfaction with the school.
- Questions 38-40 and 64-65 are open-ended designated to add data not included in the closed questions mentioned above. These questions were helpful in order to add data for all three research questions (38-40: first and second, 64-65: third).

The questionnaires were given to students and parents in six classes (systematic sampling: class no. one from each grade, 7th – 12th). The questionnaires were the same as those used in the pilot study based on the literature with the addition of 7 new questions (31-37). The additional questions include new issues that were mentioned by respondents in the open-ended questions of the pilot study. These questions included additional issues such as the continuity between the junior high school and the secondary school, the counsellor, students' presence, studying opportunities, punishments, treatment for students with special needs and focus on homework. The way the questionnaires were given to students in all three schools is addressed in chapter 3 (p. 105).

The results of the survey of students and parents (chapters 5-7) are shown in figures 5.1-5.10, 6.1-6.10, 7.1-7.10. The diagrams describe students and parents' attitudes relating to each whole school (all six grades together). The next sections (in chapters 5-7) discuss the whole school findings and also the views of separate grades and difference/similarity among them.

In figures 5.1-5.4, 6.1-6.4, 7.1-7.4 (students) and 5.6-5.9, 6.6-6.9, 7.6-7.9 (parents), the left grey column in each graph represents quality's "importance" and the white right column represents the "situation at my school". The maximal importance is 4 and the minimal is 1. The best "situation at my school" score is 4 and the worst score is 1. The figures show the

mean scores calculated for each answer relating to all grades together. Appendices I-N (pp. 424-454) introduce the mean scores of all questions relating to all grades together and also separately in each school (Appendices I-J: school A [p. 424, 430], K-L: school B [p. 436, 442] and M-N: school C [p. 448, 454]).

A calculation of standard deviation and confidence interval ($\alpha = 0.01$, which means level of confidence is 99%) was made for each question in each school in order to evaluate how well the sample represents the whole school population (appendices P, Q, p. 466, 470). All standard deviations of closed questions were small (0.4168-1.1538 for students and 0.1979-1.0762 for parents). The meaning of these results is that the scattering of answers' values was small which means that mean scores described the sample well. Further, confidence intervals were calculated for each mean score. The calculated values were small (0.0831-0.2321 for students and 0.0397-0.2098 for parents) and the meaning is that the sample represents statistically the whole students and parents' population of schools A, B and C (appendix Q, p. 470).

In order to examine the statistical significance of the difference/similarity among the six grades in each school, analysis of variance was made (appendix S, p.482). The F statistic was considered as significant (which means there is a difference among the grades) for $\alpha \leq 0.01$.

Relating to students and parents' attitudes, the following issues are addressed:

- Collaboration among stakeholders.
- The school principal.
- Teachers' characteristics.
- Other issues (school and class size, students' motivation, physical environment, organisational culture, timetable, social life, extracurricular studies, discipline, high standards and expectations, grouping, management of information, six-year continuity, the counsellor, students' presence and focus on homework).
- Satisfaction with the school.

School A findings

Introduction

This section describes the findings of school A case study including the interviews of principals and teachers and the questionnaires for students and parents. The coming

subsections address the attitudes of 4 kinds of stakeholders examined (principals, teachers, students and parents) towards the six-year high school effectiveness.

Principals' attitudes

Two school principals were interviewed in school A. Principal 1 is the general manager of the whole six-year high school and principal 2 is responsible for the secondary school only, working under principal 1. However, principal 2 also knows well the junior high school and the relations between this school and the secondary school. The coming subsections discuss principals' attitudes towards the characteristics mentioned above (p. 146).

Collaboration among stakeholders

Both principals think that there is a great importance to the collaboration of students, teachers, parents and principals. Both principals think that the relations between students and teachers are the most important because they are more intensive and teachers should help their students.

The principals think that parents have a great influence on students' learning and therefore the collaboration of school and parents is also important. School can influence parents and such a process can develop the students. To Principal 2, there should be a limitation to those relations and there are issues that must stay out of students and parents' interference. He says:

“An undesired extreme situation is one in which teachers get the feeling that things are managed according to students' and parents' requirements. There are issues which must stay out of students and parents' interference such as the curriculum and dealing with discipline and punishments”.

Both principals think that in school A there is a long way to go in order to reach the ideal model of collaboration between the school and parents. The relationships between the principal and the teachers are problematic: there are situations of stress and bad communication. In other aspects, the situation is better: there is an effective collaboration between teachers and students and an open and democratic atmosphere, which enables good access of students to teachers.

The principal

Both principals claim that the principal has a very difficult job. He/she deals with pedagogic, external relations, administration and so on. The effective principal should decentralise authority, manage resources well, should have excellent human relations, vision, lead changes, should be task oriented, have an open door and lead the team. Principal 1 stresses the importance of leading changes. She says:

“It is very important to initiate changes, to live in an environment of continuous change including high sensitivity to all elements accompanying processes of change: uncertainty, resistance and instability”.

To both principals, human resources management is very important including the choosing of the management team. This team should not be only professional but also have the ability to communicate effectively with all teachers. The main problem is that in current management it is difficult to deal with vision and most time is invested in daily details such as logistics and the problems of teachers and parents. The principal's ability to reward teachers is limited and therefore it is hard to motivate them.

The principals are aware of difficulties and problems existing in school A. Principal 1 does not think it is her fault whereas principal 2 thinks there is ineffective decision making process at the school. He is dissatisfied with the principal's leadership saying it influences the ability to motivate teachers. Further, there is lack of backing from the local authority: *“local politics is involved at school A and decisions are not based on real needs, so the school has to implement disliked policies too”*. Principal 1 has a different view arguing that the reasons for the problems are lack of willingness of the staff to cooperate in making changes as she wishes. She made personal changes that were effective in her mind but were not accepted by the staff and caused them high resistance.

The teachers

The ideal teacher, according to the principals, is flexible, professional, creative, collaborative, sensitive, knows how to face the class and teach in an interesting way, has good communication with students and parents and looks upon education as a profession. He/she should also be an independent learner who studies permanently and should encourage parental involvement.

To principals, the teachers have academic education, they were trained to teach different levels, they have high didactic ability and there is good communication between them and the students.

Most teaching and evaluation is uniform and does not reflect the real needs of the students. Teaching is mainly frontal and measures of evaluation are standard. In that sense there is a difference between the two components of the six-year high school. In the secondary school, teachers know how to teach effectively for the matriculation examinations but only a few of them have interesting and diverse teaching styles. In the junior high school on the other hand, the character of teachers' work is different – they use different teaching styles and there are enrichment programmes. All this can be done because they do not have the pressure of the matriculation examinations. This is another typical characteristic of six-year high school - there are two groups of teachers, these who teach for the matriculation examinations and these who do not. This might be another reason for the separation of the school and the lack of continuity.

To principals, the teachers of the secondary school have higher ability of conceptualisation, analysis and the objective is to reach the situation in which all teachers are able to teach all grades.

Most teachers resist parental involvement and tend to give up on students with low achievement. Principal 1 argues: *"The teachers prefer good students because it is much easier to show high achievements while teaching these students"*. Some teachers are burnout and are responsible for lack of discipline as principal 2 claims:

"The reality in school A is similar to what exists all over the state of Israel – teachers' burnout, growing difficulties because of lack of discipline and a negative relationship with parents that hurts the teacher's effectiveness.....The burnout influences negatively: veteran teachers change negatively, are less attentive, impatient, bitter and do not want to accept changes".

Another problem relates to teachers' tenure, which is given after two years. There are teachers who are in decline but the school principal cannot dismiss them even though their function is ineffective.

School and class size

To both principals each grade should have six classes whereas at school A there are 7-10 classes in each grade. There are 40 students in class whereas the ideal size is about 30-34. Principal 2 claims:

“There are ten 12th classes, nine 11th classes and seven 10th, which means the situation is not optimal. There are too many classes having 40 pupils and learning cannot be effective”.

There should be a balance between the number of boys and girls in each class.

In school A there is much crowding; there is more crowding in the junior high school and the general satisfaction of both principals is low.

Management of resources and the physical environment

Both principals think that there are insufficient financial resources what influences teaching as principal 1 argues, *“the good years have been finished, there are reductions in teaching hours and jobs”*. All financial resources pass through the municipality and part of them gets 'lost' on the way. The available resources do not fit the technological changes, the buildings are old, the maintenance is ineffective and there are reductions in teaching hours and jobs. According to governmental priorities most budget is dedicated for salaries and there are no financial resources available for development. The local authorities invest too little in the environmental development of the schools. There are options for receiving more budgets but it demands investment of much time, which is usually unavailable.

There are no extra rooms for students' activities, clubs, places for meetings of teachers and students, there is a feeling of suffocation.

Parental involvement

Principal 1 expresses a belief that each parent is a full partner of the student's educational process saying,

“The parents should get the right place to express their ideas concerning the way in which the child should be educated. Without disturbing the professionalism and autonomy of the teacher, it is worthy to let the parents participate in order to bring closer the attitudes of parents and educators in order to have effective influence on the student”.

Principal 1 invites the parents to take part in a study of creating school vision, with other stakeholders.

Principal 2 has a different view. In his mind, parental involvement is desired for general purposes only but not for educational aspects. He thinks parental involvement is mainly undesired although it has a certain advantage:

“Parental involvement is a trouble for school management. However, this involvement has a certain advantage but the problem is that there is no control on the personality of the members of the parents’ board. The advantage is achieved by pressure they make on the municipality in order to obtain more resources and budgets”.

Principal 2 objects to parental involvement even on an individual basis:

“There are negative aspects to this phenomenon – sometimes parents do not give the appropriate respect to teachers’ professionalism. Many parents let themselves interfere in issues in which they are not expert and that situation is annoying and disturbing”.

To both principals, School A discourages parental involvement and therefore, their motivation to participate decreases. Principal 1 thinks that the members of the school parents’ board are motivated by willingness to be involved for the public's favour, whereas principal 2 thinks their interest is based mainly on their children's interest.

Teamwork

To both principals, in order to have effective teamwork at school, there should be interactions among team members, synergism, common thinking and planning, common responsibility and commitment. Teamwork has a unique importance in a six-year high school because without it there cannot be six-year curricular and social continuity.

Both principals claim that there is no real culture of teamwork. Although there are formal meetings, their effectiveness is low because they are based mainly on updating. The reasons for that are teachers’ conservatism, working habits and misconceptions. The ineffective teamwork causes ineffective six-year curricular continuity and ineffective coordination between the junior high school and the secondary school staff. Because of that, the school

does not function as one six-year high school but rather as two different schools that function separately.

Students' motivation

To principals, motivation is very important, especially for six-year high schools as principal 1 claims: *“motivation is very important and can be achieved by creation of interest, thinking challenge and experiences of success”*. Junior high school low motivated students who do not improve usually remain low motivated during the whole secondary school. Motivation is school dependent but is also influenced by home and the students themselves. If the teachers create interest, thinking challenge and experiences of success, motivation can be higher. The way the 7th grade teachers deals with motivation has a substantial influence on the way forth.

Both principals think that students' motivation is not high enough. Some students have 'natural' high motivation without the necessity for school interference but there are many others who are poorly motivated. There are listening teachers but also others who are impatient and influence motivation negatively.

Principal 2 stresses the important influence teachers have relating to students' motivation:

“The teacher's task in creation of students' motivation is essential - not only because of the interest and curiosity he/she initiates but mainly owing to the feeling transferred to students that they are important to teachers”.

The crowded classes have also a negative influence on students' motivation.

Students' achievements

To principals, students' motivation and teachers' performance influence substantially on students' achievements. Their satisfaction is partial because not all students pass the matriculation examinations. Part of those who pass, do not have high achievements so they will not be accepted to higher education, as principal 1 claims:

“It is important not only to pass the exams but also to get an effective matriculation diploma, namely, high grades and high levels so the student will be accepted to academic institutions”.

According to principal 2, students in school A have reasonable achievements and most teachers do their job properly. It is impossible to choose teachers and reward them appropriately, what influences negatively on achievements.

Organisational culture and climate

To both principals, organisational culture and school climate are important factors for school effectiveness. Principal 1 defines effective organisational culture as follows: *“It encourages open communication, mutual trust among the staff, personal and collective initiative. In such an environment, there are positive attitudes towards human respect, recognition of variety and trust in human beings”*. Principal 2 adds that an effective organisational culture is one that encourages also order, regulations and hierarchy. Culture and climate are influenced mainly by tradition.

To principals, school A did not encourage teachers' initiative. There is a feeling that only one who holds a formal role can initiate. There is an atmosphere of frustration among teachers who are dissatisfied with the school. During the last ten years the school stopped being exclusive for high achieving students, as it had been while being a four-year secondary school. The transfer to six-year high school caused the institution to accept also low achieving students to the 7th grade and usually most of them remain till they finish the 12th grade. The secondary school low achieving students study separately in special classes and many teachers are dissatisfied when they are required to teach in those classes. The six-year high school is characterised by a new organisational culture that nurtures all students and not only high achieving ones as was in the old four-year secondary school and this situation causes teachers to be frustrated. Further, school climate is based on conservatism, using of old curricula, no exposure to innovation and desire to teach only good students.

Principal 2 adds that the secondary school's students do not have any linkage to the young students in the junior high school – on the contrary, they have much criticism towards them. In the past, the four-year secondary school functioned as one institution:

“There is no real feeling of six-year high school either in the junior high school or in the secondary school. The teachers of the young students do not feel they belong to a six-year high school and there is no learning and pedagogic continuity.... The problem is that there are two groups of teachers, each of which teaches in a different school and even belongs to different teachers' unions”.

Discipline

To principals, discipline is usually quite good. As the age increases, the discipline problems decrease, the self-control increases and the students are more balanced. In that sense, the discipline in a six-year high school is more problematic than it had been in the old system, because there are younger students. There is a difference in discipline between the secondary school and the junior high school. The teachers in the junior high school have no effective means to deal with discipline and it is very difficult to remove a student from school. In the old system, it was much easier to remove students whose behaviour was unacceptable. In the secondary school, the discipline is much better – students are older and the threat of the matriculation examinations helps to maintain discipline. Nevertheless, in the secondary school low achieving classes, the discipline is not reasonable. In the four-year secondary school the discipline was better because there were no low achieving students at all.

Another aspect is the variety among students and teachers. There are assertive and unassertive teachers and their reactions to discipline breaches are different. Usually, students feel teacher's disability to control the class (when such cases exist) and they tend to disturb. Principal 2 claims: *"There are teachers who punish severely while others do not punish at all – there should be uniformity according to common policy and all teachers have to believe in that policy"*. However, the principals believe that effective communication between students, teachers and parents influences positively school discipline.

Teachers' standards and expectations towards students

To principals, an effective teacher should develop high realistic expectations towards his/her students because they believe in the self-fulfilling prophecy.

There are teachers who have high expectations towards their students and such a perception encourages the students to develop and succeed. Unfortunately, there are others who teach only good students and tend to give up on students who have low achievements and to blame them for their failures. Principal 1 claims, *"Teachers develop prejudices and it is very hard to get read of it. The wise thing is to accept all students without any prejudice and to believe that everybody can study"*. School management can influence teachers' attitudes but such a process may take a long time.

Social life at school

To both principals, there is an importance to the existence of social life at the school – while relations are created they continue to exist also out of school. It is important that all students would feel they did not spend their time in a '*grades' factory*' but have got additional values at school. Principal 2 is sure that *“school should create chances and possibilities for students to develop their social life by initiation of common activities, meetings, trips, parties, ceremonies and so on”*.

To principals, School A does have many activities offering opportunities for social relations. The situation is very good and gives a variety of opportunities to all students. School A is definitely not a '*grades' factory*' and the achievements in that field are a direct outcome of effective work done by a teacher who is responsible for social activity.

School's flexibility for students

To both principals, there is much flexibility in school A and it responds to changes and innovations. Principal 1 believes in school's flexibility: *“While the student chooses, he/she becomes responsible, invests effort, takes care and his/her motivation is enlarged. Although it is good to have flexibility, the school must have limits otherwise there would be anarchy”*. To principal 2, *“flexibility towards students is enormous and sometimes may be exaggerated”*. This becomes expressed mainly in learning groups, learning units and transfer between groups. However, students have the feeling that school has flexibility and this is a good situation.

Teachers' extrinsic and intrinsic rewards

Both principals are not satisfied with the teachers' salary and the inappropriate environmental and welfare conditions. Good and bad teachers are rewarded equally and in such a way there are no incentives for excellence. If the salary had been significantly higher and differential, school would be able to select the best teachers and reward them according to their performance.

To principal 1, the intrinsic satisfaction is high whereas principal 2 has a different view saying that the principal is not fully involved in teachers' placement and does not reward them emotionally. That has a negative influence on teachers' intrinsic satisfaction. Further, there are teachers who teach high levels and others who always teach low levels and are dissatisfied. It is school management's responsibility to give opportunities to everybody.

Six-year high school continuity

To principals, there is an important principle that characterises an effective six-year high school – that is the ‘principle of inertia’, as principal 1 claims:

“A student starts learning at the 7th grade and finishes the 12th grade in the same school. Such a school enables the student to stay for six years in the same educational framework and prevents transitions, which create difficulties of adaptation”.

Another advantage of the six-year high school is the mobility teachers have, teaching younger and elder students. In the ideal six-year high school, all teachers should teach in all grades and that will help to achieve the desired continuity. The optimal situation is to have six-year continuity. Principal 2 claims:

“In such a way, all teachers will have better understanding of six-year high school needs and common difficulties. That will cause curricular and social continuity and better mutual understanding of teachers. Each teacher has to be experienced in all grades”.

The principals mention a unique phenomenon existing in their six-year high school. Because of job reductions in the secondary school, teachers are compelled to teach in the junior high school and agree to do so only because of having no choice. In the old system, these teachers taught only in the secondary school. On the other hand, the junior high school teachers cannot teach in the secondary school because of teacher surplus. The social and counselling programme is already six-year oriented. There are different job definitions in the junior high school and in the secondary school and they are not interchangeable. There are also different employers for the different populations of teachers: the junior high school staff is employed by the Ministry of Education whereas the secondary school's teachers are employed by the local municipality. This difficult situation is also unique to the six-year high schools and did not exist in the old system. It also hardens the achievement of six-year continuity and perpetuates the existence of two separated schools.

Teachers' attitudes

Twelve teachers were interviewed in school A: six homeroom teachers and six subject leaders (maths, English and history), half of them (number 1-6) teach in the secondary school and half in the junior high school (number 7-12). The coming subsections address the themes mentioned earlier (p. 146).

Collaboration among stakeholders

Teachers in school A think that collaboration is very important. Most of them claim that the collaborative teacher has to do all he/she can in order to help students to be supportive but also to define clear borderlines for the collaboration with the students and their parents. Only a minority thinks that teachers should give students assistance without limits.

To 11 respondents, many teachers do their best to help students and cause them to be satisfied. With parents, the cooperation is partial, only relating to technical issues, not pedagogic. Only one secondary school teacher argues that collaboration is not effective because teachers are not rewarded intrinsically and extrinsically:

“School A usually does not encourage teachers and they feel unimportant. Most teachers are females, they have small children at home and it disturbs their ability to create effective collaboration with other stakeholders. Teachers have to do many things at school for which they are not compensated”.

Teachers raise the problem that there is a tendency to pay more attention to good students in comparison to many weak ones. Another problem raised by the junior high school teachers related to secondary school teachers who teach also in the junior high school. They were forced to teach in the junior high school and have discipline problems. However, teachers think that not all teachers are collaborative.

The secondary school teachers are not satisfied with the collaboration between the staff and the principal because she is too centralist, is not consultative and does not back them. The junior high school teachers are more satisfied with the relations between them and the six-year principal because they have their junior high principal who is responsible for the current management and they have effective collaboration with her.

The principal

Teachers argue that the school principal is one of the most important resources of the school. Indeed, the principal has good plans but there is a great difficulty in fulfilling them although she has good cooperation with the parents and the municipality. The reasons for not succeeding to realise the plans are lack of credibility, inconsistency, weak staff motivation, shortage of resources, too much centralism and also the reality of a decrease in the number of students. The secondary school teachers have more contact with the six-year principal than the junior high school teachers whose interactions are mainly with the junior high principal. They (the secondary school teachers) think the principal represents the municipality and not the staff, they feel not updated, supported and encouraged. There is also a problem of low morale because many secondary school teachers have left the school. Teacher 1 explains those attitudes as follows:

“The principal has a great motivation to make changes but she has a problem in fulfilling the ideas because of lack of teachers’ collaboration and financial resources. The principal is ambitious but she chooses the wrong way. She cannot motivate the staff, there is an atmosphere of depression and there is disappointment relating to her personality: she is not reliable and causes quarrels between staff members”.

To the junior high school teachers, the principal discriminates them against the secondary school. Because the Ministry of Education evaluates schools according to their matriculation exams' results, there is a substantial priority to the secondary school. Such attitudes are unique to a six-year high school composed of two schools and two teachers' populations.

All teachers, except one think that the principal has a great problem of human relations and they are dissatisfied with her leadership and management ability. There is lot of talking and very little activity, decisions are made without thinking, there is no consultation with the staff and many decisions are changed or cancelled rapidly. One of the main problems is lack of reliability and teachers are pessimistic about improvement. Nevertheless, one teacher argues that *“the principal has a vision and she realises it. The problem is that she cannot reward good teachers and cannot dismiss those who are not adequate.”*

The principal has not yet succeeded in having a six-year continuity and there is no real connection between the junior high school and the secondary school. This desired continuity is another challenge of an effective six-year high school.

The teachers

To teachers, most teachers are good, have good knowledge, are caring, involved and supportive but some of them have didactical problems, lack of knowledge or class discipline problems. Teacher 9 well expresses this view: *“teachers in school A have good knowledge, there is a certain problem of didactics and the main problem is that of class control”*.

To one secondary school teacher, there are ineffective relations with students and the main problem is the burnout relating to teachers who have been teaching for many years. These teachers are impatient and cannot be effective in class.

The secondary school teachers argue that the junior high school's teachers are less educated and have less knowledge than the secondary school's teachers. They prefer to teach in the secondary school and agree to teach also in the junior high only if they have no other choice. To the junior high school teachers, they are not less educated but do not get real opportunities to teach high grades. They feel that the secondary school teachers do not behave properly towards them and they feel inferior. All teachers agree that the junior high school teachers have an advantage in their didactic ability because they received better practical training in the college in comparison to most of the secondary school teachers who studied in universities. Not all teachers receive real opportunities to be experienced in all grades and teaching levels and therefore they are frustrated.

To all teachers, there is no connection whatsoever between the secondary school's teachers and the junior high school's and there is no six-year curricular continuity in school A.

The junior high school teachers complain that there is a problem when teachers of the secondary school teach in the junior high school because they do not have effective didactics and adequate communication although they are experts in the subject matter.

Teachers think that the teaching should be diverse and not only frontal. It is effective to fit each student a style that is adequate to him/her and not to have boring lessons. There should be group work, use of computers, Internet, visualisation, movies, and it is important to cause the students to be independent learners and this is style dependent.

To the secondary school teachers, teaching is mainly frontal and boring whereas the junior high school teachers are slightly more satisfied with the diversity of teaching. The teachers in the secondary school are busy with the matriculation examinations and they have no time for alternative styles. The junior high teachers have more time for different teaching but lack of physical conditions, equipment and extrinsic rewards do not enable effective diverse teaching even in the junior high school. However, the teaching of basic subjects (maths, English) is based on grouping and that is effective to all teachers.

School and class size

To all teachers, the classes should not be too crowded (15-30 students in each class) and the buildings should not be high (1-2 floors). Most teachers prefer small school of 6-8 classes in each grade. Only one secondary school teacher thinks “*the school should be big because it is more economical*”. They think it is important that the junior high school and the secondary school should be in different locations in the same campus or even in two different campuses. This is also a unique characteristic of six-year high school.

To most teachers, the classes in school A are too crowded (38-42 students in each class). The junior high teachers think their problem is greater because all classes are crowded whereas in the secondary school there are many small groupings having 20-25 students only. The fact that all six grades study in the same area is problematic: the young children disturb the elder ones and vice versa. Teachers think that the number of classes in each grade is acceptable.

Management of resources and the physical environment

There is a lack of equipment, budget and the quality of maintenance decreases. There is much talking about obtaining resources but there are no real results. There is also shortage of teaching hours and it decreases school effectiveness. Because of that, teachers' satisfaction is low, especially the subject leaders who do not have designated equipment such as computers, software and so on.

The staff room is not well organised and there is no privacy for interviewing students or parents. There are no special rooms for small groups, no place for students who have the right to have extra time while being tested and therefore students do these activities in the staff room and disturb the teachers. There are no subject rooms, bad maintenance and damages caused by students as teacher 6 claims:

“The buildings are old, ugly and unfriendly, the foundations are spoiled and the equipment is too old. There is a great problem of maintenance, lack of resources, parking places, private rooms, there is not an appropriate library and no computers. The neglect continues for many years and now the school management tries to make an improvement”.

Parental involvement at school

To most teachers, parents should be involved at school, obtain data and express their views in every area but they should not make decisions. It is effective that the teachers will ask the parents to influence their children positively. Most teachers look upon parents as customers who should be treated well and be satisfied and only a minority thinks that the school has an interest in encouraging parental involvement in order to improve school effectiveness.

Teachers think that parental involvement is ineffective and non-legitimate and if there is any benefit it is mainly technical as teacher 2 claims:

“At school A there is a non-legitimate parental interference. The parents think they may interfere in the teachers’ work, checking exams and students’ evaluation. The main problem is that the parents do not value the teachers and therefore they want to be involved in their work exaggeratedly. This critical attitude is transferred to the students and they too criticise the teachers. The parents allow their children to be absent from the school, especially before examinations and in that way they damage the order and discipline at school”.

The causes for that ineffectiveness are as follows: parents are involved in irrelevant issues such as conflicts between the management and the staff, they prefer the school management instead of the teachers, they interfere non-legitimately in the teachers’ work, do not value the teachers and are usually passive. To the subject leaders, there is a non-legitimate parental interference: parents think they may interfere in the teachers’ work, checking exams and students’ evaluation while not evaluating teachers appropriately. The homeroom teachers have more openness towards parental involvement but they also wish to fix clear borderlines.

Some teachers think that the members of the parents’ board are interested only in their own personal interests while others think that they prefer the public interest. Nevertheless, there are matters that school A management cannot change without the involvement of parents. The parents are usually very busy and do not have much time for the school.

Teamwork

All teachers agree that there should be teamwork both in professional and management teams. Teamwork helps to solve common problems, to share activities and to have coordination and synergism. There should be professional management teams of the whole six-year high school and also grade teams.

To subject leaders, there are effective professional teams in a few subjects such as chemistry, maths, English and Hebrew, but those teams are separated to junior high and secondary school and there are no six-year professional teams. To homeroom teachers, there are grade teams that function effectively. The junior high school teachers complain that the teachers who teach in both schools usually do not come to the junior high school's meetings and that causes them to overwork. Other problems relate to lack of trust and real cooperation among secondary and junior high school teachers as teacher 3 argues: "*There is lack of communication among the teachers and lack of mutual trust*". Teachers are dissatisfied with the lack of effective six-year professional teamwork and with the ineffective functioning of the subject leaders.

Students' motivation

To all teachers, students' motivation is very important and without motivation there would be no studying. Students' motivation is dependent on teachers' functioning in class, evaluation, the existence of resources, the parents, discipline and students' social life.

Teachers think they have goodwill and openness to create motivation but nevertheless there is a motivational problem at the school. There are highly motivated students but many others have very low motivation. The origin for the high motivation is mainly the home as teacher 2 says: "*The excellence in studying is not perceived prestigious so the motivation is not high. The highly motivated students are those who are influenced by their parents*".

To the secondary school teachers, there is a positive pressure of the external exams and this motivates the secondary school students. Such a pressure does not exist in the junior high school and therefore its teachers complain the motivation is lower. In the secondary school, there is a problem of morale that causes a negative motivation – in order to achieve high marks the students are ready to cheat.

Teachers agree that there is a problem of inadequate teachers who influence motivation negatively as teacher 5 claims: "*there are bad teachers who decrease students' motivation but are not dismissed because of their tenure*". To subject leaders, lack of resources such as computers and extracurricular studies also decreases students' motivation

To junior high school teachers, there is a special problem that characterises their school. There are very low motivated students who walk in the corridors and disturb the other students. These students need special education and they cannot fulfil the regular requirements of their class. To secondary school teachers, such a problem does not exist.

Students' achievements

Secondary school teachers are satisfied with students' achievements although they prefer more students to obtain the matriculation diploma. The most problematic subjects are maths and English and in these subjects the achievements are lower. In the junior high school there are reasonable achievements but sometimes there are failures, as teacher 7 claims: *"Usually the achievements are high in comparison to the expectations. Sometimes there are failures, especially weak students, but that is not a reason to give up"*.

The junior high teachers are more patient to low achievements whereas the secondary school teachers are evaluated by the matriculation's results and are less patient. They are also dissatisfied with the decline in students' achievements because many low achieving students are accepted to the six-year high school (such students were not accepted in the past to four year high schools).

Organisational culture and climate

Teachers think that effective organisational culture should encourage innovation and volunteering to school. The school should encourage permanent change, a calm atmosphere and collaboration. An effective climate should be based on mutual respect among all teachers and nurturing of all students especially those who have low achievements. Teachers think that the school should support the teachers and take care for their needs.

All teachers agree that the school culture encourages student support and the junior high teachers are satisfied with it. The secondary school teachers are dissatisfied saying that sometimes it works against their interests. Further, there is bad atmosphere, as teacher 1 says:

"There is an organisational culture of student support. The atmosphere is not pleasant because there are conflicts and tension, unsolved problems and good colleagues who were compelled to leave the school".

The school management does not allow the staff to participate in the decision making process. The situation is ambiguous and there is a great uncertainty. In such an atmosphere, it is difficult to support students effectively.

There is a problem concerning relations between the junior high school teachers and those who teach in the secondary school, as teacher 3 says: *"the secondary school teachers despise their colleagues in the junior high school. They feel humiliated and not well appreciated"*.

On the other hand, the secondary school teachers do not think they treat their colleagues improperly. The junior high school teachers also complain that their institution is discriminated against the secondary school in all aspects related to resources.

Teachers agree that the organisational culture does not really encourage openness and innovation. There are declarations that are not fulfilled, as teacher 10 claims:

“There is a culture of visible effectiveness, namely what is most important is how we look and not how we really are. Because of that, the school invests much effort in advertisements and public relations instead of dealing with essential issues”.

Discipline

There are two extreme approaches relating to discipline: some teachers think that the basis to discipline is educational while others think it should be based on totalitarianism. Some teachers prefer a combination of both approaches. The junior high school teachers tend to the totalitarian approach because they feel it is very difficult to maintain discipline in their school. On the other hand, the secondary school teachers tend to use the educational approach. However, all teachers agree that it is very important to have consistency and in cases of a breach of discipline, there should be punishment in order to create deterrence.

To teachers, discipline is maintained firstly by the teacher in each class but there are additional factors such as school management involvement and parental help. Most teachers recommend nominating a teacher who is responsible for discipline at school.

Teachers agree that there are great discipline problems at school A and the situation is even worse in the junior high school as expressed by teacher 2:

“The discipline in school A is too bad. The students think that they are allowed to do anything: they want to transfer from one class to another, they threaten the teachers that they will complain to the principal if they do not like something. There is a permanent noise in the corridors, students do not obey teachers’ instructions and the students enter the staff room and disturb the teachers”.

There are several reasons for this situation:

- There are low achieving students, who disturb permanently.
- There is no special teacher who is responsible for discipline.

- There is a common tendency of homeroom teachers, subject leaders, grade leaders and deputies not to have confrontations with the students and to let the regular teachers deal with it.
- There is inconsistency in dealing with all aspects of discipline.
- The regulations are not well worded and there is no useful enforcement.
- There are different rules for the junior high school and the secondary school.
- Students are accepted to the junior high school with no selection and therefore the situation is worse there.

Teachers' standards and expectations towards students

Teachers agree that an effective teacher should expect the students can learn and succeed but the expectations should be realistic. The teacher should fix standards that are a little bit higher than the real ability in order to have a challenge.

Teachers think that they have high realistic expectations towards the students and they are satisfied with it. Those who teach low achieving groups in both schools have lower expectations than those teaching better groups as teacher 3 argues: *“some teachers have high expectations and others give the students the feeling that they are not able to reach achievements and this prophecy fulfils itself”*.

Social life at school

Teachers think that students' social life at school is very important and the school should deal not only with teaching and learning. This theme is well expressed by teacher 9:

“Social life at school is not less important than all the other issues mentioned above and it influences students' motivation. The effective school should have active breaks including sport's competitions, working with computers – such activities will decrease the violence at school. Furthermore, the school should organise social activities such as sport's days, trips and days of fun. It should also organise social activities that take place out of the school. Each student who is happy socially has a better motivation to come to school and naturally also to study”.

Only a minority of subject leaders thinks that social activities should not necessarily be managed by the school because this is not its main purpose. They argue that social activities might disturb regular studying and therefore clear borderlines should be fixed. The

homeroom teachers look upon this issue as more important, not less important than pure studying.

All teachers claim that there are social activities at school A and the students are satisfied. A minority of homeroom teachers thinks that these activities are not enough and there should be more.

School's flexibility for students

Most teachers think that there is a lot of flexibility for students in school A. The teachers try to be responsive to students' requests and they enable them to have additional examination times. There are many options to choose learning subjects and the whole staff do their best in order to cause the students to be satisfied so they will not leave the school. There are two exceptions: one teacher (9) thinks that *"there might be a certain exaggeration in school flexibility and it causes students' contempt towards the school"*. Another teacher (10) claims:

"In the junior high school there is no flexibility and there cannot be any flexibility either. In the secondary school there is high flexibility to students in choosing any combination of subjects they like. In the junior high school the students have no other choice so the flexibility is lower".

Teachers' intrinsic and extrinsic rewards

All teachers are dissatisfied with the extrinsic rewards and in order to reach a reasonable situation the salary should be increased by 50% at least as teacher 9 argues:

"All teachers are rewarded equally so there is no incentive for improvement. The salary is very low and there is a big gap between teachers' investment and their rewards. The long vacations help the teachers to remain in the educational field".

The subject leaders argue that if the salary would have been higher, they would be able to accept better teachers and the existing ones would function more effectively.

Teachers are more satisfied with the intrinsic rewards and because of that they remain in the educational system. These rewards are expressed by the feedback the students give them and the independence teachers have. Relating to the feedback given by school management, the secondary school teachers are less satisfied than those teaching in the junior high. Only one teacher (10) reported that her satisfaction with intrinsic rewards is even lower than the

extrinsic ones: *“owing to resources’ limitations the teacher cannot fulfil his/her ability and that causes frustration”*.

The six-year model in comparison to the old system

Teacher 7 (junior high, homeroom teacher) is dissatisfied with the six-year high school as a new model. In her mind, 7th – 8th grade students cannot be in the same school with 11th-12th grade students. If there would be a geographical separation it could have been better but the best solution is the old system, namely eight-year elementary school and four-year secondary school. In the new system, there are lots of problematic students who come from different elementary schools to one junior high school and they make life there unbearable. In the old system, very low achieving students who finished the 8th grade were not accepted to the 9th grade. In school A there are about thirty 9th grade students who are illiterate. They must stay in a class that does not suit them, they do not study at all and disturb the other students.

Students’ attitudes

Collaboration among stakeholders

The first issue being examined is collaboration among stakeholders and it includes questions 1-5. Appendices C and I include a complete version of questionnaires given to students and the results (p. 403, 424). The first five questions and the findings are shown in figure 5.1.

According to figure 5.1, the students perceive all kinds of collaboration as important. The most important issue is the collaboration between students and teachers (question 2: 3.67) and the lowest score was given to the importance of collaboration between parents and principals (question 4: 2.99).

In all aspects of collaboration there is a gap between the desired situation and reality at the school. The greatest gap relates to collaboration between students and teachers (question no. 2: 1.31) and the meaning of this finding is that according to students' perception, there is a great problem concerning the collaboration they have with their teachers. They perceive this issue as very important and the existing situation is quite ineffective. The smallest gap exists while comparing the difference between 'importance' and 'reality' concerning teachers' agreement to parental involvement (question 5: 0.53). To students, this issue is less problematic than all the others relating to collaboration.

In order to examine if there is similarity or difference between the six grades (appendix I, table I.1, p. 424), analysis of variance was made (appendix S, table S.2, p. 483). Based on

$\alpha \leq 0.01$, the following conclusions can be reached: relating to the gaps of questions 1-4 (importance minus reality) there is a significant difference between the grades and similarity regarding to question 5's gap only: The differences are expressed by the 7th grade's gaps that are much smaller in comparison to the other grades and the whole school view. Relating to questions 1, 3 and 4, the 8th and 9th grades' gaps are greater than the others and the total view. Question 2's gaps are high (above 1.14) in all grades except the 7th grade (0.35). This gap is the highest in all grades except the 8th. In the 8th grade, question 2's gap is high (1.14) but the highest gap exists relating to the collaboration between students and parents (question 1: 1.32).

The ineffective collaboration between teachers and students is expressed also by the open-ended questions. Students stress mainly the problem of communication the teachers have with them and the fact that they do not understand and do not consider them properly (appendix I, p. 424).

1. Collaboration between students and parents at school.
2. Collaboration between students and teachers at school.
3. Collaboration between teachers and parents at school.
4. Collaboration between parents and principals at school.
5. Teachers' agreement to parental involvement at school.

Students - School A - all classes: collaboration

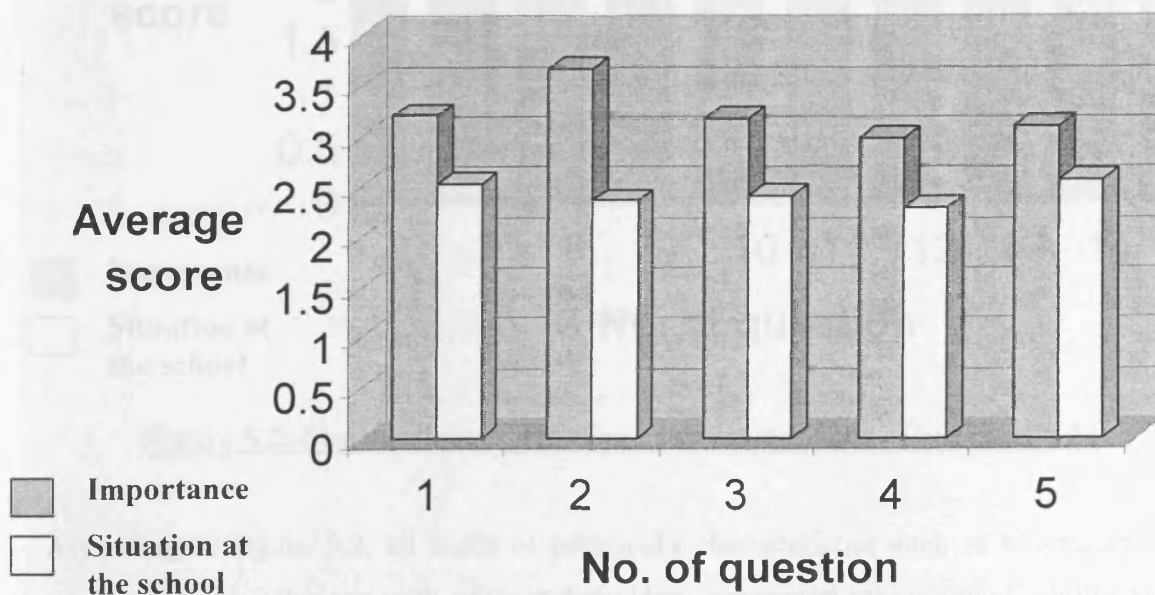


Figure 5.1: Students' view: Collaboration - Questions 1-5

The school principal

Students' attitudes towards school principal's characteristics are shown in figure 5.2 (appendix I, tables I.1-I.2, questions 6-14, p. 424):

6. Principal's vision, values and way of thinking.
7. Principal's ability to manage changes and to make initiatives.
8. Principal's personal relations with the staff, parents and students.
9. Principal's ability to control, acquire and manage resources and budgets.
10. Principal's ability to deal with difficult situations.
11. Students' belief in principal.
12. Principal's motivation influences teachers' motivation.
13. Sharing leadership with staff and students.
14. Principal's accessibility to teachers, students and parents.

Students - School A - all classes: evaluation of principal

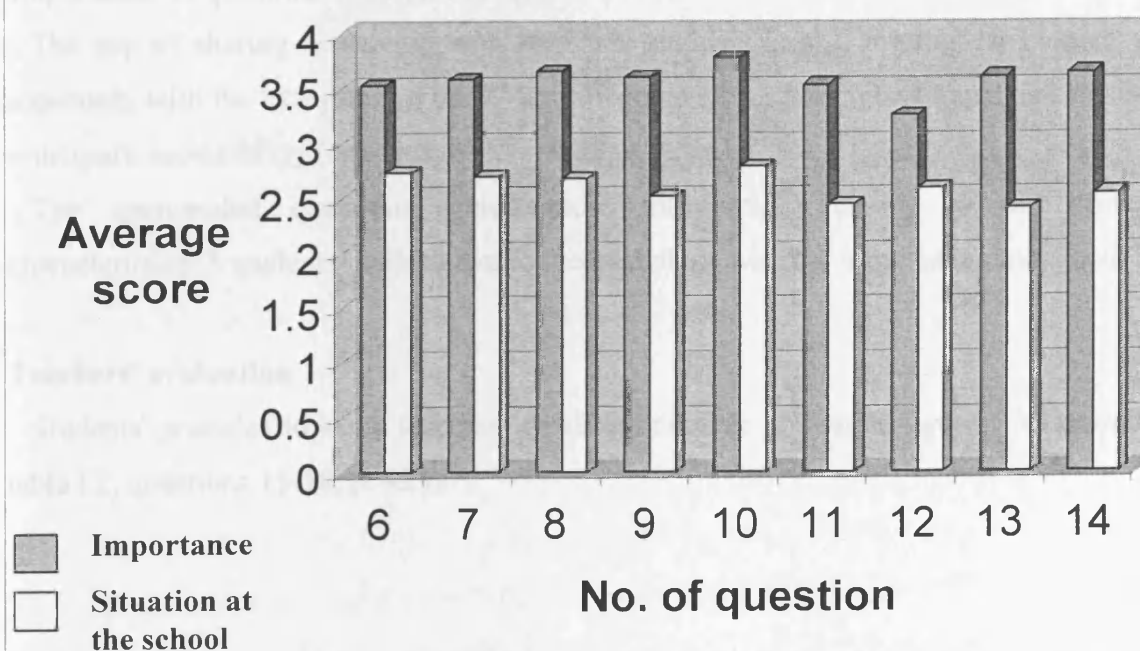


Figure 5.2: Students' view: Principal's characteristics - Questions 6-14

According to figure 5.2, all kinds of principal's characteristics such as vision, ability to manage changes, relations with other stakeholders, resources' management, ability to deal with difficult situations, students' belief in principal, motivation, sharing leadership and

accessibility are perceived as important by the students. The most important issue is the principal's ability to deal with difficult situations (question 10: 3.79) and the lowest score was given to the importance of the influence of principal's motivation on teachers' motivation (question 12: 3.26). In all principal's characteristics there is a gap between the desired situation and the reality at the school. The greatest gap relates to sharing leadership with staff and students (question no. 13: 1.21). The students perceive this issue as very important and the reality is not good. The smallest gap exists while comparing the difference between 'importance' and 'reality' concerning the influence of principal's motivation on teachers' motivation (question 12: 0.66). The students think this issue has the lowest importance and it is less problematic than all the other principal's characteristics.

Analysis of variance (appendix S, table S.2, p. 483) shows that there is a significant difference among the grades for the gaps of questions 6, 8, 10, 11 and 13 (appendix I, tables I.1-I.2, questions 6-14, p. 424-425). The 7th grade's gaps are much smaller in comparison to the whole school view. On the other hand, all the 9th and 11th grades' gaps are greater than the total view. There is no significant difference among the grades relating to the 'importance' of questions 6-14 (except question 13).

The gap of sharing leadership with staff and students is also the highest in each grade separately with the exception of the 7th and 9th grade where the highest gap exists relating to principal's accessibility (question 14: 7th - 0.89, 9th - 1.61).

The open-ended questions added more information relating to the principal's characteristics. 5 students claimed that the relationships with the principal are not good.

Teachers' evaluation

Students' attitudes towards teachers' characteristics are shown in figure 5.3 (appendix I, table I.2, questions 15-18, p. 425):

15. Teachers' knowledge and didactics.
 16. Teachers' ability to monitor and evaluate students properly.
 17. Teachers' personality.
 18. Teachers' communication with students.

Students - School A - all classes: Teachers' characteristics

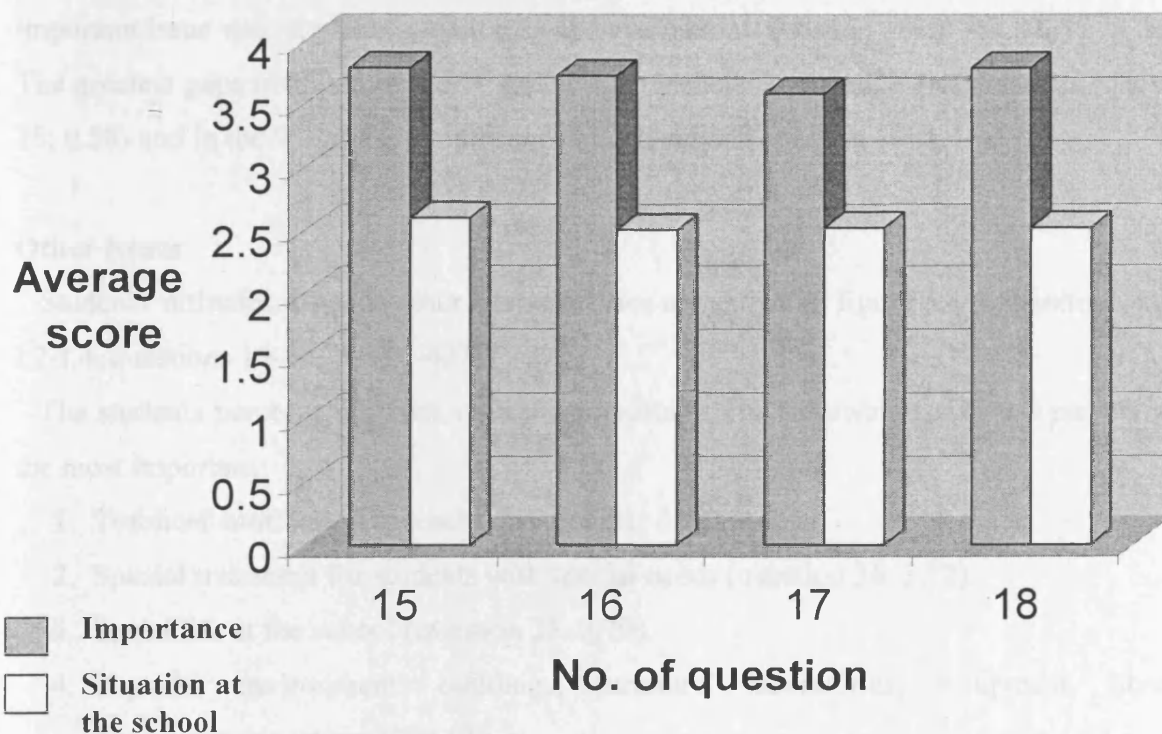


Figure 5.3: Students' view: Teachers' characteristics - questions 15-18

All characteristics examined are perceived as important by the students but the most important issues are teachers' knowledge and didactics (question 15: 3.79) and their communication with the students (question 18: 3.79). There are substantial gaps (1.07-1.28) in all aspects and the most problematic issue relates to teachers' communication with the students (question 18: 1.28). The open-ended questions strengthen these findings. 65 students wrote verbal notes saying that there are teachers who do not behave appropriately, have low motivation, lack of knowledge, bad didactics, bad communication with the students and some of them are not qualified to teach for the matriculation examinations. One student

says: *"there are teachers who do not know how to teach and in what speed, they do not understand the students and do not consider them properly"*.

According to analysis of variance (Table S.2, p. 483), there is significant difference among grades relating to gaps. The 7th grade's gaps are much smaller in comparison to the others and the whole school view. On the other hand, all the 9th, 10th and 11th grades' gaps are greater than the total view. There is a general trend of increasing gaps from the 7th grade to the 11th and a certain decrease in the 12th. Concerning 'importance', there is no significant difference among the grades.

Further, (appendix I, table I.2, questions 15-18, p. 425), in the 8th and 12th grades, the most important issue was 'students' monitoring and evaluation' (question 16: 8th - 3.82, 12th - 3.90). The greatest gaps obtained in the 7th grade was teachers' knowledge and didactics (question 15: 0.58) and in the 9th grade, monitoring and evaluation (question 16: 1.41).

Other issues

Students' attitudes towards other characteristics are shown in figure 5.4 (appendix I, tables I.2-I.4, questions 19-37, p. 425-427).

The students perceive all these issues as important. The following issues are perceived as the most important:

1. Teachers' motivation to teach (question 21: 3.72).
2. Special treatment for students with special needs (question 36: 3.72).
3. Social life at the school (question 25: 3.70).
4. Physical environment: buildings, furniture, laboratories, equipment, library, computers (question 23: 3.63).
5. Students' motivation to study (question 20: 3.62).

The following issues are perceived as the most unimportant:

1. A continuity between junior high school and secondary school (question 31: 3.03).
2. Focus on homework (question 37: 3.16).

19. School and class size.
20. Students' willingness to study.
21. Teachers' willingness to teach.
22. Organisational culture and atmosphere.
23. Physical environment (buildings, furniture, laboratories, equipment, library, computers).
24. Weekly timetable and number of subjects being taught simultaneously.
25. Social life at school.
26. Additional studies beyond regular program.
27. Discipline at school.
28. High standards and expectations towards students held by teachers.
29. Grouping is a good system for studying.
30. Management of information at school.
31. A continuity between junior high school and secondary school.
32. The school counsellor functioning.
33. Students' continuous presence at school.
34. The existence of many studying opportunities.
35. Reasonable punishments.
36. Special treatment for students with special needs.
37. Focus on homework.

Students - School A - all classes: Other Issues

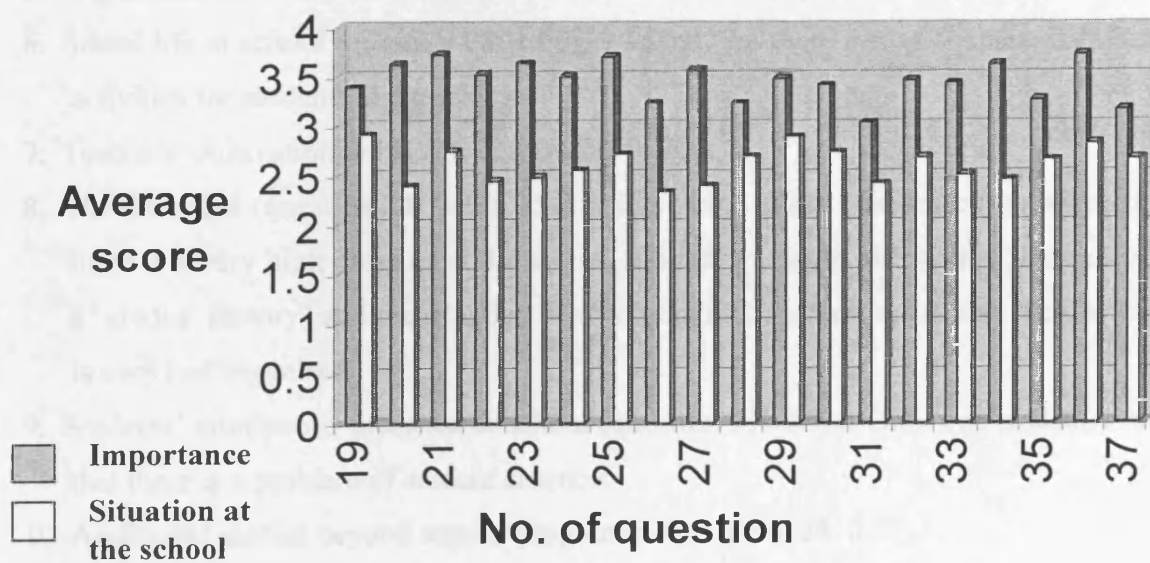


Figure 5.4: Students' view: Other issues - questions 19-37

The gaps of all characteristics being examined are between 0.49 to 1.23. The following issues are perceived as the most problematic (having the greatest gap):

1. Students' motivation to study (question 20: 1.23).
2. Discipline at school (question 27: 1.18). 33 students wrote that there is much violence and no discipline at the school. 2 wrote that there is vandalism and many students damage the equipment and furniture. 2 wrote that many students (even young ones) smoke cigarettes.
3. The existence of many studying opportunities (question 34: 1.17).
4. Physical environment - buildings, furniture, laboratories, equipment, library, computers (question 23: 1.16). The open-ended questions added more information relating to the physical environment characteristics. 24 students reported that there is a lack of equipment and decoration (computers, furniture, plants), there are not enough resources and bad maintenance, the yard is too small and the buildings are old and badly maintained.
5. Organisational culture and atmosphere (question 22: 1.07).
6. Social life at school (question 25: 1.00). 9 added that there are no social and cultural activities for students and teachers.
7. Teachers' motivation to teach (question 21: 0.97).
8. The timetable (question 24: 0.95). 15 students wrote in the open-ended questions that there is a very high pressure at the school, too many tests in every week, the school is a 'grades' factory' and the situation causes despair. 2 students wrote that the timetable is very bad organised.
9. Students' continuous presence at school (question 33: 0.93). Only one student wrote that there is a problem of student absence.
10. Additional studies beyond regular programme (question 26: 0.90).
11. Special treatment for students with special needs (question 36: 0.90). One student wrote that there is no special treatment for students with special needs.

The following issues are perceived as less problematic (having the smallest gaps):

1. School and class size (question 19: 0.49). Only 3 students wrote in the open-ended questions that the classes are too crowded.
2. Focus on homework (question 37: 0.50).
3. High standards and expectations towards students held by teachers (question 28: 0.54).
4. Grouping (question 29: 0.59).

5. Reasonable punishments (question 35: 0.60).
6. A continuity between the junior high school and the secondary school (question 31: 0.62). 8 students added that the links between the secondary school and the junior high school are not effective and they should be separated.
7. Management of information at school (question 30: 0.68).
8. The school counsellor functioning (question 32: 0.78).

According to analysis of variance there are significant differences ($\alpha \leq 0.01$) among grades relating to the following questions (Table S.2, p. 483): 19-21, 23-27, 30 and 32-34. The main reason is that the 7th grade's gaps are much smaller in comparison to the whole school and the other grades.

Students: summary of questions 1-37

Table 5.2 summarises students' gaps in school A relating to questions 1-37, sorted from the highest gap to the lowest one. According to table 5.2, 14 gaps (out of 37) are above 1. The most ineffective issues are students' collaboration with teachers (1.31), communication (1.28), students' motivation (1.23), monitoring and evaluation (1.23), sharing leadership (1.21), teachers' knowledge (1.19), discipline (1.18), studying opportunities (1.17), physical environment (1.16), principal's accessibility (1.11), students' belief in principal (1.10), principal's management of resources (1.09), teachers' personality (1.07) and the organisational culture (1.07). The most effective issues are school and class size (0.49), focus on homework (0.50), teachers' agreement to parental involvement (0.53) and high standards and expectations (0.54).

No.	Question	Gap
1	2. Collaboration between students and teachers at school.	1.31
2	18. Teachers' communication with students.	1.28
3	20. Students' willingness to study.	1.23 *
4	16. Teachers' ability to monitor and evaluate students properly.	1.23 *
5	13. Sharing leadership with staff and students.	1.21
6	15. Teachers' knowledge and didactics.	1.19 *
7	27. Discipline at school.	1.18
8	34. The existence of many studying opportunities.	1.17
9	23. Physical environment.	1.16
10	14. Principal's accessibility to teachers, students and parents.	1.11
11	11. Students' belief in principal.	1.10
12	9. Principal's ability to control, acquire and manage resources and budgets.	1.09
13	17. Teachers' personality.	1.07 *
14	22. Organisational culture and atmosphere.	1.07
15	25. Social life at school.	1.00 *
16	10. Principal's ability to deal with difficult situations.	1.00
17	8. Principal personal relations with staff, parents and students.	0.98
18	21. Teachers' willingness to teach.	0.97 *
19	24. Weekly timetable and number of subjects being taught simultaneously.	0.95 *
20	33. Students' continuous presence at school.	0.93 *
21	36. Special treatment for students with special needs.	0.90 *
22	26. Additional studies beyond regular program.	0.90
23	7. Principal's ability to manage changes and to make initiatives.	0.89
24	6. Principal's vision, values and way of thinking.	0.80
25	32. The school counsellor functioning.	0.78 *
26	3. Collaboration between teachers and parents at school.	0.76
27	1. Collaboration between students and parents at school.	0.69 *
28	4. Collaboration between parents and principals at school.	0.69 *
29	30. Management of information at school.	0.68
30	12. Principal's motivation influences teachers' motivation.	0.66
31	31. A continuity between junior high school and secondary school.	0.62 *
32	35. Reasonable punishments.	0.60 *
33	29. Grouping is a good system for studying.	0.59 *
34	28. High standards and expectations towards students held by teachers.	0.54 *
35	5. Teachers' agreement to parental involvement at school.	0.53 *
36	37. Focus on homework.	0.50 *
37	19. School and class size.	0.49 *

Table 5.2: School A - students - gaps of questions 1-37

(* There is no significant difference among the three schools)

Students' satisfaction with the school

Students' satisfaction with the school is shown in figure 5.5 (appendix I, table I.5, questions 41-63, p. 428):

41. Teachers get enough satisfaction, achievement, etc.
42. Teachers get enough salary and material rewards.
43. General atmosphere at my school is positive.
44. Discipline at my school is appropriate.
45. Students' achievements are high.
46. Relations between school principal, staff, students and parents are good.
47. The principal has the ability to advance and initiate meaningful changes.
48. Decision making process is appropriate.
49. School has good reputation in community.
50. There are good teachers at my school.
51. Students have strong desire to study.
52. School's resources and finance are managed properly.
53. School's buildings, equipment, laboratories, etc are appropriate.
54. There is a good social life at my school.
55. Monitoring and evaluation of students is done well.
56. Teachers treat students properly.
57. Teachers treat parents properly.
58. School size is reasonable (not too big).
59. Class size is reasonable (not too big).
60. Teachers have high expectations towards students.
61. Students have high chance to succeed.
62. There is high pressure on students at school.
63. School has reasonable flexibility for students.

Students - School A - all classes: Satisfaction

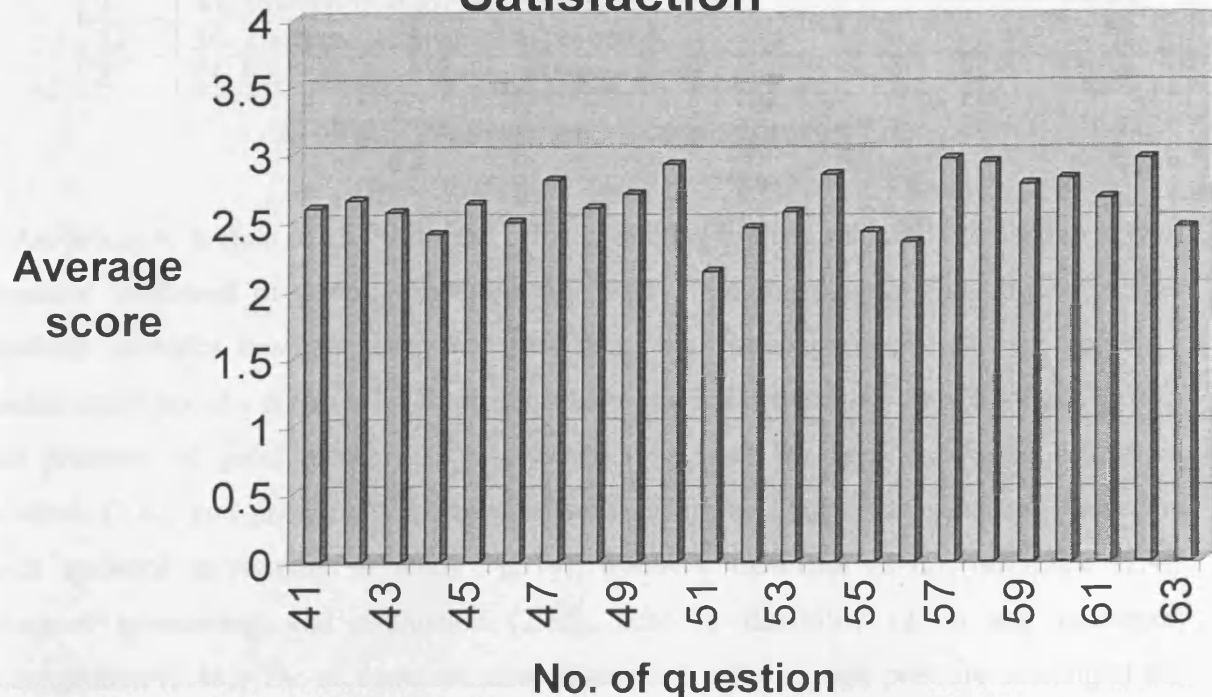


Figure 5.5: Students' view: Satisfaction - questions 41-63

Students' satisfaction with school A, sorted from the highest score to the lowest one is shown in table 5.3:

No.	Question	Score
1	57. Teachers treat parents properly.	2.96
2	62. There is high pressure on students at school.	2.96
3	58. School size is reasonable (not too big).	2.93
4	50. There are good teachers at my school.	2.92
5	54. There is a good social life at my school.	2.84
6	60. Teachers have high expectations towards students.	2.82
7	47. Principal's ability to advance meaningful changes.	2.80
8	59. Class size is reasonable (not too big).	2.77
9	49. School has good reputation in community.	2.70
10	61. Students have high chance to succeed.	2.67
11	42. Teachers get enough salary and material rewards.	2.65
12	45. Students' achievements are high.	2.63
13	41. Teachers get enough satisfaction, achievement, etc.	2.60
14	48. Decision making process is appropriate.	2.60
15	43. General atmosphere at my school is positive.	2.57
16	53. School's buildings, equipment, etc. are appropriate.	2.57
17	46. Relations between school principal and stakeholders.	2.50
18	52. School's resources and finance are managed properly.	2.46
19	63. School has reasonable flexibility for students.	2.45
20	55. Monitoring and evaluation of students is done well.	2.42
21	44. Discipline at my school is appropriate.	2.40
22	56. Teachers treat students properly.	2.35
23	51. Students have strong desire to study.	2.14

Table 5.3: Students' satisfaction with school A

According to table 5.3, all scores are below 3 and the highest students' satisfaction is with teachers' treatment of parents (question 57: 2.96). The meaning of this finding is that students' attitudes towards statements describing high satisfaction is less than 'agree' (3 means agree and 2 - disagree). The students have lower satisfaction with school size (2.93), the presence of good teachers (2.92), social life (2.84), teachers' expectations towards students (2.82) and principal's ability to advance changes (2.80). The lowest satisfaction is with students' motivation to study (2.14), teachers' treatment (2.35), discipline (2.4), students' monitoring and evaluation (2.42), school's flexibility (2.45) and resources' management (2.46). The students are also dissatisfied with the high pressure existing at the school (2.96).

According to analysis of variance there are significant differences ($\alpha \leq 0.01$) among grades relating to the following questions (Table S.3, p. 484): 41, 43-44, 46, 48-53, 56, 61 and 63. The 7th grade's scores are much greater in comparison to the whole school view. On the other hand, all the 9th grades' scores are smaller than the total view. The meaning of this finding is that the 7th grade students are most satisfied and the 9th are the least satisfied.

Parents' attitudes

Collaboration among stakeholders

The first issue being examined is collaboration among stakeholders and it includes questions 1-5. Appendices D and J (p. 409, 430) include a complete version of questionnaires given to parents and the results. The first five questions and the findings are shown in figure 5.6 (appendix J, table J.1, questions 1-5, p. 430):

1. Collaboration between students and parents at school.
2. Collaboration between students and teachers at school.
3. Collaboration between teachers and parents at school.
4. Collaboration between parents and principals at school.
5. Teachers' agreement to parental involvement at school.

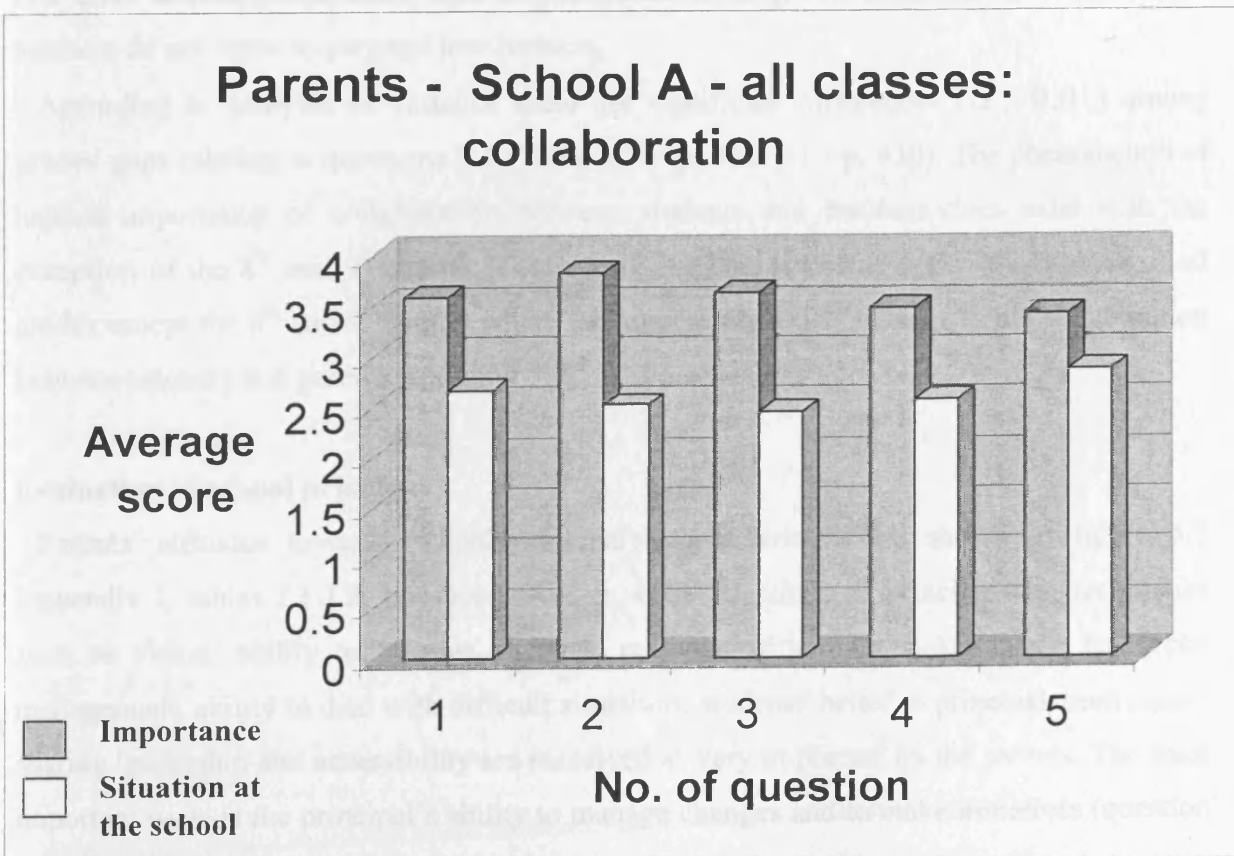


Figure 5.6: Parents' view: Collaboration - Questions 1-5

According to figure 5.6, all kinds of collaboration are perceived as very important by the parents. The most important issue is the collaboration between students and teachers (question 2: 3.84) and the lowest score was given to the importance of teachers' agreement to parental involvement at school (question 5: 3.42). In all aspects of collaboration there is a gap between the desired situation and the reality at the school. The highest gap relates to collaboration between students and teachers (question no. 2: 1.32) and the meaning of this finding is that according to parents' perception, there is a major problem concerning the collaboration their children have with their teachers. They perceive this issue as very important and the reality at school A is not good. The ineffective collaboration between teachers and students is expressed also by the open-ended questions as one parent says: *"the teachers do not treat the students well and they do not understand that the school is for the students and not in order to obtain a good salary"*.

The lowest gap exists while comparing the difference between 'importance' and 'reality' concerning teachers' agreement to parental involvement (question 5: 0.55). The parents think this issue is less problematic than all the others relating to collaboration, which means teachers do not resist to parental involvement.

According to analysis of variance there are significant differences ($\alpha \leq 0.01$) among grades' gaps relating to questions 2-5 (Table S.11- p. 492, J.1 - p. 430). The phenomenon of highest importance of collaboration between students and teachers does exist with the exception of the 8th and 9th grades. The gap of this characteristic is also the highest in all grades except the 8th and 9th grades where the highest gap exists relating to the collaboration between teachers and parents (question 3: 8th - 1.03, 9th - 2).

Evaluation of school principal

Parents' attitudes towards school principal's characteristics are shown in figure 5.7 (appendix J, tables J.1-J.2, questions 6-14, p. 430). All kinds of principal's characteristics such as vision, ability to manage changes, relations with other stakeholders, resources' management, ability to deal with difficult situations, students' belief in principal, motivation, sharing leadership and accessibility are perceived as very important by the parents. The most important issue is the principal's ability to manage changes and to make initiatives (question 7: 3.86) and the lowest score was given to sharing leadership with staff and students

(question 13: 3.59). In all principal's characteristics there is a gap between the desired situation and the reality at the school. The greatest gap relates to the principal's ability to manage changes and to make initiatives (question 7: 1.23). The parents perceive this issue as very important and the reality is not good. The smallest gap exists while comparing the difference between 'importance' and 'reality' concerning the influence of principal's motivation on teachers' motivation (question 12: 0.74).

6. *Principal's vision, values and way of thinking.*
7. *Principal's ability to manage changes and to make initiatives.*
8. *Principal's personal relations with the staff, parents and students.*
9. *Principal's ability to control, acquire and manage resources and budgets.*
10. *Principal's ability to deal with difficult situations.*
11. *Students' belief in principal.*
12. *Principal's motivation influences teachers' motivation.*
13. *Sharing leadership with staff and students.*
14. *Principal's accessibility to teachers, students and parents.*

Parents - School A - all classes: evaluation of principal

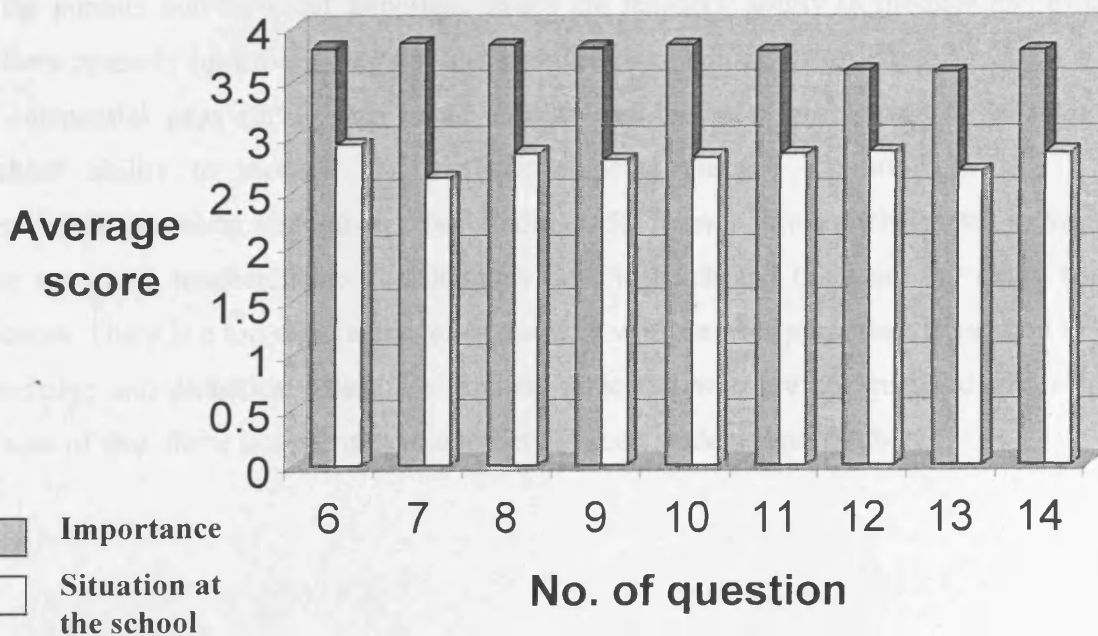


Figure 5.7: Parents' view: Principal's characteristics - Questions 6-14

Analysis of variance shows significant difference ($\alpha \leq 0.01$) among grades' gaps relating to questions 9 and 12-14 only (Table S.11 - p. 492, J.1, J.2 - p. 430) and no significant difference concerning 'importance'.

The phenomenon of greatest importance of the principal's ability to manage changes and to make initiatives does exist in the 9th and 12th grades. In the other grades, this issue is also considered as very important but the principal's personal relations, resources' management and ability to deal with difficult situations are considered as slightly more important. The gap relating to principal's ability to manage changes and make initiatives is also the highest in the 8th, 9th grades separately. In the 7th grade, the highest gap relates to principals' accessibility (question 14: 1.62), in the 10th grade - the ability to deal with difficult situations (question 10: 1.11), in the 11th grade - the influence of principal's motivation on teachers' motivation (question 12: 1.4) and in the 12th grade - sharing leadership (question 13: 1.50).

The open-ended questions added more information relating to the principal's characteristics. 3 parents claim that the principal does not manage appropriately the financial resources that are given to her.

Evaluation of teachers at school

Parents' attitudes towards teachers' characteristics are shown in figure 5.8 (appendix J, table J.2, questions 15-18, p. 431). All characteristics examined are perceived as important by the parents but the most important issues are teachers' ability to monitor and evaluate students properly (question 16: 3.85) and knowledge and didactics (question 15: 3.82). There are substantial gaps (0.91-1.33) in all aspects and the most problematic issue relates to teachers' ability to monitor and evaluate students properly (question 16: 1.33). The open-ended questions strengthen these findings. 58 parents wrote verbal notes saying that there are many teachers who do not know how to teach and there are too many teacher absences. There is a too rapid turnover of teachers who are not appropriate in relation to their knowledge and didactics. There are teachers at school who are not qualified to teach and because of that, there is a permanent conflict between students and teachers.

15. Teachers' knowledge and didactics.
 16. Teachers' ability to monitor and evaluate students properly.
 17. Teachers' personality.
 18. Teachers' communication with students.

Parents - School A - all classes: Teachers' characteristics

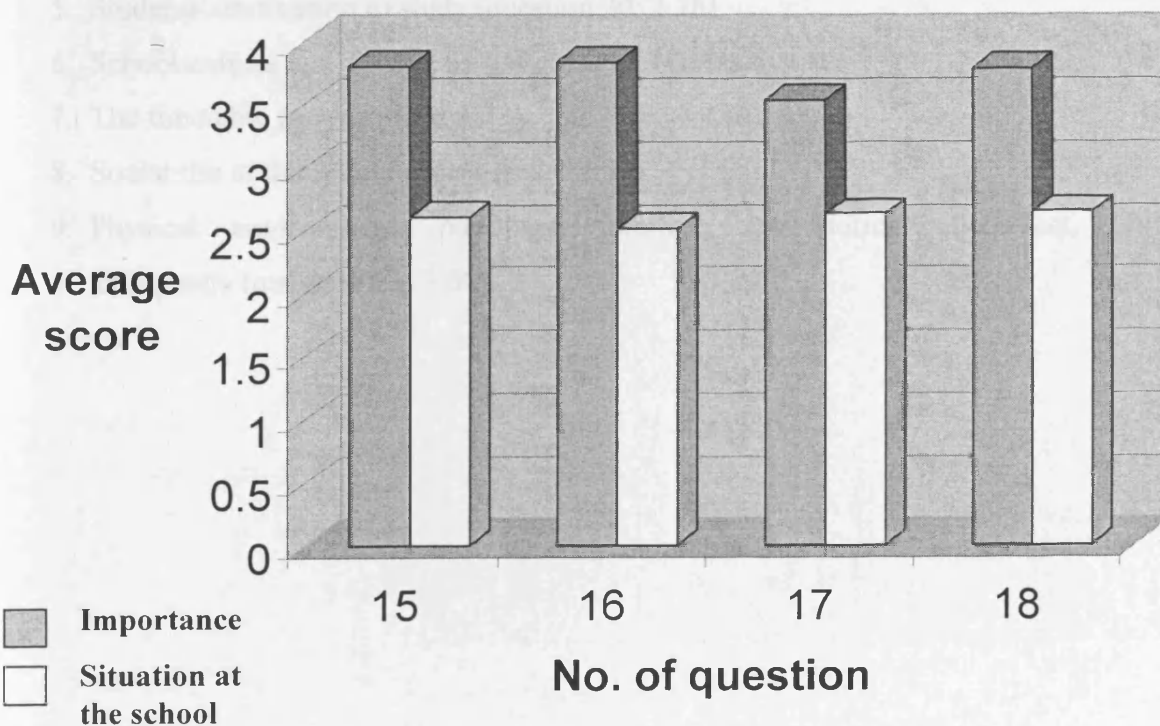


Figure 5.8: Parents' view: Teachers' characteristics - questions 15-18

Analysis of variance shows significant difference ($\alpha \leq 0.01$) among grades' gaps relating to questions 15-18 (Table S.11, J.2, p. 492, 431).

Further, in the 7th and 8th grades, the most important issue was "teachers' communication with the students" (question 18: 7th - 3.89, 8th - 4.00). The greatest gap obtained in the 8th grade was teachers' communication (question 18: 1.00). The maximal gaps in the other grades were similar to the total view.

Other issues

Parents' attitudes towards other characteristics are shown in figure 5.9 (appendix J, tables J.2-J.4, questions 19-37, pp. 431-433).

The parents perceive all these issues as important. The following issues are perceived as the most important:

1. Discipline (question 27: 3.90).
2. Special treatment for students with special needs (question 36: 3.80).
3. Teachers' motivation to teach (question 21: 3.79).
4. The existence of many studying opportunities (question 34: 3.79).
5. Students' motivation to study (question 20: 3.76).
6. School culture and climate (question 22: 3.74).
7. The timetable (question 24: 3.73).
8. Social life at the school (question 25: 3.71).
9. Physical environment: buildings, furniture, laboratories, equipment, library, computers (question 23: 3.66).

19. School and class size.
20. Students' willingness to study.
21. Teachers' willingness to teach.
22. Organisational culture and atmosphere.
23. Physical environment (buildings, furniture, laboratories, equipment, library, computers).
24. Weekly timetable and number of subjects being taught simultaneously.
25. Social life at school.
26. Additional studies beyond regular program.
27. Discipline at school.
28. High standards and expectations towards students held by teachers.
29. Grouping is a good system for studying.
30. Management of information at school.
31. A continuity between junior high school and secondary school.
32. The school counsellor functioning.
33. Students' continuous presence at school.
34. The existence of many studying opportunities.
35. Reasonable punishments.
36. Special treatment for students with special needs.
37. Focus on homework.

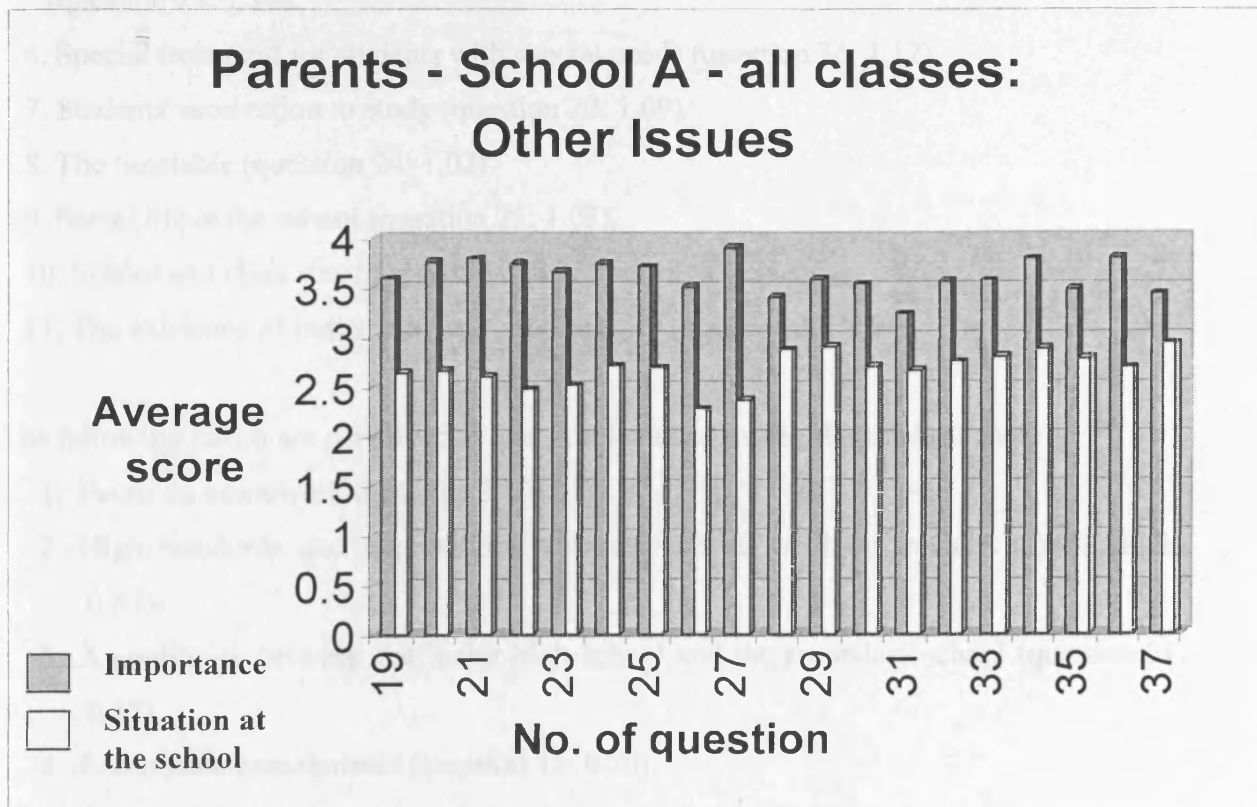


Figure 5.9: Parents' view: Other issues - questions 19-37

The following issues are perceived relatively as less important:

1. A continuity between junior high school and secondary school (question 31: 3.23).
2. High standards and expectations towards students (question 28: 3.40).
3. Focus on homework (question 37: 3.43).

The gaps of all characteristics being examined are between 0.51 to 1.55. The following issues are perceived as the most problematic (having the greatest gap):

1. Discipline at school (question 27: 1.55). 36 parents claimed that there is a problem of discipline and violence that should be handled by the school management. Few of them argued that the management does not deal with discipline properly and there is a feeling of total anarchy.
2. School culture and climate (question 22: 1.27).
3. Extracurricular studies (question 26: 1.24).
4. Teachers' motivation to teach (question 21: 1.19).
5. Physical environment - buildings, furniture, laboratories, equipment, library, computers (question 23: 1.15).
6. Special treatment for students with special needs (question 36: 1.12).
7. Students' motivation to study (question 20: 1.09).
8. The timetable (question 24: 1.02).
9. Social life at the school (question 25: 1.02).
10. School and class size (question 19: 0.95).
11. The existence of many studying opportunities (question 34: 0.91).

The following issues are perceived as less problematic (having the smallest gaps):

1. Focus on homework (question 37: 0.51).
2. High standards and expectations towards students held by teachers (question 28: 0.53).
3. A continuity between the junior high school and the secondary school (question 31: 0.57).
4. Reasonable punishments (question 35: 0.70).

Analysis of variance shows significant difference ($\alpha \leq 0.01$) among grades' gaps relating to questions 20-23, 26, 28, 30-31 and 34-36 (Tables S.11, J.2-J.4, p. 492, 431).

Parents: summary of questions 1-37

Table 5.4 summarises parents' gaps in school A relating to questions 1-37, sorted from the highest gap to the lowest one. According to table 5.4, 17 gaps (out of 37) are above 1. The most ineffective issues are discipline at school (1.55), monitoring and evaluation (1.33), students' collaboration with teachers (1.32), organisational culture (1.27), extracurricular

studies (1.24), principal's management of changes (1.23), teachers' knowledge (1.2), teachers' motivation (1.19), teachers and parents' collaboration (1.18), physical environment (1.15), communication (1.14), special treatment for students with special needs (1.12), students' motivation (1.09), management of resources (1.03), principal's ability to deal with difficult situations (1.03), social life (1.02) and the timetable (1.02). The most effective issues are focus on homework (0.51), teachers' expectations (0.53) and teachers' agreement to parental involvement (0.55).

No.	Question	Gap
1	27. Discipline at school.	1.55
2	16. Teachers' ability to monitor and evaluate students properly.	1.33
3	2. Collaboration between students and teachers at school.	1.32
4	22. Organisational culture and atmosphere.	1.27
5	26. Additional studies beyond regular program.	1.24 *
6	7. Principal's ability to manage changes and to make initiatives.	1.23
7	15. Teachers' knowledge and didactics.	1.20
8	21. Teachers' willingness to teach.	1.19
9	3. Collaboration between teachers and parents at school.	1.18
10	23. Physical environment.	1.15
11	18. Teachers' communication with students.	1.14
12	36. Special treatment for students with special needs.	1.12
13	20. Students' willingness to study.	1.09 *
14	9. Principal's ability to control, acquire and manage resources and budgets.	1.03
15	10. Principal's ability to deal with difficult situations.	1.03
16	25. Social life at school.	1.02 *
17	24. Weekly timetable and number of subjects being taught simultaneously.	1.02
18	8. Principal personal relations with staff, parents and students.	0.99
19	19. School and class size.	0.95
20	11. Students' belief in principal.	0.94
21	1. Collaboration between students and parents at school.	0.93 *
22	14. Principal's accessibility to teachers, students and parents.	0.93
23	17. Teachers' personality.	0.91 *
24	4. Collaboration between parents and principals at school.	0.91
25	34. The existence of many studying opportunities.	0.91
26	13. Sharing leadership with staff and students.	0.91
27	6. Principal's vision, values and way of thinking.	0.88
28	30. Management of information at school.	0.82
29	32. The school counsellor functioning.	0.81
30	33. Students' continuous presence at school.	0.76
31	12. Principal's motivation influences teachers' motivation.	0.74
32	35. Reasonable punishments.	0.70
33	29. Grouping is a good system for studying.	0.69
34	31. A continuity between junior high school and secondary school.	0.57
35	5. Teachers' agreement to parental involvement at school.	0.55
36	28. High standards and expectations towards students held by teachers.	0.53
37	37. Focus on homework.	0.51 *

Table 5.4: School A -parents - gaps of questions 1-37

(* There is no significant difference among the three schools)

Parents' satisfaction with the school

Parents' satisfaction with the school is shown in figure 5.10 (appendix J, table J.5, questions 41-63, p. 434):

41. Teachers get enough satisfaction, achievement, etc.
42. Teachers get enough salary and material rewards.
43. General atmosphere at my child's school is positive.
44. Discipline at my child's school is appropriate.
45. Students' achievements are high.
46. Relations between school principal, staff, students and parents are good.
47. The principal has the ability to advance and initiate meaningful changes.
48. Decision making process is appropriate.
49. School has good reputation in community.
50. There are good teachers at my child's school.
51. Students have strong desire to study.
52. School's resources and finance are managed properly.
53. School's buildings, equipment, laboratories, etc are appropriate.
54. There is a good social life at my school.
55. Monitoring and evaluation of students is done well.
56. Teachers treat students properly.
57. Teachers treat parents properly.
58. School size is reasonable (not too big).
59. Class size is reasonable (not too big).
60. Teachers have high expectations towards students.
61. Students have high chance to succeed.
62. There is high pressure on students at school.
63. School has reasonable flexibility for students.

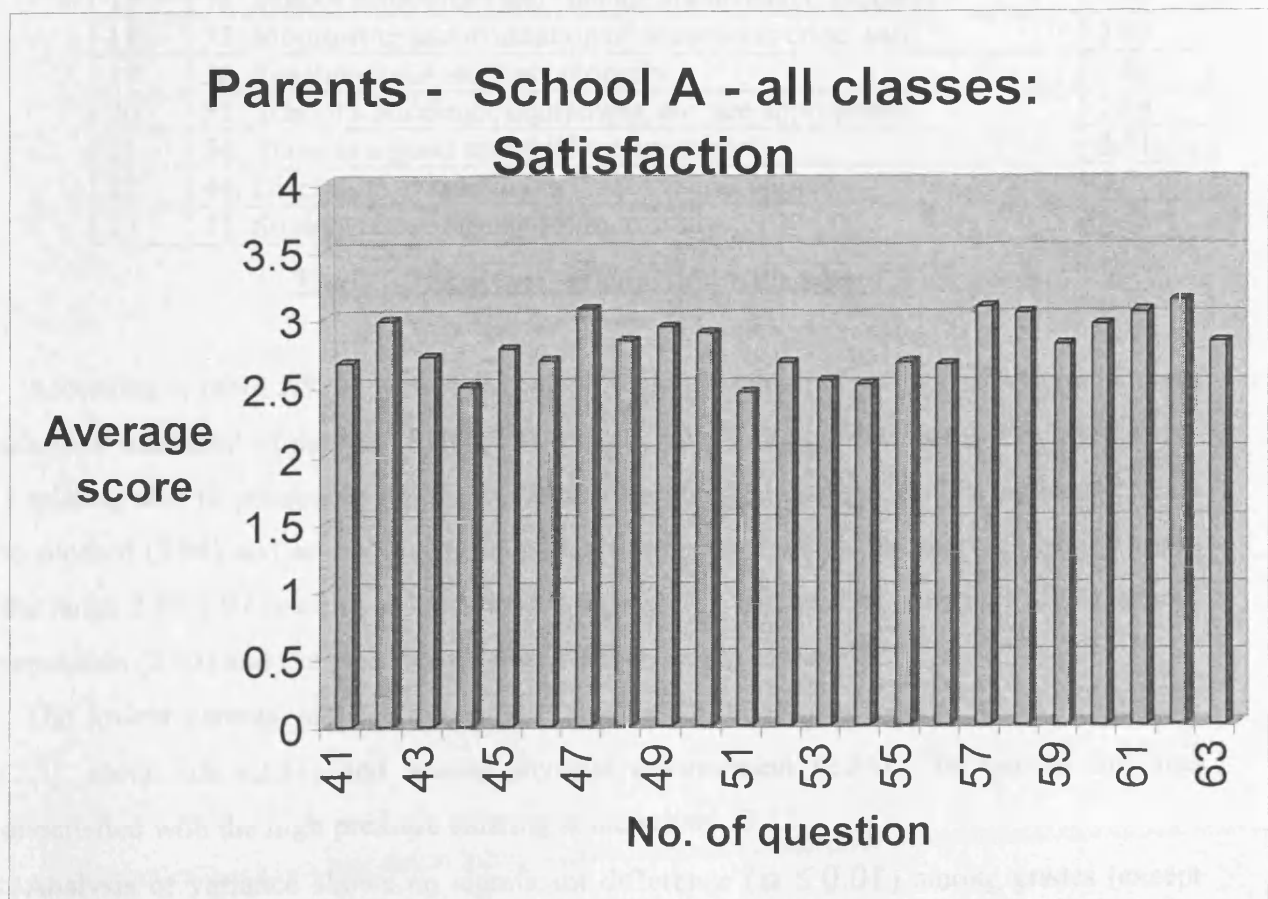


Figure 5.10: Parents' view: Satisfaction - questions 41-63

Parents' satisfaction with school A, sorted from the highest score to the lowest one is shown in table 5.5:

No.	Question	Score
1	62. There is high pressure on students at school.	3.12
2	57. Teachers treat parents properly.	3.09
3	47. Principal's ability to advance meaningful changes.	3.07
4	61. Students have high chance to succeed.	3.04
5	58. School size is reasonable (not too big).	3.03
6	42. Teachers get enough salary and material rewards.	2.97
7	60. Teachers have high expectations towards students.	2.94
8	49. School has good reputation in community.	2.93
9	50. There are good teachers at my child's school.	2.89
10	48. Decision making process is appropriate.	2.83
11	63. School has reasonable flexibility for students.	2.81
12	59. Class size is reasonable (not too big).	2.80
13	45. Students' achievements are high.	2.78
14	43. General atmosphere at my child's school is positive.	2.71
15	41. Teachers get enough satisfaction, achievement, etc.	2.68
16	46. Relations between school principal and stakeholders.	2.68
17	52. School's resources and finance are managed properly.	2.67
18	55. Monitoring and evaluation of students is done well.	2.67
19	56. Teachers treat students properly.	2.66
20	53. School's buildings, equipment, etc. are appropriate.	2.54
21	54. There is a good social life at my school.	2.51
22	44. Discipline at my child's school is appropriate.	2.5
23	51. Students have strong desire to study.	2.46

Table 5.5: Parents' satisfaction with school A

According to table 5.5, 18 scores are below 3 and the maximal parents' satisfaction is with teachers' treatment of parents (3.09). The parents have satisfaction's scores which are above 3 relating also to principal's ability to advance meaningful changes (3.07), students' chance to succeed (3.04) and school size (3.03). The parents have satisfaction's scores, which are in the range 2.89-2.97 relating to teachers' rewards (2.97), teachers' expectations (2.94), school reputation (2.93) and the presence of good teachers at the school (2.89).

The lowest parents' satisfaction is with students' motivation to study (2.46), discipline (2.5), social life (2.51) and school physical environment (2.54). The parents are also dissatisfied with the high pressure existing at the school (3.12).

Analysis of variance shows no significant difference ($\alpha \leq 0.01$) among grades (except question 55) relating to questions 41-63 (Table S.12, J.5. p. 493, 434).

Summary and preliminary conclusions

According to School A case study there are gaps between desire and reality concerning the characteristics of effective six-year high school. It means that there is a gap between the answers of the first research question (the ideal model) and the second research question (reality at stakeholders' school). That was an indication for dissatisfaction of stakeholders expressed by answers to the third research question (stakeholders' satisfaction). Gap size and satisfaction are different concerning different issues examined, different stakeholders and classes. In some issues, there are differences between the secondary school and the junior high school. Each research question contains a set of sub-questions having characteristics that were included in the research tools and for every sub-question, each stakeholder expressed attitudes relating to the three research questions. Stakeholders expressed the importance of each characteristic or how it should be ideally (concerning the first research question), the situation at respondent's own school (second research question) and his/her satisfaction with each characteristic (third research question). School A case study reveals that the following characteristics are perceived by stakeholders as important (first research question) although there is a variation relating to the reality at school A and their satisfaction with them (second and third research questions):

Collaboration among stakeholders: the students are dissatisfied with the collaboration with their teachers whereas the teachers think it is all right. In that respect, there is a substantial difference between how the staff and the students answer the second research question. Students think that the reality is unacceptable whereas teachers and principals think it is reasonable. Principals and teachers are aware of the ineffective collaboration between the school and the parents. According to Coleman (1998), parents and students are important customers of the school. When parents are satisfied with school they may influence their children's attitudes towards school and it can affect pupils' functioning at school. According to all stakeholders, there is a problem concerning the relations between the school and parents and the students and teachers.

School principal's characteristics: Both students and parents are dissatisfied with the principal's ability to manage resources, common management of the staff and students, their belief in the principal and principal's ability to deal with difficult situations. The principal is aware of her difficulty to function but explains it in her wish to make changes and the staff's resistance to it. To the teachers, it is her fault owing to ineffective management. According to the research literature (Bennis and Nanus, 1985), school leadership should have vision. To

teachers and principals, the school principal does have vision but it is not well fulfilled. Smylie (1992) states that teachers' willingness to participate in school decision-making is influenced primarily by their relationships with their principal. In school A, teachers do not have willingness for such a participation.

Teachers' characteristics: teachers are perceived to be ineffective by both parents and students and there is a substantial gap between students/parents' attitudes to those of teachers and principals. Both teachers and principals think that most teachers are good. According to Coleman (1998), students think that the good teacher is one who has technical skills together with good personal relationships with students. In School A, students and parents think that there is a substantial problem in both technical, motivational and communicational teachers' skills. Nevertheless, the teachers and their principals think they are usually ok with only marginal exceptions.

School/class size and the physical environment: students and parents do not look upon the crowding in classes or the buildings' size as problematic. The teachers and principals have a totally different view saying that the classes are too crowded. According to research literature, student achievement in small schools and small classes is superior to achievement in large schools and crowded classes (Hargreaves et al, 1997; Fowler, 1995; Howley, 1994). There is congruence between teachers and principals' attitudes and the research literature. They definitely prefer small schools and small classes whereas the customers, namely students and their parents do not fully understand the great advantage of it. Relating to the physical environment, all stakeholders think there is a problem concerning lack of classrooms and designated equipment.

Teamwork: to stakeholders, there is no effective teamwork at the school. The teachers and principals think there is also no six-year activity, which is so important for six-year high schools. Students and parents are more satisfied with the teamwork and the six-year continuity. According to the research literature (Little, 1982) collaborative teamwork includes teachers' frequently engagement, provision of useful critiques of their teaching, teaching planing and teaching each other the practice of teaching. To stakeholders, school A is ineffective in that respect.

Discipline: discipline is perceived as a necessary and insufficient condition for school effectiveness, similarly to Duke (1989). According to students, parents and teachers, there is a substantial problem of discipline although there is no violence. According to Gaustad (1992), non-violent discipline problems affect negatively the learning environment and such a situation is common in school A according to stakeholders' views. Gaustad (1992) states

that disruptions interrupt lessons for all students, and disruptive students lose even more learning time.

Students' motivation to study: to all stakeholders, students' motivation to study is too low. This is one of the main factors decreasing students' achievements and school A's effectiveness. To principals and teachers, students' motivation is not high enough and some of them are low motivated. The reasons to low motivation according to teachers and principals are home factors, personal ability, teachers' interest and expectations and lack of resources. The students and their parents think that the motivational issue is much worse in their schools in comparison to the staff. According to Renchler (1992), achieving the goal of making the individual classroom a place that naturally motivates students to learn is much easier if students and teachers function in a school culture where academic success and the motivation to learn is expected, respected, and rewarded and it is mainly influenced by the school leader. In comparing the situation at school A to the research literature, it is possible to realise that the motivational aspect according to the staff is more students' dependent and less school's dependent. This statement contradicts the research literature stressing the main school's role in creating and increasing students' motivation. This might be an explanation for the low motivation existing at school A according to stakeholders' views especially, students and their parents.

Parental involvement: to students and parents, there is no problem of teachers' agreement to parental involvement. What is more problematic in parents' view is the cooperation among parents and teachers. The students do not think there is a real problem concerning this issue. The six-year principal thinks that the parents can be involved at school without restrictions. The secondary school principal and most teachers think that parental involvement should be focused only on technical issues and not pedagogical and this is the reality in their school. The research literature on parental involvement indicates that parents and teachers can create viable partnerships (Swick, 1991). There are findings which suggest that when parents sense an inviting school climate, they emphasise nurturing and supporting behaviours in their interactions with teachers, their participation in the school environment also increases (Comer and Haynes, 1991). Together, parents and teachers can foster their partnership through such behaviours as collaborating, planning, communicating and evaluating (Epstein and Dauber, 1991; Swick, 1991). According to stakeholders, such effective parental involvement does not exist in their schools. The reasons for that are either school's preventing parents from real involvement, role holders attitudes that parental involvement is not very important or annoying or low parents' motivation to be involved. The parents are

dissatisfied with their collaboration with the teachers. There are teachers and principals who think they have to satisfy the parents but they do not fully understand the importance of parental involvement to school effectiveness as the research literature stresses. It seems that the parents at school A are not given real opportunities to be involved. To Coleman (1998), the great advantage of parental involvement is obvious but nevertheless there might be teachers' resistance. According to teachers and principals, there are educators who think parental involvement is useless or annoying.

Organisational culture and climate: parents and students think that there is a substantial gap between the ideal organisational culture and climate and reality.

To principals and teachers, the situation at the school concerning school culture is ineffective. School A does not encourage teachers' initiative and there is no real feeling of six-year high school either in the junior high school or in the secondary school. The teachers of the young students do not feel they belong to a six-year high school and there is no learning and pedagogic continuity. The problem is that there are two groups of teachers, each of which teaches in a different school. All teachers agree that the school culture encourages student support but sometimes it works against the teachers' interests. There is bad atmosphere and the school management does not allow the staff to participate in the decision making process. The organisational culture does not really encourage openness and innovation and there is a great uncertainty and pessimism. According to the research literature (Stolp and Smith, 1994), the organisational culture and climate is mainly influenced by the leaders. If the leader does have a wide-angle view, he/she may better understand the difficult problems and complex relationships within the school. By deepening their understanding of school culture, these leaders will be better equipped to shape the values, beliefs, and attitudes necessary to promote a stable and nurturing learning environment. This system of meaning often shapes what people think and how they act (Stolp and Smith, 1994). At School A, the teachers do not feel part of the school and that may decrease students' achievements and school's effectiveness. This is congruent with Brookover et al's (1978, 1979) findings indicating that school climate factors could be powerful predictors of student achievement. Healthy and sound school cultures correlate strongly with increased student achievement and motivation, and with teacher productivity and satisfaction (Brookover et al, 1978, 1979). All these components are missing in school A.

Teachers' standards and expectations: to students and parents, this issue is not problematic. Principals and teachers think that an effective teacher should develop high

expectations towards students because they believe in the self-fulfilling prophecy. Most of them think that expectations should be realistic; not too low but also not too high. They think that there are teachers who have high expectations towards their students but there are others who have high expectations towards high achieving students and low expectations towards low achieving ones. High expectations of students have been among the most consistent of findings in the research literature, together with the communication of such expectations so that students know them, being shown in the original effective schools literature (Weber, 1971; Brookover et al, 1979; Edmonds, 1979a, 1979b, 1981; Venezky and Winfield, 1979) as well as in more recent American research (Teddle and Stringfield, 1993; Stringfield and Teddle, 1991) and in the major British empirical studies (Rutter et al, 1979; Mortimore et al, 1988; Reynolds and Sullivan, 1979; Tizard et al, 1988).

Only part of the teachers do have high expectations and unfortunately, some of them have low expectations especially in low achieving classes. This phenomenon can explain the low motivation causing to low achievements mentioned by stakeholders. Another important factor is the principal's influence on teachers' expectations. Teddle et al (1989) note that effective principals ensure that all staff expect the very highest levels of attainment and behaviour from students. This element does not exist in school A and may influence negatively school's effectiveness.

Social life: both students and teachers think that social life at the school is very important and there is a substantial gap between desire and reality. To teachers and principals, school A does have lots of activities offering opportunities for social relations. Some of them think that social life influences students' satisfaction and their motivation. To Stevenson and Nerison-Low (1995), school occupies a significant portion of adolescents' everyday lives. For many, school is not only about classes, but is also the hub of an active life. In that sense, the students have social needs and there is social life at the school. According to the staff, the school social life is fine, but the students and parents think it is not good enough.

It is very clear that school A students' satisfaction with the school is lower than their parents'. They are more critical and tend not to forgive to school's failures. The main problems in school A, according to all stakeholders, are lack of discipline, ineffective communication between students and teachers, scarce resources, equipment and maintenance. To students and parents the school is not flexible whereas teachers and principals think it is very flexible. To all stakeholders, especially teachers, there is a great problem concerning extrinsic rewards. Teachers agree to remain in the educational field

because of the intrinsic rewards, especially good feedback given them by the students although they do not receive support from the school management. The lack of resources, especially computers and advanced instructional technology, is crucial for school A's effectiveness, according to most teachers. Only teachers and principals are dissatisfied with the lack of a six-year continuity whereas students and parents are not aware of the importance of this characteristic to the effectiveness of a six-year high school.

Chapter 6: School B case study

Introduction

Chapter 6 describes the findings of school B case study including the following:

1. Interviewing of two principals and twelve teachers (September 2000 until January 2001).
2. Surveying by questionnaires, 167 students and 167 parents from six grades as introduced in table 6.1 (during January 2001).

No.	Grade	No, of students/parents
1	7 th	31
2	8 th	34
3	9 th	25
4	10 th	18
5	11 th	29
6	12 th	30
	Total	167

Table 6.1: No. of students/parents in each grade

School B belongs to a technological network and it was established in the year 1960. Until 1993 it was a four-year secondary school. In the year 1993, it became a six-year high school after merging with a junior high school that had been belonged to the local municipality. In school B there are about 1500 students and 140 teachers and it is managed by two principals. One of them is a general manager who is responsible for both the whole six-year high school and the secondary school and another one works under the general manager and is responsible for the junior high school. The junior high and secondary school are located in two campuses with two staff rooms. The distance between the two campuses is about 500 metres.

Chapter 6 addresses the following themes:

1. **School B findings:** this section relates to the attitudes of principals, teachers, students and parents towards the effectiveness of six-year high school as found in school B case study.
2. **Summary and preliminary conclusions:** it summarises the main findings of school B, compares them to the research literature and explains how they relate to the research questions.

The aim of school B case study is to consider the three key research questions as follows:

1. What are the characteristics of effective six-year high schools according to stakeholders' points of view?
2. In what aspects is school B regarded as effective/ineffective (from the same points of view)?
3. What is the level of satisfaction of stakeholders with school B?

A general explanation relating to the three case studies including the interview schedule and questionnaires is introduced in chapter 5 (p. 145).

School B findings

Introduction

This section describes the findings of school B case study including the interviews for principals and teachers and the questionnaires for students and parents. The coming subsections address the attitudes of stakeholders examined (principals, teachers, students and parents) towards the six-year high school effectiveness.

Principals' attitudes

Two school principals were interviewed in school B. Principal 1 is the general manager of the whole six-year high school and he is also responsible directly for the secondary school. Principal 2 is the junior high school principal, working under principal 1. The next subsections discuss principals' attitudes towards the characteristics of the effective six-year high school.

Collaboration among stakeholders

Both principals think that collaboration is very important especially between students and teachers. The collaboration with parents is also important because they can assist and support the students. Principal 2 claims: *"the teachers are more interested in collaboration with parents than the parents are. Sometimes the parents justify bad behaviour of their children"*.

To principals, the teachers should behave naturally with their students exactly as they wish their children's teachers would behave towards their own children. The students should feel that the teachers and the management are taking care for them. In school B most teachers behave in that way because that is the norm which the management requires. They respond

to students' requests if it is feasible. Most teachers in school B would never say they tried if they did not really try. The teachers adopted this norm of behaviour even if they used to behave differently in the past. The teachers assist the students also after the lessons' end and they do their best in order to prevent students' dropping out. Principal 2 agrees saying: *"80% of the teachers response to students' requests but there is a gap in that respect between regular teachers and homeroom teachers. The homeroom teachers are more collaborative"*.

To both principals, the teachers have a high awareness of giving service. That requires more effort and adaptation, but it does not disturb them. The good collaboration with the students improves teachers' collaboration with their parents and vice versa and it is very important to both principals' opinion. The situation in the school is slightly different from the ideal because there are few teachers who do not look upon the openness and goodwill as an advantage but rather as a weakness. Such teachers get explanations from the management and usually change their behaviour.

To principal 1, the relations between school principal and other stakeholders are 'good' whereas to principal 2, they are 'very good'. Principal 1 says that usually the relations are fine but sometimes there are specific events that hurt the relations between the principal and the staff. The reason for that is that there is a contradiction between task orientation and staff orientation and high demands cause interpersonal tension. To principal 2, the reason is different: there are about 5-7 problematic teachers who behave against the organisational norms.

The principal

To both principals, the school principal should have vision - he/she should touch the future and bring it to the presence. Principal 2 appreciates principal 1 saying, *"the six-year principal has vision, he determines goals and usually fulfils his wishes and in that respect he behaves similarly to an ideal model"*. To both principals, vision should be implemented and there should be permanent change. It is very good to 'dream' with the staff and to implement products that develop the whole system. They believe in brain storming and therefore give all teachers the opportunity to enter their office and raise new ideas. It is effective to deal with small or big changes and if the staff object they try to convince them to agree or to realise that the idea is not good. Principal 1 claims he is open and empathic and fixes clear borderlines and definite requirements. What is most important is the ability to make a combination between pressing the staff when needed but also backing and praising them when it is right.

The school principal is "*students oriented*" having high access that demands lots of working hours from himself and the staff. To principal 2, that orientation is exaggerated and it is better to decentralise authority.

They describe the principal's motivation as derived from his wish to influence, change and develop things at the school. He looks for interest, excitement and tension. The motivation is an outcome of love to the profession and to students, the job is diverse and interesting. The graduates who come to visit the school give satisfaction and increase his motivation. He wishes his school would lead in any educational area. Indeed, school B has high achievements in sport and in local social activity.

Principal 1 thinks his own leadership and management are good but he is dissatisfied with lack of managerial control. In order to make progress, the computerised data system should be improved. He thinks he should enter the staff room and the classes more frequently and have more talks with students and teachers. To principal 2, his leadership is excellent - he decentralises authority and has high sensitivity to students and less sensitivity to teachers. Sometimes, in crucial situations he has too rapid reactions and therefore the decisions made are wrong.

The teachers

The ideal teacher to both principals is highly motivated and involved as principal 1 claims:

"The ideal teacher is curious, has high motivation to make effort, is ready to learn, realises that he/she does not know everything, loves teaching and students and is deeply involved. Professional knowledge, didactic ability, effective evaluation and good communication are essential".

Knowledge and didactics can be acquired and it is important to have alternative evaluation and to learn in teams. They think that the staff at the school is good but there are few problems. They have to motivate the teachers permanently and to monitor them. There are some teachers who are not functioning effectively and in these cases there are two options: an unfitted teacher should either be improved or leave the school. Because of the tenure, it is very difficult to dismiss teachers but in extreme cases they do not give up and cause such teachers to leave the school even though it takes a very long time.

To principal 2, "*most teachers are well educated, they have first or second degree. All of them take professional courses but the problem is that they do not use the acquired*

knowledge for the school". There is a minority of teachers who speak impolitely to students, insult them and do not respect them. Although that is a marginal problem, it does have a substantial impact. Nevertheless, most teachers are between 'good' to 'excellent'. Students' evaluation is done mainly by examinations but in certain subjects there are also assignments and personal evaluation for specific students. The veteran teachers have a problem of burnout whereas the young teachers are excellent because they are patient.

Relating to teaching styles, both principals think that the desire is to have in-groups learning. Such a style helps the students to have teamwork and it is adequate to some of the students. It is worthy to diverse teaching styles in order to fit each student the style that is adequate to him/her. The school conducts a project intended to improve the existing teaching and to have better and diverse learning, but in the mean time, most teaching is frontal except certain subjects such as communication and computers.

School and class size

To principals, there should be 8 classes in each grade in a technological school (such as school B) and in a regular school there should be 6 classes in each grade. In each class there should be 30-33 students only. Principal 1 argues: *"in the secondary school there are 8-9 classes in each grade and there are 39-40 students in each class - the classes are too crowded"*.

Management of resources and the physical environment

Both principals think that there is an effective management of school's resources but it can be better as principal 2 claims:

"The equipment at school is maintained very well, there are many computers and good laboratories but nevertheless the resources are not enough for supplying needs of designated and regular equipment ".

Principal 1 argues that he manages the resources and finance of the school with decentralisation of authority but also with monitoring and sample checking. He gives the employees the feeling that he relies on them and gives them responsibility. Decentralisation with effective control can achieve very good outcomes. He can save money by limiting the possibilities available for the students but he prefers not to do so. That gives them more options and improves their chance to be accepted to universities. 75% of the total budget is

invested in teaching and only the rest of it is dedicated for managerial jobs, maintenance and supplying. The allocation of budgets between the secondary school and the junior high school is also a unique characteristic of six-year high schools. To principal 2, the principal allocates a certain share of the whole budget for the junior high school and it enables her to work effectively. He makes great effort in order to achieve more budgets for supply, maintenance and construction. Teaching hours are obtained proportionally to the students' number and the principal has no real influence on it.

Relating to the physical environment the principals are satisfied but they have also criticism as principal 1 claims:

"The secondary school has a nice garden, good scientific equipment and reasonable furniture. The classrooms' condition is bad. The school building was not renovated 40 years and in order to do so there should be a great budget and it requires a specific arrangement. The acoustics at the secondary school is very bad, it is old, ugly and grey and there is no sport's hall".

Principal 2 argues:

"The junior high school building is located in a different area, about half a kilometre away from the secondary school. It is very good but there is no auditorium, no good sport hall and there are no places for students' activity and playing".

The issue of geographical separation between the secondary school and the junior high school versus having one shared campus is a specific characteristic of six-year high school. In that respect, the two principals have different views. To principal 2, the physical separation between the secondary school and the junior high school is effective although it has certain disadvantages. It is not convenient for teachers who teach in both schools, the use of laboratories and computers' rooms is inefficient and there is lack of belonging feeling the young students should have towards the secondary school. Nevertheless, she thinks that the separation is better because the young students do not meet the elder ones and if both areas were closer (but yet separated) it could have been better. Principal 1 has a different view saying that both schools should be located in the same campus because the elder students can be good models for the younger.

Parental involvement at school

To principal 1, there should be and there is full partnership with the parents and no hiding of information. It is necessary that parents should be involved but not interfere at school. The parents should not be involved in pedagogical decisions but practically they do criticise teachers. There is good collaboration with parents with clear borderlines. Principal 1 has full openness to the parents and he does not look upon parents' boards as disturbing but on the contrary - they can help the school. Principal 2 wishes to involve the parents in everything saying, *"I prefer to reach common decisions with the parents and let their involvement in anything even relating to pedagogical issues"*. However, both principals think that the parental involvement is fine and when they have exaggerated requirements, the school usually objects and tries to obtain their agreement to school's decision.

Teamwork

To principals, there are six-year working teams and they plan and monitor the implementation of what is agreed upon. Only few teachers teach both in the secondary school and the junior high school although it is desired that all teachers would teach in both schools and in different levels. There is an effective teamwork at school as principal 2 claims:

"All professional teams have a one weekly hour meeting and the teachers support each other. Once a month there is a meeting of the six-year teams of English, maths, literature and Bible. Such a system helps to create a six-year curriculum continuity".

The teams create common tests for each grade and they have effective coordination. There is an effective six-year continuity and good working relations between the secondary school and the junior high school. The homeroom teachers have efficient teamwork under the grades' leaders. There is a problem with some regular teachers who do not have a team orientation and such behaviour disturbs the homeroom teachers' functioning.

Students' motivation

Principal 1 has high expectations towards the students. He thinks that the school influences positively on students' motivation - it causes the students to feel committed to studying, to feel well and because of that their motivation to make effort increases. There is great flexibility concerning additional exams for students who failed. Such a policy, to principal 1,

increases students' motivation. There is a tendency of grades' improvement in repeated examinations. The dealing with motivation continues permanently and because of that there are good results.

Principal 2 has a different view saying that there is a problem of motivation among students:

"The reason for that is the home culture - students do not come to additional lessons that are given for free. Some teachers influence positively students' motivation but not all of them. The teachers who succeed to increase motivation, have good relations with the students, they encourage and support them but without lowering the standards".

Students' achievements

To principal 1, students' achievements are good but he is not satisfied very much because there should be continuously new objectives and better achievements. He claims:

"I have very high demands from the students and I keep continuous tension and ambition for excellence. Because of that, students who got marks of 80-90 are dissatisfied. There is a constant creation of new challenges and without it, there would be no real progress".

Principal 2 is less satisfied with students' achievements because there is a group of about 20% of the students' population, which has very low achievements. 80% have good achievements but nevertheless her satisfaction is just medium.

Organisational culture and climate

To principals, there is positive organisational culture as principal 1 argues:

"The organisational culture nurtures mutual assistance and support between students and teachers but it is not enough. There is openness at the school but not enough. I try to encourage the staff and the students, to be a model and to be attentive. The school encourages the fulfilment of abilities of all students and not only those who have high achievements.

Principal 1 gives high priority to administration and reports and this is done by an efficient computerised data system enabling efficient monitoring of students and teachers' absences

and the reasons for them. The administrative system should be improved and the use of computerised data system should be increased.

To both principals, the school takes care for good atmosphere and the management makes efforts to prevent the phenomenon in which many students are out of class and do not study. The school nurtures teamwork but the ambition is to become a community school in which the teachers and parents have better collaboration. When a teacher knows that there is a chance that a parent would appeal to him/her, he/she operates more effectively. Principal 2 prefers to operate in a hierarchical decision making process, namely, students have to apply other role holders and not her directly. Concerning that point, principal 1 behaves differently because he agrees to talk with students directly and sometimes makes decisions by himself without getting information from the staff. However, both principals nurture teachers' belonging to school and they wish they would function similarly to them concerning their devotion to the school.

Discipline

To principals, in the past discipline was problematic but the situation was improved as principal 1 claims:

"In the past, discipline was problematic and there was also students' violence. The situation was dramatically changed because the school stressed students' understanding and punishing in cases of discipline breaches rather than just frightening. The school is consistent and not lenient in dealing with discipline and this is the main reason for its success. The discipline is very good because the students learn to behave properly. They should understand that the staff and I mean what we say. Therefore, the discipline in the secondary school is as good as in the junior high school".

Principal 2 agrees saying that the message given by the school management is clear and uniform in both schools and therefore the discipline is good in the whole six-year high school.

To principal 2, there is a difference between the 8th and 9th grades in comparison to the 7th grade. The elder students assimilated good behavioural school norms whereas the younger students are still in the process of norms' internalising and they behave worse. The school educates the students to apply the staff in any problem of discipline and not to deal with such

problems by themselves. In her mind, the class discipline is mainly teacher dependent and the school management just gives assistance. Although most teachers have good discipline in their classes, there are about 4-5 unassertive teachers who have discipline problems. Usually, it is almost impossible to cause those teachers to improve. The principals report that there are grades' leaders who help the teachers to deal with discipline and there is permanent control of the principal and other role holders, to prevent disturbances in the corridors. Another important factor is that the school principal takes care to send a replacement to each class having teacher's absence.

Teachers' standards and expectations towards students

Principal 1 claims:

"I do believe in teachers' high expectations towards their students. When teachers believe in their students, there is high prospect that the students would fulfil the expectations. In order to make progress, the expectations should be increased permanently".

To principal 1, the expectations at the school are very high and realistic. Principal 1 is highly satisfied saying that there was a great change in teachers' expectations and because of that, students' motivation and achievements were increased. Nevertheless, there is a minority of teachers who have low expectations and that annoys him very much. Principal 2 is less satisfied saying that there are too high expectations relating to the best classes, reasonable expectations in regular classes and too low expectations towards students in low achieving classes.

Social life at school

Both principals say that there is active social life at the school including parties, trips and so on. Some activities take place during studying time and others are in the afternoon and evening. The school balances between learning and social needs and the teachers are required to complete lessons that were cancelled because of social activities. To principal 1, there is a specific problem relating to the 11th grade because these students have many learning hours (56 weekly hours) and it is difficult to activate them socially.

School's flexibility for students

Both principals are satisfied with school's flexibility as principal 1 argues: *"the flexibility is very high and if there is a wrong decision, I do not hesitate to cancel it or change it"*. Nevertheless, it is required to invest great effort in order to engage the whole staff to the spirit of flexibility of the school.

Teachers' intrinsic and extrinsic rewards

Both principals' satisfaction with the extrinsic teachers' rewards is very low saying that there is a great gap between teachers' education, efforts and their salary. Principal 2 claims: *"I prefer to have personal contracts for the teachers what would enable the school to reward them according to their performance"*. Both principals' satisfaction with the intrinsic teachers' rewards is medium and this is the only factor that convinces the teachers to remain in the educational field. Some teachers have high internal satisfaction but many others are just partially satisfied with the school's intrinsic rewards.

Six-year management

Principal 2 prefers to have a larger six-year management team because nowadays she is the only representative of the junior high school in the general management. Further, she prefers that most teachers would teach in all six grades whereas in the present situation there are only few teachers who teach both in the secondary school and in the junior high school.

Teachers' attitudes

Collaboration among stakeholders

The teachers think that collaboration is very important especially between teachers and students. The collaboration between them and the students is very good, there is openness, good atmosphere and the teachers are accessible and help the students also out of class's hours. The teachers enable the students to have additional exams, almost with no limitation. Both teachers and students love to come to the school. The school principal is a model of students' support and most teachers behave similarly to him. Because of that says teacher 1, *"the students feel that the school is their home and they love it very much. They can enter freely the staff room, although it is exaggerated, nobody stops them. The teachers prefer the students' interest over their own"*. The school management encourages the staff to support the students - the teachers think it is right although sometimes this students' preference gives

the teachers a feeling it is against their self interest. The junior high school teachers are more critical than the secondary school teachers relating to the collaboration between teachers and students as teacher 7 claims:

"The most important factor is the personal relations between teachers and students. About 60% of teachers have good personal relations and communication and they succeed to develop the students. The other 40% are linked only to the professional aspect and therefore they are less successful".

The teachers do their best in order to have good communication with the parents although they think it is less important than the relations with the students. There is a permanent monitoring of students' presence at the school. If any student does not come to school, there is a norm to communicate the parents. To the secondary school teachers, there is a negative phenomenon at their school in which the parents justify unreasonable absences and that annoys the staff. The junior high teachers mention another problem concerning parents' passivity. Many parents are passive and think that the school only is responsible for students' development. Teachers are sure these parents are wrong because parents' collaboration is crucial for school's effectiveness.

There is also good cooperation between the students and among themselves. They study together and help each other.

Teachers think the relations among the school principal and the staff are good. A gap exists because there are teams in which the relations are not so good and there are some teachers who do not have reasonable relations with the school management.

The principal

To teachers, the school principal has vision, charisma, openness to renovations and new technologies and he succeeded to develop the school a lot. He is perceived as a leader, has modern perceptions, energetic, creative and has excellent communications with all stakeholders. While he has a definite target, he focuses on it and nobody can stop him. He plans many steps in advance and always tries to be attractive. The students have top priority, he is accessible very much to them and even knows their names. To most teachers it is good and just a minority thinks that can be against them. He has good communication with the teachers and everyone can talk with him.

Teacher 7 well describes the principal:

"The principal is highly motivated because his wishes to have many students and classes and a reputed school. His vision is fulfilled by looking for new things that do not exist in other schools, what would bring more students to school B. He has direct communication with the students and some teachers think it is wrong. I think he has no other choice because otherwise he will not have real contact with the students".

A few years ago the school was about to be closed and the principal succeeded to develop it, to add a junior high school and to do excellent marketing for the school. He improves the school's reputation and encourages the staff to treat the students as if they were their own children. His motivation is based on the ambition to improve the school continuously, to accept more students, to improve students' achievements, to be innovative and competitive and to fulfil an educational vision. The principal is updated permanently, he backs the staff, decentralises authority but knows also how to control main processes while taking place. He is highly motivated and causes the staff and the students to have high motivation. The principal loves the students and has willingness that they will fulfil their potential and reach achievements.

The school principal knows how to receive criticism and in cases of making wrong decisions he knows to change them and even apologise if necessary. He manages the resources very well and takes care of current and designated equipment. The school has good computers' rooms, laboratories and extra lessons for all subjects. The principal demands high standards and he criticises those teachers who have low performance. The teachers' tenure disturbs him and he persists that unsuccessful teachers will either be improved or be dismissed. Most teachers think he is close to an ideal model of school-principal.

The teachers

To all teachers, most teachers are good, highly educated, having high professional and didactical ability and excellent communication with the students. There is a small minority of teachers who are problematic as claims teacher 3:

"There are few teachers whose professional knowledge and didactics are not quite good. There are more teachers who give top priority to the subject and the achievements and not to the students and their education. The students know that if

there is any problem they immediately apply to the principal and that annoys some teachers but not me".

The unsuccessful teachers have problems with their professional knowledge, didactics, discipline, burnout or ineffective communication with the students and they cause the school great damage. New teachers start to teach low levels and only if they succeed, they get an opportunity to teach also higher levels.

The homeroom teachers and subject leaders think that the students' evaluation is based mainly on exams and it is not diverse. The English subject leaders have a different view saying that students' evaluation in English is diverse and it includes exams, quizzes, projects, assignments, portfolio, book reports, homework or personal exams. However, to all teachers, the students obtain many opportunities to improve their marks by additional exams.

The teaching is mainly frontal because of the lack of resources (especially teaching hours) and the need to prepare the students for the matriculation examinations. However, all teachers would have preferred to have diverse teaching because it might be more interesting and the students can study actively.

Again, the English subject leaders have a different view saying that much teaching is not frontal, there are projects, Internet, using computers and therefore the learning is much more interesting. Nevertheless, In the 12th class the teaching is less diverse in all subjects because of the matriculation examinations.

Half of teachers think their general quality is medium and the other half think it is 'very good' or 'good'. The gaps exist in special subjects where the teachers are not professional enough, do not have initiative, have communicational problems, low expectations or carelessness.

School and class size

To teachers, most classes are too crowded. There are about 36-44 students in each class whereas the optimal number is only 20-34. The crowding hardens the teachers to support the students effectively. To the junior high teachers, the crowding is more problematic in their school. If the classes were less crowded it could have saved extra budgets in the future. Teacher 11 well describes the crowding in the junior high school classes:

"There is much crowding and that causes great problems. If the classes were less crowded it could have saved extra budgets in the future. The low achieving and high

achieving students cannot study effectively because the teachers are compelled to teach in a medium level and cannot give personal treatment".

To the secondary school teachers, the problem is less severe because in their school there are groupings (maths, English) which are less crowded.

The teachers think that the school size (7-9 classes in each grade) is fine although there is an advantage to a smaller school.

Management of school's resources and the physical environment

All teachers think that the management of school's resources is between 'good' to 'very good'. The principal takes care for all school's needs including equipment, books and teaching hours. The gap exists because of the bad condition of the secondary school's old building and a feeling of discrimination of the junior high school's teachers against the secondary school, concerning financial resources' allocation. Teacher 10 explains her medium satisfaction with the resources' management in the junior high school saying, *"there are no computers and working corners in each class and no audio visual equipment in each grade"*.

To most secondary school teachers, their school buildings are ugly, there is no natural light and no sport's hall, no grass and the school looks very old and out-of-date. Only one teacher (no. 1) thinks that the secondary school buildings are fine and well maintained: *"The classrooms and the school's building are clean and well maintained and there are good football and basketball fields"*. The junior high school teachers are more satisfied with the buildings and the physical environment in their school. The junior high school is located in a different campus, there is much space, sports' fields, each grade has its own building and the separation between both schools is effective. It prevents friction between the young students and the elder ones. Nevertheless, the teachers are dissatisfied with the maintenance and the lack of administrative employees.

Parental involvement

Most teachers think that parental involvement is important but not in professional issues. The parents' boards are involved mainly in technical issues, not in pedagogy and they have good collaboration with the school principal. To the junior high teachers, the connections of the parent's board are mainly between them and the school management and the teachers are not participated. Only teacher 10 has a different view stressing that there should be real

parental involvement: *"the management limits the board's operation and it would have been better to enable them be involved in what they wish and not only in technical and financial issues"*.

The individual involvement has variance - there are parents who are deeply involved and others who think that only the school should be involved with their children's problems. There is a phenomenon in which precisely the parents of students, who have problems, are not involved. There are parents who just look upon their own interest and do not see the general view. They want to influence the school without making much effort but the school needs real involvement of real partners.

Teamwork

To most teachers, teamwork is well organised both in professional and managerial teams. Each professional team has a subject leader and an effective weekly appointment. These teams write curricular plans, decide on didactics, deal with students' monitoring and evaluation and the team members help each other. There are also grade teams and they meet once a week the grade-leader and the pedagogic principal (in the junior high school, principal 2 and the counsellor participate too in these meetings). The school management has also effective teamwork. The teachers think that the whole six-year high school functions as one team, there is complete collaboration among the whole staff, especially the subject leaders of both schools and there is six-year curricular and social continuity. The collaboration between the six-year principal and the junior high school principal is effective, they look upon the whole school as one unit and it influences positively the whole six-year high school functioning.

One junior high school teacher (7) has a different view saying that only 60% of the staff participate effectively in teamwork:

"60% of the staff participate effectively in teamwork and the other 40% do not participate. These 60% belong to some teams and they function effectively in all of them - professional, grade and management teams. The other 40% are ineffective in all areas and they cause damage to the linkage between the junior high and the secondary school teachers and that hurts the whole six-year continuity".

Students' motivation

All teachers agree that there is a variance in students' motivation. There are highly motivated students but many others have low motivation. The teachers give several explanations to this phenomenon. One explanation is that there are different levels of classes - in the high-level groups the motivation is usually high whereas in the low-level groups it is much lower. Another reason is that in the 12th grade the students are burnt-out and therefore their motivation decreases. Most teachers agree that they have substantial influence on students' motivation and there are more and less successful teachers concerning this aspect. Only one teacher (no. 9, junior high) thinks that the students' home influences mainly the motivation and the school's role in that aspect is just marginal. Another conjecture is that the motivation depends on how far the teachers respect their students. Those who respect their students succeed to motivate them better. To teacher 10, in the junior high school, the best motivation is in the 7th grade and the worst - in the 8th grade. The good and open atmosphere created by the school principal increases students' motivation. There is an agreement that the teachers who support and encourage their students influence their motivation positively. There are students who have personal problems (economical problems, parents' divorce, etc.) and they are not ready for studying. In such cases the school has to give the students psychological assistance. The crowded classes decrease also students' motivation because of lack of personal treatment.

The staff nurtures the motivation as teacher 8 claims, *"everyone is involved in increasing students' motivation, the counsellor, the homeroom teachers and the regular teachers. There is an effective monitoring of students' absences"*. The school gives additional lessons, personal talks and additional exams in order to increase the motivation. Because there are many subjects being taught simultaneously, there is much pressure and that decreases students' motivation. The social life became so important to students that many prefer them rather than learning.

Students' achievements

To most teachers, students' achievements are medium, only one teacher (no. 1) argues they are very good. The gap exists because not enough students receive the matriculation diploma, the students do not fulfil their potential, there are unsuccessful teachers who cause low achievements and the students do not make enough effort. Teacher 10 explains that *"there are students who fail because they do not fulfil their potential. If there were less crowded classes and less pressure at the school, the achievements could have been higher"*.

Organisational culture and climate

The school has an aspiration that each student would fulfil his/her potential and the school management supports this approach as teacher 3 claims:

"There is a norm to fulfil the potential of all students stressing mainly the weak ones who get more help. There is mutual assistance among the staff and the organisational culture looks upon the student as the most important entity in the school. The atmosphere is very good and the teachers love to come to school. I love my students and have very close relations with them".

The students and their success have top priority and therefore they feel very well, they love the school and agree to contribute to it. The organisational culture encourages all kinds of innovation and permanent change. The school encourages the teachers to personal development. There is tight control on teaching quality and unsuccessful teachers cannot stay for long time. The students have the right to criticise the school and the management considers their comments. There is openness and each stakeholder may express his/her thoughts with no fear. The decision-making processes are well arranged and usually all relevant views are taken into consideration before making decisions.

To the secondary school teachers, there is no formal and hierarchic atmosphere in their school and students are free to apply directly to the school principal when they wish. The junior high school teachers have a different view saying that in their school there is more formality and keeping hierarchic channels. However, the general atmosphere is very good and most teachers love to come to work.

Discipline

The situation concerning students' discipline is reasonable in the junior high and secondary school. The six-year high school has a set of rules valid for both secondary and junior high schools and the staff enforces it. The corridors are usually silent and that is an outcome of the atmosphere created by the management. The good relations between students and teachers improve the discipline. Not all teachers are satisfied but there are no phenomena of impudence, violence or smoking. The treatment in discipline problems is consistent, immediate and without compromises.

The discipline is based mainly on educational activities as claims teacher 10:

"The discipline is based on educational activities and not on students' fear. Violence is prevented by the police's help. In the junior high school there is a permanent policeman who gives the students training and helps the school to prevent delinquency".

Nevertheless, there are some problematic teachers who cannot control their class and there are some problematic classes. Teachers agree that discipline at school is created by collaboration among the teachers, the school management and the role holders but most of them think that the teacher's role is dominant.

Teachers' standards and expectations towards students

Teachers agree that there should be high realistic expectations and there should not be too high pressure on students. Most teachers think that teachers have high realistic expectations but there is a minority who has low expectations and they cause lower achievements. The school management influences the teachers positively as claims teacher 4: *"The school management has a positive influence on the teachers and it succeeds to cause them to develop high realistic expectations towards their students"*.

Only one junior high school teacher (8) criticises the expectations of the principal saying:

"The principal has very high expectations, sometimes they are too high. There are teachers who have high expectations similarly to him. There is a problem of too high and also too low expectations".

Social life at school

Teachers agree that the school gives high priority to students' social life. The school takes care for trips, movies, parties, students' council, shows, museums and so on. The students are involved in the school social life and there is a social leader who invests much time in that important activity. These activities improve the atmosphere and usually do not disturb the learning but on the contrary, it improves students' motivation because they are more satisfied.

A minority of secondary school teachers thinks the social activity is not enough as teacher 4 argues:

"There are too few activities, not enough shows, only one trip and that is too little. Because the school gives too little the students look for additional frameworks such as youth movements".

School's flexibility for students

Teachers are highly satisfied with school's flexibility as teacher 3 claims:

"I am highly satisfied with the school's flexibility. The only gap exists because there are some students who wish to specialise in other subjects than what the school could have afforded".

The students may have additional exams, can transfer from one group to another and there are personal frameworks for students who need it. The existing gap is focused on inconsistency among teachers - there are teachers who are more flexible whereas others are less considering and sometimes the flexibility is exaggerated.

Teachers' intrinsic and extrinsic rewards

Most teachers' satisfaction with the extrinsic teachers' rewards is very low and they say there is a great gap between teachers' performance, education and responsibility and the salary. Teacher 8 claims:

"I am very dissatisfied with the extrinsic rewards. The salary is much better in similar professions having the same level of education. In order to have reasonable salary, it should be doubled and young teachers should be encouraged".

Only one junior high teacher (7) thinks that the salary is good (!) although it might be improved. Teachers' satisfaction with the intrinsic rewards is much better. These rewards are expressed by positive feedback given by the students, students' success and teaching's interest. Only one junior high teacher's (10) satisfaction is low saying, there is no feeling of mission, vision and creativity in the school.

General education

Teacher 4 claims that the effective school should deal with education and not only acquiring of professional skills. Each teacher should be a model and give values. There are not enough hours for the homeroom teachers' meetings with their classes (only one weekly hour). Further, the professional teachers usually teach only and do not invest time in general education.

Theoretical versus technological orientation

Teacher 7 says that the school is perceived as a scientific/technological institution. There is a need to improve the theoretical component aside by the technological one. That would improve the school's image and will be adequate to students' and parents' needs.

Students' attitudes**Collaboration among stakeholders**

The first issue being examined is collaboration among stakeholders and it includes questions 1-5. Appendices C and K include a complete version of questionnaires given to students and the results (p. 403, 436). The first five questions and the findings are shown in figure 6.1:

1. Collaboration between students and parents at school.
2. Collaboration between students and teachers at school.
3. Collaboration between teachers and parents at school.
4. Collaboration between parents and principals at school.
5. Teachers' agreement to parental involvement at school.

Students - School B - all classes: collaboration

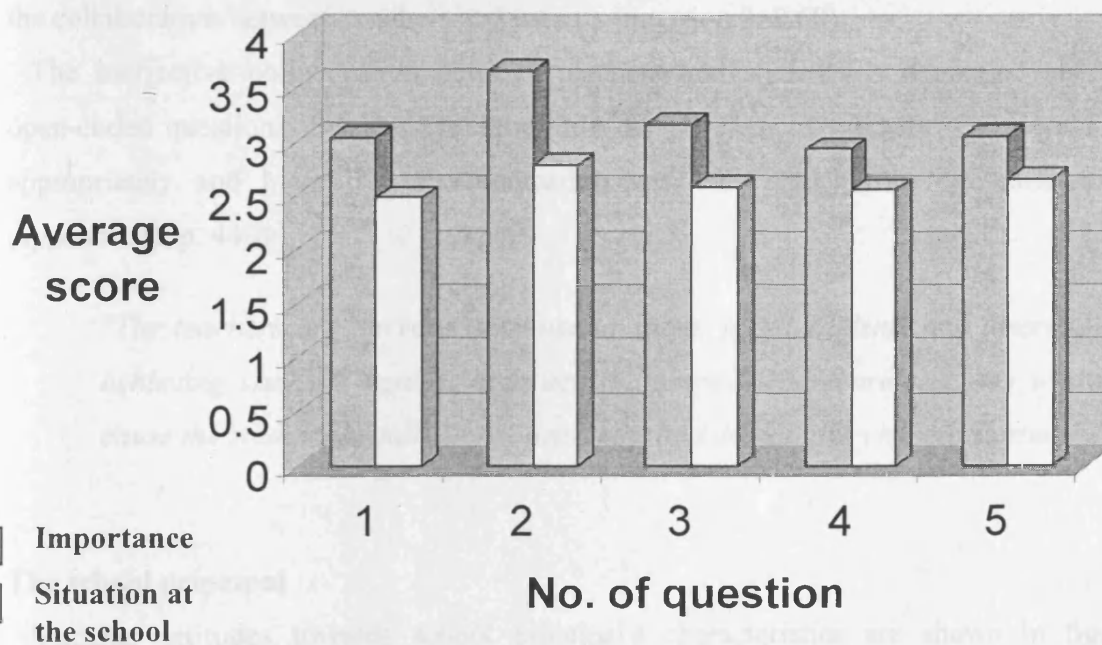


Figure 6.1: Students' view: Collaboration - Questions 1-5

According to figure 6.1, all kinds of collaboration are perceived as important by the students. The most important issue is the collaboration between students and teachers (question 2: 3.66) and the lowest score was given to the importance of collaboration between parents and principals (question 4: 2.94).

In all aspects of collaboration there is a gap between the desired situation and the reality at the school. The greatest gap relates to collaboration between students and teachers (question no. 2: 0.87) and the meaning of this finding is that according to students' perception, there is a problem concerning the collaboration they have with their teachers. They perceive this issue as very important and the existing situation is ineffective. The smallest gap exists while comparing the difference between 'importance' and 'reality' concerning the collaboration

between parents and principals (question 4: 0.38). To students, this issue is less problematic than all the others relating to collaboration.

Analysis of variance based on $\alpha \leq 0.01$ (table S.5, K.1, p. 486, 436) shows that there are no significant differences among grades' gaps between desire and reality relating to questions 1, 3-5. In question 2 there is a significant difference: the 7th grade has the smallest gap (0.52) and the 12th grade has the biggest gap (1.43).

Further, the phenomenon of highest importance of the collaboration between students and teachers does exist while looking at each grade separately. In all grades except the 7th, the gap of this characteristic is also the highest. In the 7th grade, the highest gap exists relating to the collaboration between teachers and parents (question 3: 0.68).

The ineffective collaboration between teachers and students is expressed also by the open-ended questions. Students stress mainly the problem of teachers who do not behave appropriately and have bad communication with the students as one student claims (appendix K, p. 440):

"The teachers are nervous, they use to shout, insult students and discriminate low achieving students against high achieving ones. There are teachers who want to cause the students to fail, do not help them and do not give chances to study".

The school principal

Students' attitudes towards school principal's characteristics are shown in figure 6.2 (appendix K, tables K.1-K.2, questions 6-14, pp. 436-437). According to figure 6.2, all kinds of principal's characteristics such as vision, ability to manage changes, relations with other stakeholders, resources' management, ability to deal with difficult situations, students' belief in principal, motivation, sharing leadership and accessibility are perceived as important by the students. The most important issue is the principal's ability to deal with difficult situations (question 10: 3.83) and the lowest score was given to the importance of the influence of principal's motivation on teachers' motivation (question 12: 3.25). In all principal's characteristics there is a gap between the desired situation and the reality at the school. The greatest gap relates to sharing leadership with staff and students (question no. 13: 0.80). The students perceive this issue as very important and the reality is not too good. The smallest gap exists while comparing the difference between 'importance' and 'reality' concerning the influence of principal's motivation on teachers' motivation (question 12:

0.34). The students think this issue has the lowest importance and it is less problematic than all the other principal's characteristics.

6. Principal's vision, values and way of thinking.
7. Principal's ability to manage changes and to make initiatives.
8. Principal's personal relations with the staff, parents and students.
9. Principal's ability to control, acquire and manage resources and budgets.
10. Principal's ability to deal with difficult situations.
11. Students' belief in principal.
12. Principal's motivation influences teachers' motivation.
13. Sharing leadership with staff and students.
14. Principal's accessibility to teachers, students and parents.

Students - School B - all classes: evaluation of school principal

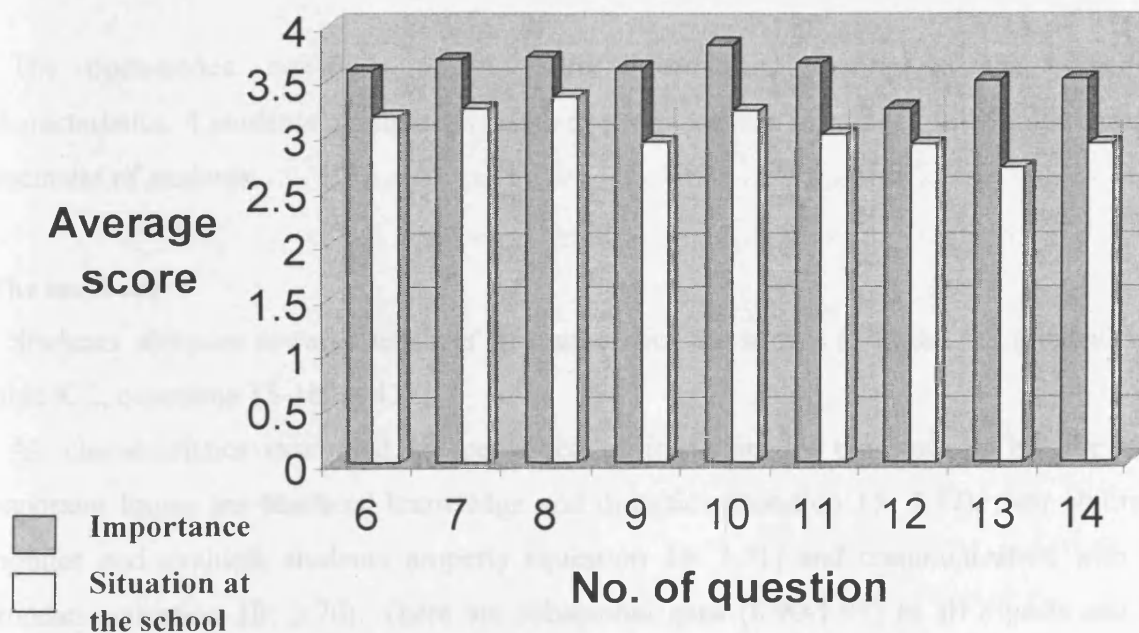


Figure 6.2: Students' view: Principal's characteristics - Questions 6-14

Analysis of variance ($\alpha \leq 0.01$, table S.5, K.1, K.2, p. 486, 436) shows that there are significant differences among grades' gaps relating to questions 9-11 only. The extremes are as follows:

1. Question 9 (ability to manage resources) - the 7th grade has the minimal gap (0.29) and the

12th, the maximal (1.18).

2. Question 10 (ability to deal with difficult situations) - the 9th grade has the minimal gap (0.30) and the 10th, the maximal (1.00).
3. Question 11 (belief in principal) - the 11th grade has the minimal gap (0.25) and the 10th, the maximal (1.33).

Relating to all other questions in this group there is no significant difference among grades. Further, the phenomenon of highest importance of the principal's ability to deal with difficult situations does exist in all grades except the 9th. In the 9th grade, this issue is also considered as very important but the principal's vision, values and way of thinking are considered as slightly more important (question 6: 3.61). The gap of sharing leadership with staff and students is the highest only in the 11th grade (question 13, gap: 0.76). In the other grades, the maximal gaps are as follows:

- 7th and 10th grades: belief in principal (question 11: 0.97, 1.33).
- 8th and 9th grades: principal's accessibility (question 14: 0.73, 0.82).
- 12th grade: management of resources (question 9: 1.18).

The open-ended questions added more information relating to the principal's characteristics. 4 students' complaints relate to promises that were not fulfilled and unequal treatment of students.

The teachers

Students' attitudes towards teachers' characteristics are shown in figure 6.3 (appendix K, table K.2, questions 15-18, p. 437).

All characteristics examined are perceived as important by the students but the most important issues are teachers' knowledge and didactics (question 15: 3.77), their ability to monitor and evaluate students properly (question 16: 3.71) and communication with the students (question 18: 3.70). There are substantial gaps (0.90-1.05) in all aspects and the most problematic issue is teachers' ability to monitor and evaluate students properly (question 16: 1.05). The open-ended questions strengthen these findings. 61 students wrote verbal notes saying that there are teachers who do not behave appropriately, have low motivation, are not professional and have bad communication with the students.

15. Teachers' knowledge and didactics.
 16. Teachers' ability to monitor and evaluate students properly.
 17. Teachers' personality.
 18. Teachers' communication with students.

Students - School B - all classes: Teachers' characteristics

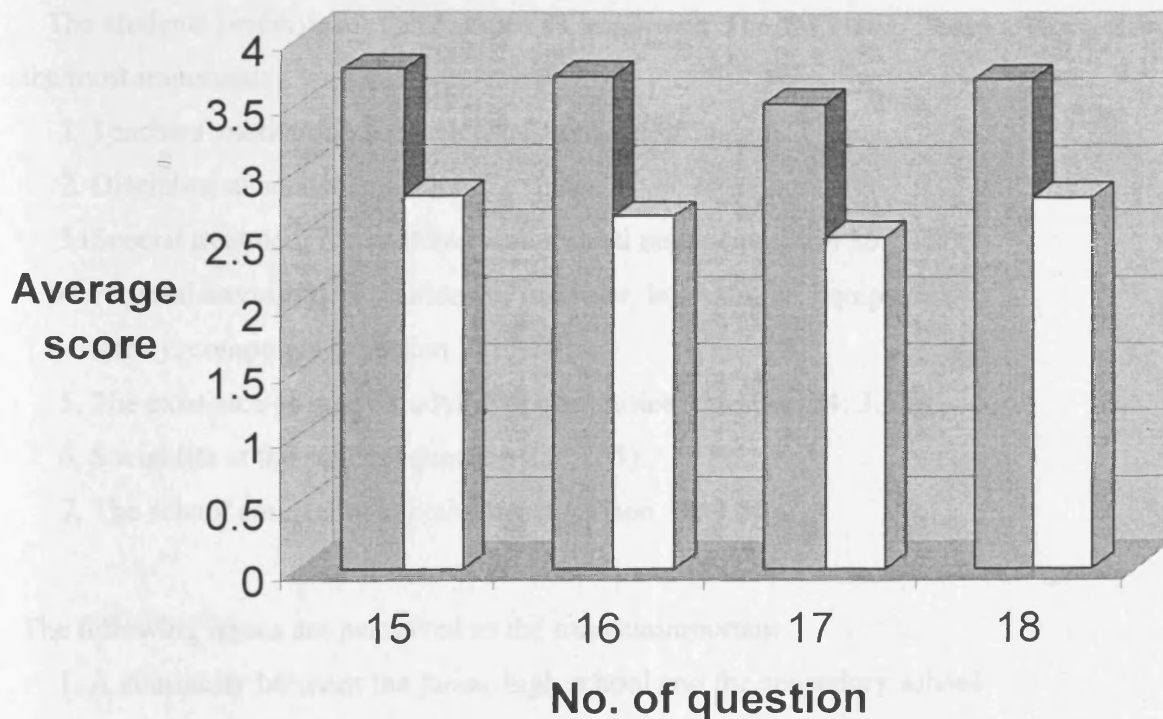


Figure 6.3: Students' view: Teachers' characteristics - questions 15-18

Analysis of variance ($\alpha \leq 0.01$, table S.5, K.2, p. 486, 437) shows that there are significant differences among grades' gaps relating to these questions except no. 16. The maximal gaps were obtained in the 12th grade (question 15: 1.50, question 17: 1.63, question 18: 1.47) and the minimal ones in the junior high school (question 15: 8th grade-0.47, question 17: 7th grade-0.62, question 18: 9th grade-0.50).

Further, in the 9th grade, the most important issue was 'students' monitoring and evaluation' (question 16: 3.71) and in the 12th grade, 'teachers' ability to communicate with students (question 18: 3.73). In the other grades, the most important issue was similar to the whole school view (teachers' knowledge and didactics, question 15). The greatest gaps

obtained in the 9th and 12th grades was 'teachers' personality' (question 17, 9th grade: 1.13, 12th grade: 1.63) and in the 10th grade, 'teachers' ability to communicate with students (question 18: 1.33). In the other grades, the greatest gap was similar to the whole school view (monitoring and evaluation, question 16).

Other issues

Students' attitudes towards other characteristics are shown in figure 6.4 (appendix K, tables K.2-K.4, questions 19-37, pp. 437-439).

The students perceive all these issues as important. The following issues are perceived as the most important:

1. Teachers' motivation to teach (question 21: 3.67).
2. Discipline at school (question 27: 3.65).
3. Special treatment for students with special needs (question 36: 3.64).
4. Physical environment: buildings, furniture, laboratories, equipment, library, computers (question 23: 3.59).
5. The existence of many studying opportunities (question 34: 3.58).
6. Social life at the school (question 25: 3.55).
7. The school counsellor functioning (question 32: 3.50).

The following issues are perceived as the most unimportant:

1. A continuity between the junior high school and the secondary school (question 31: 3.16).
2. Focus on homework (question 37: 3.16).

The gaps of all characteristics being examined are between 0.36 to 1.05. The following issues are perceived as the most problematic (having the greatest gap):

1. Students' motivation to study (question 20: 1.05).
2. Teachers' motivation to teach (question 21: 0.91).
3. The school counsellor functioning (question 32: 0.86).
4. The existence of many studying opportunities (question 34: 0.83).

19. School and class size.
20. Students' willingness to study.
21. Teachers' willingness to teach.
22. Organisational culture and atmosphere.
23. Physical environment (buildings, furniture, laboratories, equipment, library, computers).
24. Weekly timetable and number of subjects being taught simultaneously.
25. Social life at school.
26. Additional studies beyond regular program.
27. Discipline at school.
28. High standards and expectations towards students held by teachers.
29. Grouping is a good system for studying.
30. Management of information at school.
31. A continuity between junior high school and secondary school.
32. The school counsellor functioning.
33. Students' continuous presence at school.
34. The existence of many studying opportunities.
35. Reasonable punishments.
36. Special treatment for students with special needs.
37. Focus on homework.

Students - School B - all classes: Other Issues

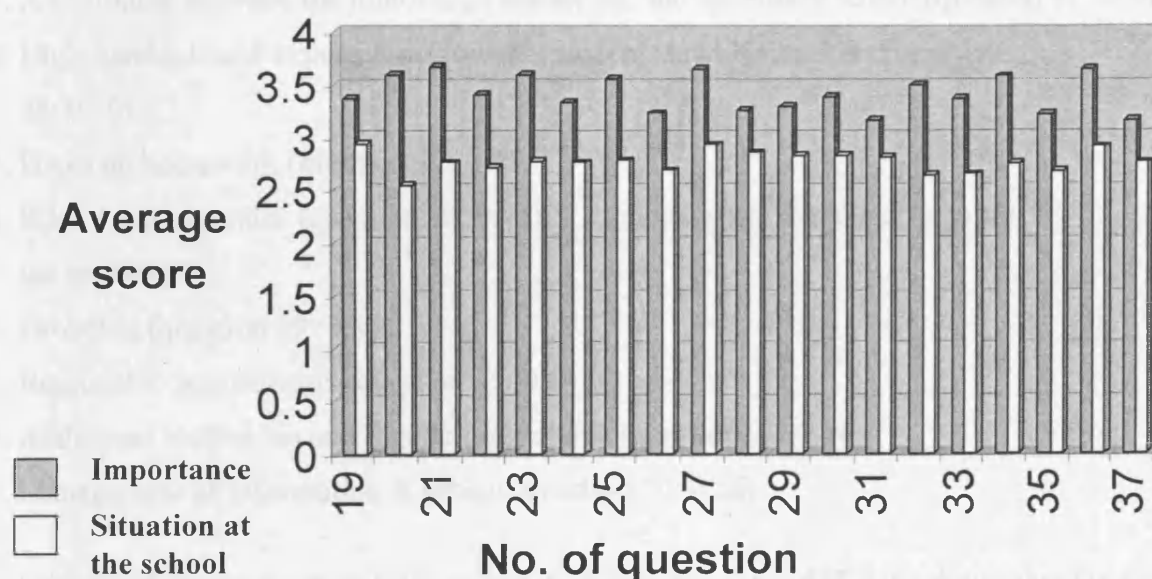


Figure 6.4: Students' view: Other issues - questions 19-37

5. Physical environment - buildings, furniture, laboratories, equipment, library, computers (question 23: 0.82). The open-ended questions added more information relating to the physical environment characteristics. 19

students reported that the air-condition system has failures and the classes are not well cleaned. 11 students wrote that the secondary school buildings are old and not aesthetic

6. Social life at school (question 25: 0.77). 14 added verbal notes saying that there are not enough social activities for students.
7. Special treatment for students with special needs (question 36: 0.74).
8. Discipline at school (question 27: 0.73). 15 students wrote in the open-ended questions that there are discipline problems especially in the junior high school.
9. Students' continuous presence at school (question 33: 0.72).
10. Organisational culture and atmosphere (question 22: 0.69).
11. The timetable (question 24: 0.58). 21 students wrote that there is high pressure, too many tests and learning hours and too much homework.

The following issues are perceived as less problematic (having the smallest gaps):

1. A continuity between the junior high school and the secondary school (question 31: 0.36).
2. High standards and expectations towards students held by teachers (question 28: 0.40).
3. Focus on homework (question 37: 0.41).
4. School and class size (question 19: 0.43). 6 students wrote that the classes are too crowded.
5. Grouping (question 29: 0.46).
6. Reasonable punishments (question 35: 0.54).
7. Additional studies beyond regular programme (question 26: 0.54).
8. Management of information at school (question 30: 0.56).

Analysis of variance ($\alpha \leq 0.01$, table S.5, K.2-K.4, p. 486, 437-439) shows that there are no significant differences among grades' gaps relating to these questions, except questions 21, 23, 24, 26, 28 and 36. The significant differences show bigger gaps in the secondary school than in the junior high relating to teachers' motivation (question 21), the physical environment (23), timetable (24), extracurricular studies (26) and special treatment for students with special needs (36).

Students: summary of questions 1-37

Table 6.2 summarises students' gaps in school B relating to questions 1-37, sorted from the highest gap to the lowest one. According to table 6.2, only 3 gaps (out of 37) are above 1. The most ineffective issues are students' motivation (1.05), monitoring and evaluation (1.05) and teachers' personality (1.01). The most effective issues are principal's influence on teachers' motivation (0.34), principal's personal relations (0.36) and the six year continuity (0.36).

No.	Question	Gap
1	20. Students' willingness to study.	1.05 *
2	16. Teachers' ability to monitor and evaluate students properly.	1.05 *
3	17. Teachers' personality.	1.01 *
4	15. Teachers' knowledge and didactics.	0.95 *
5	21. Teachers' willingness to teach.	0.91 *
6	18. Teachers' communication with students.	0.90
7	2. Collaboration between students and teachers at school.	0.87
8	32. The school counsellor functioning.	0.86 *
9	34. The existence of many studying opportunities.	0.83
10	23. Physical environment.	0.82
11	13. Sharing leadership with staff and students.	0.80
12	25. Social life at school.	0.77 *
13	36. Special treatment for students with special needs.	0.74 *
14	27. Discipline at school.	0.73
15	33. Students' continuous presence at school.	0.72 *
16	22. Organisational culture and atmosphere.	0.69
17	9. Principal's ability to control, acquire and manage resources and budgets.	0.68
18	11. Students' belief in principal.	0.65
19	10. Principal's ability to deal with difficult situations.	0.61
20	14. Principal's accessibility to teachers, students and parents.	0.60
21	3. Collaboration between teachers and parents at school.	0.59
22	24. Weekly timetable and number of subjects being taught simultaneously.	0.58 *
23	1. Collaboration between students and parents at school.	0.56 *
24	30. Management of information at school.	0.56
25	35. Reasonable punishments.	0.54 *
26	26. Additional studies beyond regular program.	0.54
27	29. Grouping is a good system for studying.	0.46 *
28	7. Principal's ability to manage changes and to make initiatives.	0.46
29	19. School and class size.	0.43 *
30	6. Principal's vision, values and way of thinking.	0.42
31	37. Focus on homework.	0.41 *
32	28. High standards and expectations towards students held by teachers.	0.40 *
33	5. Teachers' agreement to parental involvement at school.	0.40 *
34	4. Collaboration between parents and principals at school.	0.38 *
35	31. A continuity between junior high school and secondary school.	0.36 *
36	8. Principal personal relations with staff, parents and students.	0.36
37	12. Principal's motivation influences teachers' motivation.	0.34

Table 6.2: School B - students - gaps of questions 1-37

(* There is no significant difference among the three schools)

Students' satisfaction with the school

Students' satisfaction with the school is shown in figure 6.5 (appendix K, table K.5, questions 41-63, p. 440):

41. Teachers get enough satisfaction, achievement, etc.
42. Teachers get enough salary and material rewards.
43. General atmosphere at my school is positive.
44. Discipline at my school is appropriate.
45. Students' achievements are high.
46. Relations between school principal, staff, students and parents are good.
47. The principal has the ability to advance and initiate meaningful changes.
48. Decision making process is appropriate.
49. School has good reputation in community.
50. There are good teachers at my school.
51. Students have strong desire to study.
52. School's resources and finance are managed properly.
53. School's buildings, equipment, laboratories, etc are appropriate.
54. There is a good social life at my school.
55. Monitoring and evaluation of students is done well.
56. Teachers treat students properly.
57. Teachers treat parents properly.
58. School size is reasonable (not too big).
59. Class size is reasonable (not too big).
60. Teachers have high expectations towards students.
61. Students have high chance to succeed.
62. There is high pressure on students at school.
63. School has reasonable flexibility for students.

Students - School B - all classes: Satisfaction

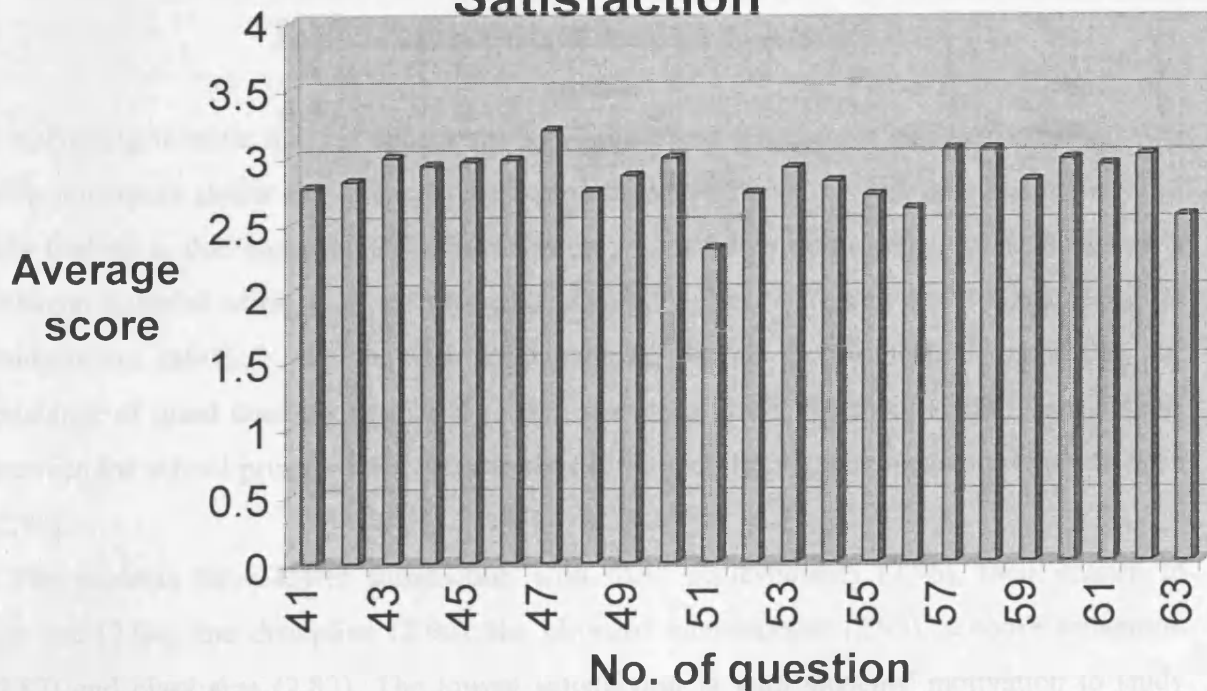


Figure 6.5: Students' view: Satisfaction - questions 41-63

Students' satisfaction with school B, sorted from the highest score to the lowest one is shown in table 6.3:

No.	Question	Score
1	47. Principal 's ability to advance meaningful changes.	3.20
2	57. Teachers treat parents properly.	3.06
3	58. School size is reasonable (not too big).	3.05
4	62. There is high pressure on students at school.	3.02
5	50. There are good teachers at my school.	3.00
6	43. General atmosphere at my school is positive.	3.00
7	46. Relations between school principal and stakeholders.	2.99
8	60. Teachers have high expectations towards students.	2.98
9	45. Students' achievements are high.	2.96
10	61. Students have high chance to succeed.	2.94
11	44. Discipline at my school is appropriate.	2.94
12	53. School's buildings, equipment, etc. are appropriate.	2.93
13	49. School has good reputation in community.	2.87
14	59. Class size is reasonable (not too big).	2.82
15	42. Teachers get enough salary and material rewards.	2.82
16	54. There is a good social life at my school.	2.81
17	41. Teachers get enough satisfaction, achievement, etc.	2.78
18	48. Decision making process is appropriate.	2.75
19	52. School's resources and finance are managed properly.	2.73
20	55. Monitoring and evaluation of students is done well.	2.71
21	56. Teachers treat students properly.	2.62
22	63. School has reasonable flexibility for students.	2.56
23	51. Students have strong desire to study.	2.32

Table 6.3: Students' satisfaction with school B

According to table 6.3, six scores are 3 or above and the highest students' satisfaction is with principal's ability to advance meaningful changes (question 47: 3.20). The meaning of this finding is that students' attitudes towards 5 statements describing high satisfaction is between 'agree' to 'strongly agree' (4 means 'strongly agree', 3 - 'agree' and 2 - disagree). The students are satisfied with the way teachers treat parents (3.06), school size (3.05), the existence of good teachers at school (3.00), the atmosphere at school (3.00), the relations between the school principal and stakeholders (2.99) and the high expectations teachers have (2.98).

The students have lower satisfaction with their achievements (2.96), their chance to succeed (2.94), the discipline (2.94), the physical environment (2.93), school's reputation (2.87) and class size (2.82). The lowest satisfaction is with students' motivation to study (2.32), school's flexibility (2.56), teachers' treatment of students (2.62), students' monitoring

and evaluation (2.71), and resources' management (2.73). The students are also dissatisfied with the high pressure existing at the school (3.02).

Analysis of variance ($\alpha \leq 0.01$, table S.6, K.5, p. 487, 440) shows that there are significant differences among grades relating to these questions, except questions 46, 49 and 56. Concerning the significant differences, in most issues the 8th grade's students have the maximal satisfaction and the 9th - the minimal (general atmosphere, achievements, principals' ability to make changes, decision making processes, good teachers, management of resources and the physical environment, social life, students' monitoring and evaluation, teachers' treatment, students' chance to succeed and school's flexibility).

Parents' attitudes

Collaboration of students, teachers and parents

The first issue being examined is collaboration among stakeholders and it includes questions 1-5 (appendices D and L, p. 409, 442, include a complete version of questionnaires given to parents and the results). The first five questions and the findings are shown in figure 6.6 (appendix L, table L.1, questions 1-5, p. 442).

According to figure 6.6, all kinds of collaboration are perceived as very important by the parents. The most important issue is the collaboration between students and teachers (question 2: 3.73) and the lowest score was given to the importance of teachers' agreement to parental involvement at school (question 5: 3.36). In all aspects of collaboration there is a gap between the desired situation and reality at the school. The highest gaps relate to collaboration between students and parents (question no. 1: 0.82) and students and teachers (question no. 2: 0.70). The meaning of this finding is that according to parents' perception, there is a major problem concerning the collaboration they have with their own children and the teachers' collaboration with students. They perceive these issues as very important and the reality is unsatisfactory. The ineffective collaboration between teachers and students is expressed also by the open-ended questions. Parents stress that there are teachers who do not treat the students well and do not know how to monitor and evaluate them properly (appendix L, p. 446).

1. Collaboration between students and parents at school.
2. Collaboration between students and teachers at school.
3. Collaboration between teachers and parents at school.
4. Collaboration between parents and principals at school.
5. Teachers' agreement to parental involvement at school.

Parents - School B - all classes: collaboration

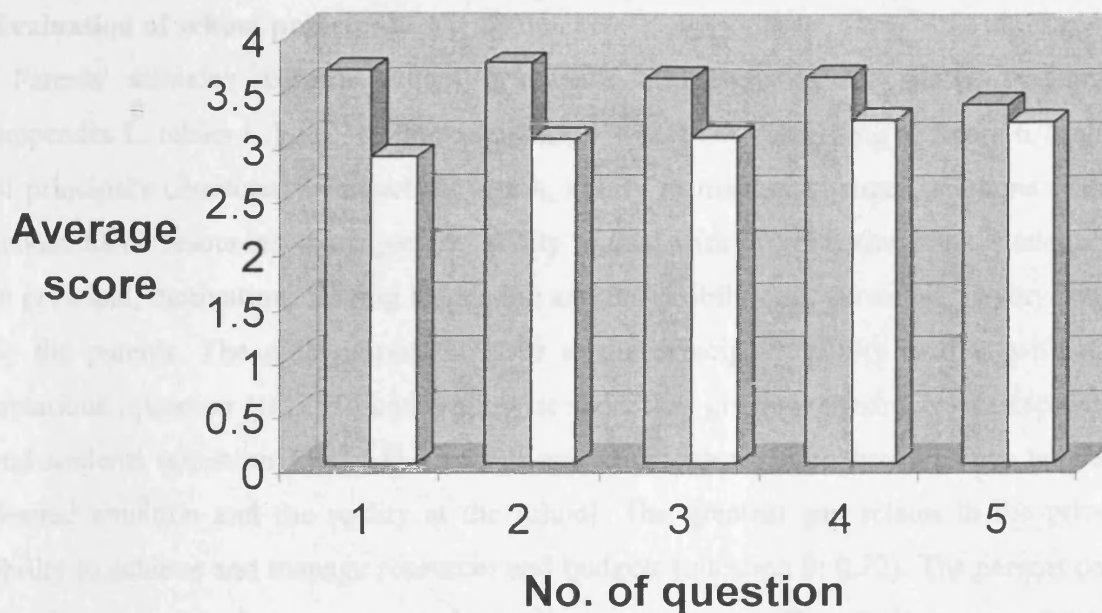


Figure 6.6: Parents' view: Collaboration - Questions 1-5

The smallest gap exists while comparing the difference between 'importance' and 'reality' concerning teachers' agreement to parental involvement (question 5: 0.17). The parents think this issue is substantially less problematic than all the others relating to collaboration, which means teachers agree to parental involvement.

Analysis of variance ($\alpha \leq 0.01$, table S.14, L.1, p. 495, 442) shows that there are significant differences among grades' gaps relating to questions 4,5 only. Concerning these questions, the 8th grade's parents have the maximal gaps (4: 0.93, 5: 0.54) and the 10th grade's parents have the minimal gaps (4: 0.00, 5: -0.50).

Further, the phenomenon of highest importance of the collaboration between students and teachers does exist in the junior high school. In the secondary school, the highest importance is the collaboration between students and parents (question 1, 10th grade: 4.00, 12th grade: 3.86) and collaboration between parents and principals (question 4, 11th grade: 4.00). In the secondary school, the greatest gap is also related to collaboration between students and parents. In the junior high school, the highest gap relates to collaboration between students and teachers (question 2, 7th grade: 0.71, 9th grade: 0.72) and to collaboration between parents and principals (question 4, 8th grade: 0.93).

Evaluation of school principal

Parents' attitudes towards school principal's characteristics are shown in figure 6.7 (appendix L, tables L.1-L.2, questions 6-14, pp. 442-443). According to figure 6.7, all kinds of principal's characteristics such as vision, ability to manage changes, relations with other stakeholders, resources' management, ability to deal with difficult situations, students' belief in principal, motivation, sharing leadership and accessibility are perceived as very important by the parents. The most important issue is the principal's ability to deal with difficult situations (question 10: 3.90) and the lowest score was given to sharing leadership with staff and students (question 13: 3.61). In all principal's characteristics there is a gap between the desired situation and the reality at the school. The greatest gap relates to the principal's ability to achieve and manage resources and budgets (question 9: 0.72). The parents perceive this issue as very important and the reality is not good. The smallest gaps exist while comparing the difference between 'importance' and 'reality' concerning the principal's accessibility to teachers, students and parents (question 14: 0.12) and the principal's vision, values and way of thinking (question 6: 0.13).

Analysis of variance ($\alpha \leq 0.01$, table S.14, L.1-L.2, p. 495, 442-443) shows that there are significant differences among grades' gaps relating to these questions except questions 8 and 12.

6. Principal's vision, values and way of thinking.
7. Principal's ability to manage changes and to make initiatives.
8. Principal's personal relations with the staff, parents and students.
9. Principal's ability to control, acquire and manage resources and budgets.
10. Principal's ability to deal with difficult situations.
11. Students' belief in principal.
12. Principal's motivation influences teachers' motivation.
13. Sharing leadership with staff and students.
14. Principal's accessibility to teachers, students and parents.

Parents - School B - all classes: evaluation of school principal

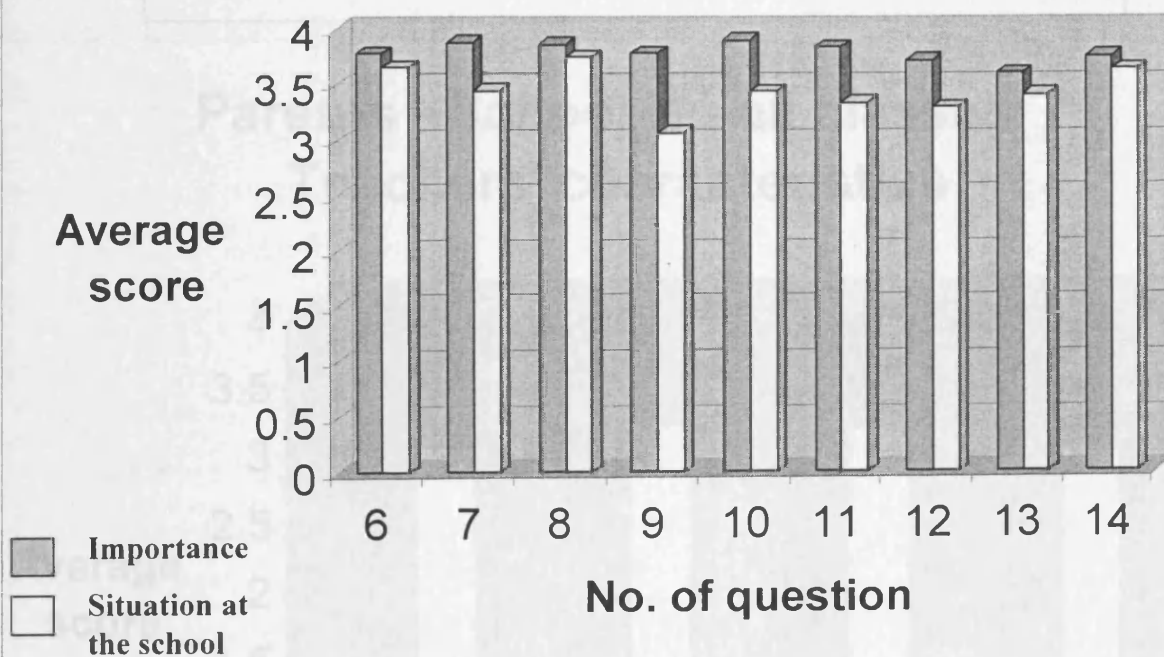


Figure 6.7: Parents' view: Principal's characteristics - Questions 6-14

The phenomenon of greatest importance of the principal's ability to manage changes and to make initiatives (question 7) does exist in the secondary school. In the junior high school, this issue is also considered as very important but the principal's accessibility is considered as more important (question 14, 7th, 8th, 9th grade: 4.00). The gap relating to principal's ability to achieve and manage resources (question 9) is also the highest in the 8th, 11th and

12th grades. In the 7th and 9th grades, the highest gap relates to principals' accessibility (question 14: 7th grade: 0.86, 9th grade: 0.56) and in the 10th grade - the highest gap relates to students' belief in principal (question 11: 1.00).

The open-ended questions added more information relating to the principal's characteristics. 3 parents claim that the principal does not manage the financial resources appropriately.

Evaluation of teachers at school

Parents' attitudes towards teachers' characteristics are shown in figure 6.8 (appendix L, table L.2, questions 15-18, p. 443):

- 15. Teachers' knowledge and didactics.
- 16. Teachers' ability to monitor and evaluate students properly.
- 17. Teachers' personality.
- 18. Teachers' communication with students.

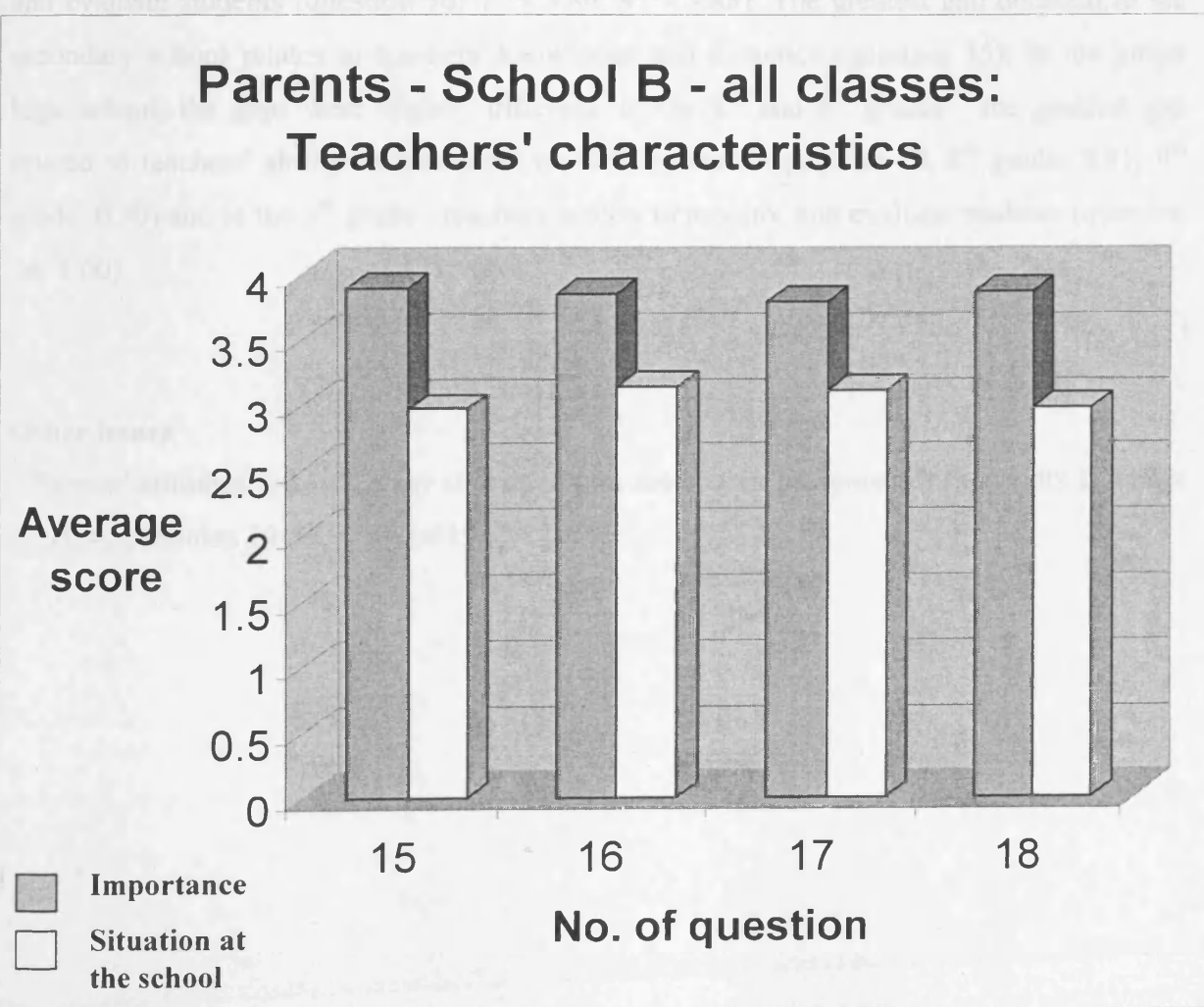


Figure 6.8: Parents' view: Teachers' characteristics - questions 15-18

All characteristics examined are perceived as important by the parents but the most important issues are teachers' knowledge and didactics (question 15: 3.90) and their communication with students (question 18: 3.87). There are substantial gaps (0.68-0.93) in all aspects and the most problematic issue relates to teachers' knowledge and didactics (question 15: gap size is 0.93) and their ability to communicate with students (question 18: 0.89). The open-ended questions strengthen these findings. 20 parents wrote verbal notes saying that there are teachers who do not treat the students well and do not know how to monitor and evaluate them properly.

Analysis of variance ($\alpha \leq 0.01$, table S.14, L.2, p. 495, 443) shows that there are no significant differences among grades' gaps relating to these questions except question 15. In question 15 (teachers' knowledge and didactics), the junior high school's gaps are significantly smaller than those of the secondary school.

Further, in the 7th and 9th grades, the most important issue was teachers' ability to monitor and evaluate students (question 16: 7th - 3.86, 9th - 3.88). The greatest gap obtained in the secondary school relates to teachers' knowledge and didactics (question 15). In the junior high school, the gaps were slightly different: in the 8th and 9th grades - the greatest gap related to teachers' ability to communicate with students (question 18, 8th grade: 0.91, 9th grade: 0.90) and in the 7th grade - teachers' ability to monitor and evaluate students (question 16: 1.00).

Other issues

Parents' attitudes towards other characteristics are shown in figure 6.9 (appendix L, tables L.2-L.4, questions 19-37, p. 443-445):

19. School and class size.
20. Students' willingness to study.
21. Teachers' willingness to teach.
22. Organizational culture and atmosphere.
23. Physical environment (buildings, furniture, laboratories, equipment, library, computers).
24. Weekly timetable and number of subjects being taught simultaneously.
25. Social life at school.
26. Additional studies beyond regular program.
27. Discipline at school.
28. High standards and expectations towards students held by teachers.
29. Grouping is a good system for studying.
30. Management of information at school.
31. A continuity between junior high school and secondary school.
32. The school counselor functioning.
33. Students' continuous presence at school.
34. The existence of many studying opportunities.
35. Reasonable punishments.
36. Special treatment for students with special needs.
37. Focus on homework.

Parents - School B - all classes: Other Issues

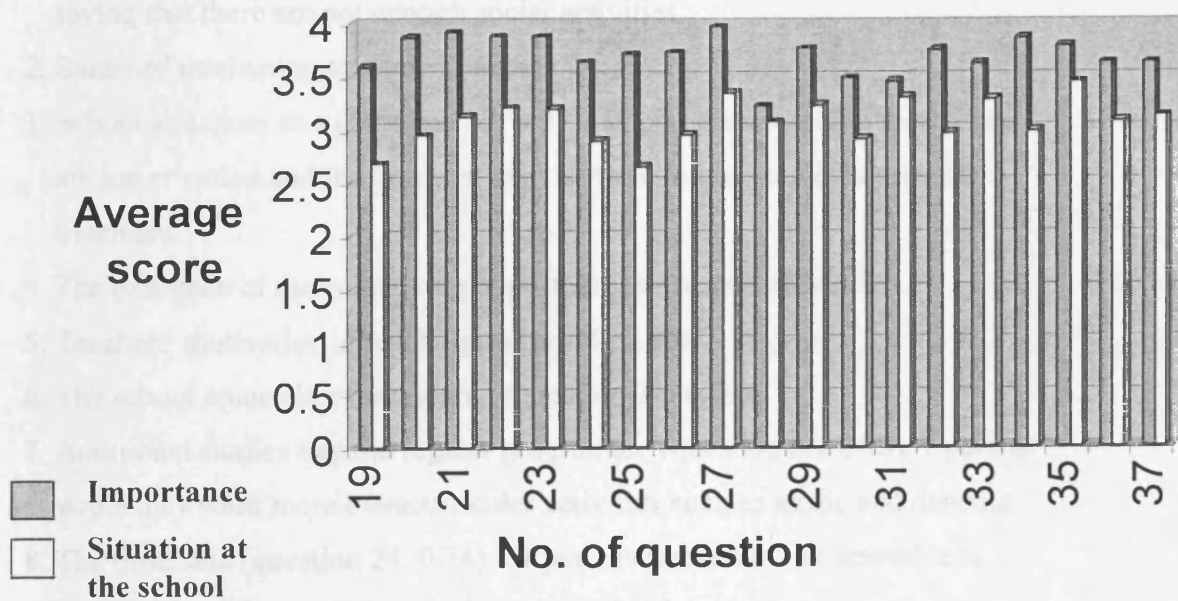


Figure 6.9: Parents' view: Other issues - questions 19-37

The parents perceive all these issues as important. The following issues are perceived as the most important:

1. Discipline at school (question 27: 3.97).
2. Teachers' motivation to teach (question 21: 3.92).
3. Organisational culture and atmosphere (question 22: 3.88).
4. Physical environment: buildings, furniture, laboratories, equipment, library, computers (question 23: 3.88).

5. Students' willingness to study (question 20: 3.87).
6. The existence of many studying opportunities (question 34: 3.87).
7. Reasonable punishments (question 35: 3.8).

The following issues are perceived relatively as less important:

1. High standards and expectations towards students (question 28: 3.22).
2. A continuity between the junior high school and the secondary school (question 31: 3.45).
3. Management of information at school (question 30: 3.49).

The gaps of all characteristics being examined are between 0.15 to 1.05. The following issues are perceived as the most problematic (having the greatest gap):

1. Social life at school (question 25: 1.05). 7 parents added verbal notes saying that there are not enough social activities.
2. Students' motivation to study (question 20: 0.92).
3. School and class size (question 19: 0.91). 18 parents wrote that the classes are too crowded and the teachers have no time to give students personal treatment.
4. The existence of many studying opportunities (question 34: 0.88).
5. Teachers' motivation to teach (question 21: 0.80).
6. The school counsellor functioning (question 32: 0.79).
7. Additional studies beyond regular programme (question 26: 0.78). 7 parents wrote they want more extracurricular activities such as music and dancing.
8. The timetable (question 24: 0.74). 51 parents wrote that the timetable is not well organised and there are too many free hours.
9. Organisational culture and atmosphere (question 22: 0.68).
10. Physical environment - buildings, furniture, laboratories, equipment, library, computers (question 23: 0.68). 6 parents wrote complaints concerning the buildings' condition, the furniture and the air condition.
11. Discipline at school (question 27: 0.63).

The following issues are perceived as less problematic (having the smallest gaps):

1. A continuity between the junior high school and the secondary school (question 31: 0.15).
2. High standards and expectations towards students held by teachers (question 28: 0.15).
3. Reasonable punishments (question 35: 0.35).
4. Students' continuous presence at school (question 33: 0.35).

Analysis of variance ($\alpha \leq 0.01$, table S.14, L.2-L.4, p. 495, 443-445) shows that there are significant differences among grades' gaps relating to questions 19, 21, 23-26, 28 and 35 only. Concerning, teachers' motivation (question 21), the physical environment (23) and the timetable (24), the junior high's gaps are smaller than the secondary school's. Relating to social life (25), the junior high's gaps are bigger in comparison to the secondary school.

Parents: summary of questions 1-37

Table 6.4 summarises parents' gaps in school B relating to questions 1-37, sorted from the highest gap to the lowest one. According to table 6.4, only one gap (out of 37) is above 1 (social life at school, 1.05). The most effective issues are principal's accessibility (0.12), principal's personal relations (0.12), principal's vision (0.13), teachers' expectations (0.15), six-year continuity (0.15), teachers' agreement to parental involvement (0.17), and sharing leadership (0.19).

No.	Question	Gap
1	25. Social life at school.	1.05 *
2	15. Teachers' knowledge and didactics.	0.93
3	20. Students' willingness to study.	0.92 *
4	19. School and class size.	0.91
5	18. Teachers' communication with students.	0.89
6	34. The existence of many studying opportunities.	0.88
7	1. Collaboration between students and parents at school.	0.82 *
8	21. Teachers' willingness to teach.	0.80
9	32. The school counsellor functioning.	0.79
10	26. Additional studies beyond regular program.	0.78 *
11	24. Weekly timetable and number of subjects being taught simultaneously.	0.74
12	9. Principal's ability to control, acquire and manage resources and budgets.	0.72
13	16. Teachers' ability to monitor and evaluate students properly.	0.71
14	2. Collaboration between students and teachers at school.	0.70
15	17. Teachers' personality.	0.68 *
16	22. Organisational culture and atmosphere.	0.68
17	23. Physical environment.	0.68
18	27. Discipline at school.	0.63
19	30. Management of information at school.	0.57
20	3. Collaboration between teachers and parents at school.	0.55
21	36. Special treatment for students with special needs.	0.55
22	29. Grouping is a good system for studying.	0.53
23	37. Focus on homework.	0.51 *
24	11. Students' belief in principal.	0.50
25	10. Principal's ability to deal with difficult situations.	0.46
26	7. Principal's ability to manage changes and to make initiatives.	0.43
27	12. Principal's motivation influences teachers' motivation.	0.42
28	4. Collaboration between parents and principals at school.	0.39
29	33. Students' continuous presence at school.	0.35
30	35. Reasonable punishments.	0.35
31	13. Sharing leadership with staff and students.	0.19
32	5. Teachers' agreement to parental involvement at school.	0.17
33	31. A continuity between junior high school and secondary school.	0.15
34	28. High standards and expectations towards students held by teachers.	0.15
35	6. Principal's vision, values and way of thinking.	0.13
36	8. Principal personal relations with staff, parents and students.	0.12
37	14. Principal's accessibility to teachers, students and parents.	0.12

Table 6.4: School B - parents - gaps of questions 1-37

(* There is no significant difference among the three schools)

Parents' satisfaction with the school

Parents' satisfaction with the school is shown in figure 6.10 (appendix L, table L.5, questions 41-63, p. 446):

41. Teachers get enough satisfaction, achievement, etc.
42. Teachers get enough salary and material rewards.
43. General atmosphere at my school is positive.
44. Discipline at my school is appropriate.
45. Students' achievements are high.
46. Relations between school principal, staff, students and parents are good.
47. The principal has the ability to advance and initiate meaningful changes.
48. Decision making process is appropriate.
49. School has good reputation in community.
50. There are good teachers at my school.
51. Students have strong desire to study.
52. School's resources and finance are managed properly.
53. School's buildings, equipment, laboratories, etc are appropriate.
54. There is a good social life at my school.
55. Monitoring and evaluation of students is done well.
56. Teachers treat students properly.
57. Teachers treat parents properly.
58. School size is reasonable (not too big).
59. Class size is reasonable (not too big).
60. Teachers have high expectations towards students.
61. Students have high chance to succeed.
62. There is high pressure on students at school.
63. School has reasonable flexibility for students.

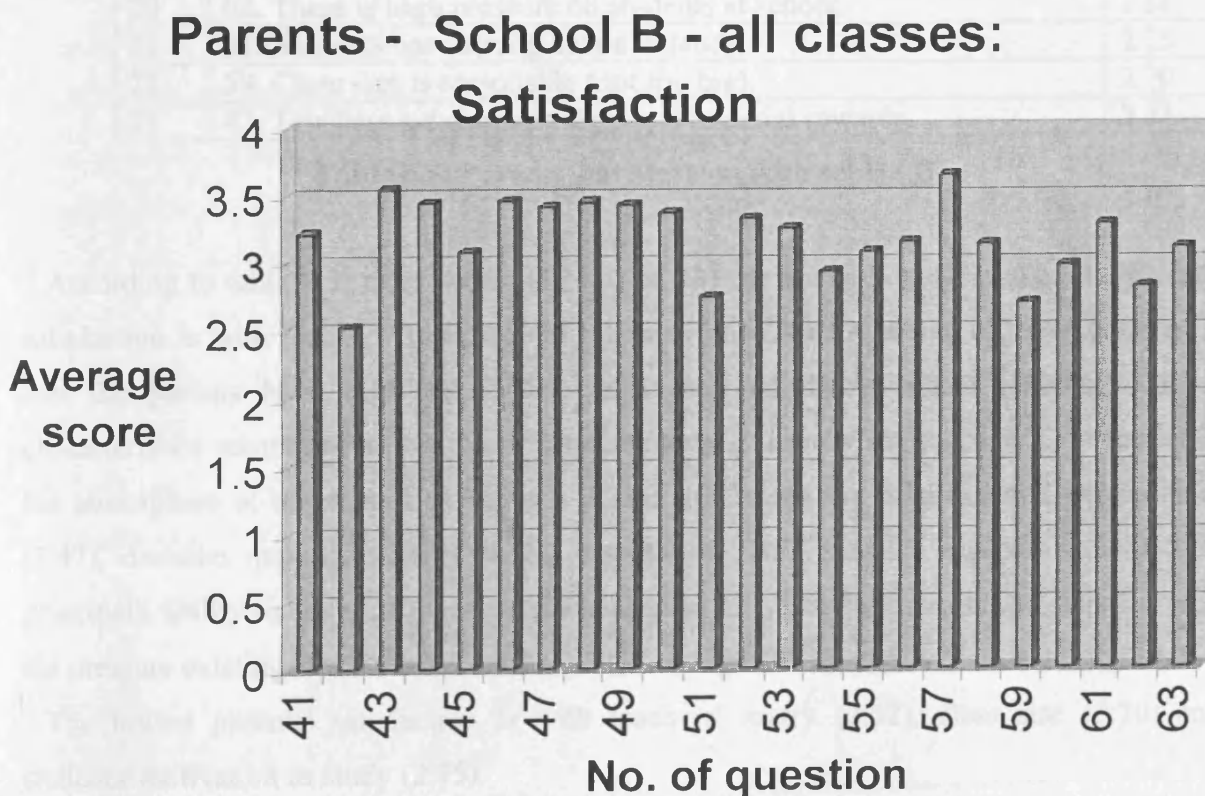


Figure 6.10: Parents' view: satisfaction - questions 41-63

Parents' satisfaction with school B, sorted from the highest score to the lowest one is shown in table 6.5:

No.	Question	Score
1	57. Teachers treat parents properly.	3.66
2	43. General atmosphere at my child's school is positive.	3.56
3	46. Relations between school principal and stakeholders.	3.47
4	48. Decision making process is appropriate.	3.46
5	44. Discipline at my child's school is appropriate.	3.45
6	49. School has good reputation in community.	3.44
7	47. Principal's ability to advance meaningful changes.	3.42
8	50. There are good teachers at my school.	3.38
9	52. School's resources and finance are managed properly.	3.33
10	61. Students have high chance to succeed.	3.29
11	53. School's buildings, equipment, etc. are appropriate.	3.27
12	41. Teachers get enough satisfaction, achievement, etc.	3.22
13	56. Teachers treat students properly.	3.16
14	58. School size is reasonable (not too big).	3.15
15	63. School has reasonable flexibility for students.	3.12
16	55. Monitoring and evaluation of students is done well.	3.09
17	45. Students' achievements are high.	3.08
18	60. Teachers have high expectations towards students.	2.98
19	54. There is a good social life at my school.	2.94
20	62. There is high pressure on students at school.	2.81
21	51. Students have strong desire to study.	2.75
22	59. Class size is reasonable (not too big).	2.70
23	42. Teachers get enough salary and material rewards.	2.52

Table 6.5: Parents' satisfaction with school B

According to table 6.5, most scores (17 out of 23) are above 3 and the maximal parents' satisfaction is with teachers' treatment of parents (3.66). The meaning of these findings is that the parents have high satisfaction with their children's school relating to most characteristics mentioned above. Their satisfaction is extremely high (above 3.4) relating to the atmosphere at the school (3.56), the relations between the principal and stakeholders (3.47), decision making process (3.46), discipline (3.45), school's reputation (3.44) and principal's ability to advance meaningful changes (3.42). The parents are also satisfied with the pressure existing at the school, which is not too high (2.81).

The lowest parents' satisfaction is with teachers' salary (2.52), class size (2.70) and students' motivation to study (2.75).

Analysis of variance ($\alpha \leq 0.01$, table S.15, L.5, p. 496, 446) shows that there are no significant differences among grades relating to questions 41-63.

Summary and preliminary conclusions

School B case study shows the existence of a gap between desired and reality concerning the characteristics of six-year high school. Gaps' sizes are different for different issues, stakeholders and grades. This case study intended to answer three key research questions (chapter 1, p. 9) dealing with desired and real characteristics of effective six-year high school (research questions no. 1 and 2) and stakeholders' satisfaction with the school (research questions no. 3). In order to answer them, each research question was divided into sub questions and all kinds of stakeholders in school B were asked to express their views towards ideal characteristics of school effectiveness, the existing situation and their satisfaction with their school. The gap mentioned above was an indication for stakeholders' satisfaction and it helped to answer the third research question as well as direct questions that dealt with satisfaction.

Stakeholders expressed the importance of each characteristic or how it should be ideally (answering the first research question), the situation at respondent's own school (second research question) and their satisfaction with each characteristic (third research question). School B case study reveals that the following characteristics are perceived by stakeholders as important (first research question) although there is a variation in stakeholders' views relating to the reality at school and their satisfaction (second and third research questions):

Collaboration among stakeholders: the students are dissatisfied with the collaboration with their teachers whereas the teachers and principals think it is much better. Relating to teachers/parents, the principals are aware of the ineffective collaboration among them. Parents think this collaboration is less effective than students do. The teachers think that most of them are collaborative with the students but with their parents, the collaboration is just partial because of parents' low motivation to cooperate with the school. According to all stakeholders at school B, the relations between the school and parents, and students and teachers are ineffective. Relating to the first issue, most teachers do not realise their role in creating an inviting environment that might encourage the parents to participate. Davis (1989) states that the interactions amongst teachers, students and parents largely determine the students' motivation to study. According to stakeholders' attitudes, the ineffective collaboration found in their schools might damage school effectiveness.

School principal's characteristics: Both students and parents look upon the principal's ability to achieve and manage resources as ineffective. The students look upon common management of the staff and students as even more problematic. The principals' human

relations and influence on teachers' motivation is considered very good. The principal believes that the school should give the best service to the customers, namely the students. Because of that, he has an open door policy and does his best to influence all teachers to be supportive and collaborative. All teachers give him excellent appreciation saying he has vision, charisma and openness to innovations. The teachers' perceptions concerning the principal are similar to students' and parents'. According to the research literature (Dempster and Logan, 1998) provision of clear direction is frequently expressed by teachers and parents as clear leadership vision and clear instructions. School leadership should have vision and to all stakeholders, the principal does have vision, which is closer to an ideal model. Riley and Macbeath (1998) claim that good school leaders are those who lead by managing, motivating and inspiring people. Good leaders who operate in this way recognise that teachers are more likely to become engaged in making changes within their own schools when more collaborative leadership models are the norm. Stakeholders perceive the relationships of school B principal with the staff, parents and students as quite good. Because of that, in school B, the principal's high motivation increases teachers' motivation. To stakeholders, the principal's leadership is similar to Leithwood et al's (1997) definition of effective leaders: they are good role models, having lots of energy, being genuine, modelling openness, having good people skills and showing evidence of learning by growing and changing themselves. Another characteristic of school B principal is the proactive selection and replacement of staff as has been picked out in many studies (Austin and Holowenzak, 1985; Wimpelberg, 1987; Strigfield and Teddlie, 1987, 1988; Teddlie et al, 1987). Bridges (1988) provided detailed information on how to manage, and then dismiss if necessary, incompetent teachers. School B's principal seems to know well how to recruit good teachers but also persists to dismiss (or improve) those who are not adequate in spite of the staff's tenure. This effective leadership influences the whole institutional effectiveness.

Teachers' characteristics: according to students and parents, this is one of the most problematic issues at the school. The students give their teachers a worse evaluation than the other stakeholders. Most teachers and principals are aware of the fact that most teaching is frontal because of the lack of resources (especially teaching hours) and the need to prepare the students for the matriculation examinations. However, all of them would have preferred to have diverse teaching because it might be more interesting and the students could have studied actively. To the Israeli Goldberg (1994), students perceive the good teacher as one who is supportive and teaches in an interesting and understood way. The meaning is that in students' views, an effective teacher should combine collaborative style with technical skills.

The students and parents think that there is a problem in technical, motivational and communicational teachers' skills. This finding is remarkable also according to the open-ended questions of both students and parents. Nevertheless, the teachers and their principals think the teachers are better in comparison to students and parents' view.

School/class size and the physical environment: the parents look upon the crowding in classes as more problematic than students do. Teachers and principals claim that the crowding in classes is unacceptable. According to recent research literature, students are likely to have higher achievements in small classes. Hargreaves et al (1997) measured changes in expert teachers' behaviours in classrooms ranging in size from 30 students to 15 students. Outcomes showed that in smaller classes the teachers interacted more effectively with the entire class, had more sustained interactions with individual students, and required less time to manage individual student's routines. There is congruence between school B stakeholders' attitudes and the research literature (especially principals, teachers and parents) although staff members do not think about such small numbers of students in each class.

Teamwork: Stakeholders are satisfied with the teamwork and the six-year continuity. Teachers and principals describe the existence of subject teams, management teams and grade teams helping the whole school to function more effectively. There is mutual assistance among the staff, coordination and processes' improvement. According to the research literature, collaborative teamwork exists when administrators and teachers routinely work together to promote effective teaching and learning (Little, 1982). In that respect, school B seems to be effective according to stakeholders' views.

Discipline: According to students, parents and teachers, the discipline is maintained well in school B. The teachers and principals describe the discipline as reasonable and dependent mainly on teachers with the management's assistance. According to Moles (1989), school discipline is intended to ensure the safety of staff and students and to create an environment conducive to learning. Such an environment does exist in school B according to stakeholders' views.

Students' motivation to study: to principals and teachers, students' motivation is not high enough and some of them are low motivated. The students and parents think that the motivational issue is much worse. According to Renchler (1992), an atmosphere where students learn to love learning for learning's sake, especially insofar as it evolves into academic achievement, is a chief characteristic of an effective school and it is mainly influenced by the school leader. To Johnston (1987), if a principal can establish goals that define the expectations of the school towards academic achievement, then the motivation to

achieve the goals is likely to follow. In comparing the situation in school B to the research literature, it seems that although the staff intends to increase students' motivation, the results are not quite good. Maybe these good intentions are not well translated into effective performance.

Parental involvement: to students and parents, teachers usually agree to parental involvement. The principals and teachers express a different view saying that parental involvement is focused mainly on technical issues and not pedagogy and it is so owing to school's management decisions. Only the junior high school principal would have preferred to let parents be involved in everything, even pedagogical issues, although this is not yet fulfilled in school B. The research literature on parental involvement indicates that parents have great influence upon instructional relationships that impact directly on student commitment to and success in school. Epstein (1987) claims that parental encouragement, activities and interest at home and participation in schools and classrooms affect children's achievements, attitudes, and aspirations, even after student ability and family socioeconomic status are taken into account. According to stakeholders, an effective parental involvement does not exist in their school. The reasons for that are either school's preventing parents from real involvement or low parents' motivation to be involved. According to Powell (1989), it has been noted that parents, when given the opportunity, are quite active in setting programme goals. It seems that the parents in school B are not given real opportunities to be involved. To Epstein (1987), parents have great influence upon instructional relationships that impact directly on student commitment to and success in school. The lack of real parental involvement at school B may influence negatively students' motivation and achievements and the findings show that stakeholders are dissatisfied with students' motivation and achievements.

Organisational culture and climate: to parents and students there is a gap between an ideal organisational culture and climate and reality. According to principals and teachers, the organisational culture at school B nurtures mutual assistance and support between students and teachers and there is openness. The school nurtures teamwork and there is criticism on the exaggerated open door policy. Parts of the staff prefer more formal and hierarchical decision-making process instead of direct access to the school principal. In school B there is a clear preference of students' interests and therefore they feel very well. Research shows effective schools as possessing a vision that is shared by staff. Hopkins et al (1994) note the importance of a sense of community that is related to cooperation and communication between staff. Many other studies suggest that agreement upon school goals is associated

with effectiveness (Rutter et al, 1979; Lightfoot, 1983; Stoll and Fink, 1994; Edmonds, 1979a, 1979b). In school B the principals make much effort in order to create common vision, beliefs and attitudes which are necessary to develop the school.

Teachers' standards and expectations towards students: according to students and parents, teachers' standards and expectations towards students are not very important and not problematic. Principals and teachers think that an effective teacher should develop high expectations towards students because they believe in the self-fulfilling prophecy. They think that expectations should be realistic. At school B there are teachers who have high expectations towards their students and such a perception encourages the students to develop and succeed. However, there are others who have high expectations towards high achieving students and low expectations towards low achieving students. To the principal and teachers, in school B there is an influence of the principals on teachers to increase their expectations permanently in order to have continuous advancement. Nevertheless, there are teachers who think that the principals' expectations are too high. The research literature suggests that schools can improve student learning by encouraging teachers and students to set their sights high. The expectation teachers have for their students and the assumptions they make about their potential have a tangible effect on student achievement (Bamburg, 1994). Students tend to internalise the beliefs teachers have about their ability (Raffini, 1993). Conversely, when students are viewed as lacking in ability or motivation and are not expected to make significant progress, they tend to adopt this perception of themselves (Gonder, 1991). In comparing school B's findings to the research literature it is worthy noting that only part of the teachers do have high expectations and unfortunately, some of them have low expectations especially in low achieving classes. This phenomenon can explain the low motivation causing to low achievements mentioned by stakeholders. Another factor is the important role the principal should have by influencing teachers' expectations (Teddle et al, 1989). This element does exist in school B's principal's behaviour that makes effort to influence teachers in order to increase their expectations and standards towards the students. According to Bamburg (1994), poor performance in school is often attributed to low ability, and ability is viewed as being immune to alteration. Therefore, poorly performing students often come to believe that no matter how much effort they put forth, it will not be reflected in improved performance. At school B, some teachers distinguish between high and low achieving students according to their performance. These students learn to believe they cannot improve their achievements owing to low ability and therefore they may stop making

effort, adopt low motivation and block their chance to make progress. Students and parents do not fully understand the great importance of teachers' expectations.

Social life at school: students and teachers think that social life at the school is very important and there is a gap between desire and reality in their school. The principals and teachers think that students' social life at school is very important and the school should deal with it. To teachers and principals, the school has lots of activities offering opportunities for social relations. To the Israeli Gvaram (1996), teachers and students perceive social life at the school as influencing teaching and learning, norms of behaviour, the interrelationships among the educational teams and the supportive social climate. Social activities influence the students to be more involved, caring and responsible. Teachers and students think that the school should encourage socialisation and the social activity should be combined with the regular teaching processes. In this respect, school B's students have social needs and there is social life at the school. According to the staff, the social life is fine, but the students and parents think it could have been better.

To sum-up, parents' satisfaction with school B is significantly higher than that of their children in most issues examined. The students are more critical than their parents and are usually less satisfied. The main problems in school B, according to all stakeholders, are teachers' functioning (part of them), students' motivation and classes' crowding. Teachers and parents feel there is a great problem concerning teachers' extrinsic rewards.

Chapter 7: School C case study

Introduction

Chapter 7 describes the findings of school C case study including the following:

1. Interviewing of two principals and twelve teachers (December 2000 until February 2001).
2. Surveying by questionnaires, 167 students and 167 parents from six grades as introduced in table 7.1 (during February 2001).

No.	Grade	No, of students/parents
1	7 th	31
2	8 th	36
3	9 th	32
4	10 th	31
5	11 th	17
6	12 th	20
	Total	167

Table 7.1: No. of students/parents in each grade

School C's ownership is the local municipality. It is a relatively new, it was established in the year 1994 as a six-year high school and it still grows. In school C there are about 700 students and 70 teachers and it is managed by two principals. One of them is a general manager who is responsible for both the whole six-year high school and the secondary school and another one works under the general manager and is responsible for the junior high school. The junior high school and secondary school are located in the same campus having one common staff room.

Chapter 7 addresses the following themes:

1. **School C findings:** this section relates to the attitudes of principals, teachers, students and parents towards the effectiveness of six-year high school as found in school C case study.
2. **Summary and preliminary conclusions:** it summarises the main findings of school C, compares them to the research literature and explains how they relate to the research questions.

School C case study considers the three key research questions as follows:

1. What are the characteristics of effective six-year high schools according to stakeholders' points of view?
2. In what aspects are school C regarded as effective/ineffective (from the same points of view)?
3. What is the level of satisfaction of stakeholders with school C?

A general explanation relating to the three case studies including the interview schedule and questionnaires is introduced in chapter 5 (p. 145).

School C findings

Introduction

This section describes the findings of school C case study including the interviews for principals and teachers and the questionnaires for students and parents. The coming subsections address the attitudes of stakeholders examined (principals, teachers, students and parents) towards the six-year high school effectiveness.

Principals' attitudes

Two school principals were interviewed in school C. Principal 1 is the general manager of the whole six-year high school and she is also responsible directly for the secondary school. Principal 2 is the junior high school principal, working under principal 1. The next subsections discuss principals' attitudes towards the characteristics of the effective six-year high school.

Collaboration among stakeholders

To principal 1, there is a comprehensive collaboration among all stakeholders with clear and definite borderlines for each partner. The collaboration with parents and students is very effective and they have helped to establish the school. Principal 1 claims:

"In the past, students did not want to be registered to the school owing to administrative problems. Without effective collaboration with parents and students, the school could not exist. I want that the staff would come to work with 'a song in the

heart' because that would influence the students. If the teachers and students were satisfied, the parents would be satisfied too".

To principal 2, the collaboration with parents is fine but only 60%-70% of the parents are collaborative.

Principal 1 makes a great effort that the staff would be satisfied. She is sure that because the teachers feel well, the students are satisfied too. To principal 1, there is a gap between the teachers' and students' perceptions relating to collaboration. Most teachers think they are collaborative but the students complain they do not receive what they want. Principal 2 explains the reason for that gap saying the teachers are ready to give great support to students but the students do not always accept this support.

To both principals, the collaboration between parents and students creates a positive influence on students and the school stresses the importance of this kind of collaboration. To principal 1, the collaboration between teachers and students is mainly teacher's dependent whereas principal 2 thinks it depends equally on both sides.

Both principals argue that the school has an expectation that students would be supported by the staff if they have any problem, and there should be contact with the parents as a regular part of teachers' work. Most teachers fulfil those expectations, cooperate and do their best to help the students.

Principal 2 stresses an additional problem existing in the junior high school. There is ineffective parents' collaboration concerning payments for extracurricular activities such as trips, shows and so on, although the parents' board agrees to all those expenses. Further, there are parents who are very demanding but fortunately they are just a minority.

The principal

Principal 1's vision includes creation of self-responsibility of the staff and the students to all happening at the school. She claims:

"I consider as very important the teachers' and students' responsibility for themselves and for the school's society. I have not yet reached the situation in which all teachers and students take responsibility".

She argues that there are teachers who insult students and students who do not behave properly. She intends to internalise values of patience and the life holiness.

Principal 1 thinks that the school should be renewed permanently and in order to achieve such a situation she lets the staff be participated. She deals with not too great changes in order to overcome the staff's resistance. She thinks that this philosophy helped her to develop the school a lot.

To both principals, the six-year high school principal has good relationships with all stakeholders and high accessibility, which is sometimes difficult to implement. The principal gives operational freedom to all role holders with control and that gives them a good feeling and independence. They think that the six-year principal does her best to develop the school but still the secondary school is too small and it should be enlarged.

The school does not have financial local management, so the principal is totally dependent on budgets that are allocated by the Ministry of Education and the local municipality. The parent's board helps to increase the budgets mainly for maintenance.

In the past the school had low reputation in the community and the principals' motivation was and still is to improve it substantially. In the present situation there is not yet a full trust of the parents in the school and that requires a change. However, the school passed successfully a great crisis that was accompanied by negative publications in the local press and parents' strikes. In spite of that, they succeeded to convince many students who finished the junior high school (and their parents) to continue studying in the secondary school.

The teachers

To principal 1, most teachers have professional knowledge but not all of them have a didactic ability and therefore they cannot develop the low achieving students. She argues:

"The teachers' didactics should be improved - I am not sure that everyone can learn it because there might be skills, which cannot be acquired. On the other hand, there are didactical elements that can be taught and the school tries to teach the staff. The main question is whether such a change would be significant. Usually, I prefer that an unfitted teacher would leave the school. There is an unfitted minority - these teachers should be dismissed although the tenure hardens to do so".

Principal 1 claims that the school deals with alternative evaluation especially in the humanities. To both principals, the communication among most teachers is very good and they make great effort, have goodwill, motivation and willingness to support the students. To principal 2, there is a difference between the junior high and the secondary school

concerning more alternative students' evaluation existing in the junior high school. It includes assignments, research projects, exams and class questioning. The reason for that difference is the existence of matriculation examinations that do not enable the teachers to require preparation of assignments. In the secondary school, the focus is mainly on studying for the external matriculation exams.

Concerning teaching styles, principals argue that most teaching is frontal and it is not quite effective. Not all students can study in frontal teaching style because of the variance in their learning styles. The school uses this style mainly because other styles require more teachers' investment. To principal 1, the matriculation examinations do not disturb the existence of diverse teaching. Principal 2 has a different view saying that most teaching in the secondary school is frontal because of the matriculation examinations and lack of time. In the junior high school the teaching is more diverse but it is also mainly frontal.

School and class size

To principals, the school should not be too big although economically, there is an advantage to size. The optimal size is about 6-7 classes in each grade and 20-33 students in each class. The number of classes in the 7th and 8th grade is fine (6) but in the 9th grade there are only 4 classes (too few). In the secondary school there are also only 4 classes in each grade and it is too little. The 8th, 9th and 10th grades are too crowded - about 40 students in each class. In the 7th, 11th and 12th grades the classes are not too crowded - 35 students in each class. Principal 2 claims:

"There are crowded classes of 40 students and this is problematic. I prefer that the Ministry of Education would change the standards so there will be less crowding. Such a change would improve school's effectiveness substantially".

Management of school's resources and the physical environment

The principals are not too satisfied with the resources' management. Principal 1 is not satisfied with the fact that the school buildings are not used in the afternoon and night although it has an economical advantage. Principal 2 is worried because there is a shortage of equipment. She argues, *"there is a shortage of computers, software, video-tapes, projectors and so on"*.

The principals claim that the buildings are not adequate for disabled students because there are not enough ground classrooms. Further, there are no extra rooms for the teachers and not

enough computers. They think there is an excellent sport's hall, the buildings are nice and the schoolyard is aesthetic.

Parental involvement at school

To both principals, parents should not interfere in pedagogic issues because that is the teachers' responsibility. Principal 2 claims:

"We direct the parents to be involved in issues that are adequate to the school management focusing mainly on technical and financial aspects, without any pedagogic intervention whatsoever. Sometimes the parents want to be involved in pedagogical issues such as the curriculum or classes' divisions but we stop them immediately".

The principals argue that there is six-year parents' board headed by a chairman with two deputies representing the secondary school and the junior high school. The board has several committees for specific areas such as culture, communication, marketing, sport, finance, environment quality and so on. A parent heads each committee and its members are parents, representatives of the students' council and the school management. The parents are active, interested and involved. They may express any view towards the school management, the municipality or even the Ministry of Education and they usually enable the school to function effectively. Regularly, there is good cooperation between the school and the parents. The boards are active but most parents who are not board's members are not involved substantially at the school.

Teamwork

The principals argue that according to school policy, in most professional teams there are six-year teams headed by a six-year subject leader who directs the team pedagogically. The school principal is currently updated about the teamwork and intervenes when necessary. This year (2000-2001), the subject teams of literature, history, citizenship and English create curriculum focusing on 4 values: responsibility, life holiness, tolerance and discussion's culture. Principal 2 adds that, *"there is a six-year curricular continuity but not in all subjects. This continuity is obtained when teachers teach in both secondary and junior high schools".*

To principals, the school management has also teamwork. There is a reduced management team working in a six-year continuity and having a weekly meeting. This team's members

are the six-year high school principal, the junior high school principal, the two deputies (one of them is also a six-year administrative leader), the pedagogical leader, the social leader and the counsellor. In such a way, all main areas are covered: pedagogic, counselling, administrative and social. Another team is the enlarged management team having a monthly meeting. This team is composed of the former one plus all other role holders: social leaders, grade leaders and the 'personal commitment' leader (each student has a personal commitment during the year such as helping people, assisting in a hospital, etc.). Students' representatives join the forum for a specific time.

To both principals, the six-year model is better than the old system (eight-year elementary school and four-year secondary school). In the new model, the students have better teachers from the 7th grade and they study effectively in a six-year continuity from that stage on.

Students' motivation

To both principals, there is a great problem concerning students' motivation. About 20% of the students are low motivated and this is one of the greatest problems of the school. In order to handle it, there is special teachers' training, which intended to help them to raise students' motivation. Principal 2 claims:

"The students' motivation is unsatisfactory. I prefer that each student would take responsibility and make effort. The school has instructional activities with the students but I am not sure how effective it is. There is a problem of families who are not aware of the importance of higher education and the fact that the six-year high school is a necessary step along this way".

The principals talk with the teachers and explain them that they cannot accept students' failures and each one should do his/her best in order to improve their motivation and achievements. Principal 2 thinks that there is a variation of motivation among grades. The motivation in the 9th grade is lower than in the 7th and 8th grade whereas the higher grades of the secondary school are more highly motivated.

Students' achievements

To both principals, the students' achievements are medium and the reason for that is either low motivation or low ability or both. There is a group of low achieving and low motivated students whom the teachers do not succeed to develop.

Principal 2 argues:

"There is a problem concerning students' abilities and it influences the achievements. Although most teachers are very good and make great effort, I am not very much satisfied with students' achievements".

Organisational culture and climate

The principals believe in individual nurturing of each student. The school enables the excellent students to reach excellence and the low achieving to fulfil their abilities. Principal 1 claims: *"I insist on enabling the good students to fulfil their potential but we should also consider the low achieving students. I believe in the open door policy and expect that other role holders will behave similarly".*

Principal 2 adds:

"The school encourages total fulfilment of students' abilities. Each student gets attention and there is willingness to continuous improvement and reaching maximal achievements for all students. Sometimes, the school wishes to support the students more than they are ready to accept".

Principal 1 enables the students to have as many alternatives as possible, she decentralises authority with control and wants to be aware of anything happening at school in real time. She does her best to cause all teachers to feel well, having good atmosphere and she thinks that such a situation does help the students to be more satisfied.

Discipline

To principal 1, *"there are better and worse teachers relating their ability to maintain discipline at class"*. The school management assists the teachers. The discipline is created by respect and not deterrence, consistency and real time reaction to any discipline breach. She prefers to be the 'good guy' and to have complimentary role holders who are tougher. Her satisfaction with discipline is medium but she is satisfied with the fact that there is no violence at the school. She does not hesitate to call the police if necessary. In the secondary school there are less discipline problems because the students are mature. In the junior high school there is a need to be much tougher and the junior high principal deals much more with discipline in comparison to the secondary school's principal (principal 1).

However, principal 2 adds:

"There was a great improvement in discipline in comparison to the situation three years ago. The school functions well, the students study and there are no students who stay outside the class during the studies. The reason for that improvement is school management involvement, consistency, immediacy, definite borderlines without compromising the important things".

Teachers' standards and expectations towards students

To principals, the expectations towards high achieving students are high whereas the expectations towards low achieving students are too low. In the past the situation was worse and there is a process of increasing teachers' expectations. Principal 1 argues that *"most teachers have high expectations and it is effective. Nevertheless, there are students whose teachers told them they would not succeed and I am worried about them"*. The veteran teachers, who taught in the past in high level four-year secondary schools, came to school C with high expectations but they do not necessarily know how to fulfil these desired standards. Because of that, principals' satisfaction is just 'medium'.

Social life at school

To both principals there is a dilemma between teaching and conducting social activities as principal 1 argues: *"we stand on the borderline between wasting lessons and giving culture. The school exposes the students to qualitative culture such as repertoire's theatre, music and ballet and also entertaining activities such as students' parties"*. Principal 2 adds that beyond the social activities conducted by the school she would like to see more friendships in the classes among students. If the students' response had been better, she would have preferred to add more activities beyond the studying time.

School's flexibility for students

To principal 1, there is a difference between the secondary school and junior high school flexibility: *"the secondary school is very flexible whereas the junior high school is not flexible at all. The junior high school principal is excellent but she is not flexible in her personality"*. Principal 2 has a different view saying, *"I am satisfied with school's flexibility, the school has a reasonable flexibility towards the students"*.

Teachers' intrinsic and extrinsic rewards

Both principals' satisfaction with the extrinsic and intrinsic teachers' rewards is medium. The problem with the extrinsic rewards is that it is impossible to reward differentially excellent and unsuccessful teachers based on their performance. Principal 1 explains: *"The salary is fine relatively to what is common in the public sector. The problem in my mind is that it is impossible to reward excellent teachers according to their success"*.

Concerning the intrinsic rewards, the students do not give positive feedback to their teachers, whereas the school management gives teachers both positive and negative feedback.

Teachers' attitudes

Collaboration among stakeholders

To most teachers, collaboration among all stakeholders is important especially between teachers and students. Only one teacher (2) thinks that collaboration with parents is not important at all and only the collaboration of teachers with students is important. She says, *"At school C there is collaboration between teachers and parents but it should be cancelled"*. There are more and less collaborative teachers at school C but the overall view is reasonable.

The collaboration of teachers and students is expressed by giving students assistance also out of class, giving support, talking politely and so on. There is a variance between subject leaders and homeroom teachers. The homeroom teachers are more accessible to students and parents although it is limited by borderlines. To teachers, there is much less collaboration between teachers and parents in comparison to teachers and students. The reason is that parents are very busy and they do not take responsibility. The communication with parents is mainly initiated by teachers and not by parents. Teachers say that there is much less collaboration between teachers and parents in comparison to teachers/students as teacher 3 claims:

"The collaboration with parents is negligible and the reason for that is that they are very busy and do not take responsibility. The communication with parents is mainly initiated by teachers and not by parents".

The principal

To teachers, the school principal has excellent human relations, she gives personal treatment to teachers and takes care of them. She is more 'people oriented' than 'task oriented' and the secondary school teachers think that this orientation should be more balanced.

The principal is motivated by strong desire to improve the school, love of the profession and students and belief in her way. To the secondary school teachers, her accessibility is sometimes too high and it may disturb because there are no reasonable borderlines as teacher 7 claims:

"The principal prefers the individual interest against the whole system's interest. For example, there can be major changes in the timetable owing to one student's wish and that annoys many other students and teachers".

The junior high school teachers do not mention such problems because their daily contact is with the junior high school principal who is tougher and less flexible.

To teachers, the principal has vision and credo including common management with the parents, openness to renovations, creating good atmosphere and leading the school to achievements as teacher 1 claims:

"The principal has a vision of common management with the students and the parents so that together we will have the best school. She is ambitious to excel in everything and continuously makes effort to reach her goals. The teachers are engaged to these efforts because she succeeds to motivate them".

The most important goal of the school principal is to reach high achievements in the matriculation examinations. She is a model for an educational leader and she deals mainly with vision and policy and less with current management. The teachers are motivated by her and do their best to improve the school. The principal manages substantial changes in stages and with full participation of the staff. She improved the school and its image a lot. In the past, students did not want to be registered to the school but she succeeded to change this situation significantly. She decentralises authority and that gives her enough time to develop and fulfil the vision.

The teachers

To most teachers, they are professional, highly motivated, have good didactic abilities and reasonable communication with the students. The gaps are focused mainly on communication of some teachers with students. The secondary school teachers think that the students' evaluation in the junior high school is not accurate as teacher 1 claims: *"students' marks are biased upward and when they start studying in the secondary school there is a substantial decrease in their achievements because of the higher standards"*. In the secondary school, most evaluation is based on exams because of the matriculation examination standards whereas in the junior high school there is also alternative evaluation in some subjects including assignments, portfolio and so on. However, most evaluation is based on exams in the junior high school too.

Just a few teachers teach in both junior high and secondary school. The main reason for that is that there are different employers to the different schools (the Ministry of Education for the junior high and the local municipality for the secondary school).

There is a certain problem of unfitted teachers as teacher 7 argues:

"There is a minority of unfitted teachers which the school was compelled to accept. In order to dismiss such teachers there is a long process, which is undertaken only when there is no other choice".

The teachers at school C are very busy because they have to deal with many missions besides pure teaching such as discipline, meetings and training while having low salary. Some of them, usually young ones start thinking about more attractive occupational alternatives.

Concerning teaching styles, teachers argue that most teaching is frontal although there is also a combination of other styles such as group working, oral projects and computers' learning. To the junior high school teachers, in their school there are more diverse styles than in the secondary school but most teaching is also frontal. The English leaders have started training their professional team to teach by computers but it is not yet practical. In order to have diverse teaching styles the school needs more equipment and time resources, which are not yet available. Teachers believe that diverse teaching is better because in that way it is possible to fit each student the style adequate to him/her.

Teachers' satisfaction with their quality is between 'medium' to 'good'. Although most teachers are good there are some teachers who have low ethics and lots of absences. The

secondary school teachers think they are better than those teaching in the junior high school. They suppose they are more focused, have definite requirements and better academic ability. Such attitudes may cause tensions between the two populations of teachers manning the six-year high school staff.

School and class size

The school is in a growing process so the numbers of classes are not yet stabilised in all grades. The secondary school is too small (3-4 classes in each grade). The optimal size to teachers is 6 classes in each grade. The main problem is the crowding in classes - there are classes having 40 students instead of an optimal number of 25-35. The junior high school teachers are more concerned with the crowding in their classes than the secondary school teachers as claims teacher 8:

"In an optimal class there should be 25-30 students. If there were less than 25 there would be no significant social interaction. Usually, there are about 39-40 students in each class and that prevents effective work, the high and low achieving students do not obtain what they deserve and I cannot give the students personal treatment".

The scientific classes in the secondary school have about 30 students and the teachers think it is fine.

Management of school's resources and the physical environment

The management of resources is reasonable but does need a certain improvement. A co-manager deals with the current management of resources and the principal is updated permanently and takes care for means' attainment. From the point of view of resources' existence, there is lack of technological designated equipment and classrooms, although there is a plan to build new classrooms in the next years. Concerning human resources management, she never denies justified claims against unsuitable teachers and does her best to deal effectively with unskilled manpower. Unfitted teachers have to leave the school although the process of dismissal is long and complicated.

The physical size of the classrooms is good but there is a problem of lack of classrooms and extra rooms. This trend is about to be worse in the next years if there would not be new buildings.

The teachers complain about the small staff room, the blackboards' condition and the air condition maintenance, which is not good. They claim there is a good sport hall, nice garden and aesthetic buildings, lobby and corridors.

Only one junior high teacher (11) is very dissatisfied with the school buildings. She claims:

"There is a terrible acoustics in the corridors and it disturbs the classes. In the secondary school the classrooms are too close, occasionally the doors are spoilt so there is annoying noise".

Parental involvement

The teachers argue that in the past when the school was in a crisis, parental involvement was exaggerated. After the school management was changed, the parents' trust increased and their involvement decreased. The parents tend to be involved only when there are problems as claims teacher 3:

"Individually, most parents are passive and they react only in a moment of crisis. The parents see their interest only and they tend to justify their children in any case and to oppose the school's attitude".

The collaboration of the parents' boards with the school is usually good. There are some individuals (a minority) who tend to interfere and to justify their children against the school even when they are wrong.

To teachers, there should be no parental pedagogic involvement but rather social and motivational. Practically, there is parental involvement concerning technical and financial issues. Only a minority thinks that the boards are involved non-legitimately in pedagogical issues.

Individually, there is a variance in parents' involvement. Some parents are involved and others are passive. However, all teachers agree that individual involvement is desired.

To the secondary school subject leaders, there should be no parental involvement at all and the existing involvement is unnecessary as claims teacher 2:

"The school pretends to let the parents be involved but actually no one lets a real involvement. There are parents' committees for environmental quality, discipline, finance and so on. All these activities are unnecessary and annoying. In the

individual aspect, parents should be involved only in extreme cases. The parents have exaggerated demands, complaints and they do not have any borderlines."

Teamwork

To most teachers the school does its best to function as a six-year team and it is according to school management policy. There are six-year teams meetings concerning most subjects but not all of them. The junior high school teachers have inferior feelings as teacher 1 claims:

"The junior high school teachers feel inferior against their colleagues in the secondary school and that hardens to work effectively in six-year teams. Nevertheless, there is six-year curricular, social and counselling continuity".

To homeroom teachers, there are effective grade teams that function collaboratively and also effective social and counselling teamwork. To subject leaders, most subjects have effective teamwork with permanent weekly meetings. This professional teamwork helps to control students' evaluation, to create mutual assistance, to build the curriculum and to conduct common projects. Just the history subject leader (teacher 12) argues that in history there is no six-year team but only two separate teams one for each school. She argues:

"In the secondary school there is an orientation to the matriculation examinations. In the junior high school there is more flexibility and that influences the teamwork character. Although there is a six-year view in history, the curricular continuity does not exist. However there is subject leaders' teamwork in all subjects and it is very good".

The management teams work effectively and have six-year orientation having effective collaboration among the staff. The school management members are well coordinated and the teachers are satisfied with it.

Students' motivation

Most teachers agree that although motivation is extremely important, there is a motivational problem in school C and that decreases students' achievements. There are many

reasons for this phenomenon. The motivation is influenced by students' environment - family, neighbourhood and society. The motivation depends also on teachers' characteristics such as their success to interest the students, maintain discipline, encourage and be understandable. The motivation is created also by marks and there is a variation among different subjects. The teachers are trained to deal with increasing of motivation but most of them think it is not quite effective because the major factors influencing motivation are those of students and their environment. Teacher 2 well explains this view saying, *"the motivation is dependent mainly on students themselves. The teachers make effort but the students are not well motivated"*. Teacher 11 has a different view claiming:

"The students' motivation is positively correlated with their ability. If teachers would have been rewarded effectively, maybe they could have improved the low ability students' motivation. These students are about 20% of the school population and in the meantime the school has no real answers for them".

Only one teacher (10) thinks that the motivation is mainly teachers' dependent.

Students' achievements

To secondary school teachers, the students' achievements are between medium to good. The gap exists because of the insufficient number of students who receive the matriculation diploma. The junior high school teachers are less satisfied proclaiming that the achievements are too low as argues teacher 9: *"the general ability of students decreased, the norms were badly changed and low achievements became normative"*.

Organisational culture and climate

There is good atmosphere at the school and good relationships among teachers and the management as teacher 3 claims:

"The organisational climate is fine and the main contribution is of the management and the staff whereas the students are more passive and have undesired norms of behaviour. There is openness to initiation and there is collaboration concerning decisions dealing with social issues, training and pedagogy. In the staff room there is good atmosphere and teachers are placed according to their skills and experience what gives a feeling of justice".

There is a policy of 'open door', listening and being flexible towards the students although sometimes this flexibility is exaggerated. The school's goal is to develop all students and to give personal support to each of them. There is openness to initiatives and the management decisions are well made. The school makes effort to give the students valued education and to increase the success in the matriculation exams. The past problems were not yet totally solved and the reputation in community is still not very high. However, most teachers are optimistic and hope to reach improvement during the next few years.

Discipline

To teachers, the discipline is one of the most important characteristics of the effective school. Most of them think the discipline at school C is reasonable, there is no violence, there is a learning atmosphere most of the day and usually students do not walk in the corridors. There are relevant regulations, which are enforced, checked and if necessary, are updated each year. The school management helps to maintain the discipline and there is a continuous improvement. The junior high school teachers think that the discipline in their school is better than in the secondary school because of more consistent treatment and toughness of its principal and more collaboration between the management and the staff. One secondary school homeroom teacher thinks that the discipline is not reasonable claiming: *"the discipline is not good because of bad teachers' treatment and the disability to deter disturbing students and to punish them"*.

Teachers' standards and expectations towards students

Teachers proclaim that most of them have high realistic expectations towards the students. The expectations are adequate to the students' ability and they are definitely not too high. They explain the students that they believe they are able to succeed and this policy is backed by the school management. The problem is that there are low achieving students towards whom the expectations are too low as proclaiming teacher 1:

"I can divide the students to two groups - those having good ability and those whose ability is medium or less. Towards the good students there are high expectations but relating to the second group, the expectations are very low and this is the prophecy that fulfils itself".

Social life at school

Most teachers think that the social aspect is important and well conducted. Each grade has a social education leader and there is an adequate mixture of activities including parties, trips, assistance to community, shows and so on. The social life is important to most teachers because they improve students' feeling.

A few secondary school teachers have a different view saying the social activity is exaggerated as claiming teacher 1: *"there are too many social activities which take learning time. There are unnecessary activities that may be cancelled"*.

School's flexibility for students

The teachers are satisfied with school's flexibility. It enables low achieving students to succeed and gives all the others good feeling. Some secondary school teachers think that the flexibility is too high, the school principal prefers the students' favour against the teachers' and that weakens their authority as teacher 1 claims:

"I think that the school flexibility is too high. The borderlines are not clear and the students become decision-makers instead of the school. For example, the open door policy can be fine but if parents' demands are transferred directly to the school principal and not to the relevant role holder, it might be problematic".

Teachers' intrinsic and extrinsic rewards

Teachers' satisfaction with their extrinsic rewards is low. The salary is too low as claiming teacher 2:

"The teachers' salary is very low and there is no connection between the efforts invested, the education required and the material rewards. Further, I think that there is no chance that the situation would be changed in the future".

Relating to young teachers, the problem is much greater because their salaries are even lower. The satisfaction with the intrinsic rewards is medium mainly because of the low image of the teaching profession.

Students' attitudes

Collaboration among stakeholders

The first issue being examined is collaboration among stakeholders and it includes questions 1-5. Appendices C and M include a complete version of questionnaires given to students and the results (p. 403, 448). The first five questions and the findings are shown in figure 7.1:

1. Collaboration between students and parents at school.
2. Collaboration between students and teachers at school.
3. Collaboration between teachers and parents at school.
4. Collaboration between parents and principals at school.
5. Teachers' agreement to parental involvement at school.

Students - School C - all classes: collaboration

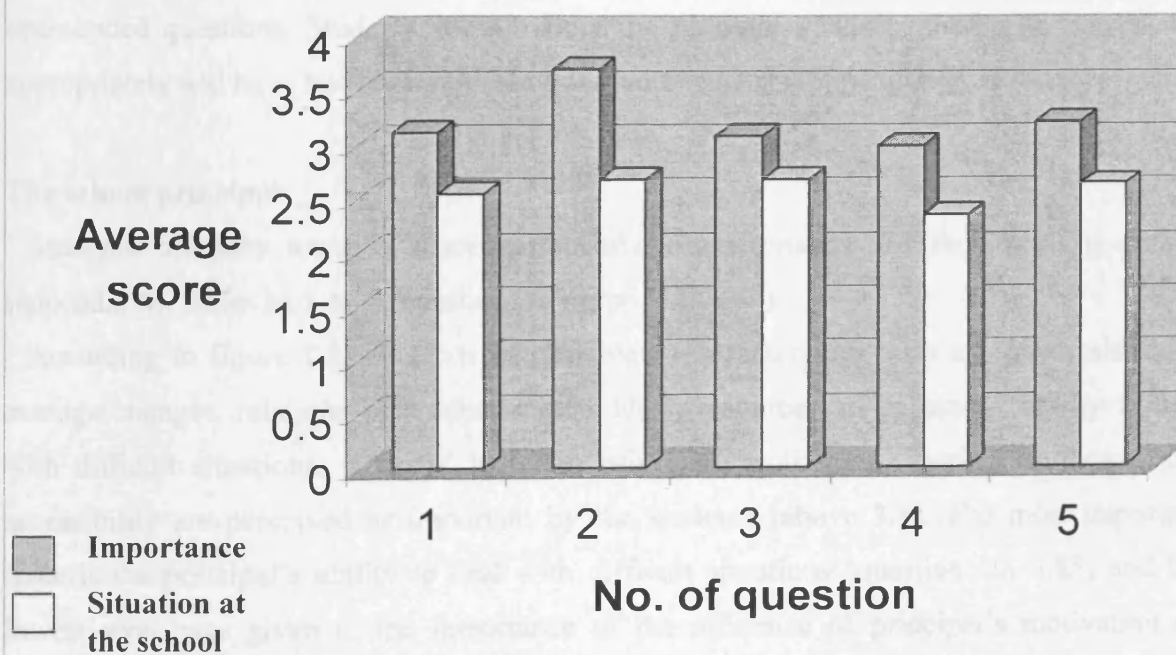


Figure 7.1: Students' view: Collaboration - Questions 1-5

According to figure 7.1, all kinds of collaboration are perceived as important by the students. The most important issue is the collaboration between students and teachers (question 2: 3.70) and the lowest score was given to the importance of collaboration between

parents and principals (question 4: 2.99). In all aspects of collaboration there is a gap between the desired situation and reality at the school. The greatest gap relates to collaboration between students and teachers (question no. 2: 1.02) and the meaning of this finding is that according to students' perception, the collaboration they have with their teachers is ineffective. The smallest gap exists while comparing the difference between 'importance' and 'reality' concerning the collaboration between teachers and parents (question 3: 0.40). To students, this kind of collaboration is relatively the most effective.

Analysis of variance based on $\alpha \leq 0.01$ (Table S.8, M.1, p. 489, 448) shows that there are no significant differences among grades' gaps relating to these questions, except question 2. In question 2 there is a significant difference: the 7th grade has the smallest gap (0.41) and the 9th grade has the biggest gap (1.56).

Further, the collaboration between students and teachers is again the most important in each grade separately. In all grades except the 7th, the gap of this characteristic is also the highest. In the 7th grade, the highest gap relates to the collaboration between students and parents (question 1: 0.46).

The ineffective collaboration between teachers and students is expressed also by the open-ended questions. Students stress mainly the problem of teachers who do not behave appropriately and have bad communication with the students (appendix M, p. 448).

The school principal

Students' attitudes towards school principal's characteristics are shown in figure 7.2 (appendix M, tables M.1-M.2, questions 6-14, pp. 448-449).

According to figure 7.2, all kinds of principal's characteristics such as vision, ability to manage changes, relations with other stakeholders, resources' management, ability to deal with difficult situations, students' belief in principal, motivation, sharing leadership and accessibility are perceived as important by the students (above 3.4). The most important issue is the principal's ability to deal with difficult situations (question 10: 3.85) and the lowest score was given to the importance of the influence of principal's motivation on teachers' motivation (question 12: 3.43). In all principal's characteristics there is a gap between the desired situation and reality at the school. The greatest gap relates to principal's ability to achieve and manage resources (question no. 9: 1.35). The students perceive this issue as very important and the reality is not too good. The smallest gap exists while comparing the difference between 'importance' and 'reality' concerning the influence of

principal's motivation on teachers' motivation (question 12: 0.86). The students think this issue has the lowest importance and it is less problematic than all the other principal's characteristics.

6. Principal's vision, values and way of thinking.
7. Principal's ability to manage changes and to make initiatives.
8. Principal's personal relations with the staff, parents and students.
9. Principal's ability to control, acquire and manage resources and budgets.
10. Principal's ability to deal with difficult situations.
11. Students' belief in principal.
12. Principal's motivation influences teachers' motivation.
13. Sharing leadership with staff and students.
14. Principal's accessibility to teachers, students and parents.

Students - School C - all classes: evaluation of school principal

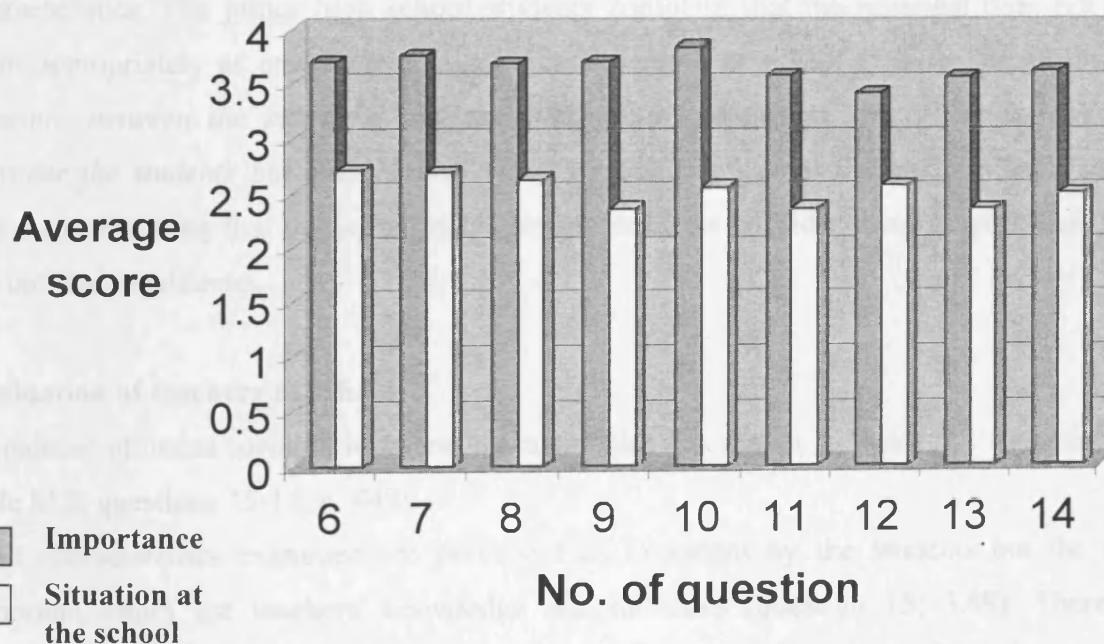


Figure 7.2: Students' view: Principal's characteristics - Questions 6-14

Analysis of variance based on $\alpha \leq 0.01$ (table S.8, M.1-M.2, p. 489, 448-449) shows that there are significant differences among grades' gaps relating to questions 6-14. In all these

questions the highest gaps relate to the 9th grade. The 7th grade has the smallest gaps (except questions 13, 14 in which the 10th grade has the smallest gap). Nevertheless, all 7th grade's gaps are much smaller than the whole school view (except question 14).

Further, the phenomenon of highest importance of the principal's ability to deal with difficult situations (question 10) does exist in all grades except the 9th, 11th and 12th. In the 9th and 12th grades, this issue is also considered as very important but the principal's ability to manage resources (question 9) is considered as slightly more important (9th grade: 3.88, 12th grade: 3.90). In the 11th grade, the principal's vision and values (question 6) are considered as more important (3.82).

The gap relating to principal's ability to achieve and manage resources (question 9) is also the greatest in the 8th grade (1.75), the 9th (2.16) and the 10th (1.03) similarly to the total view. In the 7th, 11th and 12th grades the highest gaps are different and they relate to principal's ability to deal with difficult situations (7th grade, question 10: 0.81), common management with the staff and students (11th grade, question 13: 1.65) and students' belief in principal (12th grade, question 11: 1.57).

The open-ended questions added more information relating to the principal's characteristics. The junior high school students complain that the principal does not treat them appropriately as one student says: *"The discipline at school C is too tough and the relations between the principal and the students are not good. The principal does not consider the students but only herself"*. In the secondary school the students have similar arguments claiming that the school management does not consider them properly and there are unfitted regulations.

Evaluation of teachers at school

Students' attitudes towards teachers' characteristics are shown in figure 7.3 (appendix M, table M.2, questions 15-18, p. 449).

All characteristics examined are perceived as important by the students but the most important issues are teachers' knowledge and didactics (question 15: 3.89). There are substantial gaps (1.01-1.19) in all aspects and the most problematic issue is teachers' ability to monitor and evaluate students properly (question 16: 1.19). The open-ended questions strengthen these findings. 47 students wrote verbal notes saying that there are teachers who do not behave appropriately, do not support the students, are not listening and have bad didactics.

Analysis of variance based on $\alpha \leq 0.01$ (table S.8, M.2, p. 489, 449) shows that there are significant differences among grades' gaps relating to questions 15, 17-18. In all these questions the 7th grade's gaps are smaller than the other grades' gaps. The entire 11th grade's gaps are greater than the whole school's gaps.

15. Teachers' knowledge and didactics.
 16. Teachers' ability to monitor and evaluate students properly.
 17. Teachers' personality.
 18. Teachers' communication with students.

Students - School C - all classes: Teachers' characteristics

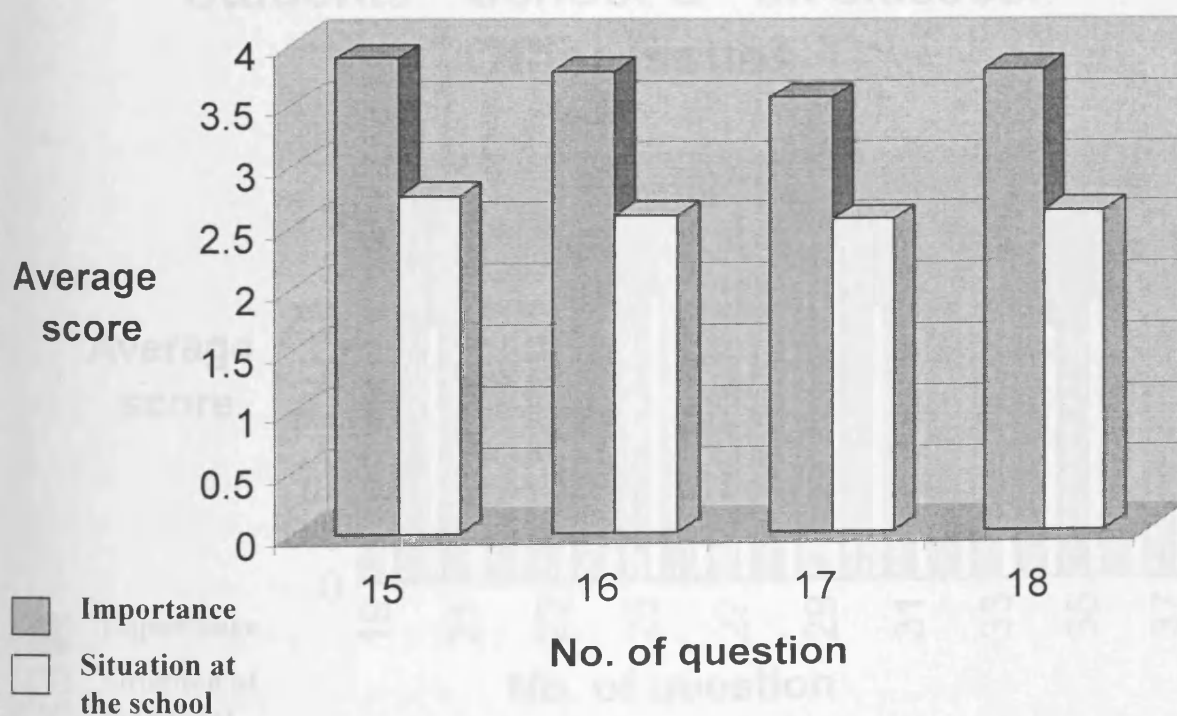


Figure 7.3: Students' view: Teachers' characteristics - questions 15-18

Other issues

Students' attitudes towards other characteristics are shown in figure 7.4 (appendix M, tables M.2-M.4, questions 19-37, p. 449-451):

19. School and class size.
20. Students' willingness to study.
21. Teachers' willingness to teach.
22. Organisational culture and atmosphere.
23. Physical environment (buildings, furniture, laboratories, equipment, library, computers).
24. Weekly timetable and number of subjects being taught simultaneously.
25. Social life at school.
26. Additional studies beyond regular program.
27. Discipline at school.
28. High standards and expectations towards students held by teachers.
29. Grouping is a good system for studying.
30. Management of information at school.
31. A continuum between junior high school and secondary school.
32. The school counsellor functioning.
33. Students' continuous presence at school.
34. The existence of many studying opportunities.
35. Reasonable punishments.
36. Special treatment for students with special needs.
37. Focus on homework.

Students - School C - all classes: Other Issues

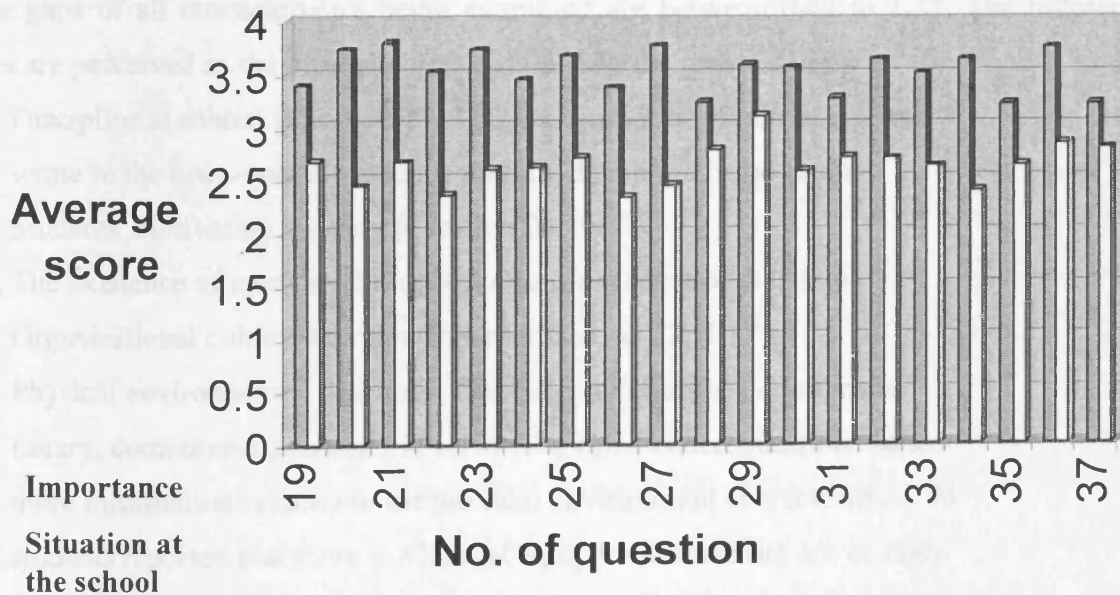


Figure 7.4: Students' view: Other issues - questions 19-37

The students perceive all these issues as important. The following issues are perceived as the most important:

1. Teachers' motivation to teach (question 21: 3.79).
2. Discipline at school (question 27: 3.77).
3. Special treatment for students with special needs (question 36: 3.75).
4. Students' willingness to study (question 20: 3.73).
5. Physical environment: buildings, furniture, laboratories, equipment, library, computers (question 23: 3.73).
6. Social life at the school (question 25: 3.67).
7. The school counsellor functioning (question 32: 3.63).
8. The existence of many studying opportunities (question 34: 3.63).

The following issues are perceived as less important:

1. Focus on homework (question 37: 3.21).
2. Reasonable punishments (question 35: 3.21).
3. High standards and expectations (question 28: 3.24).

The gaps of all characteristics being examined are between 0.42 to 1.32. The following issues are perceived as the most problematic (having the greatest gap):

1. Discipline at school (question 27: 1.32). 27 junior high school students wrote in the open-ended questions that the discipline is too tough.
2. Students' motivation to study (question 20: 1.29).
3. The existence of many studying opportunities (question 34: 1.24).
4. Organisational culture and atmosphere (question 22: 1.17).
5. Physical environment - buildings, furniture, laboratories, equipment, library, computers (question 23: 1.13). The open-ended questions added more information relating to the physical environment characteristics. 24 students reported that there is a lack of equipment, there are not enough financial resources and bad maintenance especially improper cleaning.
6. Teachers' motivation to teach (question 21: 1.12).
7. Additional studies beyond regular programme (question 26: 1.04).
8. Management of information (question 30: 0.98).
9. Social life at school (question 25: 0.96). 24 students added verbal notes saying that there are not enough social activities for students.

10. The school counsellor functioning (question 32: 0.93).

The following issues are perceived as less problematic (having the smallest gaps):

1. Focus on homework (question 37: 0.42).
2. High standards and expectations towards students held by teachers (question 28: 0.46).
3. Grouping (question 29: 0.48).
4. A continuity between the junior high school and the secondary school (question 31: 0.55).
5. Reasonable punishments (question 35: 0.58).

Analysis of variance based on $\alpha \leq 0.01$ (table S.8, M.2-M.4, p. 489, 449-451) shows that there are significant differences among grades' gaps relating to these questions except no. 20, 21, 25, 28, 33, 37. In all these questions the 7th grade has the smallest gap (except in question 35). Comparing to the whole school view, the entire 7th grade's gaps are much smaller whereas the entire 9th grade's gaps are much greater.

Students: summary of questions 1-37

Table 7.2 summarises students' gaps in school C relating to questions 1-37, sorted from the highest gap to the lowest one. According to table 7.2, 19 gaps (out of 37) are above 1. The most ineffective issues are management of resources (1.35), discipline (1.32), students' motivation (1.29), principal's ability to deal with difficult situations (1.29), studying opportunities (1.24), students' belief in principal (1.22), sharing leadership (1.21), monitoring and evaluation (1.19), communication (1.17), organisational culture (1.17), teachers' knowledge (1.13), physical environment (1.13), teachers' motivation (1.12), principal's accessibility (1.12), management of changes (1.07), principal's personal relations (1.06), extracurricular studies (1.04), collaboration between teachers and students (1.02) and teachers' personality (1.01). The most effective issues are collaboration between teachers and parents (0.12), focus on homework (0.42), high expectations (0.46) and grouping (0.48).

No.	Question	Gap
1	9. Principal's ability to control, acquire and manage resources and budgets.	1.35
2	27. Discipline at school.	1.32
3	20. Students' willingness to study.	1.29 *
4	10. Principal's ability to deal with difficult situations.	1.29
5	34. The existence of many studying opportunities.	1.24
6	11. Students' belief in principal.	1.22
7	13. Sharing leadership with staff and students.	1.21
8	16. Teachers' ability to monitor and evaluate students properly.	1.19 *
9	18. Teachers' communication with students.	1.17
10	22. Organisational culture and atmosphere.	1.17
11	15. Teachers' knowledge and didactics.	1.13 *
12	23. Physical environment.	1.13
13	21. Teachers' willingness to teach.	1.12 *
14	14. Principal's accessibility to teachers, students and parents.	1.12
15	7. Principal's ability to manage changes and to make initiatives.	1.07
16	8. Principal personal relations with staff, parents and students.	1.06
17	26. Additional studies beyond regular program.	1.04
18	2. Collaboration between students and teachers at school.	1.02
19	17. Teachers' personality.	1.01 *
20	6. Principal's vision, values and way of thinking.	1.00
21	30. Management of information at school.	0.98
22	25. Social life at school.	0.96 *
23	32. The school counsellor functioning.	0.93 *
24	36. Special treatment for students with special needs.	0.91 *
25	33. Students' continuous presence at school.	0.88 *
26	12. Principal's motivation influences teachers' motivation.	0.86
27	24. Weekly timetable and number of subjects being taught simultaneously.	0.83 *
28	19. School and class size.	0.72 *
29	4. Collaboration between parents and principals at school.	0.64 *
30	35. Reasonable punishments.	0.58 *
31	5. Teachers' agreement to parental involvement at school.	0.57 *
32	1. Collaboration between students and parents at school.	0.56 *
33	31. A continuity between junior high school and secondary school.	0.55 *
34	29. Grouping is a good system for studying.	0.48 *
35	28. High standards and expectations towards students held by teachers.	0.46 *
36	37. Focus on homework.	0.42 *
37	3. Collaboration between teachers and parents at school.	0.40

Table 7.2: School C - students - gaps of questions 1-37

(* There is no significant difference among the three schools)

Students' satisfaction with the school

Students' satisfaction with the school is shown in figure 7.5 (appendix M, table M.5, questions 41-63, p. 452):

41. Teachers get enough satisfaction, achievement, etc.
42. Teachers get enough salary and material rewards.
43. General atmosphere at my school is positive.
44. Discipline at my school is appropriate.
45. Students' achievements are high.
46. Relations between school principal, staff, students and parents are good.
47. The principal has the ability to advance and initiate meaningful changes.
48. Decision making process is appropriate.
49. School has good reputation in community.
50. There are good teachers at my school.
51. Students have strong desire to study.
52. School's resources and finance are managed properly.
53. School's buildings, equipment, laboratories, etc are appropriate.
54. There is a good social life at my school.
55. Monitoring and evaluation of students is done well.
56. Teachers treat students properly.
57. Teachers treat parents properly.
58. School size is reasonable (not too big).
59. Class size is reasonable (not too big).
60. Teachers have high expectations towards students.
61. Students have high chance to succeed.
62. There is high pressure on students at school.
63. School has reasonable flexibility for students.

Students - School C - all classes: Satisfaction

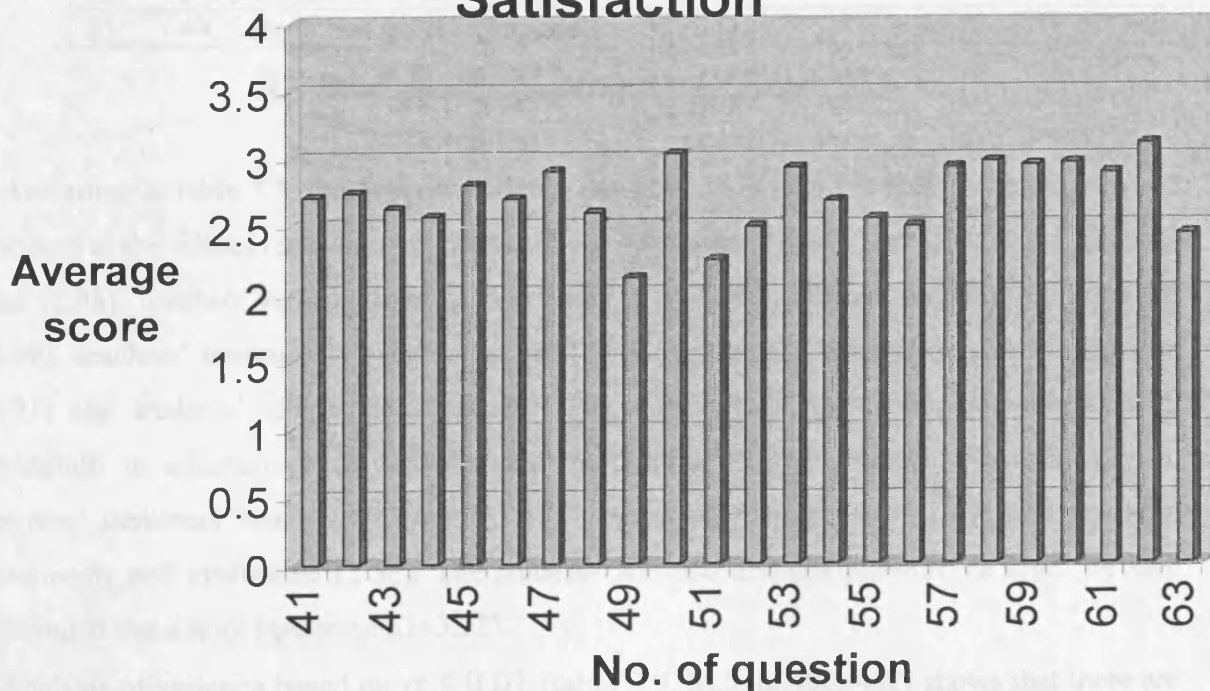


Figure 7.5: Students' view: Satisfaction - questions 41-63

Students' satisfaction with school C, sorted from the highest score to the lowest one is shown in table 7.3:

No.	Question	Score
1	62. There is high pressure on students at school.	3.12
2	50. There are good teachers at my school.	3.04
3	58. School size is reasonable (not too big).	2.98
4	60. Teachers have high expectations towards students.	2.97
5	59. Class size is reasonable (not too big).	2.96
6	53. School's buildings, equipment, etc. are appropriate.	2.94
7	57. Teachers treat parents properly.	2.93
8	47. Principal 's ability to advance meaningful changes.	2.91
9	61. Students have high chance to succeed.	2.90
10	45. Students' achievements are high.	2.81
11	42. Teachers get enough salary and material rewards.	2.75
12	41. Teachers get enough satisfaction, achievement, etc.	2.72
13	46. Relations between school principal and stakeholders.	2.70
14	54. There is a good social life at my school.	2.69
15	43. General atmosphere at my school is positive.	2.63
16	48. Decision making process is appropriate.	2.60
17	44. Discipline at my school is appropriate.	2.57
18	55. Monitoring and evaluation of students is done well.	2.56
19	52. School's resources and finance are managed properly.	2.49
20	56. Teachers treat students properly.	2.49
21	63. School has reasonable flexibility for students.	2.44
22	51. Students have strong desire to study.	2.25
23	49. School has good reputation in community.	2.11

Table 7.3: Students' satisfaction with school C

According to table 7.3, the highest students' satisfaction is with the fact that there are good teachers at the school (question 50: 3.04). The students are slightly less satisfied with school size (2.98), teachers' expectations (2.97), class size (2.96), school's physical environment (2.94), teachers' treatment towards parents (2.93), principal's ability to advance changes (2.91) and students' chance to succeed (2.90). The lowest satisfaction is with school's reputation in community (2.11), students' motivation (2.25), school's flexibility (2.44), teachers' treatment towards students (2.49), resources' management (2.49) and students' monitoring and evaluation (2.56). The students are also dissatisfied with the high pressure existing at the school (question 62: 3.12).

Analysis of variance based on $\alpha \leq 0.01$ (table S.9, M.5, p. 490, 452) shows that there are significant differences among grades' scores relating to these questions except no. 41, 42, 44, 45, 57, 60 and 62. Relating to these questions, all the 7th grades are bigger than the whole

school view and most of them are the biggest (except questions 50, 59, 61). The smallest are the scores of the 9th or the 8th grades.

Parents' attitudes

Collaboration of students, teachers and parents

The first issue being examined is collaboration among stakeholders and it includes questions 1-5 (appendices D and N include a complete version of questionnaires given to parents and the results). The first five questions and the findings are shown in figure 7.6 (appendix N, table N.1, questions 1-5, p. 454):

1. Collaboration between students and parents at school.
2. Collaboration between students and teachers at school.
3. Collaboration between teachers and parents at school.
4. Collaboration between parents and principals at school.
5. Teachers' agreement to parental involvement at school.

Parents - School C - all classes: collaboration

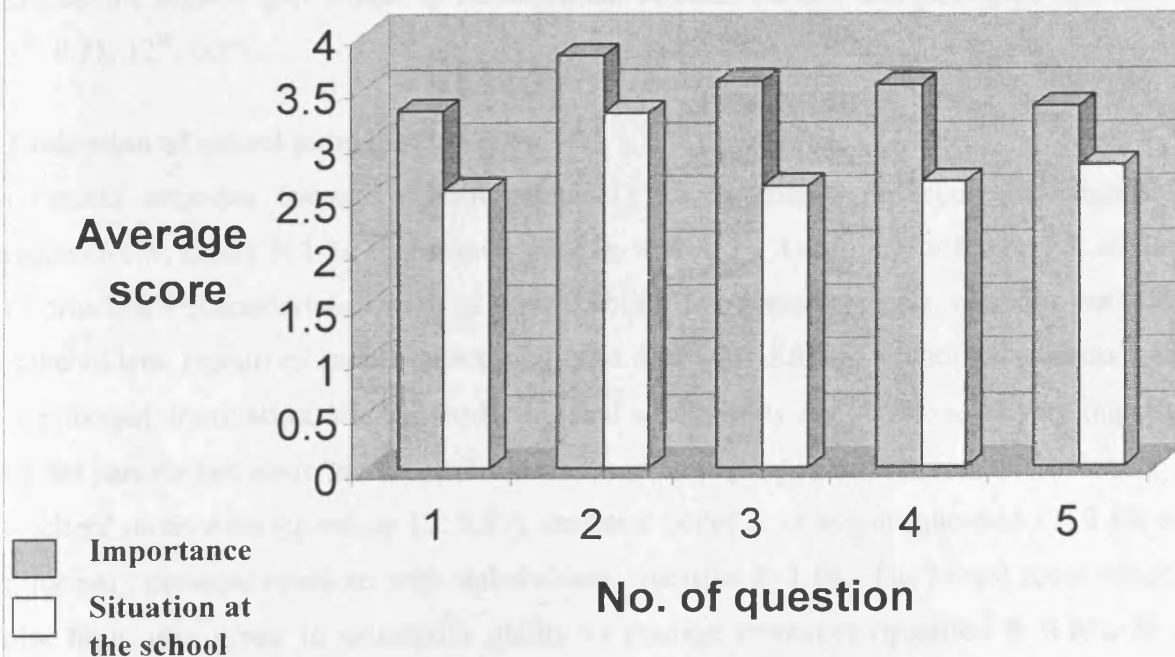


Figure 7.6: Parents' view: Collaboration - Questions 1-5

According to figure 7.6, all kinds of collaboration are perceived as very important by the parents. The most important issue is the collaboration between students and teachers (question 2: 3.82) and the lowest score was given to the importance of the collaboration among students and parents (question 1: 3.30). In all aspects of collaboration there is a gap between the desired situation and the reality at the school. The highest gaps relate to collaboration between teachers and parents (question no. 3: 0.98) and parents and principals (question no. 4: 0.91). The meaning of this finding is that according to parents' perception, there is a major problem concerning the collaboration they have with teachers and principals. They perceive these issues as very important and the reality is not satisfactory.

The smallest gap exists while comparing the difference between 'importance' and 'reality' concerning collaboration between students and teachers (question 2: 0.54).

Analysis of variance based on $\alpha \leq 0.01$ (tables S.17, N.1, p. 498, 454) shows that there are significant differences among grades' gaps relating to question 5 (teachers' agreement to parental involvement): the 8th grade has the maximal gap (1.17) and the 9th grade has the minimal one (0.14). Further, the collaboration between students and teachers is the most important in all grades except the 8th grade where the collaboration between teachers and parents is perceived as more important (question 3: 3.83). In the 8th, 10th and 11th grades, the highest gap relates also to collaboration between teachers and parents. In the 9th and 12th grades, the highest gap relates to collaboration between parents and principals (question 4, 9th: 0.71, 12th: 0.89).

Evaluation of school principal

Parents' attitudes towards school principal's characteristics are shown in figure 7.7 (appendix N, tables N.1-N.2, questions 6-14, p. 454-455). According to figure 7.7, all kinds of principal's characteristics such as vision, ability to manage changes, relations with other stakeholders, resources' management, ability to deal with difficult situations, students' belief in principal, motivation, sharing leadership and accessibility are perceived as very important by the parents (all score are above 3.6). The most important issue is principal's influence on teachers' motivation (question 12: 3.89), students' belief in principal (question 11: 3.88) and principal's personal relations with stakeholders (question 8: 3.88). The lowest score which is also high, was given to principal's ability to manage resources (question 9: 3.65). In all principal's characteristics there is a gap between desired situation and reality at the school. The greatest gap relates to principal's ability to achieve and manage resources and budgets (question 9: 0.72). The parents perceive this issue as important and the reality is not good.

The smallest gaps exist while comparing the difference between 'importance' and 'reality' concerning principal's accessibility to teachers, students and parents (question 14: 0.22) and principal's ability to initiate changes (question 7: 0.32) and her personal relations with stakeholders (question 8: 0.32).

6. Principal's vision, values and way of thinking.
7. Principal's ability to manage changes and to make initiatives.
8. Principal's personal relations with the staff, parents and students.
9. Principal's ability to control, acquire and manage resources and budgets.
10. Principal's ability to deal with difficult situations.
11. Students' belief in principal.
12. Principal's motivation influences teachers' motivation.
13. Sharing leadership with staff and students.
14. Principal's accessibility to teachers, students and parents.

Parents - School C - all classes: evaluation of school principal

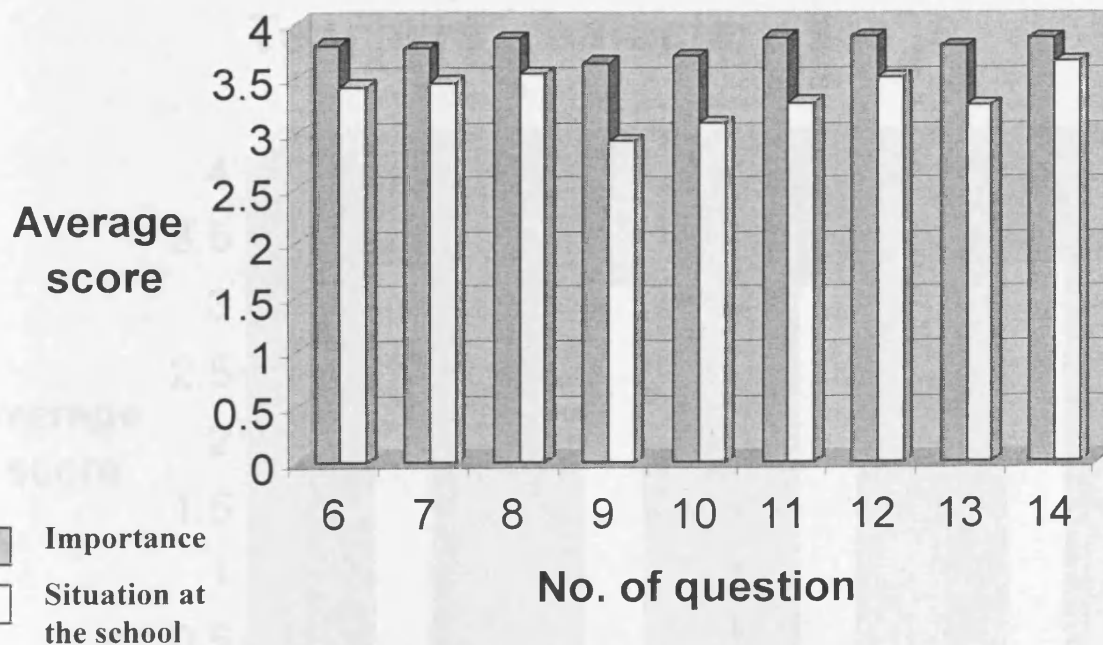


Figure 7.7: Parents' view: Principal's characteristics - Questions 6-14

Analysis of variance based on $\alpha \leq 0.01$ (tables S.17, N.1-N.2, p. 498, 454-455) shows that there are significant differences among grades' gaps relating to questions 7, 10 and 14

only. In these questions, the junior high's gaps are bigger than the secondary school's gaps. Further, all principal's characteristics are perceived as very important in all grades (all scores are between 3.43 to 4). The gap relating to principal's ability to achieve and manage resources (question 9) is also the highest in the 8th (1.4) and 11th (0.74) grades. In the 7th grade, the highest gap relates to principal's accessibility (question 14: 0.67), in the 9th grade, it relates to principals' vision and values (question 6: 0.69) and in the 10th and 12th grades - the highest gap relates to students' belief in principal (question 11, 10th: 0.72, 12th: 0.78).

Evaluation of teachers at school

Parents' attitudes towards teachers' characteristics are shown in figure 7.8 (appendix N, table N.2, questions 15-18, p. 455):

- 15. Teachers' knowledge and didactics.
- 16. Teachers' ability to monitor and evaluate students properly.
- 17. Teachers' personality.
- 18. Teachers' communication with students.

Parents - School C - all classes: Teachers' characteristics

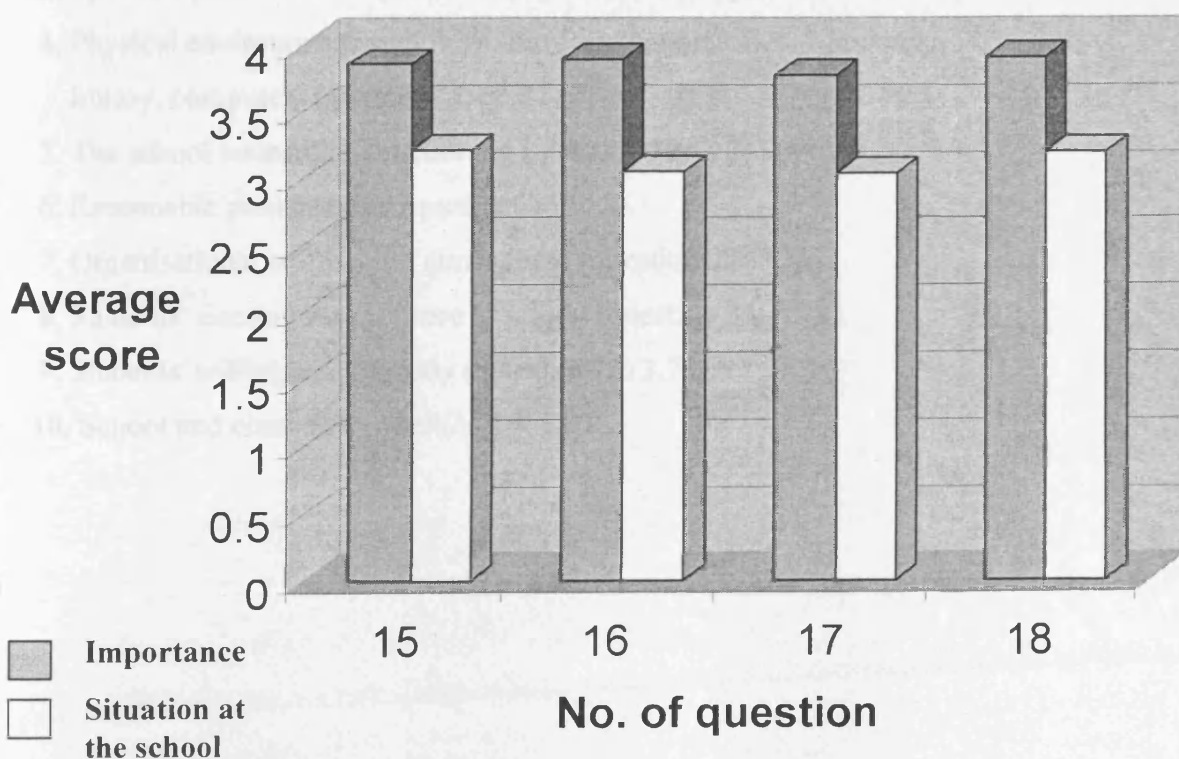


Figure 7.8: Parents' view: Teachers' characteristics - questions 15-18

All characteristics examined are perceived as very important by the parents and the differences among them are very small (the scores are between 3.77 to 3.91). There are gaps in all aspects and they are quite close (0.65-0.84). The open-ended questions strengthen these findings. 30 parents wrote verbal notes saying there are teachers who do not make enough effort, they should be more open and more accessible to students and part of them should improve their education because they do not have an academic degree.

Analysis of variance based on $\alpha \leq 0.01$ (tables S.17, N.2, p. 498, 455) shows that there are significant differences among grades' gaps relating to questions 17 and 18 only. In these questions the highest gaps are in the 11th grade (question 17: 1.11, 18: 1.17).

Other issues

Parents' attitudes towards other characteristics are shown in figure 7.9 (appendix N, tables N.2-N.4, questions 19-37, p. 455-457).

The parents perceive all these issues as important. The following issues are perceived as the most important:

1. Teachers' motivation to teach (question 21: 3.95).
2. The existence of many studying opportunities (question 34: 3.88).
3. Special treatment for students with special needs (question 36: 3.84).
4. Physical environment: buildings, furniture, laboratories, equipment, library, computers (question 23: 3.82).
5. The school counsellor functioning (question 32: 3.81).
6. Reasonable punishments (question 35: 3.8).
7. Organisational culture and atmosphere (question 22: 3.78).
8. Students' continuous presence at school (question 33: 3.78).
9. Students' willingness to study (question 20: 3.75).
10. School and class size (question 19: 3.71).

19. School and class size.
20. Students' willingness to study.
21. Teachers' willingness to teach.
22. Organisational culture and atmosphere.
23. Physical environment (buildings, furniture, laboratories, equipment, library, computers).
24. Weekly timetable and number of subjects being taught simultaneously.
25. Social life at school.
26. Additional studies beyond regular program.
27. Discipline at school.
28. High standards and expectations towards students held by teachers.
29. Grouping is a good system for studying.
30. Management of information at school.
31. A continuity between junior high school and secondary school.
32. The school counsellor functioning.
33. Students' continuous presence at school.
34. The existence of many studying opportunities.
35. Reasonable punishments.
36. Special treatment for students with special needs.
37. Focus on homework.

Parents - School C - all classes: Other Issues

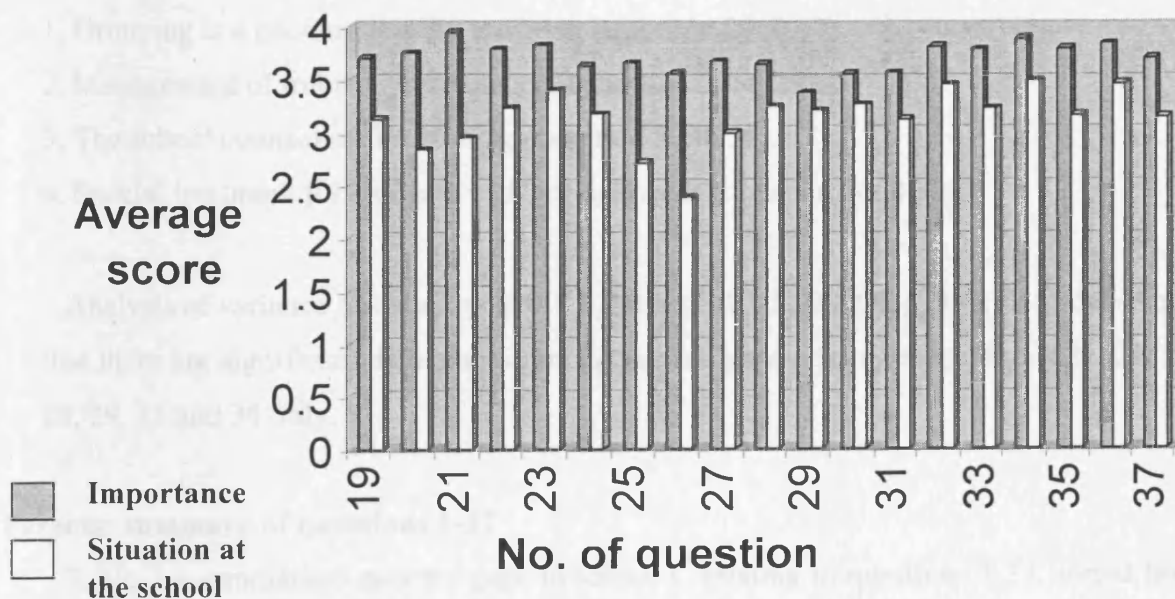


Figure 7.9: Parents' view: Other issues - questions 19-37

The following issues are perceived relatively as slightly less important:

1. Grouping is a good system for studying (question 29: 3.37).
2. Management of information at school (question 30: 3.55).
3. Additional studies beyond regular programme (question 26: 3.55).
4. A continuity between the junior high school and the secondary school (question 31: 3.56).

The gaps of all characteristics examined are between 0.17 to 1.16. The following issues are perceived as the most problematic (having the greatest gap):

1. Additional studies beyond regular programme (question 26: 1.16). 8 parents wrote that there is a shortage of extracurricular activities.
2. Teachers' motivation to teach (question 21: 1.01).
3. Social life at school (question 25: 0.94). 15 parents added verbal notes saying that there is not enough social activity.
4. Students' motivation to study (question 20: 0.91).
5. Discipline at school (question 27: 0.67).
6. Reasonable punishments (question 35: 0.64).
7. School and class size (question 19: 0.59).

The following issues are perceived as less problematic (having the smallest gaps):

1. Grouping is a good system for studying (question 29: 0.17).
2. Management of information at school (question 30: 0.29).
3. The school counsellor functioning (question 32: 0.36).
4. Special treatment for students with special needs (question 36: 0.39).

Analysis of variance based on $\alpha \leq 0.01$ (tables S.17, M.2-M.4, p. 498, 449-451) shows that there are significant differences among grades' gaps relating to questions 21, 22, 24, 25, 29, 31 and 34 only.

Parents: summary of questions 1-37

Table 7.4 summarises parents' gaps in school C relating to questions 1-37, sorted from the highest gap to the lowest one. According to table 7.4, only 2 gaps (out of 37) are above 1. The most ineffective issues are extracurricular studies (1.16) and teachers' motivation (1.01). The most effective issues are grouping (0.17), principal's accessibility (0.22), management of information (0.29), principal personal relations (0.32) and principal's ability to manage changes (0.32).

No.	Question	Gap
1	26. Additional studies beyond regular program.	1.16 *
2	21. Teachers' willingness to teach.	1.01
3	3. Collaboration between teachers and parents at school.	0.98
4	25. Social life at school.	0.94 *
5	20. Students' willingness to study.	0.91 *
6	4. Collaboration between parents and principals at school.	0.91
7	16. Teachers' ability to monitor and evaluate students properly.	0.84
8	1. Collaboration between students and parents at school.	0.73 *
9	17. Teachers' personality.	0.73 *
10	9. Principal's ability to control, acquire and manage resources and budgets.	0.72
11	18. Teachers' communication with students.	0.71
12	27. Discipline at school.	0.67
13	15. Teachers' knowledge and didactics.	0.65
14	35. Reasonable punishments.	0.64
15	10. Principal's ability to deal with difficult situations.	0.61
16	11. Students' belief in principal.	0.60
17	19. School and class size.	0.59
18	37. Focus on homework.	0.56 *
19	22. Organisational culture and atmosphere.	0.56
20	33. Students' continuous presence at school.	0.56
21	5. Teachers' agreement to parental involvement at school.	0.55
22	2. Collaboration between students and teachers at school.	0.54
23	13. Sharing leadership with staff and students.	0.54
24	24. Weekly timetable and number of subjects being taught simultaneously.	0.45
25	31. A continuity between junior high school and secondary school.	0.44
26	23. Physical environment.	0.43
27	34. The existence of many studying opportunities.	0.40
28	28. High standards and expectations towards students held by teachers.	0.40
29	36. Special treatment for students with special needs.	0.39
30	12. Principal's motivation influences teachers' motivation.	0.38
31	6. Principal's vision, values and way of thinking.	0.38
32	32. The school counsellor functioning.	0.36
33	7. Principal's ability to manage changes and to make initiatives.	0.32
34	8. Principal personal relations with staff, parents and students.	0.32
35	30. Management of information at school.	0.29
36	14. Principal's accessibility to teachers, students and parents.	0.22
37	29. Grouping is a good system for studying.	0.17

Table 7.4: School C - parents - gaps of questions 1-37

(* There is no significant difference among the three schools)

Parents' satisfaction with the school

Parents' satisfaction with the school is shown in figure 7.10 (appendix N, table N.5, questions 41-63, p. 458):

41. Teachers get enough satisfaction, achievement, etc.
42. Teachers get enough salary and material rewards.
43. General atmosphere at my school is positive.
44. Discipline at my school is appropriate.
45. Students' achievements are high.
46. Relations between school principal, staff, students and parents are good.
47. The principal has the ability to advance and initiate meaningful changes.
48. Decision making process is appropriate.
49. School has good reputation in community.
50. There are good teachers at my school.
51. Students have strong desire to study.
52. School's resources and finance are managed properly.
53. School's buildings, equipment, laboratories, etc are appropriate.
54. There is a good social life at my school.
55. Monitoring and evaluation of students is done well.
56. Teachers treat students properly.
57. Teachers treat parents properly.
58. School size is reasonable (not too big).
59. Class size is reasonable (not too big).
60. Teachers have high expectations towards students.
61. Students have high chance to succeed.
62. There is high pressure on students at school.
63. School has reasonable flexibility for students.

Parents - School C - all classes: Satisfaction

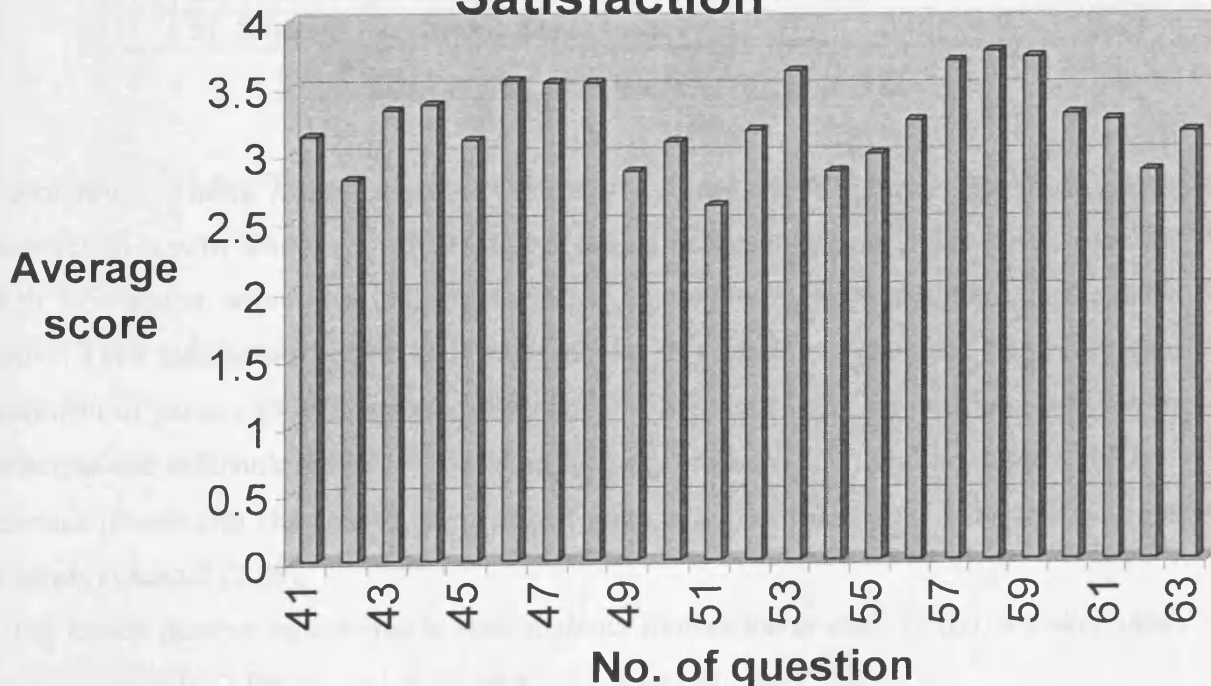


Figure 7.10: Parents' view: Satisfaction - questions 41-63

Parents' satisfaction with school C, sorted from the highest score to the lowest one is shown in table 7.5:

No.	Question	Score
1	58. School size is reasonable (not too big).	3.77
2	59. Class size is reasonable (not too big).	3.73
3	57. Teachers treat parents properly.	3.70
4	53. School's buildings, equipment, etc. are appropriate.	3.62
5	46. Relations between school principal and stakeholders.	3.56
6	48. Decision making process is appropriate.	3.54
7	47. Principal's ability to advance meaningful changes.	3.54
8	44. Discipline at my child's school is appropriate.	3.38
9	43. General atmosphere at my child's school is positive.	3.33
10	60. Teachers have high expectations towards students.	3.31
11	56. Teachers treat students properly.	3.26
12	61. Students have high chance to succeed.	3.25
13	52. School's resources and finance are managed properly.	3.19
14	63. School has reasonable flexibility for students.	3.17
15	41. Teachers get enough satisfaction, achievement, etc.	3.14
16	45. Students' achievements are high.	3.12
17	50. There are good teachers at my school.	3.09
18	55. Monitoring and evaluation of students is done well.	3.01
19	49. School has good reputation in community.	2.88
20	54. There is a good social life at my school.	2.88
21	62. There is high pressure on students at school.	2.88
22	42. Teachers get enough salary and material rewards.	2.83
23	51. Students have strong desire to study.	2.63

Table 7.5: Parents' satisfaction with school C

According to table 7.5, most scores (18 out of 23) are above 3 and the maximal parents' satisfaction is with school size (3.77). The meaning of these findings is that the parents have high satisfaction with their children's school relating to most characteristics mentioned above. Their satisfaction is extremely high (above 3.5) relating to class size (3.73), teachers' treatment of parents (3.70), school's physical environment (3.62), the relations between the principal and stakeholders (3.56), decision making process (3.54) and principal's ability to advance meaningful changes (3.54). Further, parents do not think there is high pressure on students at school (2.88).

The lowest parents' satisfaction is with students' motivation to study (2.63), teachers' salary (2.83), social life (2.88) and school's reputation in community (2.88).

Analysis of variance based on $\alpha \leq 0.01$ (tables S.18, N.5, p. 499, 458) shows that there are no significant differences among grades' scores relating to questions 41-63.

Summary and preliminary conclusions

The case study at School C shows the existence of a gap between desire and reality concerning characteristics of the effective six-year high school. That may be the reason for the dissatisfaction of stakeholders. Gap size is different concerning different issues examined, different stakeholders and grades. This case study considers three key research questions (chapter 1, p. 9) dealing with desired and real characteristics of the effective six-year high school (research questions no. 1 and 2) and stakeholders' satisfaction with the school (research questions no. 3). All kinds of stakeholders in school C were asked to express their views towards these three research questions.

Two sample hypothesis test ($\alpha = 0.01$) reveals that parents' satisfaction with the school is significantly higher in comparison to their children's in all aspects examined (tables R.5, M.5, N.5, p. 478, 452, 458). Further, in many issues examined (atmosphere, relations among stakeholders, making changes, decision making, school's reputation, teaching quality, management of resources, the physical environment, social life, school and class size) the 7th grade students are more satisfied than students in other grades. Concerning these issues, in the 9th grade, students' satisfaction is the lowest in comparison to all the other grades. Nevertheless, relating to parents, there is no significant difference among the grades. The reason for this may be that during the first year the students do not fully know the school and therefore they do not tend to be too critical. However, later on, they become familiar with the school and tend to be much more critical.

Relating to the first research question, school C case study reveals that the following characteristics are perceived by stakeholders as important but there are differences in stakeholders' views concerning the second and third research questions (reality at school and satisfaction):

Collaboration among stakeholders: The less effective attribute according to students is teachers/students collaboration. The parents have a slightly different view: the highest gap between desire and reality relates to teachers/parents collaboration. According to principals, the collaboration is fine but could be better if the students would have been more cooperative. Concerning teachers/parents, there is awareness of the fact that this kind of collaboration is ineffective because of parents' lack of willingness to cooperate. According to parents this issue is problematic too. Teachers think they are collaborative with the students but with their parents, the collaboration is just partial or not existing either because of lack of importance from the teachers' point of view or owing to parents' low motivation to cooperate

with the school. These attitudes held by both principals and teachers contradict students and parents pointing out an existing gap between the importance of teachers/students/parents collaboration and reality. According to Chrispeels (1992), collaborative teachers create a classroom setting that reflects many of the characteristics of the effective school. They convey to students and parents alike the message that in their classrooms students work hard and have lots of opportunities to learn. They do this in an environment that is perceived to be conducive to learning and in which students are kept informed of what is expected of them and how well they have achieved those goals. The collaborative teacher extends learning opportunities beyond the schoolhouse by keeping parents informed of what pupils are learning, how well they make progress and how parents can support learning. All this is done in a way that conveys to students and parents that they are engaged in a mutual relationship that is working toward a common goal – student success. According to stakeholders examined, there is a problem concerning the relations between the school and parents and the students and teachers. The first issues seem to be more problematic because most teachers do not realise its great importance whereas the principals are aware of its importance but do not succeed to make any substantial progress.

School principal's characteristics: both students and parents look upon the principal's ability to achieve and manage resources as a great problem in school C. Students look upon common management of the staff and students as ineffective too. The students are also dissatisfied with their belief in the principal and her ability to deal with difficult situations. The principal believes in excellent relationships with all stakeholders, open door policy, decision-making process with the staff collaboration and improving the school's reputation in community. To teachers, the principal does have excellent human relations, she is sometimes too much accessible, has vision, did improved the school significantly and should improve the management of resources because there is shortage of equipment. Students are dissatisfied with all principal's characters whereas their parents are more satisfied. The students are dissatisfied with the principal's vision whereas the parents and teachers are more satisfied. According to Leithwood et al (1997), the principal's role involves creating structures that facilitates communication and collaboration among staff around the school's valued purposes. It includes shared mission, teacher participation in decision-making, scheduling, use of teaming, principal stimulation of staff learning, patterns of collaboration and team learning. School C principal tries to fulfil some of these ideas but nevertheless, stakeholders think that she is not always successful.

Teachers' characteristics: students and parents think this is one of the most problematic issues at their school. In this respect, there is a substantial gap between students/parents' attitudes to those of the teachers and principals. Both teachers and principals think that most teachers are good, what contradicts students and parents' attitudes. Although students and parents think there are also good teachers at the school, the general situation is not too good. Most teachers and principals are aware of the fact that most teaching is frontal because of lack of resources (especially teaching hours) and the need to prepare the students for the matriculation examinations. However, all of them would have preferred to have diverse teaching. To Coleman (1998), students think that a good teacher combines technical skills together with good personal relationships with students. In school C, students and parents think that there is a substantial problem in both technical, motivational and communicational teachers' skills. The teachers and the principals have a different view claiming that the teachers are usually effective with only marginal exceptions.

School/class size and the physical environment: the students and their parents do not look upon the crowding in classes as problematic. The teachers and principals have a totally different view saying that the crowding in classes is unacceptable and this is one of the most important factors decreasing school effectiveness. One of the more notable efforts in the U.S.A to reduce class size is Tennessee's Project STAR (Student - Teacher - Achievement - Ratio). Finn (1998) reports that the STAR Programme showed positive results from a reduction in class size - academic achievement, engagement, and behaviours. In that respect, there is similarity between teachers and principals' attitudes and the recent American research dealing with class size. They prefer small classes whereas the customers, namely students and their parents do not fully understand the advantage of small classes. Relating to the physical environment, all stakeholders think there is a lack of classrooms, designated equipment such as computers and so on. The parents look upon this issue as less significant than the other stakeholders.

Teamwork: stakeholders are satisfied with the teamwork and the six-year continuity. Teachers and principals describe the existence of subject teams, management teams and grade teams helping the whole school to function more effectively. According to the research literature (Goodlad, 1984), many teachers work in isolation, neither helping nor being helped by their colleagues. Given these circumstances, educational leaders are calling for closer professional interaction among teachers and between teachers and administrators. In that respect, school C seems to be effective according to stakeholders' views.

Discipline: stakeholders perceive discipline as very important for school effectiveness because without having it, the school cannot function reasonably. Therefore, discipline is perceived as a necessary and insufficient condition for school effectiveness as Duke (1989) argues. According to students the situation is ineffective whereas parents, teachers and principals think it is better. The teachers and principals describe the discipline as reasonable and dependent mainly on teachers with the management's assistance. According to an Israeli research (Ben-Yakov, 1995) there is a significant negative correlation between discipline breaches and characteristics of school effectiveness. A situation of bad discipline is common in school C according to students and as the literature reveals, it might influence negatively school C effectiveness.

Students' motivation to study: According to stakeholders' attitudes, students' motivation to study is very important for school effectiveness but unfortunately the existing motivation is too low. To principals and teachers, students' motivation is not high enough and some of them are low motivated. The teachers think that the major factors influencing motivation are those of the students and their environment and not school's variables. The students and their parents think that the motivational issue is much worse in comparison to the staff. According to the literature (Ames, 1987; Brophy, 1987; Grossnickle, 1989; Wlodkowski and Jaynes, 1990) an atmosphere that nurtures the motivation to learn can be cultivated in the home, in the classroom, or, at a broader level, throughout an entire school. Much of the research on educational motivation has rightly centred on the classroom, where the majority of learning takes place and where students are most likely to acquire a strong motivation to gain new knowledge. Nevertheless, it seems that in school C the motivational aspect according to the staff is more students' dependent and less school's dependent. This statement contradicts the research literature stressing the important role of the school in creating and increasing students' motivation.

Parental involvement: relating to students' and parents' attitudes, there is an agreement of teachers to parental involvement. What is more important in parents' view is the cooperation among parents and teachers. In this respect, parents think there is a gap between what they wish and the reality in their school. The students do not think there is a real problem concerning this issue. Principals and teachers express a different view relating to the cooperation among teachers and parents. They think that parental involvement should be focused only on technical issues and not pedagogical and this is the reality in their school. The Israeli research literature on parental involvement (Sidkiyahu, 1988; Friedman and Bar, 1987) indicates that parental involvement in Israeli schools is limited and there is no real

partnership. In most Israeli schools parents participate mainly in technical and financial issues. In relation to issues of curriculum and policy making, parents are not asked to be active or to express their opinion. Goldring (1989) examined principals' views and concluded that only a few Israeli school principals agree to run common activities with parents concerning decision making and policy making. Similarly to the literature, stakeholders think that effective parental involvement does not exist in school C. The reasons for that are either school's preventing parents from real involvement, role holders' attitudes that parental involvement is not very important or annoying or low parents' motivation to be involved. The parents are dissatisfied with their collaboration with the teachers and that can also explain the ineffective parental involvement. There are teachers and principals who think they have to satisfy the parents but they do not fully understand the importance of parental involvement to school effectiveness as the research literature stresses.

Organisational culture and climate: Students think that the organisational culture is ineffective whereas to parents, it is fine. To principals and teachers the situation concerning school culture is better. The organisational culture nurtures mutual assistance and support between students and teachers and there is openness. The school nurtures teamwork and there is criticism on the exaggerated open door policy. Part of the staff prefers more formal and hierarchical decision-making process instead of direct apply to the school principal. The school has an aspiration that each student would fulfil his/her potential and the school management supports this approach. The management tries to balance between students' and teachers' interests and nurtures the existence of good atmosphere and good relations with the principal and among the staff. Most teachers are optimistic and hope to reach improvement during the next years. The Americans Thacker and McInerney (1992) found that there is an influence of school culture on improving student achievement. The results are consistent with other findings that suggest the implementation of a clear mission statement, shared vision, and schoolwide goals promote increased student achievement. School C principal makes much effort in order to create common vision, beliefs and attitudes which are necessary to develop the school and to increase students' motivation and achievements.

Teachers' standards and expectations towards students: gaps between desire and reality relating to students and parents are small. Principals and teachers think that an effective teacher should develop high expectations towards students because they believe in the self-fulfilling prophecy. Most of them think that expectations should be realistic, not too low but also not too high. All of them think that there are teachers who have high expectations towards their students and such a perception encourages the students to develop and succeed.

However, there are others who have high expectations towards high achieving students and low expectations towards low achieving students. According to the staff, there is no influence of the principal on teachers to increase their expectations in order to have continuous advancement. Myers (1995) claims that students' intellectual, personal and technical abilities have to be recognised and valued, and that expectations of progress and performance should be high. The Israeli research supports also similar findings. Yafa (1994) argues that there is a direct linkage between teachers' expectations and students' achievements. When teachers have high expectations, they tend to create supportive atmosphere, give effective feedback to students, teach more material and give more opportunities to the students towards whom teachers have high expectations. In such a way, teachers nurture performance and enable the students to make progress. While comparing the findings to the research literature it is worthy noting that only some teachers do have high expectations and unfortunately, some of them have low expectations especially in low achieving classes. This phenomenon can explain the low motivation causing to low achievements mentioned by stakeholders. Another important factor is the principal's influence on teachers' expectations. Teddlie et al (1989) note that effective principals ensure that all staff expect the very highest levels of attainment and behaviour from students. This element does not exist in school C and may decrease its effectiveness. In school C, some teachers distinguish between high and low achieving students according to their performance. These students learn to believe they cannot improve their achievements owing to low ability and therefore they may stop making effort. The students do not fully understand the great importance of teachers' expectations.

Social life: to teachers and principals, there are lots of activities offering opportunities for social relations. Some of them think that social life influences students' satisfaction and their motivation. A minority thinks that social activities should not necessarily be managed by the school. The research literature stresses the importance of school social life to its effectiveness (Stevenson and Nerison-Low, 1995; Gvaram, 1996). School C students have social needs and there is social life at the school. According to the staff, the school social life is fine, but the students and parents think it is not very good.

To sum-up, the main problems in school C, according to all stakeholders, are students' motivation, didactical and communicational problems of some teachers, shortage of resources and bad maintenance. Most teachers feel there is a great problem concerning extrinsic rewards and they agree to remain in the educational field because of the intrinsic

rewards or because of having no other choice. To students, there is a substantial problem of discipline although principals, teachers and parents think discipline is at least reasonable. Lack of resources, especially computers and advanced instructional technology, is crucial for school C's effectiveness, according to most teachers. The teachers and the school management are satisfied with the six-year continuity and with the good atmosphere.

Chapter 8: Analysis

Introduction

The main study includes three case studies conducted in schools A, B and C. The findings are introduced for each school separately in chapters 5, 6 and 7.

The study was directed to answer three key research questions (chapter 1, p. 9) as follows:

1. What are the characteristics of effective six-year high schools according to stakeholders' points of view?
2. In what aspects are stakeholders' own schools regarded as effective/ineffective (from the same points of view)?
3. What is the level of satisfaction of stakeholders with their own school?

The three previous chapters (5-7) suggested answers to these key research questions relating to each school separately. The answers are based on an ideal picture of effective six-year high school, the reality in the schools examined and stakeholders' satisfaction, which is linked also to gap between desire and reality. Chapter 8 intends to give more general answers to the research questions, viewing all schools together and indicating also differences (among schools and stakeholders) if existing. Answering these key research questions enabled to find links between variables and to develop models and theories. The models/theories are directed to offer explanations for deficiencies found and suggest possible reasons for their existence. Such models might also fit additional six-year high schools having similar characteristics and/or shortcomings. The analysis presented in chapter 8 was helpful in order to word recommendations for improvement (chapter 9, p. 358).

Chapter 8 addresses the following themes:

1. **Aggregation of all three schools:** viewing all three schools together stressing the differences and similarities among schools and among groups of stakeholders. Such a view is about to give general answers to the research questions. This section also introduces differences between schools and stakeholders.
2. **Linkage between variables:** linkage was examined by correlation factors (quantitative data) and interviews' results. These links were the basis for creation of models/theories.
3. **Models and theories:** based on the data gathered in all three schools and the links mentioned above, a general model of six-year high school effectiveness was developed. It introduces a general picture of the main components of the effective six-year high

school and the links between them. The general model enabled to derive more specific models/theories dealing with the most significant components of the six-year high school effectiveness found in the research. These models address the following themes:

- The principal.
- The teachers (knowledge, personality, communication, students' evaluation, high expectations towards students, teachers' motivation).
- Collaboration among stakeholders.
- Resources (including the physical environment, school and class size and teachers' rewards).
- Organisational culture and climate.
- Parental involvement.
- Teamwork.
- Discipline.
- Students' motivation (including social life at school and school's flexibility and pressure).
- Students' achievements.

4. Summary.

Aggregation of all three schools

Introduction

Chapter 5-7 introduced each school's findings separately. This section intends to present the picture of all schools together according to all four kinds of stakeholders and to make comparisons among schools and stakeholders. Relating to the quantitative data, in order to examine if the differences are significant, statistical analysis was used. Analysis of variance was used for comparing the three schools and two-sample hypothesis tests examined the significance of differences between parents and students ($\alpha \leq 0.01$). A complete view of the questionnaires' results for students and parents in all three schools together and separately, is introduced in appendix O (p. 460).

The coming subsections are directed to offer answers to the three research questions mentioned above (desired effectiveness, reality and satisfaction) concerning all three schools.

The following themes are addressed:

- Collaboration.
- The principal.
- The teachers.
- Other issues: school and class size, motivation, organisational culture, physical environment, timetable, social life, extracurricular studies, discipline, high standards and expectations, grouping, management of information, six-year continuity, the school counsellor, studying opportunities, students with special needs and focus on homework.
- Stakeholders' satisfaction.

Collaboration

Students and parents' views

To students and parents, collaboration among stakeholders is expressed by questions 1-5 (appendix O, table O.1, p. 460). The first five questions and the findings of all three schools together are shown in figure 8.1.

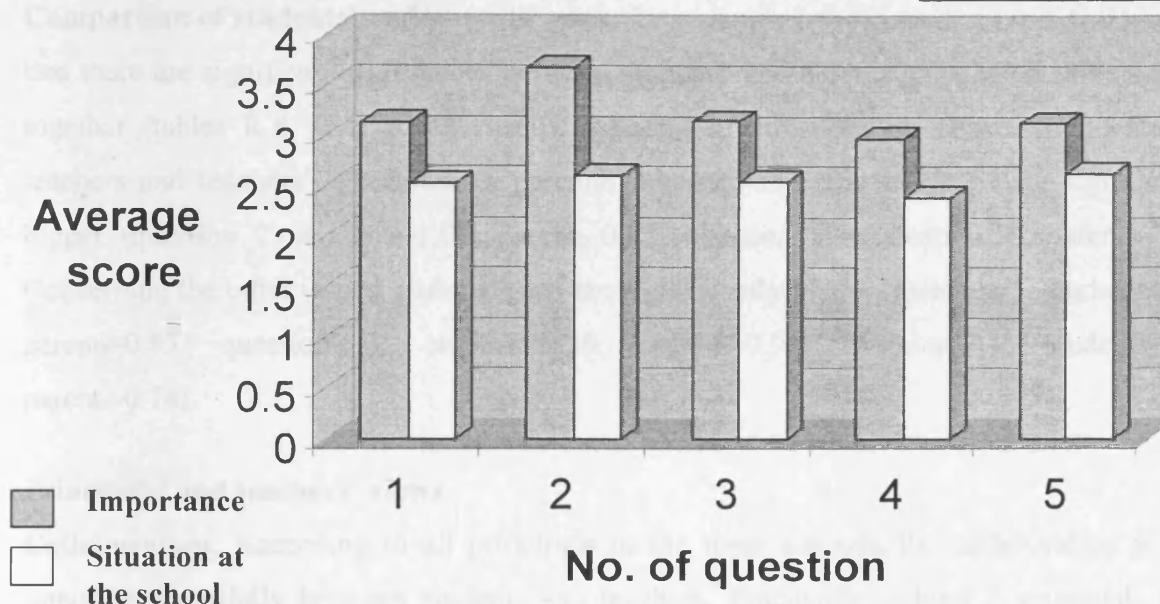
According to figure 8.1, students and parents perceive all kinds of collaboration as important. To students, the greatest gap between desire and reality relates to collaboration between students and teachers (question no. 2: 1.08) and the meaning of this finding is that according to students' aggregated view, there is a great problem concerning the collaboration they have with their teachers. The smallest gap relates to teachers' agreement to parental involvement (question 5: 0.50). To students, this issue is less problematic than all the others relating to collaboration. Parents on the other hand, perceive collaboration between teachers and parents as the most problematic issue.

In order to examine if there is similarity or difference between the three schools (tables O.1, T.2, T.5, p. 460, 501, 504), analysis of variance was made. Based on $\alpha \leq 0.01$, the following conclusions can be reached:

Students - relating to the gaps of questions 2, 3 only (students/teachers, teachers/parents collaboration) there are significant differences between the schools. School A is the worst (question 2: 1.31, question 3: 0.76) and school B is the best relating to collaboration between students and teachers (question 2: 0.87). School C is the best relating to collaboration between teachers and parents (question 3: 0.40).

Students - Schools A+B+C: collaboration

1. Students/parents.
2. Students/teachers.
3. Teachers/parents.
4. Parents/principals.
5. Teachers' agreement to parental involvement.



Parents - Schools A+B+C: collaboration

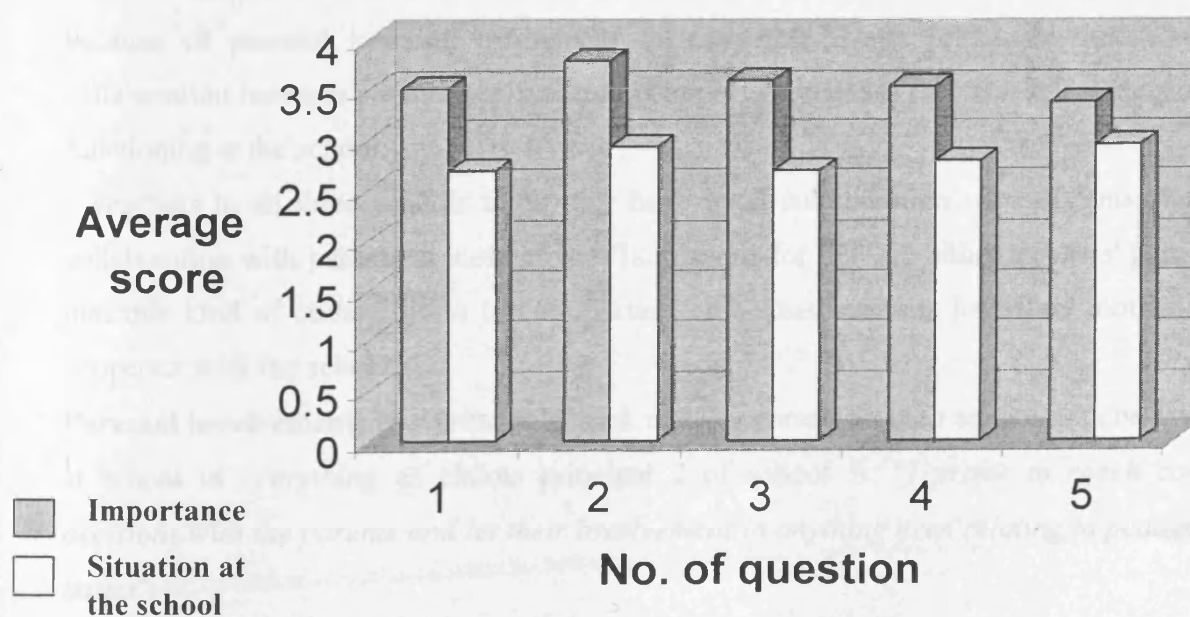


Figure 8.1: Three schools - students' and parents' views - collaboration - questions 1-5

Parents - there are significant differences between the schools relating to all issues (except question 1). School A is in the worst situation (has the highest gaps) whereas school B is the best relating to collaboration between teachers/parents and parents/principals and teachers' agreement to parental involvement (question 3: 0.55, 4: 0.39, 5: 0.17). Concerning collaboration between students and teachers, school C is the best (question 2: 0.54).

Comparison of students' and parents' gaps: Two sample hypothesis test ($\alpha \leq 0.01$) show that there are significant differences between students' and parents' gaps in all three schools together (tables R.8, O.1, p. 481, 460). Relating to collaboration between students and teachers and teachers' agreement to parental involvement, students' gaps are significantly bigger (question 2: students-1.08, parents-0.87, question 5: students-0.50, parents-0.43). Concerning the other issues, parents' gaps are significantly bigger (question 1: students-0.60, parents-0.83, question 3: students-0.59, parents-0.91, question 4: students-0.58, parents-0.74).

Principals' and teachers' views

Collaboration: According to all principals in the three schools, the collaboration is very important especially between students and teachers. Practically, school A principals think there is an effective collaboration between teachers and students, to school B principals, most teachers are collaborative and in school C, the principals think that the collaboration is reasonable but could be better if the students would have been more cooperative.

All schools' principals are aware of the ineffective collaboration among teachers/parents. In school C there is awareness of the fact that this kind of collaboration is not quite effective because of parents' lack of willingness to cooperate. Most principals think that the collaboration between parents and students is important because they can influence students' functioning at the school.

Teachers in all three schools think they have good collaboration with students and their collaboration with parents is ineffective. The reasons for that are either teachers' perception that this kind of collaboration is unimportant or because parents have low motivation to cooperate with the school.

Parental involvement: two principals think that the parents in their schools can be involved at school in everything as claims principal 2 of school B: *"I prefer to reach common decisions with the parents and let their involvement in anything even relating to pedagogical issues"*.

School A principal adds:

"Ever since I have believed that the relationships between teachers and parents are dominant and it is a key factor for students' success. Unfortunately, in school A there is stress between teachers and parents, the teachers feel threatened and real parental involvement is perceived as an undesired intervention which hurts teachers' authority".

The other four principals and most teachers think that parental involvement should be focused only on technical issues. They argue that in their own schools, parents are not involved in pedagogical issues and they justify this situation. Furthermore, there are principals and teachers who perceive parental involvement as an unimportant and disturbing phenomenon.

The principal

Students and parents' views

To students and parents, the evaluation of the principal is expressed by questions 6-14 (appendix O, table O.1-O.2, p. 460, 461). The questions and the findings of all three schools together are shown in figure 8.2.

According to figure 8.2, students and parents perceive all kinds of principal's characteristics as very important. To students, the greatest gaps relate to common management (question no. 13: 1.08) and management of resources (question no. 9: 1.04). The smallest gap relates to the influence of principal's motivation on teachers' motivation (question 12: 0.62). Parents also perceive management of resources as the most problematic issue (question no. 9: 0.83). The least problematic issue to parents' view is the principal's accessibility (question no. 14: 0.44)

Analysis of variance ($\alpha \leq 0.01$) reveals that there are significant differences between the three schools relating to the gaps of all the questions dealing with principal's characteristics, concerning students and parents (6-14) as follows (tables O.1-O.2, T.2, T.5, p. 460-461, 501, 504):

Students - School C's principal is considered to be the worst (gaps are: question 6:1.00, 7:1.07, 8:1.06, 9:1.35, 10:1.29, 11:1.22, 12:0.86, 13:1.21, 14:1.12) and school B is the best (6:0.42, 7:0.46, 8:0.36, 9:0.68, 10:0.61, 11:0.65, 12:0.34, 13:0.80, 14:0.60).

Parents - School A is perceived to be the least effective whereas school B is the best in all issues except two: the principal ability to make changes and influence on teachers' motivation in which school C principal is considered the best (question 7:0.32, 12:0.38).

Comparison of students' and parents' gaps: Two sample hypothesis tests ($\alpha \leq 0.01$) show that students' gaps are significantly bigger in comparison to parents' gaps (tables R.8, O.1-O.2, p. 481, 460-461). The meaning of this finding is that according to the aggregated view of all three schools together, parents perceive the principal as much better than their children.

Principals' and teachers' views

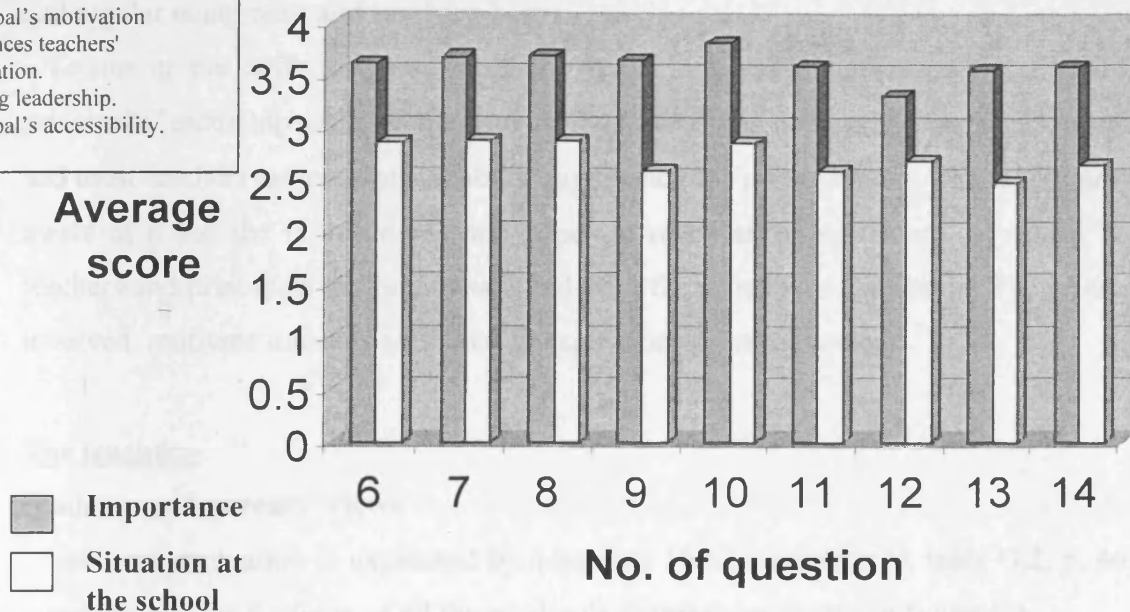
There are different attitudes of principals and teachers evaluating the school principal in each school. School A principal is aware of her difficulty to function but explains this difficulty in her wish to make substantial changes while started her job and the staff's disagreement to accept this attitude, what causes a great resistance to her leadership. School A's teachers explain her unsuccessfulness by her disability to fulfil her plans, the fact that she is against the staff, has ineffective human relations and discriminates some teachers against their colleagues.

School B's principal believes that the school should give the best service to the customers, namely the students. Because of that, he has an open door policy and he does his best to influence all teachers to be supportive and collaborative, to achieve resources for the students' welfare and development and to have renovation and changes. All teachers give him excellent appreciation saying he has vision, charisma and openness to renovations. They also claim that he succeeded to develop the school. He is perceived by all teachers as a creative leader having excellent communications with all stakeholders. The teachers' perceptions concerning the principal are similar to students' and parents'.

School C's principal believes in excellent relationships with all stakeholders, open door policy, decision-making process with the staff collaboration and improving the school's reputation in community. The teachers think she does have excellent human relations, is sometimes too much accessible, has vision and that she improved the school significantly.

- 6. Vision, values.
- 7. Ability to manage changes.
- 8. Personal relations.
- 9. Management of resources.
- 10. Ability to deal with difficult situations.
- 11. Students' belief in principal.
- 12. Principal's motivation influences teachers' motivation.
- 13. Sharing leadership.
- 14. Principal's accessibility.

Students - Schools A+B+C: evaluation of principal



Parents - Schools A+B+C: evaluation of principal

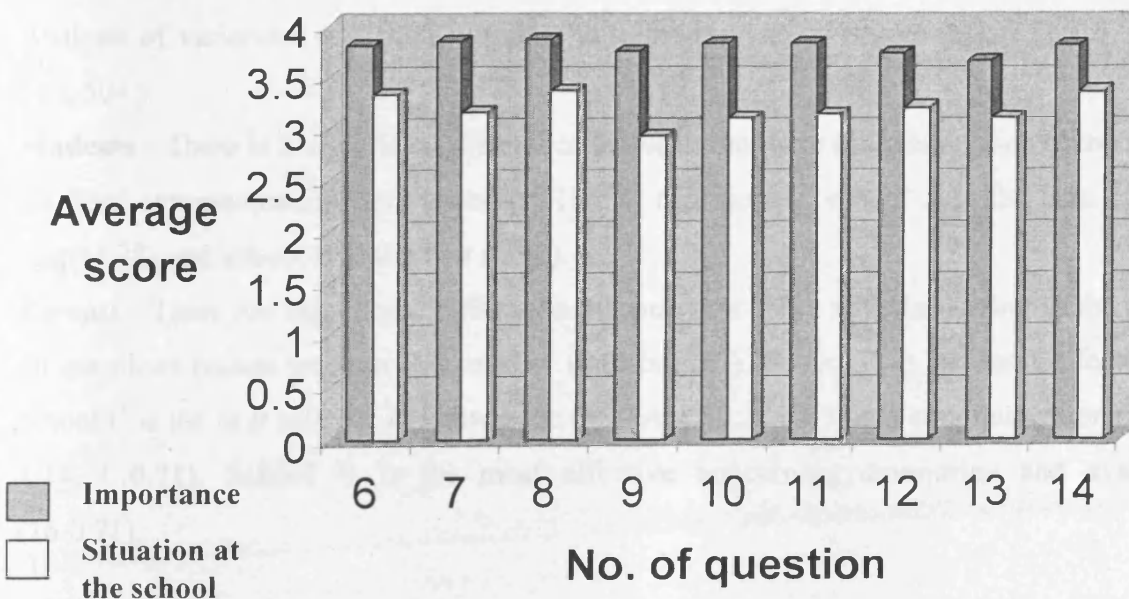


Figure 8.2: Three schools - students' and parents' views - the principal - questions 6-14

Relating to management of resources, in school A, principals and teachers' satisfaction is low because there are insufficient financial resources and there is lack of equipment. In schools B and C, principals and teachers' satisfaction with the management of resources is better. Nevertheless, concerning the availability of resources, principals and teachers in schools B and C state that there are not enough resources for supplying needs of designated and regular equipment and teaching hours.

To sum up the staff's attitudes, in school A, teachers and principals are dissatisfied with the principal's leadership and management ability. One of the main problems is lack of reliability and most teachers are pessimistic about any chance for improvement. The school principal is aware of it but she is optimistic and hopes to reach an improvement. In school B and C, teachers and principals are highly satisfied with the principal's leadership. The principals are involved, motivate the staff and have an aspiration for improvement.

The teachers

Students and parents' views

Teachers' evaluation is expressed by questions 15-18 (appendix O, table O.2, p. 461). The questions and the findings of all three schools together are shown in figure 8.3.

According to figure 8.3, students and parents perceive teachers' characteristics as very important and there are substantial gaps between importance and reality. To students and parents, the greatest gap relates to monitoring and evaluation (question 16-students' gap: 1.16, parents: 0.98) and the smallest gap relates to teachers' personality (question 17-students' gap: 1.03, parents: 0.78).

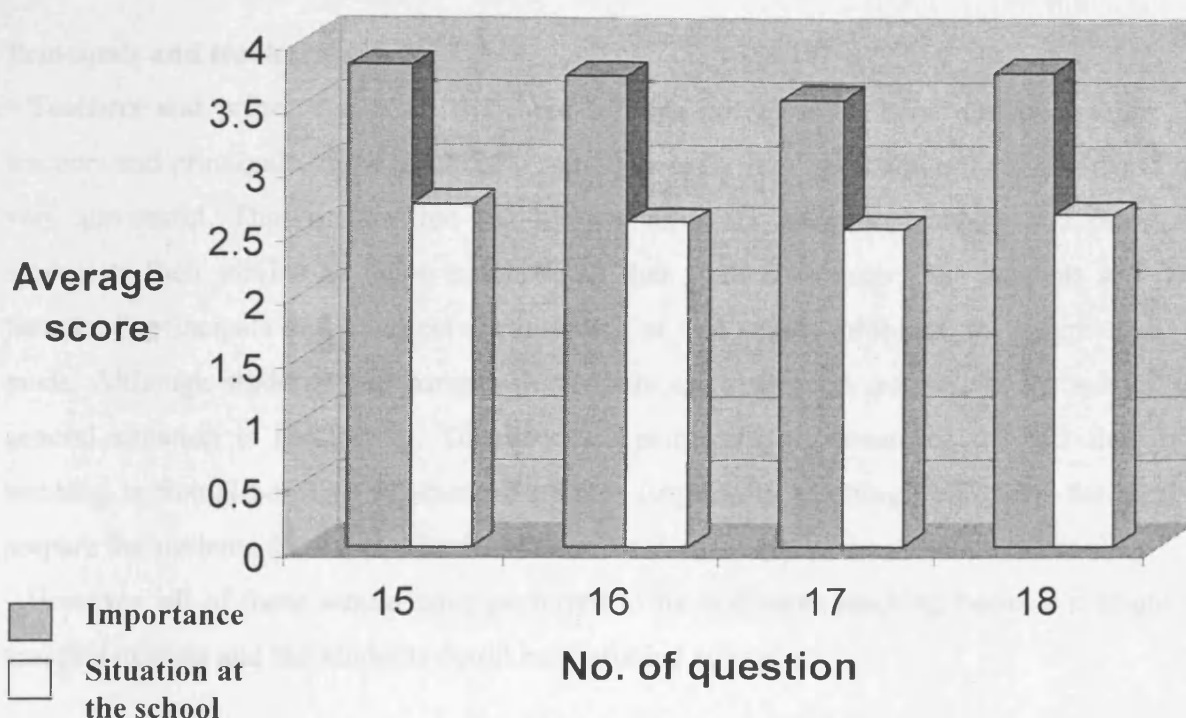
Analysis of variance ($\alpha \leq 0.01$) shows the following results (tables O.2, T.2, T.5, p. 461, 501, 504):

Students - There is a significant difference between the three schools relating to the gaps of teachers' communication only (question 18): in that respect, school A is the least effective (gap=1.28) and school B is the best (0.90).

Parents - There are significant differences between the three schools relating to the gaps of all questions except teachers' personality (question 17). School A is the least effective and school C is the best relating to knowledge (15 - A:1.20, C:0.65) and communication (18 - A: 1.14, C:0.71). School B is the most effective concerning monitoring and evaluation (16-0.71).

15. Knowledge and didactics.
 16. Monitoring and evaluation.
 17. Personality.
 18. Communication.

Students - Schools A+B+C: Teachers' characteristics



Parents - Schools A+B+C: Teachers' characteristics

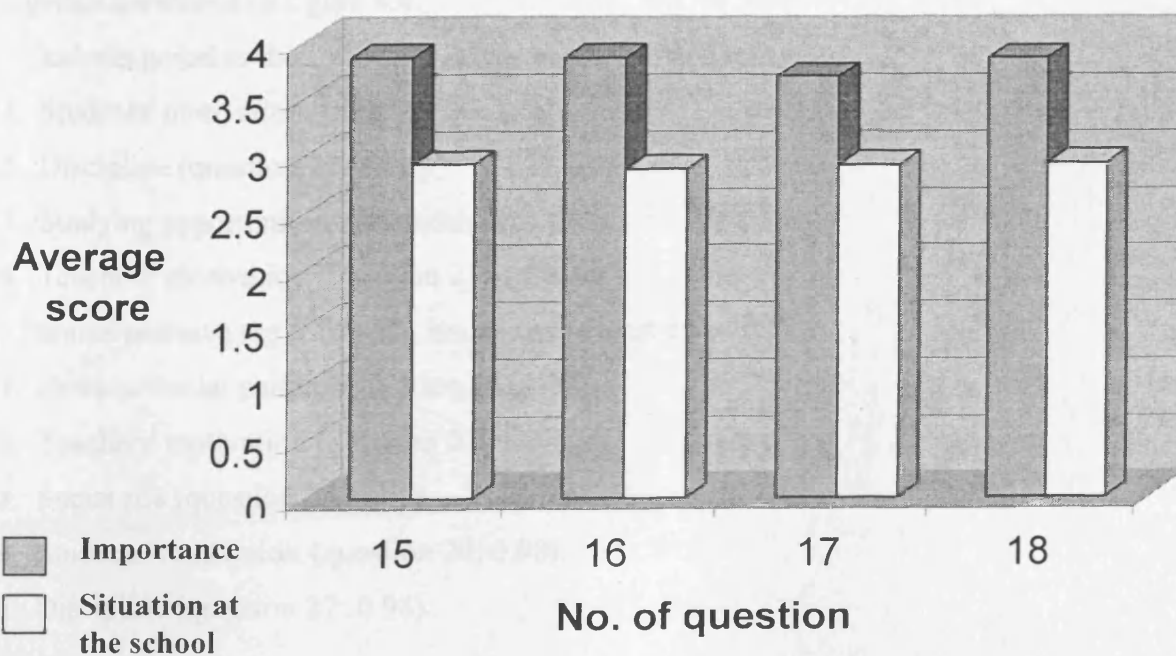


Figure 8.3: Three schools - students' and parents' views - the teachers - questions 15-18

Comparison of students' and parents' gaps: Two sample hypothesis test ($\alpha \leq 0.01$) shows that students' gaps are significantly bigger in comparison to parents' gaps (tables R.8, O.2, p. 481, 461). The meaning of this finding is that viewing of all the three schools together, parents give significant higher evaluation to teachers than the students.

Principals and teachers' views

Teachers and principals in all the three schools perceive teachers' quality as high. To teachers and principals, most teachers are good or even very good and only a minority is not very successful. That means that the service suppliers, namely, teachers and principals appreciate their service as being much better than their customers - the students and their parents. If principals and teachers are unaware of this central problem, no progress can be made. Although students and parents think there are also good teachers at the school, the general situation is ineffective. Teachers and principals are aware of the fact that most teaching is frontal because of scarce resources (especially teaching hours) and the need to prepare the students for the matriculation examinations (only in the secondary school).

However, all of them would have preferred to have diverse teaching because it might be more interesting and the students could have studied actively.

Other issues

Students and parents' views

Students and parents' views towards other issues are expressed by questions 19-37 (appendix O, table O.2-O4, pp. 461-463). The questions and the findings of all three schools together are shown in figure 8.4.

Students perceive the following issues as the least effective:

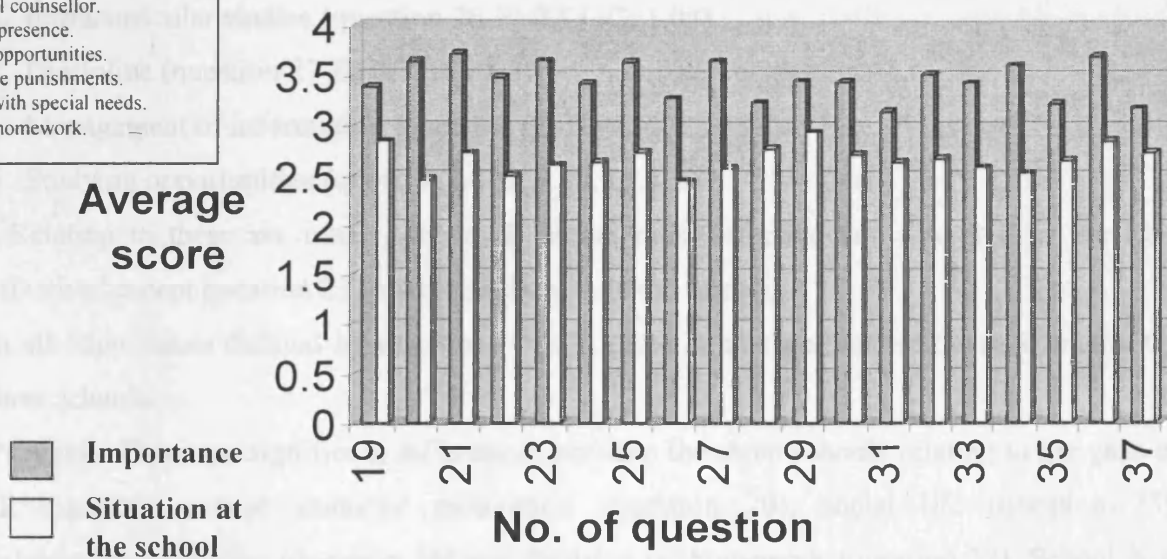
1. Students' motivation (question 20: 1.19).
2. Discipline (question 27: 1.08).
3. Studying opportunities (question 34: 1.08).
4. Teachers' motivation (question 21: 1.00).

Parents perceive the following issues as the least effective:

1. Extracurricular studies (question 26: 1.07).
2. Teachers' motivation (question 21: 1.01).
3. Social life (question 25: 1.01).
4. Students' motivation (question 20: 0.98).
5. Discipline (question 27: 0.98).

19. School and class size.
20. Students' motivation.
21. Teachers' motivation.
22. Organisational culture.
23. Physical environment.
24. Timetable.
25. Social life.
26. Extracurricular studies.
27. Discipline.
28. High standards and expectations.
29. Grouping.
30. Management of information.
31. Six-year continuity.
32. The school counsellor.
33. Students' presence.
34. Studying opportunities.
35. Reasonable punishments.
36. Students with special needs.
37. Focus on homework.

Students - Schools A+B+C: Other Issues



Parents - Schools A+B+C: Other Issues

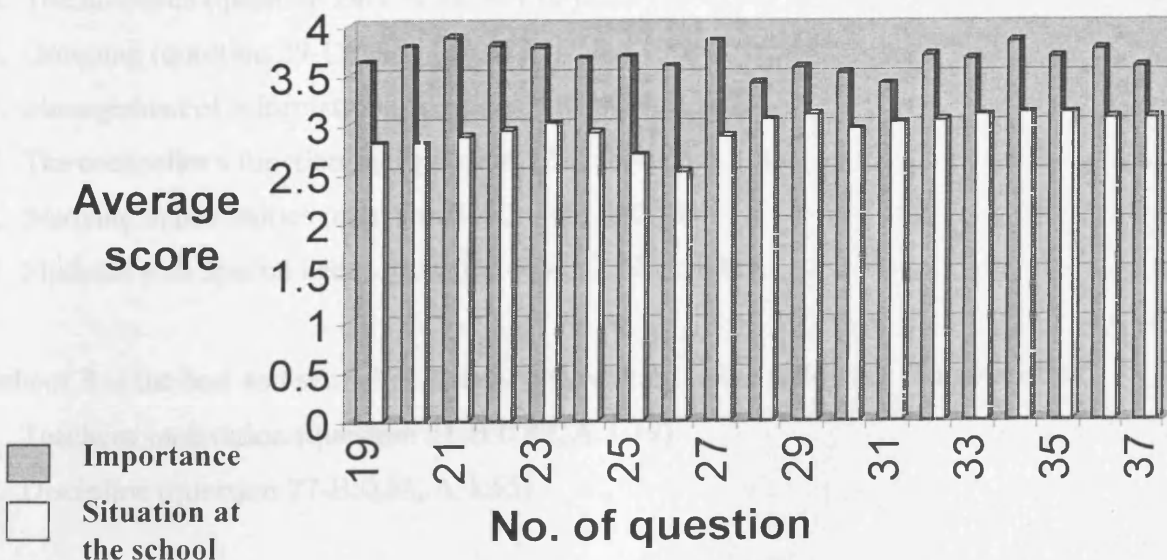


Figure 8.4: Three schools - students' and parents' views - other issues - questions 19-37

According to the aggregating view, the issues of students' and teachers' motivation and school discipline are problematic to both students and parents.

Analysis of variance ($\alpha \leq 0.01$) shows the following results (tables O.2-O.4, T.2, T.5, pp. 461-463, 501, 504):

Students - There is a significant difference between the three schools relating to the gaps of the following issues only:

1. School culture (question 22-B: 0.69, C: 1.17).
2. The physical environment (question 23-B: 0.82, A: 1.16).
3. Extracurricular studies (question 26-B: 0.54, C: 1.04).
4. Discipline (question 27-B: 0.73, C: 1.32).
5. Management of information (question 30-B: 0.56, C: 0.98).
6. Studying opportunities (question 34-B: 0.83, C: 1.24)

Relating to these six issues, school B is the most effective and school C is the least effective (except question 23 in which school A is the worst).

In all other issues defined by questions 19-37, there is no significant difference among the three schools.

Parents - There are significant differences between the three schools relating to the gaps of all questions except students' motivation (question 20), social life (question 25), extracurricular studies (question 26) and focusing on homework (question 37). School A is the least effective and school C is the best relating to the following characteristics:

1. School and class size (question 19- C:0.59, A:0.95).
2. School culture (question 22-C:0.56, A:1.27).
3. The physical environment (question 23-C: 0.43, A:1.15).
4. The timetable (question 24-C:0.45, A:1.02).
5. Grouping (question 29-C:0.17, A:0.69).
6. Management of information (question 30-C:0.29, A:0.82).
7. The counsellor's functioning (question 32-C:0.36, A:0.81).
8. Studying opportunities (question 34-C:0.40, A:0.91).
9. Students with special needs (question 36-C:0.39, A:1.12).

School B is the best and school A is the worst relating to the following characteristics:

1. Teachers' motivation (question 21-B:0.80, A:1.19).
2. Discipline (question 27-B:0.63, A:1.55).

3. High expectations (question 28-B:0.15, A:0.53).
4. Six-year continuity (question 31-B:0.15, A:0.57).
5. Students' presence (question 33-B:0.35, A:0.76).
6. Reasonable punishments (question 35-B:0.35, A:0.70).

Comparison of students' and parents' gaps: Two sample hypothesis test ($\alpha \leq 0.01$) shows that students' gaps are significantly bigger in comparison to parents' gaps (tables R.8, O.2-O.4, p. 481, 461-463) except two issues: school/class size (question 19) and social life (question 25). The meaning of this finding is that according to the aggregated view of all three schools together, parents perceive all these issues as less problematic than the students.

Principals' and teachers' views

School and class size: The teachers and principals of the three schools have a totally different view in comparison to students/parents. In their mind, the classes are too crowded and this is one of the most problematic factors decreasing school effectiveness because the staff cannot give students appropriate support. The teachers and principals prefer schools having six classes in each grade.

Students' motivation: To principals and teachers, students' motivation is insufficient and some of them are low motivated (a minority). The reasons for low motivation according to teachers and principals are home factors, personal ability, teachers' interest and expectations and lack of resources. School A and C's teachers think that the major factors influencing motivation are those of the students and their environment and not school's parameters.

Organisational culture: Principals and teachers in school A, are dissatisfied with their school's culture. School A does not encourage teachers' initiative, there is no real feeling of six-year high school either in the junior high school or in the secondary school. The teachers of the young students do not feel they belong to a six-year high school and there is no learning and pedagogic continuity. The problem is that there are two groups of teachers, each of which teaches in a different school. School A's teachers agree that the school culture encourages student support but sometimes works against their interests. There is unhelpful atmosphere and the school management does not allow the staff to participate in decision making process. The organisational culture does not really encourage openness and innovation and there is a great uncertainty.

In school B and C the situation in this respect is better according to principals and teachers. The organisational culture in these schools nurtures mutual assistance and support among

students and teachers and there is openness. Both schools (B, C) nurture teamwork and in both of them there is criticism relating to the exaggerated open door policy. The staff prefers more formal and hierarchical decision-making process instead of direct apply to the school principal. The school has an aspiration that each student would fulfil his/her potential and the school management supports this approach. In school B there is a clear preference of students' interests and therefore they feel very well. In school C the management tries to balance between students' and teachers' interests and the existence of good atmosphere and good relations with the principal and among the staff is very important. Most teachers in school B and C are optimistic and hope to reach improvement during the next years whereas school A's teachers are more pessimistic and do not believe there will be better in the future.

The physical environment: Principals and teachers in the three schools think there is lack of classrooms, designated equipment such as computers and so on.

High expectations: Principals and teachers in all three schools think that an effective teacher should develop high expectations towards students because they believe in the self-fulfilling prophecy. Most of them think that expectations should be realistic, not too low but also not too high. All of them think that there are teachers who have high expectations towards their students and such a perception encourages the students to develop and succeed. However, there are others who have high expectations towards high achieving students and low expectations towards low achieving students.

According to the principals and teachers, only in school B does the principal ask the teachers to have high expectations and to increase them continuously. Nevertheless, there are teachers in school B who think that the principals' expectations are too high.

Social life: All principals and most teachers think that students' social life at school is very important and the school should deal with it. To teachers and principals, all three schools do have lots of activities offering opportunities for social relations. Only a minority thinks it is not enough. Some of them think that social life influences students' satisfaction and their motivation. A minority thinks that social activities should not necessarily be managed by the school. These activities may disturb regular studying and therefore clear borderlines should be fixed.

Discipline: According to teachers in school A, there is a substantial problem of discipline as claims teacher 1:

"The discipline at the school is not good and it is worse in the junior high than in the secondary school. There are some reasons for that: there are many problematic

students that in the past would not have been accepted to the school, there is no special role holder for discipline and role holders tend to be nice with the students and to leave the hard work to the regular teachers".

The teachers and principals in schools B and C describe the discipline as reasonable and dependent mainly on teachers with the management's assistance. To all the three principals, the discipline in their schools is good.

Teamwork: Schools A's principals and teachers perceive teamwork as ineffective in their school. There is also no six-year curricular continuity and there are actually two separated schools. The teachers and principals in schools B and C are more satisfied with the teamwork and the six-year continuity.

Students and parents: general view of the gaps of questions 1-37

Tables 8.1 and 8.2 summarise all the gaps relating to questions 1-37 for students and parents. The items' gaps are sorted in decreasing order. Some of the gaps have asterisks indicating that according to analysis of variance (appendix T, tables T.2, T.5, p. 501, 504) in these issues there is no significant difference among the three schools.

Table 8.1 shows that to students the most problematic issues are students' motivation, monitoring and evaluation of students, teachers' communication, knowledge and collaboration with students, sharing leadership, discipline, lack of opportunities, management of resources, the physical environment and teachers' personality and motivation. On the other hand, the students have no problems with focusing on homework, high expectations, teachers' agreement to parental involvement, grouping, six-year continuity and school/class size. There are no significant differences among the three schools relating to students' motivation, monitoring and evaluation, teachers' knowledge and personality.

According to Table 8.2, parents look upon the following issues as ineffective: extracurricular studies, teachers' and students' motivation, monitoring and evaluation, discipline, teachers' knowledge, communication with students and collaboration with students and parents, social life at the school, collaboration between teachers and parents and organisational culture. High expectations, six-year continuity and teachers' agreement to parental involvement are perceived as the least problematic issues. There are no significant differences among the three schools relating to extracurricular studies, students' motivation and social life at the school.

No.	Question	Gap
1	20. Students' willingness to study.	1.19 *
2	16. Teachers' ability to monitor and evaluate students properly.	1.16 *
3	18. Teachers' communication with students.	1.12
4	15. Teachers' knowledge and didactics.	1.10 *
5	2. Collaboration between students and teachers at school.	1.08
6	13. Sharing leadership with staff and students.	1.08
7	27. Discipline at school.	1.08
8	34. The existence of many studying opportunities.	1.08
9	9. Principal's ability to control, acquire and manage resources and budgets.	1.04
10	23. Physical environment.	1.04
11	17. Teachers' personality.	1.03 *
12	21. Teachers' willingness to teach.	1.00 *
13	11. Students' belief in principal.	0.99
14	22. Organisational culture and atmosphere.	0.98
15	10. Principal's ability to deal with difficult situations.	0.97
16	14. Principal's accessibility to teachers, students and parents.	0.95
17	25. Social life at school.	0.91 *
18	32. The school counsellor functioning.	0.85 *
19	33. Students' continuous presence at school.	0.85 *
20	36. Special treatment for students with special needs.	0.85 *
21	26. Additional studies beyond regular program.	0.83
22	7. Principal's ability to manage changes and to make initiatives.	0.81
23	8. Principal personal relations with staff, parents and students.	0.81
24	24. Weekly timetable and number of subjects being taught simultaneously.	0.79 *
25	6. Principal's vision, values and way of thinking.	0.74
26	30. Management of information at school.	0.74
27	12. Principal's motivation influences teachers' motivation.	0.62
28	1. Collaboration between students and parents at school.	0.60 *
29	3. Collaboration between teachers and parents at school.	0.59
30	4. Collaboration between parents and principals at school.	0.58 *
31	35. Reasonable punishments.	0.57 *
32	19. School and class size.	0.54 *
33	31. A continuity between junior high school and secondary school.	0.52 *
34	29. Grouping is a good system for studying.	0.51 *
35	5. Teachers' agreement to parental involvement at school.	0.50 *
36	28. High standards and expectations towards students held by teachers.	0.47 *
37	37. Focus on homework.	0.44 *

Table 8.1: Students - gaps of questions 1-37 - general view

(* There is no significant difference among the three schools)

No.	Question	Gap
1	26. Additional studies beyond regular program.	1.07 *
2	21. Teachers' willingness to teach.	1.01
3	25. Social life at school.	1.01 *
4	16. Teachers' ability to monitor and evaluate students properly.	0.98
5	20. Students' willingness to study.	0.98 *
6	27. Discipline at school.	0.98
7	15. Teachers' knowledge and didactics.	0.94
8	18. Teachers' communication with students.	0.92
9	3. Collaboration between teachers and parents at school.	0.91
10	2. Collaboration between students and teachers at school.	0.87
11	22. Organisational culture and atmosphere.	0.85
12	1. Collaboration between students and parents at school.	0.83 *
13	9. Principal's ability to control, acquire and manage resources and budgets.	0.83
14	19. School and class size.	0.82
15	17. Teachers' personality.	0.78 *
16	23. Physical environment.	0.77
17	24. Weekly timetable and number of subjects being taught simultaneously.	0.75
18	4. Collaboration between parents and principals at school.	0.74
19	34. The existence of many studying opportunities.	0.74
20	10. Principal's ability to deal with difficult situations.	0.72
21	36. Special treatment for students with special needs.	0.70
22	7. Principal's ability to manage changes and to make initiatives.	0.69
23	11. Students' belief in principal.	0.69
24	32. The school counsellor functioning.	0.66
25	13. Sharing leadership with staff and students.	0.57
26	30. Management of information at school.	0.57
27	35. Reasonable punishments.	0.57
28	33. Students' continuous presence at school.	0.56
29	12. Principal's motivation influences teachers' motivation.	0.52
30	37. Focus on homework.	0.52 *
31	8. Principal personal relations with staff, parents and students.	0.50
32	6. Principal's vision, values and way of thinking.	0.48
33	29. Grouping is a good system for studying.	0.47
34	14. Principal's accessibility to teachers, students and parents.	0.44
35	5. Teachers' agreement to parental involvement at school.	0.43
36	31. A continuity between junior high school and secondary school.	0.39
37	28. High standards and expectations towards students held by teachers.	0.37

Table 8.2: Parents - gaps of questions 1-37 - general view

(* There is no significant difference among the three schools)

Satisfaction

Students and parents' views

Students and parents' satisfaction is expressed by questions 41-63 (appendix O, table O.5-O6, p. 464, 465). The questions and the findings of all three schools together are shown in figure 8.5.

- Students' and parents' satisfaction, sorted from the highest score to the lowest one is shown in tables 8.3, 8.4.

No.	Question	Score
1	62. There is high pressure on students at school.	3.03 *
2	57. Teachers treat parents properly.	2.99 *
3	58. School size is reasonable (not too big).	2.98 *
4	50. There are good teachers at my school.	2.98 *
5	47. Principal's ability to advance meaningful changes.	2.96
6	60. Teachers have high expectations towards students.	2.92 *
7	59. Class size is reasonable (not too big).	2.85 *
8	61. Students have high chance to succeed.	2.83
9	53. School's buildings, equipment, etc. are appropriate.	2.80
10	45. Students' achievements are high.	2.79
11	54. There is a good social life at my school.	2.78 *
12	42. Teachers get enough salary and material rewards.	2.74 *
13	43. General atmosphere at my school is positive.	2.73
14	46. Relations between school principal and stakeholders.	2.72
15	41. Teachers get enough satisfaction, achievement, etc.	2.70 *
16	48. Decision making process is appropriate.	2.65 *
17	44. Discipline at my school is appropriate.	2.63
18	49. School has good reputation in community.	2.56
19	55. Monitoring and evaluation of students is done well.	2.56
20	52. School's resources and finance are managed properly.	2.55
21	63. School has reasonable flexibility for students.	2.48 *
22	56. Teachers treat students properly.	2.48 *
23	51. Students have strong desire to study.	2.23 *

Table 8.3: Students' satisfaction with the school

(* There is no significant difference among the three schools)

The meaning of the asterisks is that according to analysis of variance (appendix T, tables T.3, T.6, p. 502, 505) in these issues there is no significant difference between the schools. These scores (*) might be a relevant indication for the general satisfaction in all the three schools.

No.	Question	Score
1	57. Teachers treat parents properly.	3.46
2	47. Principal's ability to advance meaningful changes.	3.33
3	58. School size is reasonable (not too big).	3.30
4	48. Decision making process is appropriate.	3.26
5	46. Relations between school principal and stakeholders.	3.21
6	61. Students have high chance to succeed.	3.19 *
7	43. General atmosphere at my school is positive.	3.18
8	53. School's buildings, equipment, etc. are appropriate.	3.12
9	50. There are good teachers at my school.	3.11
10	44. Discipline at my school is appropriate.	3.08
11	49. School has good reputation in community.	3.08
12	60. Teachers have high expectations towards students.	3.07
13	59. Class size is reasonable (not too big).	3.06
14	52. School's resources and finance are managed properly.	3.05
15	63. School has reasonable flexibility for students.	3.02
16	56. Teachers treat students properly.	3.01
17	41. Teachers get enough satisfaction, achievement, etc.	3.00
18	45. Students' achievements are high.	2.98
19	62. There is high pressure on students at school.	2.95 *
20	55. Monitoring and evaluation of students is done well.	2.91
21	42. Teachers get enough salary and material rewards.	2.78
22	54. There is a good social life at my school.	2.76
23	51. Students have strong desire to study.	2.61

Table 8.4: Parents' satisfaction with the school

(*: There is no significant difference among the three schools)

Students: According to students, the lowest satisfaction is with students' motivation (51: 2.23), treatment of students by teachers (56: 2.48) and school's flexibility (63: 2.48). Students' highest satisfaction is with treatment of parents by teachers (57: 2.99), school size (58: 2.98) and the fact that there are good teachers at the school (50: 2.98). Analysis of variance (appendix T, Table T.3, p. 502) shows that concerning all these items (and the others having an asterisk), there is a significant similarity among the three schools. Therefore, these values can represent a general view. Relating to the following issues there is a significant difference between the three schools: principals' ability to make changes, students' chance to succeed, the physical environment, students' achievements, general atmosphere, relations between the principal and stakeholders, discipline, school's reputation, monitoring and evaluation of students and management of resources. Concerning all these issues, school B's students are most satisfied whereas school A's students are least satisfied

(except school's reputation in which school C's students are least satisfied and the physical environment in which school C's students are most satisfied).

Parents: Parents are least satisfied with students' motivation (51: 2.61) and social life at the school (54: 2.76) and they are most satisfied with how teachers treat them (57: 3.46), principal's ability to make changes (47: 3.33), school size (58: 3.30) and decision making process (48: 3.26). Relating to all items, there are significant differences between the three schools (except two items: students' chance to succeed and pressure at the school). In most issues, school A's parents are least satisfied among the three schools (except school's reputation and the way teachers treat parents). Comparing the schools, school C's parents have the maximal satisfaction with students' achievements, relations with the principal, the principal's ability to make changes, decision making process, the physical environment, the way teachers treat students and parents, school and class size, high expectations and school's flexibility. School B's parents have the maximal satisfaction with teachers' intrinsic rewards, the atmosphere, discipline, school's reputation, the existence of good teachers, students' motivation, management of resources, social life, students' evaluation and class size.

Comparison of students' and parents' scores: Two-sample hypothesis test ($\alpha \leq 0.01$, tables R.7, O.5-O.6, p. 480, 464-465) shows that parents' scores of satisfaction are significantly bigger in comparison to students' scores (except the issue of social life at school). The meaning of this finding is that according to the aggregated view of all three schools together, parents' satisfaction is significantly higher than students'.

Principals' and teachers' satisfaction (not discussed earlier)

Teachers' rewards: All teachers and principals are dissatisfied with teachers' extrinsic rewards but they are more satisfied with the intrinsic rewards. The main problem is that the salary is low and teachers have to invest many working hours without any real compensation. The intrinsic satisfaction is higher and that is the main reason why teachers remain in the educational field.

Students' achievements: Principals' and teachers' satisfaction with students' achievements in the three schools is usually medium. Only principal B's satisfaction is good.

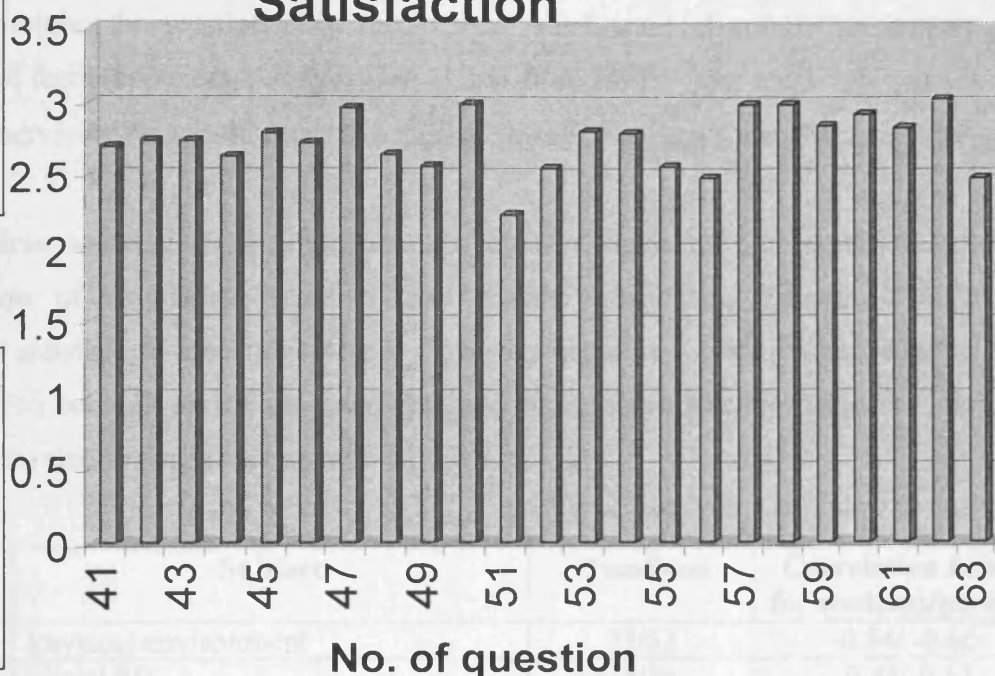
School's flexibility: all the principals are highly satisfied with their schools' flexibility. Only school C is exceptional because the principal thinks that there is flexibility only in the secondary school and not in the junior high.

- 41. Intrinsic rewards.
- 42. Extrinsic rewards.
- 43. Atmosphere.
- 44. Discipline.
- 45. Students' achievements.
- 46. Relations between stakeholders.
- 47. Changes' initiation.
- 48. Decision making.
- 49. School's reputation.
- 50. There are good teachers.
- 51. Students' desire to study.
- 52. Management of resources

**Average
score**

- 53. The physical environment.
- 54. Social life.
- 55. Students' evaluation.
- 56. Treatment of students.
- 57. Treatment of parents.
- 58. School size.
- 59. Class size.
- 60. High expectations.
- 61. Students' chance to succeed.
- 62. High pressure on students.
- 63. School's flexibility.

Students - Schools A+B+C: Satisfaction



Parents - Schools A+B+C: Satisfaction

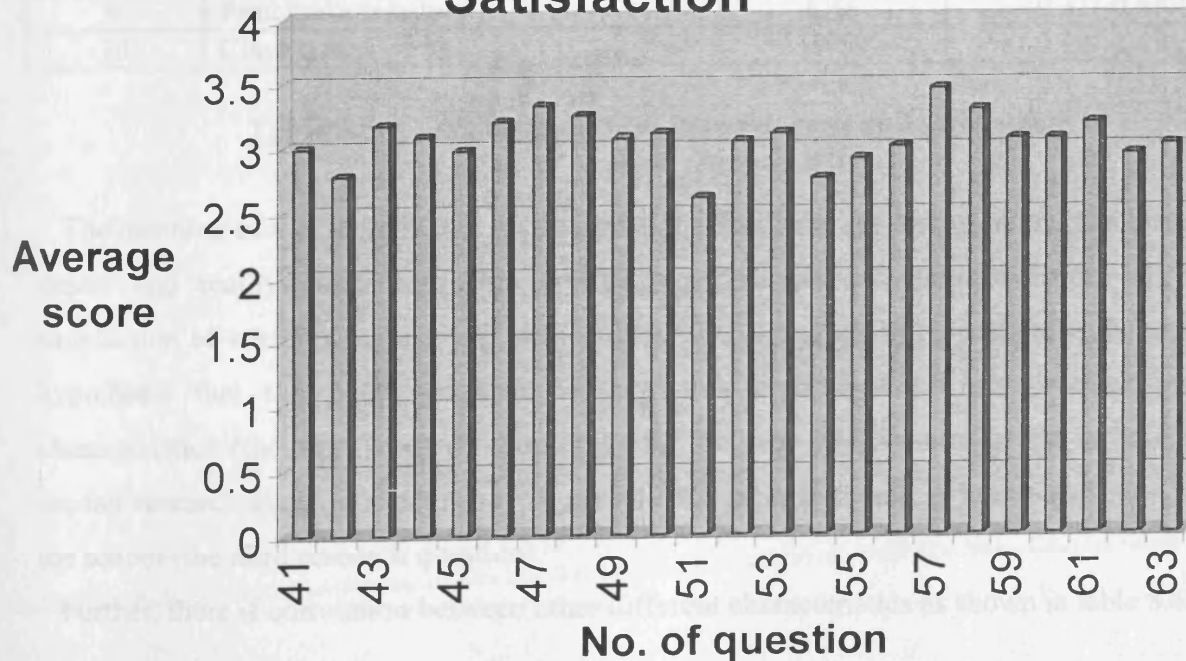


Figure 8.5: Three schools - students' and parents' views - satisfaction - questions 41-63

Linkage between variables

The study reveals that there is linkage between characteristics that were examined as follows:

- By examining the questionnaires' results there was found high correlation between some of them (appendix U, tables U.1, U.2, p. 506, 507).
- The interviews' responses show that there is linkage between some characteristics.

Questionnaires: viewing all the three schools together, there are high correlation factors between gaps of responses (students' and parents' responses, questions 1-37) and stakeholders' satisfaction (questions 41-63). There is negative correlation between the gaps and satisfaction because as the gap increases, the score of satisfaction decreases and vice versa. The correlation factors are as follows:

No.	Subject	Questions	Correlation factor for students/parents
1	Physical environment	23/53	-0.54/-0.66
2	Social life	25/54	-0.44/-0.53
3	Discipline	27/44	-0.41/-0.52
4	Monitoring and evaluation	16/55	-0.39/-0.46
5	Motivation	20/51	-0.38/-0.45
6	Principal's ability to initiate changes	7/47	-0.34/-0.36
7	Management of resources	9/52	-0.34/-0.28
8	School size	19/58	-0.33/-0.36
9	Principal's relations	8/46	-0.31/-0.41
10	Class size	19/59	-0.30/-0.45

Table 8.5: Correlation factors between gaps and satisfaction

The meaning of this table is that for example, the first item shows that as the gap between desire and reality concerning the physical environment increases (question 23), the satisfaction of students and parents with it decreases. These findings encourage the study's hypothesis that the perceived gap between the importance of school effectiveness characteristics (the first research question) and the real effectiveness at the school (the second research question) might have been an indication for stakeholders' satisfaction with the school (the third research question).

Further, there is correlation between other different characteristics as shown in table 8.6:

No.	Subject	Questions	Correlation factor (students/parents)
1	Management of resources and physical environment	52/53	0.45/0.54
2	Teachers/parents' collaboration and teachers' agreement to parental involvement (gaps)	3/5	0.41/0.58
3	Motivation and students' achievements	51/45	0.36/0.53
4	Teachers' motivation and students' motivation (gaps)	21/20	0.36/0.46
5	Students' evaluation and students' motivation	55/51	0.35/0.49
6	Principal's vision/values and discipline (gaps)	6/27	0.21/0.44
7	Social life and students' motivation	54/51	0.30/0.41
8	Principal's vision/values and parental involvement (gaps)	6/5	0.24/0.37
9	Principal's vision/values and culture (gaps)	6/22	0.35/0.36
10	Culture/climate and common management (gaps)	22/13	0.34/0.34
11	Teachers' personality and discipline (gaps)	27/17	0.19/0.30

Table 8.6: Correlation factors between characteristics of school effectiveness

The meaning of table 8.6 and the interview results is as follows:

- Correlation factors (students and parents) and interviews' results (principals and teachers) show that there is a linkage between management of resources and the physical environment. Teachers and principals complain that there is lack of financial resources and because of that there is shortage of designated and regular equipment and ineffective maintenance.
- Teachers and principals have an influence on parental involvement. There is positive correlation between teachers/parents collaboration, principal's vision and values and teachers' agreement to parental involvement. According to the interviews, in the three schools examined, the organisational culture does not encourage effective parental involvement but one that is focused mainly on technical and financial issues. That gives an indication to the linkage between parental involvement and the management of financial resources. The organisational culture is correlated with the principal's vision and values.
- Students' motivation is correlated with their achievements (students and parents). According to principals and teachers, motivation has a direct influence on achievements and because of low motivation there are low achievements. Students' motivation is correlated with schools' characteristics such as teachers' motivation, students' monitoring

and evaluation and social life at the school. According to principals and school B teachers, teachers should increase students' motivation because it is school's dependent. School A and C's teachers think students' motivation is mainly home's dependent. Question 12 (importance) reveals that students and parents in all the three schools think that the principal's motivation has high influence on teachers' motivation. This linkage is also expressed by school B teachers' interview. The teachers claim that their principal is highly motivated and he causes the staff to have high motivation.

- To parents, the discipline at the school is highly correlated to principal's vision and values. It has lower correlation with teachers' personality. The interviews reveal that effective discipline, which is necessary but insufficient, is influenced by teachers and the school management. If the school creates an atmosphere of strictness and consistency, the discipline is likely to be better. There are some teachers who are unable to maintain discipline and in such extreme cases the school management cannot help.
- Organisational culture is correlated with collaborative teamwork. According to principals' and teachers' attitudes, whole school teamwork influences the six-year continuity that is very important for six-year high school effectiveness.

Based on the general answers to the research questions analysed so far, the coming sections introduce models/theories which analyse the findings and the links among different variables and compare them to the research literature.

Models and theories

Introduction

Following the discussion addressing general answers to the research questions, the next sections introduce models intended to analyse and explain the findings and the answers of the research questions. The first subsection deals with a general model for Israeli six-year high schools' effectiveness based on the links described earlier. Figure 8.6 (p. 321) introduces this model which intends to be the basis for additional models designating to analyse specific phenomena as detailed later on. This general model evaluates school effectiveness according to outcomes, namely, students' achievements. Based on this general model, the next sub-sections introduce more specific models/theories analysing additional themes and comparing them to the research literature.

The next subsections address the following models/theories:

- The general model.
- The principal.
- The teachers (knowledge, personality, communication, students' evaluation, high expectations towards students, teachers' motivation).
- Collaboration among stakeholders.
- Resources (including the physical environment, school and class size and teachers' rewards).
- Organisational culture and climate.
- Parental involvement.
- Teamwork.
- Discipline.
- Students' motivation (including social life at school and school's flexibility and pressure).
- Students' achievements.

The general model

The meaning of the term "*students' achievements*" mentioned above relates to a more general aspect than just achievements in learning of certain subjects. It includes all benefits students may acquire during the educational process at the school. Such benefits might be amongst others, curricular, social, behavioural, psychological or conceptual achievements. Each arrow in figure 8.6 (p. 321) links between two squares in which the first might have an influence on the second one (this principle exists also in other models in chapter 8). Thus, students' achievements might be influenced directly by the quality of the school's educational process and students' motivation to study. The educational process might be influenced by teachers' characteristics, resources, six-year curricular continuity, parental involvement and maintaining of discipline. The teachers, the principal and parents may influence students' motivation. The principal's leadership might influence teachers' characteristics, the organisational culture, parental involvement, students' motivation, discipline and resources. The principal deals with resources' management but the Ministry of Education allocates the main financial share. The six-year curricular continuity which was found to be very important for six-year high school effectiveness, depends on teamwork (which is dependant on the organisational culture created by the

principal). However, the Ministry of Education might influence it too. According to its policy, the junior high and the secondary school teachers have different employers - the government and the local municipality. The two groups of teachers also belong to different unions. Without having effective curricular continuity, the six-year high school cannot fulfil its mission. The management of resources might also influence the quality of the educational process because it determines the physical environment, class size, the principal's ability to reward teachers and so on.

The principal

As mentioned earlier (p. 299), analysis of variance ($\alpha \leq 0.01$) shows that there are significant differences between the three schools relating to the gaps of all the questions dealing with principal's characteristics (students and parents). To students, school C principal is considered to be the worst (has the maximal gaps) and school B is the best (has the minimal gaps). To parents, school A is perceived to be the least effective (has the maximal gaps) whereas school B is the best in all issues except two: the principal ability to make changes and influence on teachers' motivation in which school C principal is considered the best (minimal gaps). In school A, teachers and principals are dissatisfied with the principal's leadership and management ability. On the other hand, in school B and C, teachers and principals are highly satisfied with the principal's leadership. The principals are involved, motivate the staff and have an aspiration for improvement.

The most recent comprehensive reviews of studies dealing with the relationship between leadership and school effectiveness are these of Hallinger and Heck (Hallinger and Heck, 1996a, 1996b, 1997; Heck and Hallinger, 1999). These reviews give evidence that leadership influences the organisational system through three primary avenues:

- **Purposes:** the literature exhorts leaders to articulate their vision, set clear goals and create shared mission.
- **Structure and social networks:** The principal's role in such an organisation involves creating structures that facilitates communication and collaboration among staff around the school's valued purposes (Leithwood et al, 1997).
- **People:** There is evidence that administrative activity is largely directed at influencing people in the school organisation. It reinforces the image of school leadership as a people-oriented activity.

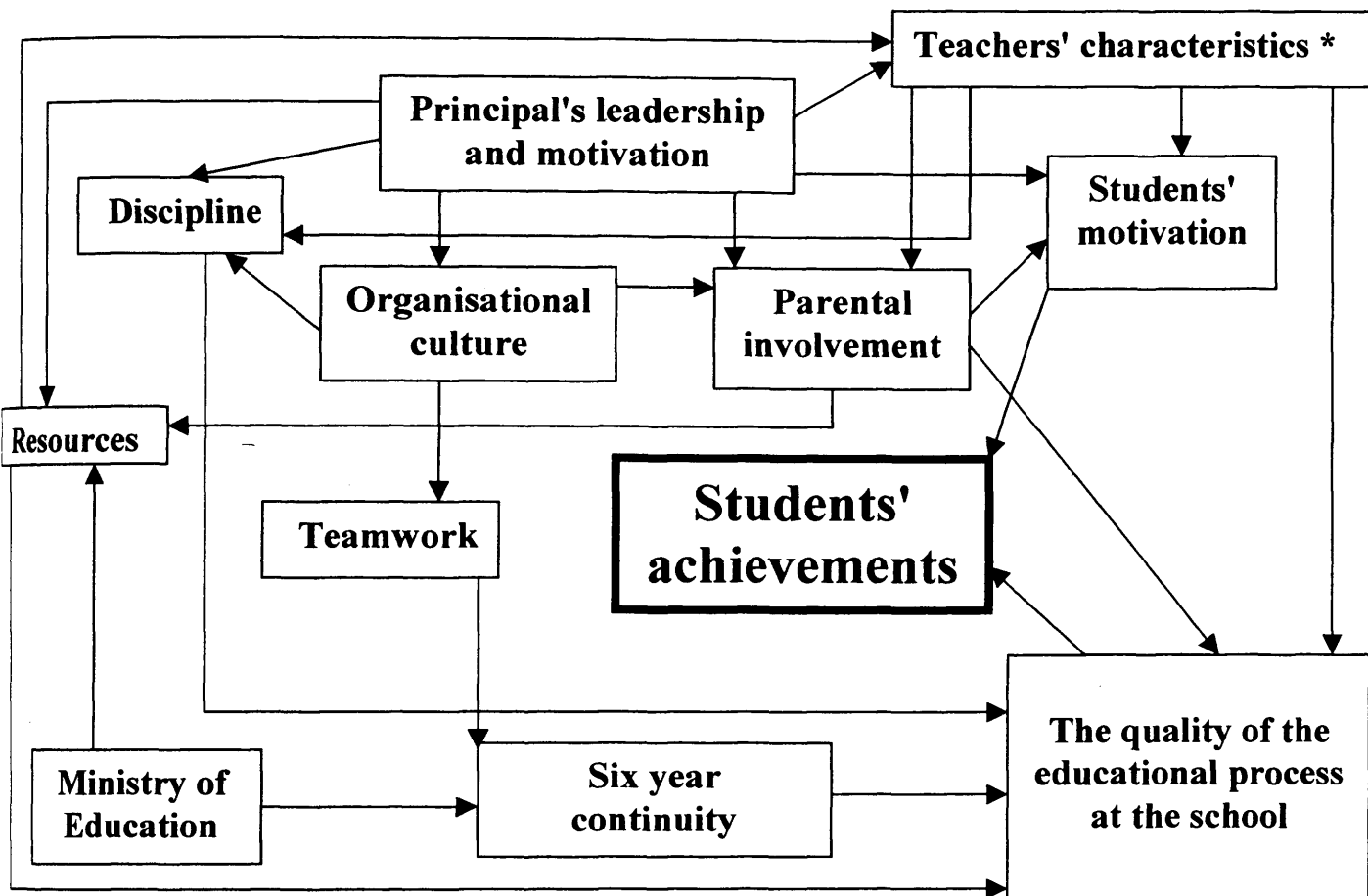


Figure 8.6: A general model for students' achievements in a six-year high school

(* Knowledge, personality, communication, students' evaluation, expectations, motivation and collaboration with students and parents).

Comparing the case studies' findings to the literature shows that teachers and principals in the three schools claim that the school principals do have vision but it is not well realised. The students in schools A and C are dissatisfied with the principals' vision whereas school B's students and school B and C's parents think that their principal's vision is closer to an ideal model.

Concerning the issue of collaboration, communication and people influencing, all stakeholders perceive the relationships of school B principal with the staff, parents and students as better than school A and C principals. Because of that, in school B, teachers' motivation might be higher because the principal's high motivation influences positively teachers' motivation. This finding is obtained by examining question 12 (principal's motivation influences teachers' motivation) in which school B's gap is much lower in

comparison to the others in both students' (0.34) and parents' (0.42) responses (as mentioned earlier, this is a statistically significant difference). This finding is adequate also to what school B's teachers say about their head. According to stakeholders, only school B principal's leadership is similar to Leithwood et al's (1997) definition of effective leaders: they are good role models, having lots of energy, being genuine, modelling openness, having good people skills and showing evidence of learning by growing and changing themselves. Another characteristic of school B principal is the proactive selection and replacement of staff as has been picked out in many studies (Austin and Holowenzak, 1985; Wimpelberg, 1987; Strigfield and Teddlie, 1987, 1988; Teddlie et al, 1987), involving the head hunting of good recruits, and the pressuring of less competent staff to either improve or move on to another school. Bridges (1988) provided detailed information on how to manage, and then dismiss if necessary, incompetent teachers. Principal B knows how to recruit good teachers but he also persists to dismiss (or improve) incompetent ones. The dismissal of teachers is very difficult because they have tenure (obtained after two years). Because of that, principal B is perceived to be a more effective leader than principals A and C. This effective leadership might influence the whole institutional effectiveness.

Figure 8.7 (p. 323) introduces a typology defining four types of school's principals depending on students' and teachers' rating of principals' leadership:

Type 1: High students' rating and high teachers' rating.

Type 2: Low students' rating and high teachers' rating.

Type 3: Low students' rating and low teachers' rating.

Type 4: High students' rating and low teachers' rating.

Principal A is evaluated poorly by students and teachers and therefore she is a type 3. Principal C's leadership is perceived as effective by teachers and ineffective by students and therefore she is a type 2. Principal B is highly evaluated by students and teachers and therefore he is a type 1.

Figure 8.8 (p. 323) introduces a similar typology defining four types of school's principals depending on parents' and teachers' rating of principals' leadership:

Type 1: High parents' rating and high teachers' rating.

Type 2: Low parents' rating and high teachers' rating.

Type 3: Low parents' rating and low teachers' rating.

Type 4: High parents' rating and low teachers' rating.

Principal A is evaluated poorly by parents and teachers and therefore she is again a type 3. Principal B and C's leadership is perceived as effective by teachers and parents and therefore they are both considered to be type 1.

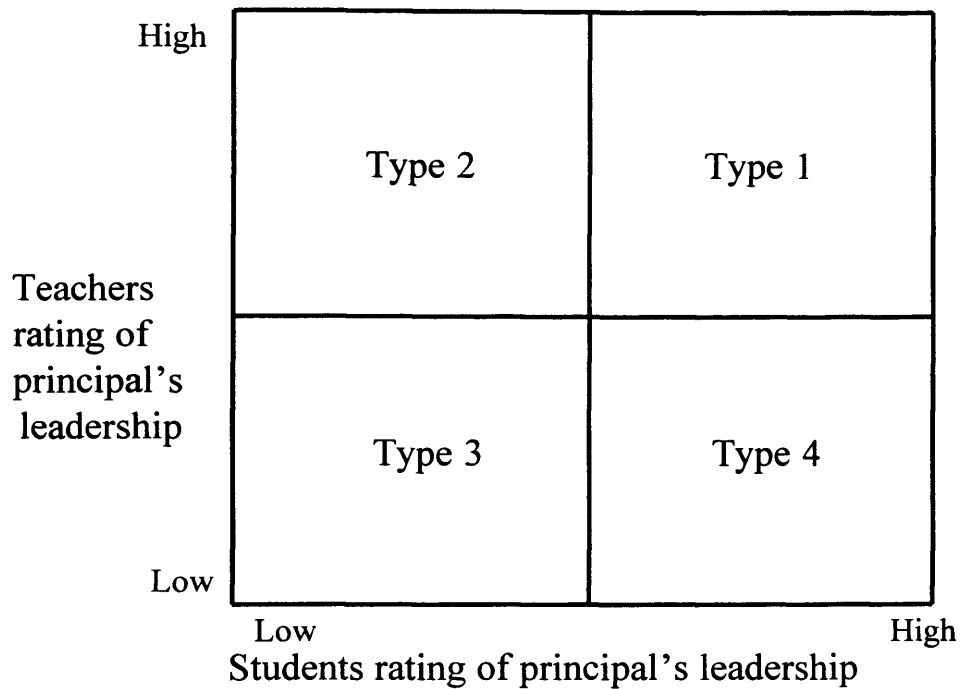


Figure 8.7: Typology of principals' leadership - teachers and students

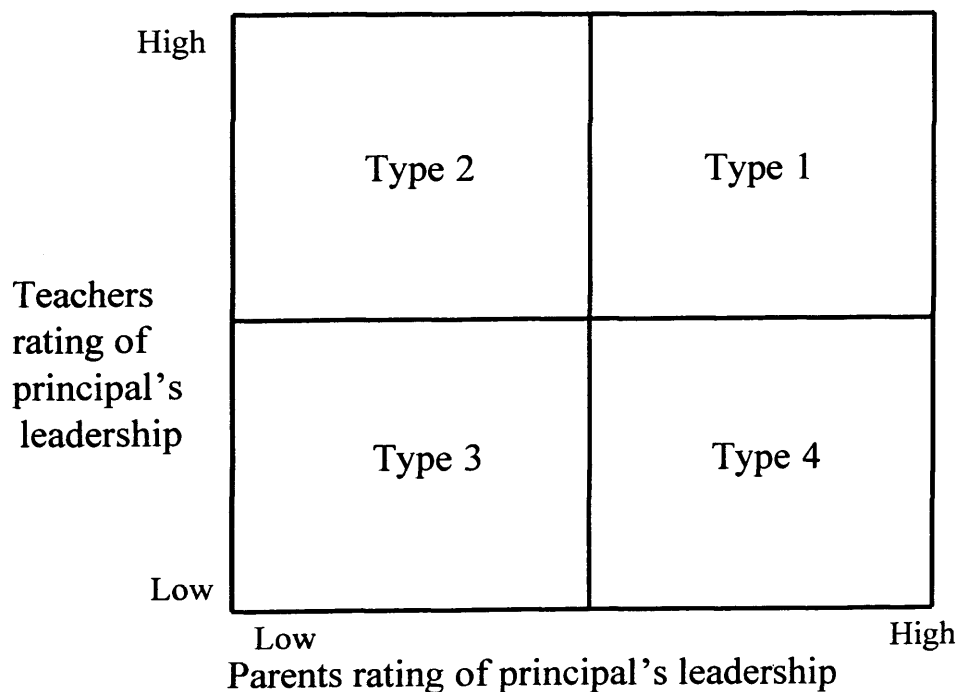


Figure 8.8: Typology of principals' leadership - teachers and parents

The Teachers

According to students and parents in all three schools, teachers' quality is one of the most ineffective characteristics at their school. In spite of the fact that there is high variance in principals' leadership (as mentioned above), to students and parents, there is low variance in teacher's quality and it is perceived as low in all the three schools. On the other hand, in all the three schools, teachers and principals perceive teachers' quality as high.

Erickson and Shultz (1992) suggest that there should be a genuine conversation between pupils and teachers. To Coleman (1998), students think that the good teacher is one who has technical skills together with good personal relationships with students. In the three schools examined, students and parents think that there is a substantial problem in both technical, motivational and communicational teachers' skills. This finding is remarkable also according to the open-ended questions of both students and parents. They write that there are teachers, who do not behave appropriately, have low motivation, are not professional and have bad communication with the students. Nevertheless, the teachers and principals think teachers' quality is usually high with only marginal exceptions.

Teachers' standards and expectations towards students

According to students and parents in all three schools, teachers' standards and expectations towards students are important. In all three schools, students and parents think this issue is not problematic. Principals and teachers think that an effective teacher should develop high expectations towards students and in their schools there are teachers who have high expectations but also others who have low expectations. The findings show that the school principal can influence teachers' expectations (as does exist in school B).

High expectations of students have been among the most consistent of findings in the research literature, together with the communication of such expectations so that students know them (Weber, 1971; Brookover et al, 1979; Edmonds, 1979a, 1979b, 1981; Venezky and Winfield, 1979; Teddlie and Stringfield, 1993; Stringfield and Teddlie, 1991). In comparing the three case studies' findings to the research literature it is worthy noting that in all three schools only some teachers do have high expectations and unfortunately, some of them have low expectations especially in low achieving classes. This phenomenon can explain the low motivation causing to low achievements mentioned by stakeholders. The teachers should have high expectations especially towards low achieving students. Practically, they do not believe in their chance to succeed, the students receive this message and their motivation to make effort decreases what may cause to low achievements. Another

important factor is the principal's influence on teachers' expectations. Teddlie et al (1989) note that effective principals ensure that all staff expect the very highest levels of attainment and behaviour from students. This element does exist only in principal B's behaviour that makes effort to influence teachers in order to increase their expectations and standards towards the students. This characteristic is missing in schools A and C and may influence negatively the schools' effectiveness.

According to Bamburg (1994), poor performance in school is often attributed to low ability, and ability is viewed as being immune to alteration. Therefore, poorly performing students often come to believe that no matter how much effort they put forth, it will not be reflected in improved performance. This view contrasts sharply with the predominant perspective in many other cultures, where hard work and effort are considered key to students' academic achievement. In these cultures, high expectations are maintained for all students, and if a student is not succeeding, it is attributed to lack of effort and hard work, not to insufficient intellectual ability. In the three case studies, some teachers distinguish between high and low achieving students according to their performance. These students learn to believe they cannot improve their achievements owing to low ability and therefore they may stop making effort, adopt low motivation and block their chance to make any breakthrough. Students in all three schools A, B and C do not fully understand the great importance of teachers' expectations and therefore they do not point out a substantial gap between reality and desire.

A model for teaching effectiveness

Figure 8.9 (p. 326) introduces a model for teaching effectiveness in a six-year high school. According to this model, the effectiveness of teaching is influenced by the following variables:

1. **Teachers' motivation:** it is influenced by principal's leadership, rewards (that are resources' dependent) and teachers' personality.
2. **Teachers' selection:** selection and placement of teachers is dependent on the principal's leadership and rewards especially extrinsic. Because the salary is perceived to be low, there might be shortage of candidates and school principals do not have the option to select the best out of many. Nevertheless, better principals may succeed to select better candidates (or dismiss unsuccessful ones) but they are limited.

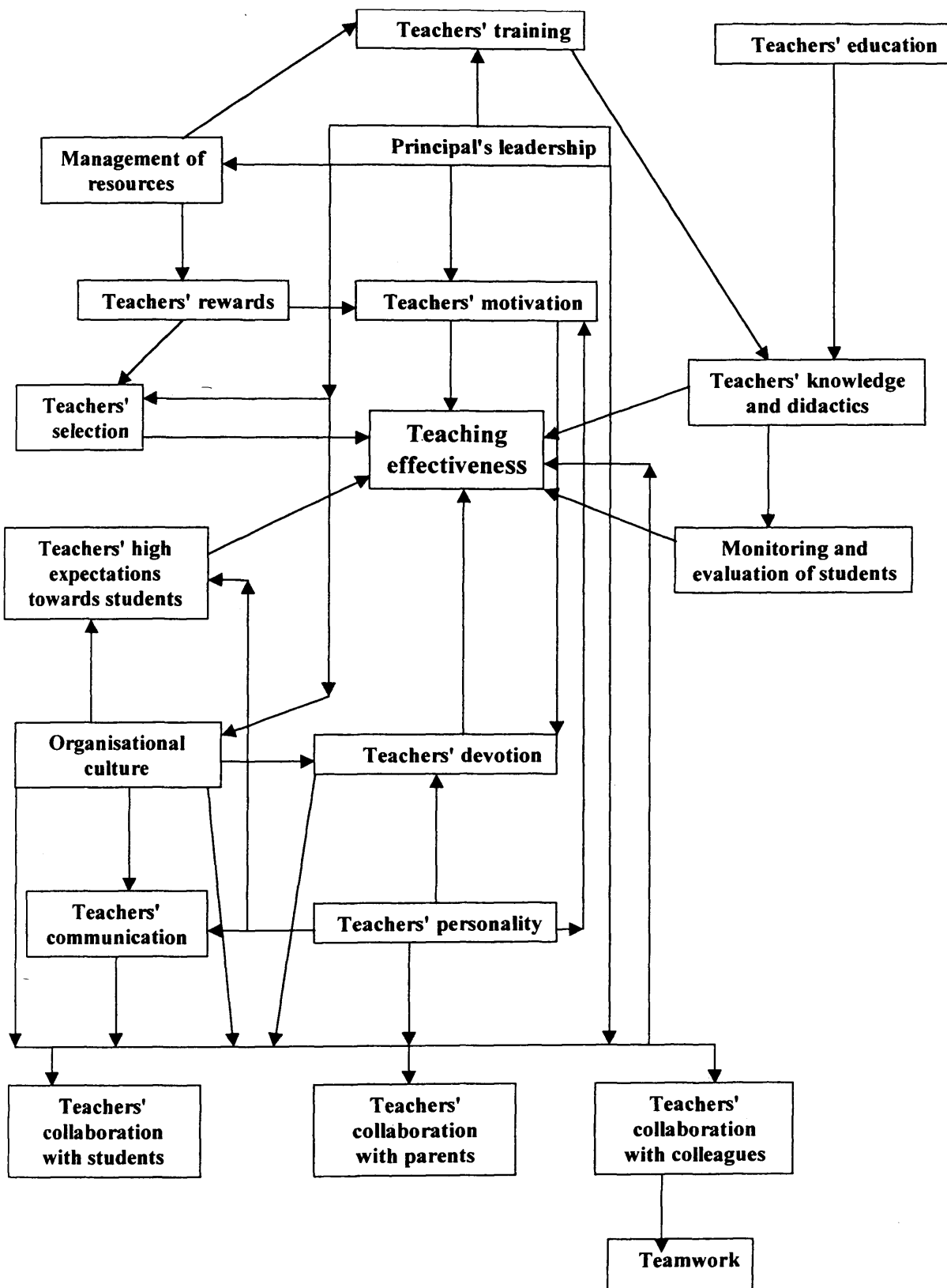


Figure 8.9: A model for teaching effectiveness in a six-year high school

3. **Teachers' expectations towards students:** the literature stresses the fact that teachers should have high expectations towards students. When these expectations are not very high, as found in the research, students' motivation might be decreased and that decreases the effectiveness of teaching. These expectations might be linked to teachers' personality but the organisational culture (influenced by the principal) might influence it and therefore it has a great importance.

4. **Teachers' knowledge and didactics:** this variable is influenced basically by teachers' education but may be improved at the school by training. Training can be initiated by the principal leadership and it is based on availability of resources. Knowledge and didactics are very important for teaching effectiveness.

5. **Monitoring and evaluation:** it is a part of knowledge and didactics and it influences teaching effectiveness.

6. **Teachers' devotion:** teachers' devotion is a function of their personality but it can be increased by motivation and encouraging and supportive organisational culture (which is shaped by the principal's leadership).

Collaboration among stakeholders

Viewing all three schools together shows that the collaboration among teachers and students and also teachers and parents is perceived by students and parents as the most important. Parents perceive the collaboration of students/teachers (question 2's gap: 0.87) and parents/teachers (question 3: 0.91) as ineffective. Students think that the collaboration of students/teachers (question 2: 1.08) is ineffective whereas the parents/teachers collaboration is more effective (question 3: 0.59). As mentioned earlier in this chapter (p. 298), the principals and teachers think there is effective collaboration between teachers and students but with parents, teachers' collaboration is ineffective. These findings are introduced in table 8.7:

Effectiveness of:	Stakeholders' views		
	Students	Parents	Teachers' and principals'
Teachers/parents collaboration	High	Low	Low
Teachers/students collaboration	Low	Low	High

Table 8.7: Collaboration of teachers/parents and teachers/students - stakeholders' views

Figure 8.10 (p. 329) introduces a typology of four types of attitudes towards these two kinds of collaboration (teachers/students and teachers/parents):

Type 1: High rating of teachers/parents' collaboration and high rating of teachers/students' collaboration.

Type 2: High rating of teachers/parents' collaboration and low rating of teachers/students' collaboration.

Type 3: Low rating of teachers/parents' collaboration and low rating of teachers/students' collaboration.

Type 4: Low rating of teachers/parents' collaboration and high rating of teachers/students' collaboration.

Students evaluate teachers/parents' collaboration as high and teachers/students' as low and therefore they are regarded as type 2. Parents evaluate teachers/parents and teachers/students collaboration as low and therefore they can be classified as type 3. On the other hand, teachers and principals evaluate teachers/parents collaboration as low and teachers/students collaboration as high. Therefore teachers and principals can be categorised as type 4.

According to Coleman (1998), students and parents are important customers of the school. When parents are satisfied with the school they may influence their children's attitudes towards the school and it can affect pupils' functioning. Relating to students and teachers collaboration, students and parents are dissatisfied whereas the teachers and principals are satisfied with this kind of collaboration. The meaning of this perceived gap is that no improvement is likely to be achieved unless the principals and teachers would be aware of their customers' dissatisfaction. Concerning teachers and parents' collaboration, all stakeholders (except students and school B's parents) agree that it is ineffective and the reason is mainly lack of willingness of both teachers and parents to make a change. Davis (1989) states that the interactions amongst teachers, students and parents largely determine the students' willingness and readiness to learn. According to stakeholders' attitudes, the ineffective collaboration found in their schools might decrease school effectiveness. The reason for that is lack of positive influence parents may have on their children.

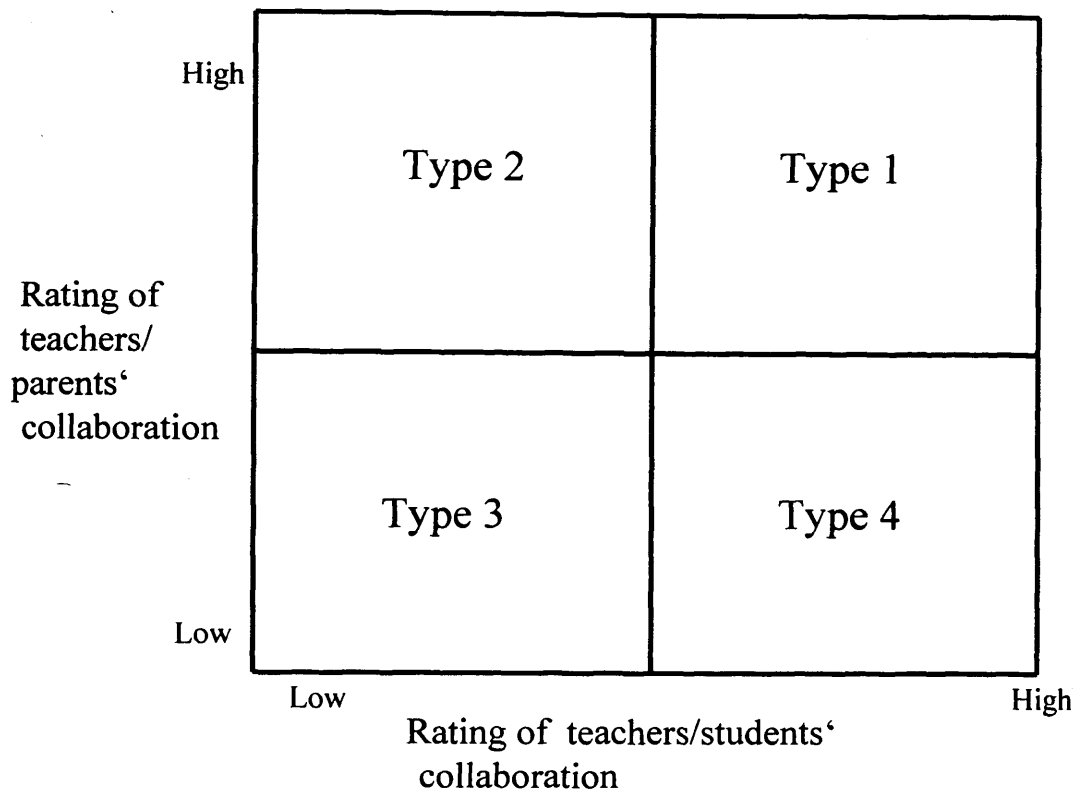


Figure 8.10: Typology of teachers/students and teachers/parents' collaboration

Resources

As mentioned earlier, although there is a variation among the staff relating to the principals' ability to manage resources, there is a general agreement among all stakeholders that resources are insufficient. The lack of resources might have an impact on school/class size, the physical environment and teachers' rewards and these factors may influence the quality of the educational process at the school. The next sub-sections address these themes and introduce a model of resources' influence on six-year high school effectiveness.

School and class size

The students and their parents in all three schools do not look upon the crowding in classes as a very problematic issue although some of them wrote critical notes about it. The teachers and principals of the three schools have a different view. In their mind, the classes are too crowded and this is one of the most problematic factors decreasing school effectiveness because the staff cannot give students appropriate support. The research literature up to 1997

is congruent with students' and parents' views claiming that smaller class size brings about only modest gains in student achievement (Ornstein, 1995). However, the British and American research literature from 1997 and on, stresses the advantage of small classes similarly to principals' and teachers' perceptions. Although there is no fully agreement upon optimal size for smaller classes, the aim is certainly to have classes with less than 20 students and perhaps as low as 15 (Achilles, 1997; Hargreaves et al, 1997; U.S. Department of Education, 1999; Picus, 2000). Although the Israeli educators do not mention such small class size (the Israelis claim that there should be about 25-30 students instead of 40) they do have a similar approach. However, changing this situation depends upon high financial resources. Although the principals do their best concerning management of resources, they cannot improve the situation owing to lack of financial resources allocated by the Ministry of Education.

The teachers and principals prefer schools having six classes in each grade. In the schools examined there are between 4 to 8 classes in each grade but this is not perceived as a substantial problem.

The physical environment

The literature stresses the importance of the physical environment to school effectiveness (Rutter et al, 1979; Mortimore et al, 1992; Riley, 1998). All stakeholders in all three schools think there is lack of classrooms, designated equipment such as computers and so on. The parents look upon this issue as less significant than the other stakeholders.

Teachers' rewards

All teachers and principals are dissatisfied with teachers' extrinsic rewards but they are more satisfied with the intrinsic rewards. The main problem is that the salary is low and teachers have to invest many working hours without any real compensation. The intrinsic satisfaction is higher and that is the main reason why teachers remain in the educational field. Students and parents in all three schools are also dissatisfied with their teachers' salary (question 42: total score is: students - 2.74, parents - 2.78) and according to analysis of variance (appendix T, table T.3, p. 502) there is no significant variance among the three schools. Students' satisfaction with their teachers' intrinsic rewards (question 41) is similar to the extrinsic rewards although it is slightly lower (total score: 2.7) whereas their parents' satisfaction is higher (3.00).

To sum-up, all stakeholders in the three schools are dissatisfied with teachers' extrinsic rewards which might have a negative impact on teachers' motivation. The teachers stress the fact that they have a reasonable motivation to continue functioning because of the intrinsic rewards but the low salary has a negative influence on their willingness to make effort. Figure 8.11 introduces a model based on the case studies' findings relating to resources' direct and indirect influence on six-year high school effectiveness.

A model of resources' influence on six-year high school effectiveness

According to figure 8.11 (p. 332), school's resources are managed by the principal but they are dependent on the Ministry of Education's allocation. Resources' availability influences the physical environment, class size and teachers' rewards. The physical environment and class size has a direct influence on the quality of the educational process and therefore on decreasing students' achievements: because lack of resources there is scarce of equipment and teaching hours and the classes are too crowded. Lack of financial resources also influences indirectly the students' motivation and achievements: teachers' low salary might decrease their motivation, what has a negative impact on students' motivation and achievements. The low salaries may also decrease the attractiveness of the teaching profession what makes the teachers' recruitment less attractive. Potential high-qualified candidates for teaching jobs might have preferred to choose a more rewarding career.

Organisational culture and climate

Parents and students think that school culture and climate are important for school effectiveness. In schools A and C it is ineffective to students' view and in school B it is better. According to parents, school A is also ineffective whereas schools B and C are better.

Principals and teachers in school A are dissatisfied with their school's culture. In school B and C the situation in this respect is better according to principals and teachers. The teachers of three schools perceive the principal as responsible for shaping the school's organisational culture and climate similarly to the research literature (Stolp and Smith, 1994) claiming that the organisational culture is mainly influenced by the leaders. If the leader does have a wide-angle view, he/she may better understand the difficult problems and complex relationships within the school. By deepening their understanding of school culture, these leaders will be better equipped to shape the values, beliefs, and attitudes necessary to promote a stable and nurturing learning environment.

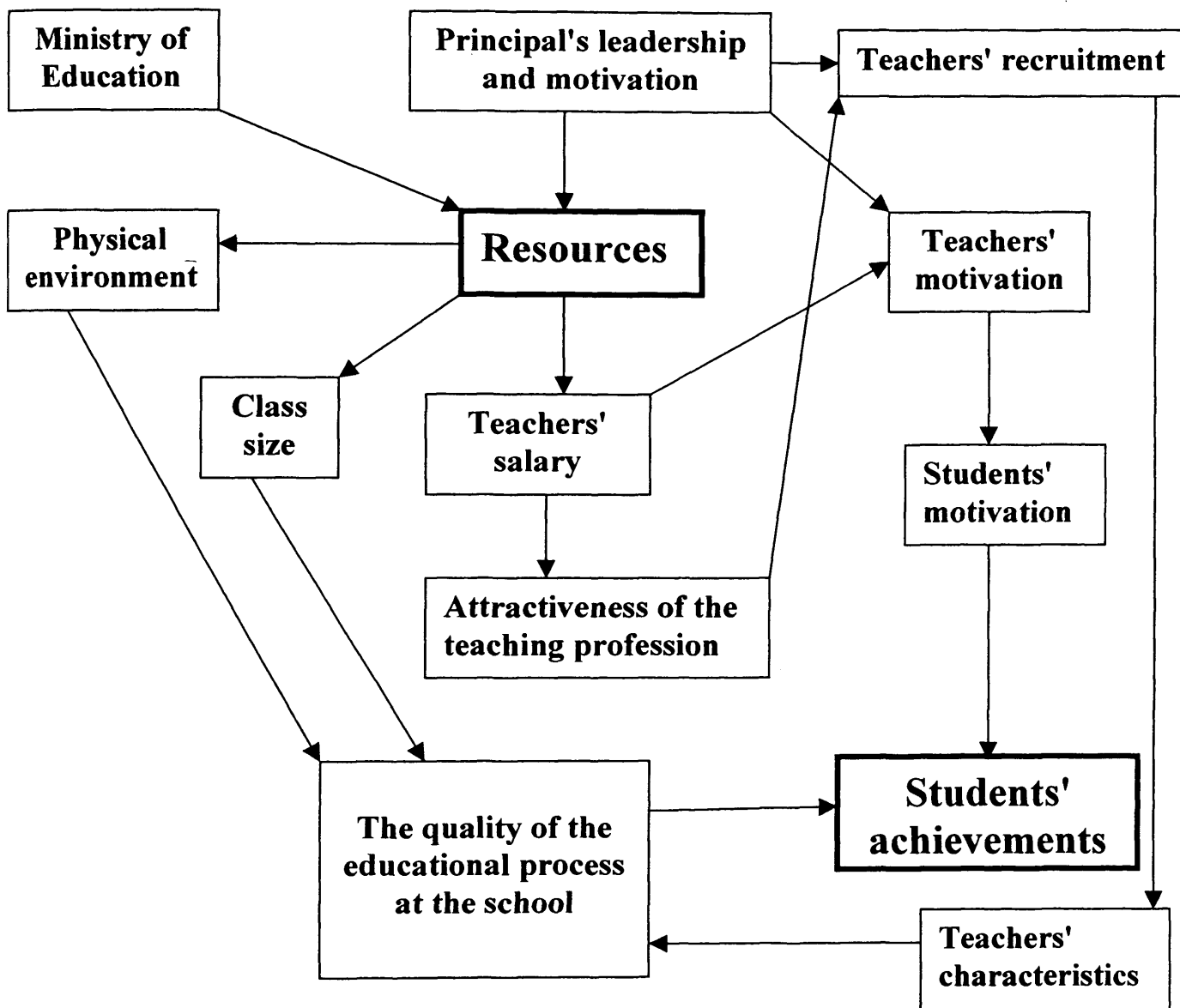


Figure 8.11: a model for resources' influence on six-year high school effectiveness

This system of meaning often shapes what people think and how they act (Stolp and Smith, 1994). This can explain the substantial differences in teachers' attitudes in school A in comparison to schools B and C. In schools B and C the principals make much effort in order to create common vision, beliefs and attitudes which are necessary to develop the school. All these components are missing in school A, the teachers do not feel part of the school and that may decrease students' achievements and school's effectiveness.

This is congruent with Brookover et al's (1978, 1979) findings indicating that school climate factors could be powerful predictors of student achievement. Healthy and sound school cultures correlate strongly with increased student achievement and motivation, and with teacher productivity and satisfaction (Brookover et al, 1978, 1979).

Figure 8.12 (p. 334) introduces a typology showing four types of school's culture based on two kinds of stakeholders rating the organisational culture, students and the staff:

Type 1: High staff's rating and high students' rating.

Type 2: Low staff's rating and high students ' rating.

Type 3: Low staff's rating and low students' rating.

Type 4: High staff's rating and low students ' rating.

Students and the staff of school A rate the school's culture as low and therefore school A is a type 3. Students and the staff of school B rate the school's culture as high and therefore school B is a type 1. Further, the staff of school C rates the culture as high whereas students' rating is low. Because of that, school C is a type 4.

Figure 8.13 (p. 334) introduces a similar typology showing four types of school's culture based on two kinds of stakeholders rating the organisational culture, parents and the staff:

Type 1: High staff's rating and high parents' rating.

Type 2: Low staff's rating and high parents ' rating.

Type 3: Low staff's rating and low parents' rating.

Type 4: High staff's rating and low parents ' rating.

Parents and the staff of school A rate the school's culture as low and therefore according to this typology, school A is a type 3. On the other hand, parents and the staff of school B and C rate the schools' culture as high and therefore schools B and C are type 1.

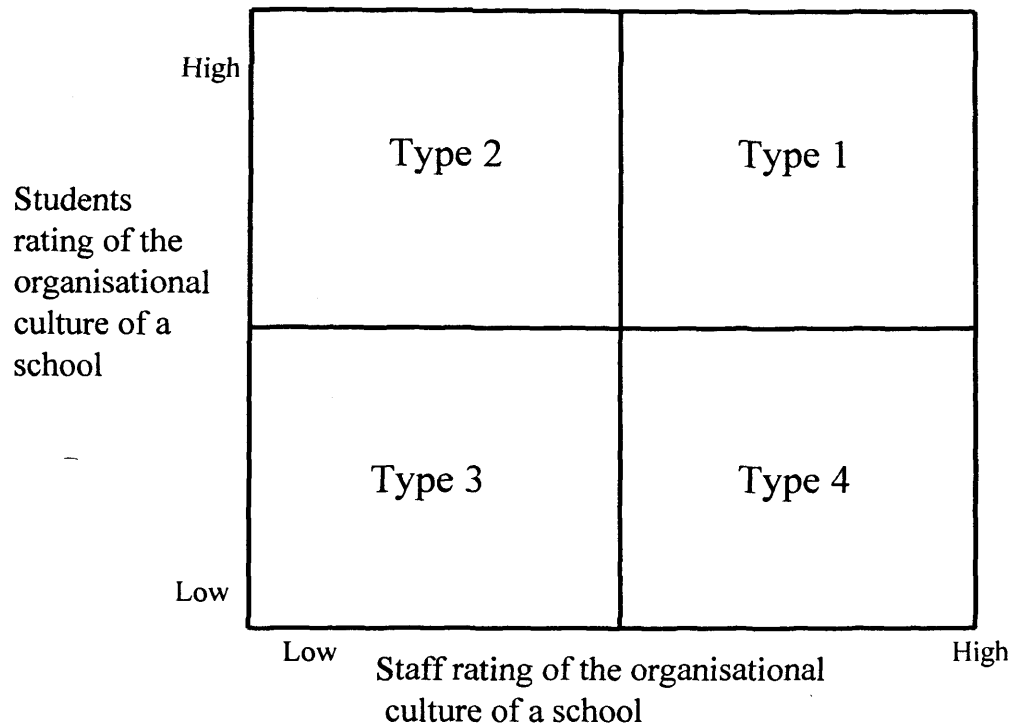


Figure 8.12: Organisational culture - students and staff's views

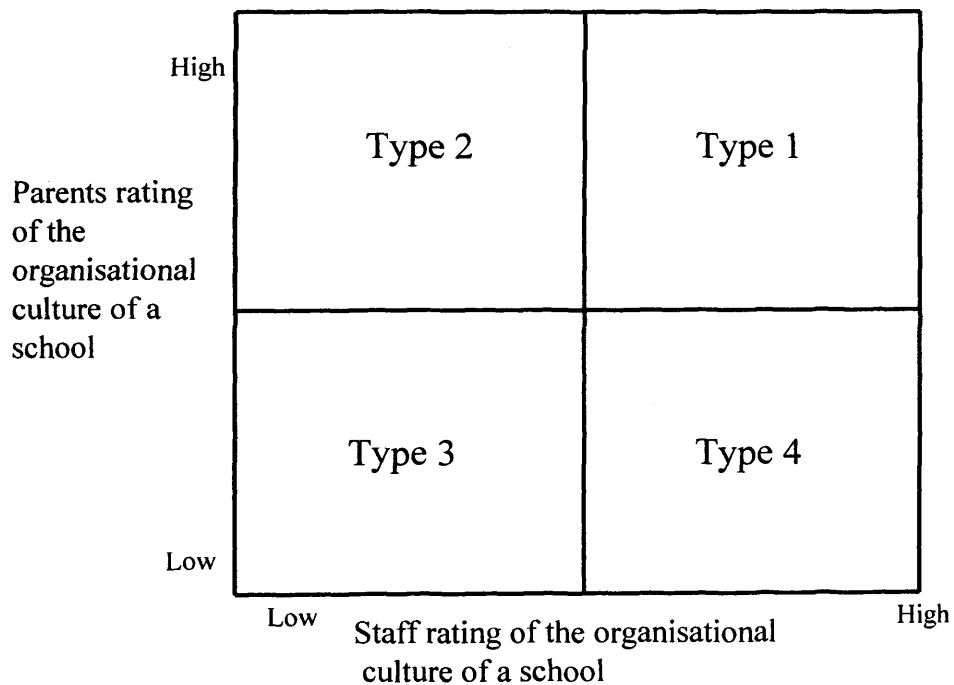


Figure 8.13: Organisational culture - parents and staff's views

Parental involvement

Students and parents think that teachers do not resist the existence of parental involvement in their own schools (question 5, the gap between desire and reality is around 0.5 in all three schools). Most principals and teachers express a different view concerning the cooperation among teachers and parents. Two principals (school A principal 1, school B principal 2) think that the parents in their schools should be involved at school in every thing. The other four principals and most teachers think that parental involvement should be focused on technical issues only.

The research literature on parental involvement indicates that parents and teachers can have cooperation that would improve learning designated activities what can help the children substantially. Such an involvement is dependent on the inviting climate the school creates. When parents are invited and given real opportunities, they tend to increase their effective involvement. Further, parents have great influence upon instructional relationships that impact directly on student commitment to and success in school. (Swick, 1991; Comer and Haynes, 1991; Epstein and Dauber, 1991; Powell, 1989; Epstein, 1987). According to stakeholders in all three schools, such an effective parental involvement does not exist in their schools. The reasons for that are either school's preventing parents from real involvement, role holders' attitudes that parental involvement is not very important or annoying or low parents' motivation to be involved. In schools A and C the parents are dissatisfied with their collaboration with the teachers and that can also explain the ineffective parental involvement. There are teachers and principals who think they have to satisfy the parents but they do not fully understand the importance of parental involvement for school effectiveness as the research literature stresses. It seems that the parents in schools A, B and C are not given real opportunities to be involved.

The lack of real parental involvement in the three schools examined may have a negative impact on students' motivation and achievements and the findings do show that stakeholders are not satisfied with students' motivation and achievements. Coleman (1998) claims that although the great advantage of parental involvement is obvious, there might be teachers' resistance towards collaboration with parents. To teachers and principals in all three schools, there are staff members who perceive parental involvement as useless or even annoying and they tend to resist any kind of parental involvement.

Figure 8.14 introduces a model of parental involvement. According to this model, the effectiveness of parental involvement which is crucial for school effectiveness and students' achievements, is influenced by the following variables:

1. **Staff's encouragement of parental involvement:** this important parameter is influenced by the organisational culture and climate shaped by principal's leadership. If the organisation's norms are to invite parents to be involved, it is more likely that they will be more involved having higher motivation.
2. **Staff's agreement to real involvement:** this issue is influenced by the same variables as the former. Such an agreement creates the difference between unvalued involvement to effective one. If parental involvement is just technical, the school cannot have the great benefits of it.
3. **Parents' motivation to be involved:** taking for granted that parents have their own priorities and they are usually busy, their motivation is shaped mainly by the school invitation and agreement for real involvement and the principal's leadership.

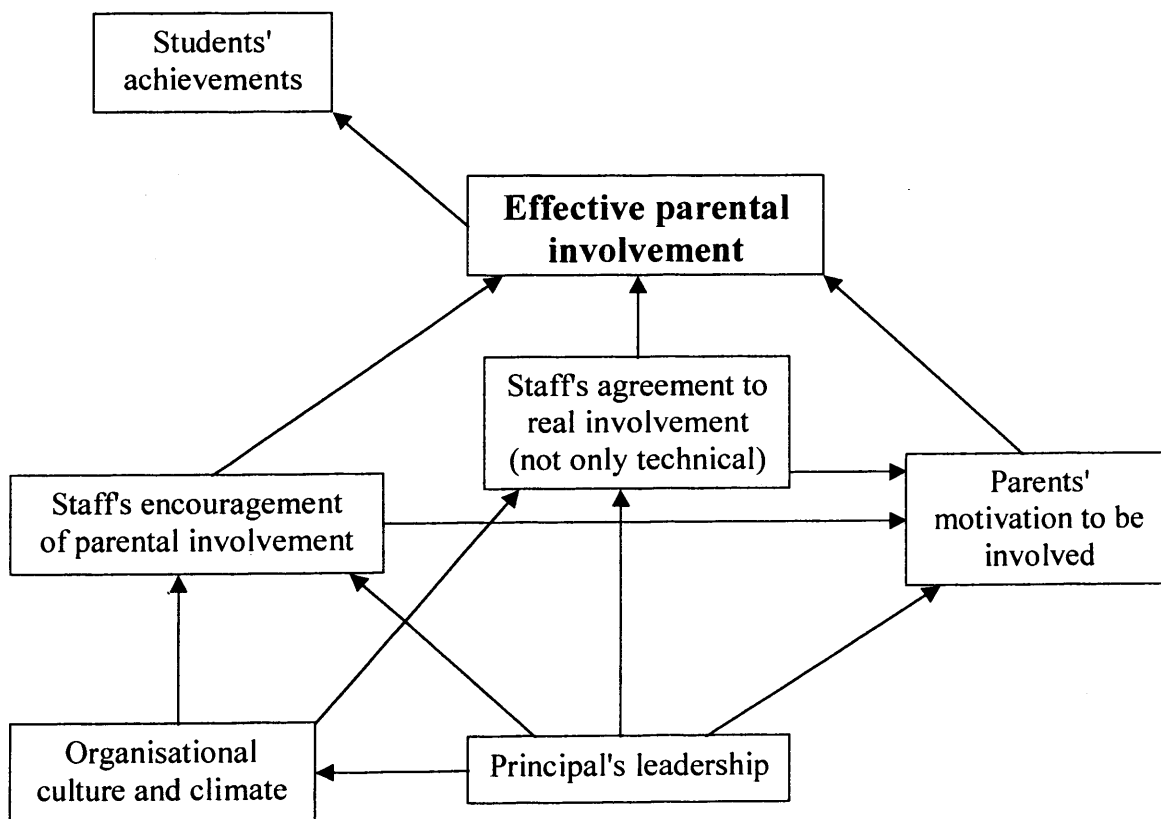


Figure 8.14: Effective parental involvement

Teamwork

There is a difference between school A and schools B and C relating to teamwork. School A's principals and teachers think there is ineffective teamwork in their school. There is also no six-year curricular continuity and there are actually two separated schools. Students and parents in the three schools are more satisfied with the teamwork and the six-year continuity and so do the teachers and principals in schools B and C. Teachers and principals describe the existence of subject teams, management teams and grade teams helping the whole school to function more effectively. There is mutual assistance among the staff, coordination and processes of improvement (in schools B and C). According to Oswald (1996), effective teamwork improves problem solving and decision-making in schools. Teams are said to build stronger relationships among those involved in education and, ultimately, to benefit students because more people with broader perspectives help to shape a stronger educational programme. In that respect, schools B and C seem to be more effective according to stakeholders' views. The most common kind of team according to Oswald (1996) is the management team, which does exist in schools B and C. Management teams are responsible for district- wide policies, missions, or decision-making. The management team might assign specific tasks, and such processes do exist in schools B and C according to teachers' and principals' views.

Figure 8.15 (p. 338) shows a typology of four types of stakeholders' attitudes towards teamwork and six-year continuity.

Type 1: High rating of teamwork and high rating of six-year continuity.

Type 2: Low rating of teamwork and high rating of six-year continuity

Type 3: Low rating of teamwork and low rating of six-year continuity

Type 4: High rating of teamwork and low rating of six-year continuity.

Following the discussion mentioned above, it seems that students and parents (in all three schools) are type 1 because their rating of teamwork and six-year continuity is high. On the other hand, while examining principals and teachers there is a difference between schools: school A is a type 3 because the rating is low for both teamwork and six-year continuity. Schools B and C are type 1 because in these schools, the staff rating is similar to students and parents. The fact that no school was found to be type 2 or 4 gives an indication that effective teamwork has a direct influence on six-year continuity. In other words, if teamwork is effective, the six-year continuity is likely to be effective too.

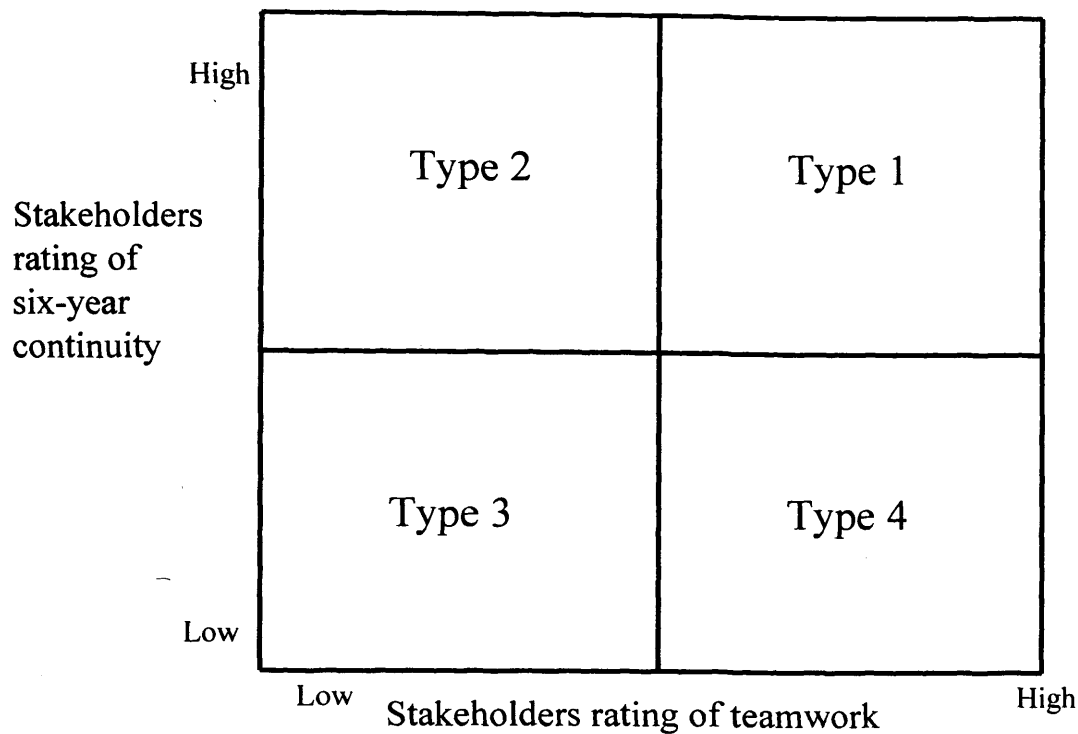


Figure 8.15: Typology of teamwork and six-year continuity

Discipline

All stakeholders in the three schools perceive discipline as very important for school effectiveness because without having it, the school cannot function reasonably. Therefore, discipline is perceived as a necessary condition, which is insufficient for school effectiveness. According to principals in all three schools, the discipline in their school is fine. Teachers and parents think that in schools B and C the discipline is reasonable and in school A it is problematic. The students are most critical claiming that only in school B the discipline is reasonable whereas in schools A and C it is ineffective. It is worth noting that relating to discipline, the differences among the three schools are statistically significant (students and parents).

According to Gaustad (1992), discipline problems affect negatively the learning environment and such a situation is more common in school A according to stakeholders' views. Gaustad (1992) states that disruptions interrupt lessons for all students, and disruptive students lose even more learning time. Duke (1989) points out that the goal of good behaviour is necessary, but not sufficient to ensure academic growth. The staff in three schools being examined agree to this statement because if there is no appropriate discipline, the school cannot function, however while there is reasonable discipline, only the existence of additional conditions would ensure school effectiveness. According to the literature,

effective school discipline strategies seek to encourage responsible behaviour and to provide all students with a satisfying school experience as well as to discourage misconduct (Duke, 1989).

Figure 8.16 (p. 340) shows a model of effective discipline in a six-year high school. The research reveals that discipline is not exclusively dependent on teachers' ability to maintain it. The picture obtained from the research is more complex: discipline is influenced also by the following:

1. **Principal's vision and leadership:** this is one of the most important factors because it has a direct influence on discipline and on other relevant variables such as the organisational culture, nomination of specific role holders for discipline maintenance and police involvement dedicated for prevention of violence.
2. **Staff's communication with students:** if there is better communication and collaboration, students are likely to be more disciplined
3. **Age and achievements:** the findings show that younger children are less disciplined and so are students having low achievements. Because of that, discipline maintenance in the junior high school and in low achieving classes are supposed to be much more difficult.
4. **Role holders responsible for discipline maintenance:** the research shows that the existence of special role holders (at least one) for maintaining discipline is important.
5. **Police involvement:** in extreme cases it is recommended to involve the police in order to prevent violent behaviour. The research shows that principals' agreement to such an involvement is helpful.
6. **Organisational culture:** many variables depend on the organisational culture and climate shaped mainly by the school principal. There should be clear and uniform regulations (the same in the junior high and secondary schools) dealing with discipline. The treatment should be consistent, immediate and uniform. Further, there should be a balance between two approaches - the totalitarian, namely punishments and deterrence and on the other hand, the educational approach intended to reach discipline out of students' understanding rather than fear.

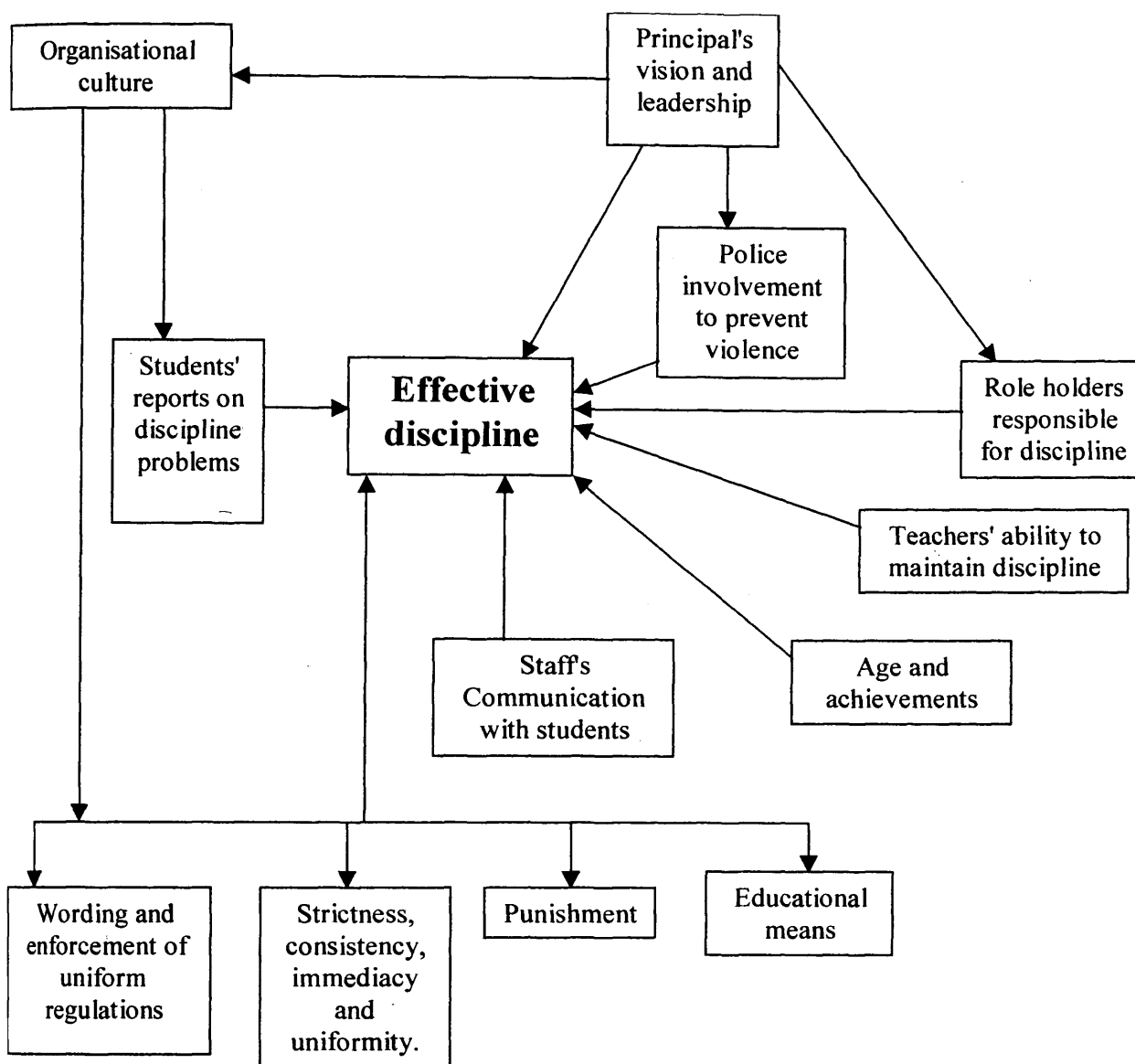


Figure 8.16: Effective discipline

Students' motivation to study

According to all stakeholders' attitudes in all three schools, students' motivation to study is one of the most important variables influencing students' achievements but unfortunately the existing motivation is very low. The gap between 'importance' and 'reality' (question 20) is an indication of how problematic motivation is viewed by students and parents. Actually, while viewing all three schools together, motivation has the biggest gap in comparison to all the other characteristics' gaps. Further, there is no statistically significant difference between the three schools. A similar picture exists according to question 51 (satisfaction with students' motivation). This question has the smallest value (comparing to all questions of satisfaction) while viewing all the three schools together, which means, students' and parents

are very dissatisfied with students' motivation. Principals and teachers claim that students' motivation is insufficient. Principals think that teachers should increase students' motivation but most teachers (in school A and C) think this issue is mainly students' dependent and not school's.

According to Renchler (1992), achieving the goal of making the individual classroom a place that naturally motivates students to learn is much easier if students and teachers function in a school culture where academic success and the motivation to learn is expected, respected, and rewarded. An atmosphere where students learn to love learning for learning's sake, especially as it leads to academic achievement, is a chief characteristic of an effective school and the school leader mainly influences it. According to Johnston (1987), if a principal can establish goals that define the expectations of the school towards academic achievement, and if he/she can rally a constituency of teachers and students to support those goals, then the motivation to achieve the goals is likely to follow. Maehr (1990) claims that the school's psychological environment can shape students' motivation. While comparing the situation in the three schools to the research literature, it seems that in two schools (A and C) the motivational aspect according to teachers is mainly students' dependent and less school's dependent. These teachers think that they are not responsible for increasing students' motivation although they know it is crucial for school's effectiveness. They perceive the parents and students themselves as accountable for this important issue. This perception contradicts the research literature stressing the main school's role in creating and increasing students' motivation. This might be an explanation for the low motivation existing in all three schools according to all stakeholders especially, students and their parents. If the staff would not have changed these attitudes towards students' motivation, the existing situation is not likely to be substantially changed because teachers do have a great role in nurturing students' motivation.

Social life at school

Students and parents in all the three schools think that social life at the school is very important but it is ineffective in their own schools. All principals and most teachers think that students' social life at school is very important and the school deals with it effectively and it influences positively on students' motivation and satisfaction. Stevenson and Nerison-Low (1995) conducted case studies in Germany, Japan, and the United States. They claim that for adolescents in all three locations, school occupies a significant portion of their

everyday lives. For many, school is not only about classes, but is also the hub of an active life, it is where they meet friends and socialise, participate in sports, pursue personal interests through extracurricular activities, try out various social roles, and express themselves through their appearance and behaviour. In that sense, the Israeli students in the three schools have social needs and there is social life at the school. According to the staff in all three schools the school social life is fine, but students and parents think it is not quite effective. The ineffective social life as seen by students and their parents may be another cause that might decrease students' satisfaction and motivation.

Other reasons that might influence motivation

The students are dissatisfied with the school flexibility towards them (question 63, A: 2.45, B: 2.56, C: 2.44, table O.5, p. 464). Most principals and teachers are highly satisfied with school's flexibility and only a minority is less satisfied because of exaggerated or too little flexibility. This becomes expressed in learning compounds, learning units, transfer between groups or teachers' responsiveness to students' requests. In this respect, there is a great gap between students' satisfaction in comparison to principals, teachers and parents.

To students, there is high pressure (question 62, A: 2.96, B: 3.02, C: 3.12, table O.6, p. 465), the counselling services are ineffective (question 32 gap - A: 0.78, B: 0.86, C: 0.93, table O.4, p. 463) and studying opportunities are insufficient (question 34 gap - A: 1.17, B: 0.83, C: 1.24). In schools A and C, students perceive the timetable (question 24, gaps are - A: 0.95, B: 0.58, C: 0.83, table O.3, p. 462) and extracurricular studies as insufficient (question 26 gap - A: 0.90, B: 0.54, C: 1.04). All these variables decrease students' satisfaction with the school and might decrease their motivation to study.

Figure 8.17 (p. 343) introduces a model describing students' motivation. The figure shows the school characteristics that have an impact on students' motivation to study. The study reveals that to stakeholders' view, the principal has an influence on teachers' motivation and it influences students' motivation. Principal B's leadership and motivation increase the staff's motivation and it has a positive contribution to students' motivation. He may also have a direct influence on students because his leadership, charisma and high accessibility. Because teachers have a high influence on students' motivation, their motivation might be low because of low salary (originated by scarce resources allocated by the Ministry of Education) and even principal B cannot change it. According to teachers' views, the lack of resources

may decrease students' motivation because lack of designated equipment (computers, audio-visual equipment, etc.) causing lessons to be more boring and less attractive.

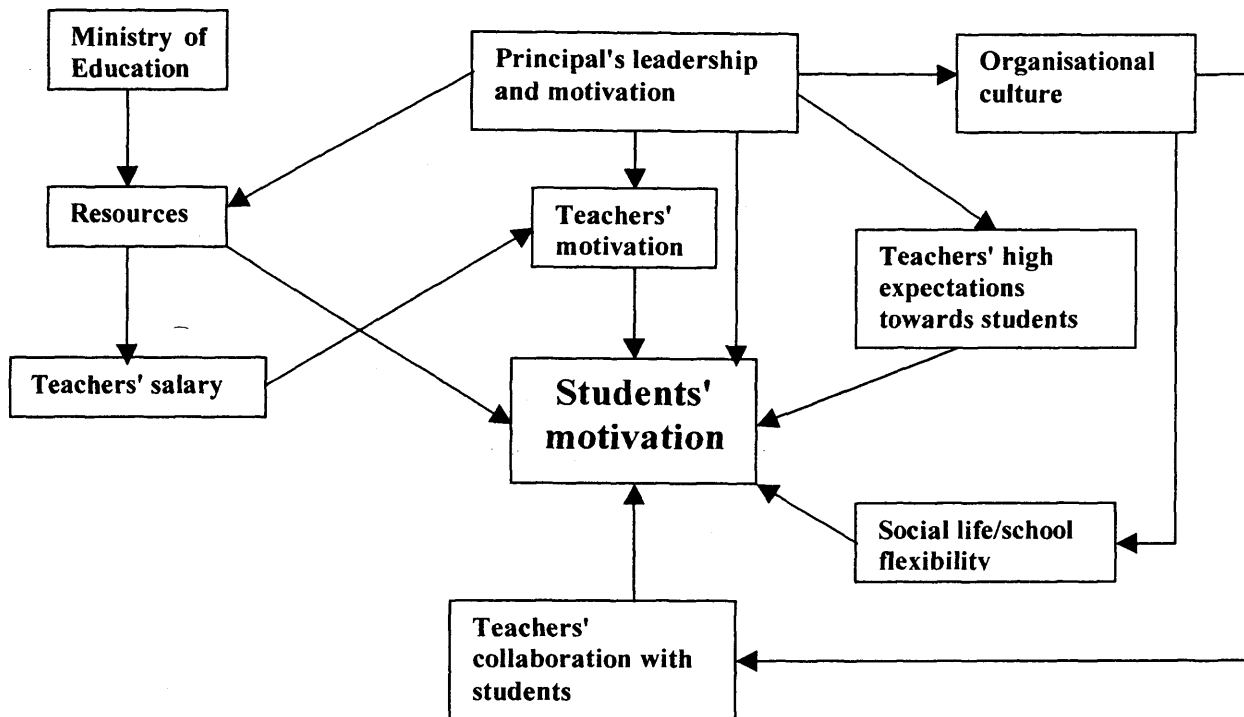


Figure 8.17: A model for students' motivation

The ineffective collaboration among teachers and students might be another cause for low students' motivation. This kind of collaboration is influenced by the organisational culture created mainly by the principal. It is better in school B and this might be another reason for its superiority concerning students' motivation. Principal B has also a positive contribution for increasing teachers' expectations towards their students what might also increase school B students' motivation. He takes care for having better social life at the school and makes effort to increase school's flexibility - all these variables have a positive influence on students' motivation. Although there is a substantial advantage to principal B's leadership and motivation, his students' motivation is only slightly better than schools A and C's students. An explanation for that small difference may be that other variables are similar in all the three schools. Even the best principal cannot recruit much better teachers if he/she cannot reward them substantially differentially owing to lack of financial resources allocated by the Ministry of Education.

Students' achievements

As mentioned earlier, the term "*students' achievements*" relates to the consequences of the educational process at the six-year high school (figure 8.6, p. 321). In the three schools, students' satisfaction with their achievements is not too high but there are statistically significant differences among the three schools. In school B, students' satisfaction is the highest (question 45: 2.96) and in school A, students have the lowest satisfaction (2.63). The parents are significantly more satisfied than their children: in school C, their satisfaction is the highest (3.12) and in school A - the lowest (2.78).

In schools B and C, teachers and principals perceive students' achievements as medium. The reason for that is that insufficient students receive the matriculation diploma, the students do not fulfil their potential, there are unsuccessful teachers who cause low achievements and the students do not make enough effort. The paradox is that in school A in which students' and parents' satisfaction is the lowest among the three schools, teachers' and principals' satisfaction is the highest. This finding shows that there is a substantial gap between the service suppliers' attitudes (namely teachers and principals) and their customers (students and parents). The customers in school A are dissatisfied whereas the service suppliers think everything is fine. Furthermore, in school A there is a linkage between students' low motivation, school's ineffective management and teaching and students' low achievements.

Generally speaking, in all the three schools, students' achievements are dependent on the quality of the educational process and students' motivation as introduced in figure 8.6 (p. 321). A school that succeeds to improve the educational process (depending on the variables mentioned above) and to increase students' motivation is about to be much more successful.

Summary

The research was intended to answer three research questions dealing with desired characteristics of effective six-year high school (first research question), the reality in three schools examined (second research question) and stakeholders' satisfaction with their schools. The findings show the existence of gaps between desire and reality in all aspects of effectiveness examined and this might be an indication for stakeholders' satisfaction or dissatisfaction (third research question). Chapter 8 introduces a general picture of the findings for three schools together discussing similarities and differences. The significance

of differences relating to the quantitative part (students and parents) of the research was determined by statistical analysis. Further, there was found correlation between variables and it helped to develop models/theories and typologies introducing and explaining relevant phenomena of six-year high schools and the reasons for them.

The three case studies at school A, B and C show differences and also similarities among the schools. To stakeholders' views, school B seems to be the best in most aspects examined and school A is the least effective. There are characteristics in which school B is much better and others, which it is only slightly better. The greatest advantage of school B is based on its better principal's leadership. This advantage influences directly and indirectly many variables influencing the whole six-year high school effectiveness.

In all the three schools there is ineffective parental involvement although students and parents do not perceive it as a problem. None of the schools really encourages the parents to be deeply involved, principals and teachers prefer only technical involvement and some of them totally resist it. In that respect, all the three schools can improve by changing principals' and teachers' attitudes towards real parental involvement as introduced by the research literature.

Concerning all variables that depend on resources, there is a similarity among the three schools, although school B is also perceived as more effective. The reason for that is that the Ministry of Education allocates financial resources and the principals' influence is not exclusive. Therefore, in that respect, the differences among schools are smaller.

The Israeli six-year high school has general but also specific characteristics of effectiveness. Because this kind of school is based on the joining of two schools (the junior high and the secondary school), its effectiveness is dependent substantially on the ability to create effective six-year continuity. This characteristic is extremely important for six-year high school effectiveness because the basic objective is to let the students to study continually from the 7th to the 12th grade and to pass the matriculation examinations successfully. This continuity is quite difficult to achieve because usually the teachers teach either in the junior high or in the secondary school and they have different and often contradicting interests. The secondary school's teachers are focused mainly on the matriculation examinations. On the other hand, their junior high colleagues are more interested in general and social activities, they have to deal with more difficult discipline problems and they do not feel forced to teach very much material. Because of that, the secondary school teachers think that when they receive the students in the 10th grade, they are not always well prepared for the secondary school. The junior high teachers tend to feel

themselves inferior against the secondary school teachers and that might also decrease the whole six-year teamwork's effectiveness. Besides, both groups have different employers and they belong to different unions. All this makes the effective six-year teamwork and continuity more difficult to achieve. The six-year continuity depends on effective teamwork that is influenced by the organisational culture created mainly by the principal's leadership. Again, in that respect, students and parents do not see any problem relating to the six-year continuity in their schools.

The study also reveals variety and similarity among different stakeholders. To students, the most problematic issues are students' motivation, teachers' characteristics (monitoring and evaluation of students, communication and collaboration between students and teachers, teachers' knowledge and personality), sharing leadership with students, discipline, studying opportunities, management of resources and the physical environment. Parents look upon some of these issues as ineffective too. Most parents' gaps are statistically significantly smaller than those of their children. These findings may be explained by the fact that most parents are not involved at the school and they tend to believe it is better than their children do. Teachers and principals think that the situation concerning collaboration between students and teachers, teaching quality and the existence of studying options is much better.

The three case studies show that parents' satisfaction with the school is significantly greater in comparison to their children in all issues examined (except social life at the school). Again, the ineffective parental involvement that causes the parents to be out of school may be the reason for this difference. To all stakeholders, there is a great problem concerning teachers' extrinsic rewards. Teachers agree to remain in the educational system because of the intrinsic rewards or because they have no other choice. The lack of resources, especially computers and advanced instructional technology, is crucial for schools' effectiveness, according to stakeholders. It has a negative influence on class size, the attractiveness of the teaching profession and the physical environment. All these variables might have an influence on the quality of the educational process and students' motivation what have a major impact on the whole six-year high school effectiveness.

To students and parents, teachers' quality seems to be low in all the three schools. Teachers and principals have an opposite view arguing that most teachers are successful. The meaning of this finding is that the service suppliers are not aware of their customers' dissatisfaction (students and parents). Without knowing it, they are not likely to improve.

All these can explain the medium satisfaction stakeholders have with students' achievements. In school A, which is perceived as the least effective concerning all

characteristics, students' satisfaction with their achievements is the lowest whereas teachers and principals' satisfaction is the highest among the three schools. This finding shows again that there is a substantial gap between the staff and students - in such a situation the teachers are not likely to improve because they do not recognise any problem.

To sum up, school B is perceived as the most effective concerning most characteristics examined. Its superiority exists mainly owing to effective principal's leadership. The ineffective characteristics that are common to all the three schools are students' motivation, lack of resources, the physical environment, class size, teaching quality and parental involvement. School A, which is perceived as the least effective, has also ineffective principal's leadership, lack of six-year curricular continuity and ineffective teamwork.

Chapter 9: Conclusions

Introduction

The author's research has been conducted in three Israeli six-year high schools during 2000-2001 in order to examine stakeholders' attitudes towards six-year high schools effectiveness. The six-year high school is a relatively new kind of Israeli institution and it has not yet been fully researched. Therefore, the research combines a general school effectiveness study with a study of innovation.

The research was directed to answer three key research questions (chapter 1, p. 9) dealing with stakeholders' attitudes towards characteristics of effective six-year high schools, aspects in which stakeholders' own schools might be regarded as effective/ineffective and the level of satisfaction of stakeholders with their schools. The answers for the research questions were introduced for each school separately in chapters 5-7. Chapter 8 introduced a whole picture of the research questions for all three schools together, links between variables and models/theories derived from the study's findings.

Chapter 9 intends to compare the findings to governmental intentions while established the six-year high schools, to word relevant conclusions and recommendations, to evaluate the study's contribution and limits and to plot possible directions for further research. The following themes are addressed in the coming sections:

- The study's findings in comparison to the Ministry of Education's aims.
- The study's conclusions.
- Recommendations for improving.
- Evaluation of the research: its contribution to the field and limitations.
- Directions for further research.
- Summary.

The study's findings in comparison to the Ministry of Education's aims

Introduction

The decision to have a reform intended to change the Israeli educational system to six-year high school (based on three-year junior high school and three-year secondary schools) and six-year primary school (instead of four-year secondary school and eight-year primary school) was made in the year 1976 according to a parliament decision. The implementation

of this decision was slow and was made mainly during the last eight years. Yet there are cities and places in which the old system did not change because the local municipality preferred to remain with the old system.

The main intention of the reform was to raise teaching levels and students' achievements and to lessen the gap in educational level between different parts of society. The main aims of the Ministry of Education in establishing the new system were to achieve improvements relating to secondary schooling as outlined below.

The Ministry of Education's aims and their fulfilment

The Israeli Ministry of Education had various important aims to achieve while decided to transfer to a new system based on six-year primary schools and six-year high schools as follows (Ministry Directive 20, 1996):

- Most teaching was didactic, based on simultaneously teaching of whole class by a teacher. In such a way, teaching was boring, passive and having no personal treatment. The intention was to assimilate advanced technologies relating to teaching methods and ways of studying in order to reach an improvement.
 - Class size was too large and it was required to decrease class crowding substantially.
 - Schools' pressure on students was high, flexibility was low and many subjects were taught simultaneously what increased the pressure. Students had only a few alternatives for choosing subjects and the intention was to give schools autonomy by including optional subjects.
 - Students' evaluation was based mainly on examinations. The Ministry of Education wished to use new ways of monitoring and evaluation of students.
- (Ministry Directive 20, 1996).

In order to reach such an ambitious change it was required also to update the old system's curriculum and to have six-year curricular continuity.

Concerning the issues mentioned above, the author has reached the following conclusions from the three case studies:

- **Teaching methods and ways of studying:** According to stakeholders' views, the most common style is still didactic and other styles remain very rare. Teachers are aware of this problem and prefer to have diverse teaching. Nevertheless, owing to lack of resources and other constraints they feel forced to continue with the old teaching

styles. Therefore, according to staff's attitudes, the Ministry of Education reform did not improve the situation and most teaching remained as it had been prior to the reform.

- **Class crowding:** To teachers and principals, the crowding in most classes is unacceptable. In many classes there are forty students or more and that prevents the teachers to support their students effectively. Again, owing to lack of financial resources it is impossible to reach an improvement. Concerning this issue, the students and parents are less critical. But, to principals and teachers, the reform did not decrease class size and actually the desired plans were not fulfilled.
- **Six-year curricular continuity:** To teachers and principals there are schools having curricular continuity but in others the junior high and secondary school function as separated and uncoordinated entities. The schools having six-year continuity are in a better position than what existed prior to the reform. In these schools, students are likely to have smoother transition from the 8th to the 9th grade without the necessity to change school.
- **High pressure:** Students are dissatisfied with school's high pressure and the fact that many subjects are being taught simultaneously. Unfortunately, schools are not likely to change this situation because they are committed to the Ministry of Education's requirements for the matriculation examinations. According to the governmental policy, the students must study many subjects in a limited time in order to reach the standards required for the matriculation diploma. Unfortunately, concerning school's pressure, the reform has not changed the situation existed previously.
- **Studying alternatives:** Students complain that they are not satisfied with school's flexibility although there is an improvement relating to studying alternatives. Principals, teachers and parents are more satisfied with this issue.
- **Students' monitoring and evaluation:** Teachers continue to evaluate students mainly by examinations. In that sense the situation has remained as it had been earlier.

The study's conclusions

The research gave detailed answers to the three key research questions (chapter 1, p. 9) as follows:

1. What are the characteristics of effective six-year high schools according to stakeholders' points of view?

According to stakeholders' perceptions in the three schools examined, the characteristics of effective six-year high schools are the following:

- **School and class size:** these issues are important to the staff. To principals and teachers, there should be 25-30 students in each class and 6-8 classes in each grade. Students and parents perceive these characteristics as less important.
- **Principal's leadership:** principal's leadership is perceived as very important by all stakeholders, including his/her vision, ability to deal with difficult situations and to manage resources.
- **Collaboration among stakeholders:** the most important issue to all stakeholders is the collaboration between students and teachers.
- **Teachers' characteristics and teaching effectiveness:** these characteristics are perceived as most important by students and parents. Teachers and principals think they are very important too.
- **Parental involvement:** it is perceived as most important by parents. To the staff and students it is not very important. There are teachers claiming it is even annoying.
- **School culture and climate:** all stakeholders perceive this characteristic as important for school effectiveness.
- **School discipline:** it is viewed by students and parents as very important. Teachers and principals think it is a necessary and insufficient condition for school effectiveness.
- **Teamwork and six-year continuity:** teamwork is viewed as important by the staff and it has an influence on six-year continuity. Students and parents look upon six-year continuity as not very important.
- **Students' motivation:** students' motivation is important according to all stakeholders' views. It has a direct impact on achievements.

- **Management of resources and the physical environment:** it is very important to all stakeholders. Principals and teachers think that resources' availability is important because it has a direct impact on designated equipment, rewards, etc.

2. In what aspects are stakeholders' own schools regarded as effective/ineffective (from the same points of view)?

Stakeholders' schools are regarded as effective/ineffective as follows:

- **Class size:** To the staff, classes are too crowded (about 40 students in each class) and it decreases school's effectiveness substantially. To parents this issue is ineffective either.
- **Principal's leadership:** in that respect there is a variance among the three schools. School B and C principals' leadership is perceived as effective. On the other hand, school A principal's leadership is viewed as ineffective by most stakeholders (principals, teachers, students and parents).
- **Collaboration among stakeholders:** the most ineffective issue according to students and parents is the collaboration between students and teachers (to parents, collaboration between teachers and parents is ineffective too). Most principals and teachers think that this kind of collaboration is fine.
- **Teachers' characteristics and teaching effectiveness:** students and parents think that this issue has a substantial negative impact on school effectiveness. They criticise teachers' knowledge, communication, ability to evaluate students and motivation. To the staff, teachers are usually good with only marginal exceptions.
- **Parental involvement:** students and parents think that parental involvement is effective. According to the staff there is a variance - some staff members think that parental involvement is effective but others claim it is unnecessary and even annoying.
- **School culture and climate:** in that sense there is a variance among the schools and stakeholders examined. In school B, all stakeholders evaluate the organisational culture as positive. In school A and C, this issue is perceived as ineffective (except parents in school C).
- **School discipline:** it is viewed by students in the three schools and by school A's parents as ineffective. In schools B and C, parents look upon discipline as being fine. To principals in all three schools the discipline is fine and to schools B and

C's teachers it is reasonable. Only school A's teachers think the discipline in their school is unacceptable.

- **Teamwork and six-year continuity:** school A's principals and teachers think there is ineffective teamwork in their school. There is also no six-year curricular continuity and there are actually two separated schools. Students and parents in the three schools are more satisfied with the teamwork and the six-year continuity and so do the teachers and principals in schools B and C.
- **Students' motivation:** according to students, students' motivation is the least effective. To parents, it is ineffective either. To teachers and principals, students' motivation is insufficient.
- **Management of resources and the physical environment:** students and parents are dissatisfied with the way their principals manage resources. All stakeholders agree that there are insufficient resources and lack of equipment.

3. What is the level of satisfaction of stakeholders with their own school?

- **Teachers' rewards:** all stakeholders are dissatisfied with teachers' extrinsic rewards. Teachers and principals are more satisfied with the intrinsic rewards.
- **School's flexibility:** students in all three schools are dissatisfied with their school flexibility. Parents, teachers and principals are more satisfied.
- **School's pressure:** students are dissatisfied with this issue. They think the pressure is too high. The other stakeholders do not think the pressure is too high.
- **Social life:** parents are dissatisfied with it whereas students' satisfaction is slightly better. On the other hand, teachers and principals are much more satisfied with the social life in their school.
- **Students' achievements:** Students are dissatisfied with their achievements whereas their parents are more satisfied. Principals and teachers have medium satisfaction and only school B principal is satisfied with his students' achievements.
- **Other issues:** in most issues, parents' satisfaction is better than their children's. Students and parents are least satisfied with students' motivation whereas principals and teachers think that motivation is insufficient but only a minority is low motivated. Students are also dissatisfied with the way teachers treat them, management of resources and the physical environment, monitoring and

evaluation, school's reputation, discipline and decision making process. In other issues they are more satisfied but even their maximal satisfaction (teachers' treatment of parents) is not very high (2.99 in a scale of 1-4). Parents are dissatisfied with the way teachers monitor and evaluate students. They are more satisfied with principal's leadership, school size, decision making process, relations with the school principal, students' chance to succeed, school's atmosphere, the physical environment, discipline, class size and the way teachers treat students. Teachers and principals are dissatisfied with class size (too crowded) and the physical environment. In other aspects they tend to be more satisfied although relating to principal's leadership there is a variance among different schools (school B's principal is perceived to be the most successful).

The meaning of the study's results

The study reveals that the final output of the six-year high school system is influenced by the quality of the educational process and students' motivation, which are influenced by many other variables. One of the most important is the leadership and motivation of the school principal because it may have an impact on other parameters such as the organisational culture, teamwork, six-year continuity, resources, teachers' characteristics and discipline. Each of these may effect the educational process or students' motivation directly or indirectly.

Although the principal has a substantial power, he/she is limited by the availability of resources (mainly financial and human). Taking for granted these constraints, principals' success is dependent on their leadership, personality and their ability of management.

Lack of resources has an impact on some other variables such as the physical environment, class size and teachers' salary. Teachers' rewards might influence their motivation (influencing students' motivation) and the attractiveness of the teaching profession. Stakeholders are dissatisfied with teachers' rewards and that may harden the recruitment of highly qualified teachers. Further, the principal is also limited in the ability to recruit or dismiss new staff because of the availability of unemployed teachers and the labour laws (tenure and the unions' involvement).

Concerning other aspects, the principal is freer to activate (organisational culture, discipline, teamwork, six-year continuity, school flexibility, parental involvement or motivation). Therefore, schools managed by better principals are likely to be more successful in aspects that are less resources dependant. School B, which has the best principal, is the

most successful according to most characteristics and stakeholders. School B's advantage is smaller concerning aspects that are resources dependent. The study found the following characteristics (that are influenced by the principal) as ineffective - teachers' quality, resources' management, six-year continuity, parental involvement, students' motivation and achievements:

Teachers' quality: In the Israeli six-year high schools there is a substantial problem concerning the quality of teachers and teaching, according to stakeholders' views. That reason decreases schools' effectiveness significantly. Students and teachers think that the collaboration among teachers and students is very important but unfortunately, in their schools it is ineffective. On the other hand, the teachers and principals think that there is effective collaboration. That gap of perceptions may prevent initiation of change because the school does not recognise students' dissatisfaction. The study examined also other teachers' characteristics such as professional knowledge, didactics, monitoring and evaluation of students, personality, communication with students, teachers' motivation, teachers' expectations and teaching styles. Concerning all these variables, customers are also dissatisfied with teachers' quality whereas the schools are not really aware of that dissatisfaction what causes them to continue the existing ineffective situation. Israeli six-year high school teachers do have high expectations towards some of their students. The problem is that the expectations are changed according to students' achievements. Teachers have very high expectations towards high achieving students but low expectations towards low achieving ones. High expectations are considered in the international research literature as having high influence on school effectiveness. The Israeli teachers do not have high expectations towards these who need them most, namely low achieving students. Principals may influence and persuade teachers to have high expectations towards their students, what can increase students' motivation substantially.

Resources: there is lack of resources and it has a negative influence on teachers' functioning and motivation, the physical environment and class crowding. To teachers' views, their effective functioning may be negatively influenced by low rewards especially extrinsic, high burnout, class's crowding and lack of equipment. There are not enough teaching hours, teachers are forced to teach very rapidly and in anachronistic styles for the matriculation exams and the students are dissatisfied and bored. In most classes there are about 40 students and schools' management cannot do a great deal about this because the Ministry of

Education determines these standards. In order to decrease class size, the government of Israel has to allocate great financial resources.

Six-year continuity: According to stakeholders' views, there are six-year high schools in which there is no six-year curricular continuity. In these institutions there are actually two separated schools - the junior high and the secondary school and there is almost no coordination between them. In such schools, the whole idea of six-year high school is completely ineffective. In other schools there is six-year continuity, at least partially. Some schools are aware of this aspect and its importance to school's effectiveness and the schools' management tries to reach an improvement.

The Israeli system has a structural barrier preventing the achievement of comprehensive six-year continuity. The junior high schools' teachers are occupied by the Ministry of Education whereas the secondary schools' teachers are municipalities' employees. Because of that, the Ministry of Education prefers not to employ secondary school teachers in the junior high school and the Municipality prefers not to let the junior high teachers work in the secondary school. Because of that, not all teachers can teach in all six-year grades what perpetuates the existence of two separated institutions instead of one six-year high school. When there are two different groups of teachers, their different interests hardens the existence of effective six-year continuity.

These two groups of teachers are also differentiated by their education and knowledge: usually the secondary school teachers are universities' graduates whereas the junior high teachers are usually colleges' graduates. This difference also prevents the junior high teachers to teach in high grades and high levels and vice versa.

The organisational structure in which there is a different principal in the junior high school and another principal (usually the six-year high school principal) in the secondary school is another cause for the separation between the two schools what prevents the existence of effective six-year continuity. This situation may cause tensions among two groups and sometimes the junior high teachers feel inferior against their colleagues in the secondary school.

Parental involvement: To principals and teachers (and also some parents) an effective parental involvement does not exist in the three six-year high schools examined (as mentioned in chapter 8, p. 335). The reasons are either school's resistance to real involvement or low parents' motivation to be involved. Although the research literature

(Swick, 1991) stresses the great importance of parents' involvement for school effectiveness, the reality is ineffective. Principals and teachers are not really interested in effective parental involvement because they are afraid such an involvement would disturb the school. Even when they do invite the parents to participate, they do it just in order to be nice to them. The Israeli teachers and principals examined do not really understand that effective parental involvement is a pure school's interest. The parents have their own life and usually they are not active at school unless they are invited and encouraged to do so. This is the school's role to invite the parents and encourage them to be involved in significant activity. Unfortunately, such an atmosphere does not exist in the Israeli six-year high schools examined.

Students' motivation: The characteristics mentioned above have an influence on the quality of the educational process what has an influence on students' achievements. But these achievements are also influenced by students' motivation. A great problem existing in Israeli six-year high schools (according to stakeholders' attitudes) is students' low motivation to study. To stakeholders, especially students, students' motivation is very low: table 8.1 in chapter 8 (p. 310) gives evidence to the fact that students' motivation is perceived by students to be the most problematic comparing to all other issues (gap size is 1.19). Teachers (in schools A, C) think that the reasons for this low motivation are mainly not school dependent. In such a situation, it is not likely to increase students' motivation because teachers do not think this is their own task. The research literature (Renchler, 1992) stresses the important role of the school in creating and increasing students' motivation and principals know it. Nevertheless, the teachers do not think this is an issue which they have to deal with.

Students' achievements: the study reveals that to students and parents, students' achievements are low whereas teachers and principals perceive them as higher. The above findings might explain the reasons for low students' achievements that are dependent on the quality of the educational process and students' motivation. The perceived gap between the staff and the customers (students and parents) concerning students' achievements may be a reason for a change that is unlikely to occur because the school does not recognise the problem.

Recommendations for improvement

In order to improve the Israeli six-year high schools' effectiveness the following recommendations are derived from the author's study:

1. **School principals:** The school principal is a key figure influencing the whole six-year high school effectiveness. Because of that, there is a great importance to the process of principals' nomination, training and monitoring. The study reveals that there are six-year high school principals who do not function effectively. It is recommended to examine the effectiveness of principals' training, nomination and monitoring and evaluation. It is very important that principals should be aware of the school task in creation students' motivation, the high importance of parental involvement, teachers' selection, placement and motivating, the creation of effective organisational culture, six-year continuity and effective management of resources (financial and human). Because principals have such an important influence on teachers' functioning and motivation, their nomination, training and monitoring is crucial for the effectiveness of the six-year high school.
2. **The teachers:** principals should have permanent contact with their teachers in order to increase their motivation and to influence them to be more collaborative and communicational and to have high expectations towards the students. They have to encourage the teachers to deal with students' motivation and to invite their parents so they would like to be involved. Teachers are about to study continuously in order to develop their professional knowledge.
3. **Resources:**
 - The three case studies show that to stakeholders, the teachers' extrinsic rewards are too low. This finding is congruent with Erez (2000) claiming that the teaching profession in Israel became an unattractive profession. He argues:

"The teachers' salary in comparison to other academic professions is low: the average gross salary of a teacher having first degree and 20 years of experience is 5,500 Shekels per month. Because of that, the teaching profession does not attract new high level candidates. This severe situation is even worse concerning the technological sciences because the teaching profession cannot compete with the high salaries of the technological private sector. For example, a young engineer working in advanced technology and having first degree can earn 20,000 Shekels per month. If he or she would have asked to be a teacher in the secondary technological system, the gross salary would have been 3,000 Shekels only" (p. 4).

Therefore the government has to invest financial resources in order to increase teachers' extrinsic rewards. Such a process might increase teachers' satisfaction and motivation and cause the teaching profession to be more attractive. If such a process would have been occurred, it is more likely that more qualified candidates would choose to become teachers. Further, teachers' rewarding should be differential in order to encourage those who invest much effort and reach high achievements. Besides the present components of salary (education, experience), such a rewarding should be based also on criteria like teacher's function and evaluation of achievements.

The higher salary should be based on additional hours in which teachers would have to be at school what will help them to do most of the extra work at the school (preparing and checking of exams, lesson preparing, giving individual support to students and so on). Nowadays, the Israeli teachers do most of these things at home and they are not rewarded for it.

- Burnout teachers should have the opportunity to retire much earlier than is permitted at present.
 - The classes' size should be decreased to maximum 30 students. That would enable the teachers to give students appropriate support, discipline is likely to be improved and students' motivation is likely to increase. Further, the change might have a substantial impact on students' achievements. Such a process is feasible because the existing teachers should work more hours and the need for additional teachers would be minimal. Following the recent research literature (Achilles, 1997; Hargreaves et al, 1997; U.S. Department of Education, 1999; Picus, 2000), the suggested decrease of class size is not enough, but nevertheless it might be a substantial improvement in comparison to the existing situation.
 - There should be additional budgets for having designated equipment and effective maintenance. Lack of computers and other designated equipment has a negative influence on teaching diversification and it decreases school's effectiveness. Further, the physical environment should be improved so the classroom would be more convenient and teachers would have special places for doing their non-teaching work.
4. **Six-year continuity:** The government should change the situation so there would be one employer for all six-year high schools' teachers. Nowadays, the secondary school teachers are employed by the local municipality and the junior high teachers, by the Ministry of

Education. Because of that, the actual ability of teachers to teach in all six grades is limited by the employers: the Ministry of Education limits the secondary school teachers who wish to work in the junior high and the municipality limits the junior high teachers who want to work in the higher grades. Further, school management should give all teachers the opportunity and the required training to teach high grades and high levels according to their skills. That would cause all teachers to be versatile and updated continuously. The six-year high school should have one management that would take care for the six-year management and curricular continuity.

5. Students' motivation: Each school should be responsible for training the staff so every teacher would know and acknowledge the school's responsibility for increasing students' motivation and expectations towards all students (and not only towards high achieving ones). The teachers should be familiar with the international literature indicating the importance and applicability of school's influence on students' motivation. Each school principal should be involved in the activity designated to increase students' motivation and self-image.

6. Parental involvement: Each school principal should take care to inform the staff with the importance of parental involvement for school effectiveness. There should be created school climate that invites and encourages parents to become real partners and decreases teachers' fear of parents' involvement.

7. Monitoring and evaluation of the whole school: the study reveals that there are cases in which stakeholders are not aware of existing problems or they know but do not do a lot to improve this. In such a situation no progress is likely to be made. Although each school has a superintendent, it tends to function without effective control. It is necessary to establish a control system that would examine the school continuously so there would be a permanent process of improvement. Such a system might be established by the local municipality and the Ministry of Education and it should inform the school principal currently.

Evaluation of the research: its contribution to the field and limitations

The study draws a profile of the Israeli six-year high school according to stakeholders' views, namely, principals, teachers, students and parents. It also gives evidence to stakeholders' perceptions towards the reality in Israeli six-year high schools relating to the relevant characteristics of effective schools. The study shows that 25 years after the decision to initiate the reform, many objectives of the Ministry of Education remained unfulfilled. Such unfulfilled objectives are new teaching methods, less class crowding, six-year

continuity, decreasing school pressure and increasing school flexibility. The study has also an important contribution in mapping ineffective characteristics of Israeli six-year high schools such as principals' leadership, students' motivation, teaching quality, parental involvement, teamwork and resources' management. At the bottom line, the study shows that the customers, namely students and parents are dissatisfied with students' achievements. The study explains the reasons for the ineffectiveness of the different characteristics and it stresses a number of recommendations for improving the existing situation.

The study offers answers to three key research questions concerning the characteristics of Israeli six-year high schools, in what aspects schools are effective/ineffective and if and why stakeholders are satisfied or dissatisfied with the school. The answers and analysis of these key research questions may help the educational systems to make progress and it can also influence six-year high schools' improvement all over the country.

Limitations

The study has the following weaknesses and limitations:

1. **Implementation of the study's results:** part of the solution required in order to make progress is dependent on allocation of very high financial resources. Nowadays it is unlikely to achieve such resources given the Israeli reality and the government's priorities.
2. **Parents' contribution to the research:** parents' attitudes towards school effectiveness may be less significant in comparison to these of other stakeholders because they are not deeply involved at the school. The reasons for that are either parents' passivity or schools' wish to discourage parental involvement. Furthermore, this group of stakeholders does not stay at school every day as the others, so they have less knowledge and experience. Because of that, the parents' data might be less valid and less reliable than the other stakeholders' data.
3. **Methodological limitations:**

Samples: because the study was conducted in only three six-year high schools out of three hundred and eighty-six, the results might not reflect the situation existing all over the state. The meaning of the findings is that similar results and reasons might be found in other six-year high schools but there is no certainty about it. The use of a large-scale survey (with less deepness) including hundreds of schools could have given more accurate picture relating to the general situation in the whole country.

Research questions: the research questions were limited only to attitudes and perceptions of stakeholders. It could have been improved by examining also existing parameters, not only perceived, such as real achievements (for instance, matriculation examinations' results), existing resources or the physical environment. Further, the interview schedules and the questionnaires could have been changed. In order to examine stakeholders' satisfaction it was sufficient to make comparisons between the first and second research questions because the gap between them might be a good indication for stakeholders' satisfaction. Such an approach could have cancelled some questions dealing with satisfaction while adding more questions intended to cover additional aspects.

Research tools: the use of triangulation for certain groups of stakeholders could have strengthened the study's findings. The study stresses that students are very important school's customers. Nevertheless, they have not been interviewed at all (although they have answered some open-ended questions). Interviewing a sample of students could have given better explanations for the shortcomings found in the research. Nevertheless, the author's research has a unique contribution to such a future study because it mapped all the relevant characteristics of effective six-year high schools and it offers various explanations for reasons of ineffectiveness. That might help future studies to be more focused and specific.

4. **Uncovered areas:** an important characteristic that was not examined and might influence principals' effective functioning (which was found to be crucial for school effectiveness) is their training, placement and monitoring. It might have been useful to study the perceptions of other key figures working in the Municipal Department of Education, the Ministry of Education and the institutions responsible for principals' training.

Directions for further research

The author's study examined the attitudes of four groups of stakeholders towards the effectiveness of six-year high schools: principals, teachers, students and parents. It might be useful to initiate an additional research that would examine other important stakeholders' attitudes relating to the external environment of the school: local educational departments' managers, district managers of the Ministry of Education and principals of teachers' training schools. Further, it might be worthy to survey a much broader population (hundreds of schools) in order to obtain a more general picture that would represent the whole Israeli six-year system.

After examining stakeholders' attitudes it might be also useful to conduct a new study that would evaluate the effectiveness of six-year high schools according to real gains and losses based on actual results and not only perceptions. This study should also compare the situation in different places all over the state including cities that did not conduct the reform. The results of such a study might be either a design of a new reform (if needed) or a plan for improving the current Israeli secondary education.

Other relevant further studies might focus on one important issue characterising six-year high school effectiveness. Possible alternatives are six-year continuity, six-year high school leadership, parental involvement in six-year high schools or motivation (students, principals and teachers') in this kind of school. Such studies are about to deepen each theme and to add a unique contribution to this six-year high school effectiveness research.

Summary

School effectiveness is very important for stakeholders namely school principals, teachers, students and parents. The study deals with the effective school from the point of view of stakeholders who considered their attitudes towards characteristics that cause them to be satisfied or dissatisfied with the school.

Stakeholders and leaders have a range of attitudes towards the characteristics of six-year high school effectiveness. There were found similarities and differences among different stakeholders and different schools.

The research was done in three Israeli six-year high schools. The aim was to study all aspects of stakeholders' expectations from school and to answer three key research questions dealt with desired effectiveness characteristics, reality at school and stakeholders' satisfaction. There was found a gap between reality and desire in all aspects examined. The existing gap between those expectations and reality at the schools is an indication of stakeholders' satisfaction/dissatisfaction.

The advantage of the six-year high school according to the Israeli Ministry of Education is that there should be a continuity of studying from the 7th to the 12th grade and students can become accustomed to high school standards from the 7th grade and above. The study reveals that according to the staff's attitudes, the continuity does not exist in all schools and there are institutions in which there is no integration between the junior high school and the secondary school. Furthermore, the study's findings show that according to stakeholders' perceptions, six-year high schools are ineffective with regard to teachers' quality, class size (classes are

too crowded), resources' management, students' motivation and parental involvement. The school principal has a direct and indirect influence on most characteristics and therefore schools managed by better principals are likely to be more effective. Nevertheless, the scarce resources (mainly financial and human) might limit in a way the school principal's impact on school's effectiveness.

The principal is responsible for the creation of organisational culture that might or might not encourage teamwork, teachers' collaboration with students and maintaining of discipline. The school principal has also an influence on teachers (recruitment or dismissal, knowledge, evaluation, expectations), six-year continuity, management of resources, parental involvement and discipline's maintenance. The resources have an impact on the physical environment, class size, teaching hours and teachers' rewards. All these influence the quality of the educational process: poor physical environment (as exists in the three schools examined) might cause boring teaching, class crowding may lead to ineffective students' support, low teachers' salary might decrease teachers' motivation and lack of teaching hours does not enable to teach the whole curriculum as planned. These variables have an impact on the quality of the educational process and students' motivation, which determines the students' achievements. Students' motivation and achievements were found to be low according to students and parents and that can be explained by the existing of ineffective characteristics as mentioned above.

Following the mapping process and explaining the reasons for six-year high schools' ineffectiveness, the study introduces a list of recommendations for improvement:

- Improving the process of principals' nomination, training and monitoring.
- Principals' permanent contact with their teachers in order to improve their functioning.
- Increasing teachers' salary and working hours, improving the physical environment and decreasing classes' crowding.
- Creation of effective six-year continuity by having one employer to all teachers, enabling qualified teachers to teach in all six grades and having effective six-year teamwork.
- Influencing teachers' attitudes that would support school's responsibility for students' motivation.
- Changing teachers' attitudes to support effective parental involvement.

- Continuous monitoring and evaluation of the whole six-year high school in order to have permanent improvement.

It is hoped that the findings and recommendations may assist the Ministry of Education, school principals and teachers to understand the causes of stakeholders' satisfaction and dissatisfaction and to improve the Israeli six-year system.

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Appendices

Appendix A: a questionnaire for students - pilot study

Dear student,

You are requested to answer the following questions concerning your attitudes towards school effectiveness. The questionnaire is anonymous and global results are intended to serve only academic purposes dealing with attitudes towards school effectiveness in order to improve schools.

Thank you very much for your cooperation.

Date _____

Class in which you study _____

The following sentences describe characteristics of six-year high schools. For each sentence you are requested to give two answers:

- a. How much (in your mind) each quality is important (or is right) for having good six-year high school.*
- b. What grade will you give to the same quality in your own school.*

The answers are to be given on a scale as follows:

a. Importance or truth of qualities for effective six-year high school:

- 1 - very unimportant/not right at all.*
- 2 - unimportant/not right.*
- 3 - important/right.*
- 4 - very important/very right.*

b. Situation at my school is:

- 1 - very bad.*
- 2 - bad.*
- 3 - good.*
- 4 - very good.*

Collaboration at school

1. Collaboration between students and parents at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

2. Collaboration between students and teachers at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

3. Collaboration between teachers and parents at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

4. Collaboration between parents and principals at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

5. Teachers' agreement to parental involvement at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

Evaluation of school principal

6. Principal's vision, values and way of thinking.

Importance	1	2	3	4
Situation at my school	1	2	3	4

7. Principal's ability to manage changes and to make initiatives.

Importance	1	2	3	4
Situation at my school	1	2	3	4

8. Principal's personal relations with the staff, parents and students.

Importance	1	2	3	4
Situation at my school	1	2	3	4

9. Principal's ability to control, acquire and manage resources and budgets.

Importance	1	2	3	4
Situation at my school	1	2	3	4

10. Principal's ability to deal with difficult Situations.

Importance	1	2	3	4
Situation at my school	1	2	3	4

11. Students' belief in principal.

Importance	1	2	3	4
Situation at my school	1	2	3	4

12. Principal's motivation influences teachers' motivation.

Right	1	2	3	4
Situation at my school	1	2	3	4

13. Sharing leadership with staff and students.

Importance	1	2	3	4
Situation at my school	1	2	3	4

14. Principal's accessibility to teachers, students and parents.

Importance	1	2	3	4
Situation at my school	1	2	3	4

Teachers' characteristics

15. Teachers' knowledge and didactics.

Importance	1	2	3	4
Situation at my school	1	2	3	4

16. Teachers' ability to monitor and evaluate students properly.

Importance	1	2	3	4
Situation at my school	1	2	3	4

17. Teachers' personality.

Importance	1	2	3	4
Situation at my school	1	2	3	4

18. Teachers' communication with students.

Importance	1	2	3	4
Situation at my school	1	2	3	4

Additional issues

19. School and class size.

Importance	1	2	3	4
Situation at my school	1	2	3	4

20. Students' willingness to study.

Importance	1	2	3	4
Situation at my school	1	2	3	4

21. Teachers' willingness to teach.

Importance	1	2	3	4
Situation at my school	1	2	3	4

22. School culture and climate.

Importance	1	2	3	4
Situation at my school	1	2	3	4

23. Physical environment (buildings, furniture, laboratories, equipment, library, computers).

Importance	1	2	3	4
Situation at my school	1	2	3	4

24. Weekly timetable and number of subjects being taught simultaneously.

Importance	1	2	3	4
Situation at my school	1	2	3	4

25. Social life at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

26. Additional studies beyond regular programme.

Importance	1	2	3	4
Situation at my school	1	2	3	4

27. Discipline at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

28. High standards and expectations towards students held by teachers.

Importance	1	2	3	4
Situation at my school	1	2	3	4

29. Grouping is a good system for studying.

Right	1	2	3	4
Situation at my school	1	2	3	4

30. Management of information at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

31. In my mind, the most important qualities of good schools are as follows:

32. My own school is **good** because of the following reasons:

33. My own school is **not good** because of the following reasons:

Self satisfaction

Give each sentence an indication reflecting your opinion to what usually exists in your own school as follows:

1 - strongly disagree.

2 - disagree.

3 - agree.

4 - strongly agree.

34. Teachers get enough satisfaction, achievement, etc.

1	2	3	4
---	---	---	---

35. Teachers get enough salary and material rewards.

1	2	3	4
---	---	---	---

36. *General atmosphere at my school is positive.*

1	2	3	4
---	---	---	---
37. *Discipline at my school is appropriate.*

1	2	3	4
---	---	---	---
38. *Students' achievements are high.*

1	2	3	4
---	---	---	---
39. *Relations between school principal, staff, students and parents are good.*

1	2	3	4
---	---	---	---
40. *The principal has the ability to advance and initiate meaningful changes.*

1	2	3	4
---	---	---	---
41. *Decision making process is appropriate.*

1	2	3	4
---	---	---	---
42. *School has good reputation in community.*

1	2	3	4
---	---	---	---
43. *There are good teachers at my school.*

1	2	3	4
---	---	---	---
44. *Students have strong desire to study.*

1	2	3	4
---	---	---	---
45. *School's resources and finance are managed properly.*

1	2	3	4
---	---	---	---
46. *School's buildings, equipment, laboratories, etc are appropriate.*

1	2	3	4
---	---	---	---
47. *There is a good social life at my school.*

1	2	3	4
---	---	---	---
48. *Monitoring and evaluation of students is done well.*

1	2	3	4
---	---	---	---
49. *Teachers treat students properly.*

1	2	3	4
---	---	---	---
50. *Teachers treat parents properly.*

1	2	3	4
---	---	---	---
51. *School size is reasonable (not too big).*

1	2	3	4
---	---	---	---
52. *Class size is reasonable (not too big).*

1	2	3	4
---	---	---	---
53. *Teachers have high expectations towards students.*

1	2	3	4
---	---	---	---
54. *Students have high chance to succeed.*

1	2	3	4
---	---	---	---
55. *There is high pressure on students at school.*

1	2	3	4
---	---	---	---
56. *School has reasonable flexibility for students.*

1	2	3	4
---	---	---	---

57. I am **satisfied** with my school because of the following reasons not mentioned above:

58. I am **not satisfied** with my own school because of the following reasons not mentioned above:

Appendix B: a questionnaire for parents - pilot study

Dear parent,

You are requested to answer the following questions concerning your attitudes towards your child's school effectiveness. The questionnaire is anonymous and global results are intended to serve only academic purposes dealing with attitudes towards school effectiveness in order to improve schools.

Thank you very much for your cooperation.

Date _____
Child's class _____

The following sentences describe characteristics of six-year high schools. For each sentence you are requested to give two answers:

- a. How much (in your mind) each quality is important (or is right) for having good six-year high school.*
- b. What grade will you give to the same quality in your own school.*

The answers are about to be given on a scale as follows:

- a. Importance or truth of qualities for effective six-year school:***

- 1 - very unimportant/not right at all.*
- 2 - unimportant/not right.*
- 3 - important/right.*
- 4 - very important/very right.*

- b. Situation at my child's school is:***

- 1 - very bad.*
- 2 - bad.*
- 3 - good.*
- 4 - very good.*

Collaboration at school

1. Collaboration between students and parents at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

2. Collaboration between students and teachers at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

3. Collaboration between teachers and parents at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

4. Collaboration between parents and principals at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

5. Teachers' agreement to parental involvement at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

Evaluation of school principal

6. Principal's vision, values and way of thinking.

Importance	1	2	3	4
Situation at my school	1	2	3	4

7. Principal's ability to manage changes and to make initiatives.

Importance	1	2	3	4
Situation at my school	1	2	3	4

8. Principal's personal relations with the staff, parents and students.

Importance	1	2	3	4
Situation at my school	1	2	3	4

9. Principal's ability to control acquire and manage resources and budgets.

Importance	1	2	3	4
Situation at my school	1	2	3	4

10. Principal's ability to deal with difficult situations.

Importance	1	2	3	4
Situation at my school	1	2	3	4

11. Students' belief in principal.

Importance	1	2	3	4
Situation at my school	1	2	3	4

12. Principal's motivation influences teachers' motivation.

Right	1	2	3	4
Situation at my school	1	2	3	4

13. Sharing leadership with staff and students.

Importance	1	2	3	4
Situation at my school	1	2	3	4

14. *Principal's accessibility to teachers, students and parents.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

Teachers' characteristics

15. *Teachers' knowledge and didactics.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

16. *Teachers' ability to monitor and evaluate students properly.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

17. *Teachers' personality.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

18. *Teachers' communication with students.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

Additional issues

19. *School and class size.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

20. *Students' willingness to study.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

21. *Teachers' willingness to teach.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

22. *School culture and climate.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

23. *Physical environment (buildings, furniture, laboratories, equipment, library, computers).*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

24. *Weekly timetable and number of subjects being taught simultaneously.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

25. *Social life at school.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

26. *Additional studies beyond regular programme.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

27. Discipline at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

28. High standards and expectations towards students held by teachers.

Importance	1	2	3	4
Situation at my school	1	2	3	4

29. Grouping is a good system for studying.

Right	1	2	3	4
Situation at my school	1	2	3	4

30. Management of information at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

31. In my mind, the most important characteristics of good schools are as follows:

32. My child's school is **good** because of the following reasons:

33. My child's school is **not good** because of the following reasons:

Self satisfaction

Give each sentence an indication reflecting your opinion to what usually exists in your child's school as follows:

1 - strongly disagree.

2 - disagree.

3 - agree.

4 - strongly agree.

34. Teachers get enough satisfaction, achievement, etc.

1	2	3	4
---	---	---	---

35. Teachers get enough salary and material rewards.

1	2	3	4
---	---	---	---

36. *General atmosphere at my child's school is positive.*

1	2	3	4
---	---	---	---
37. *Discipline at my child's school is appropriate.*

1	2	3	4
---	---	---	---
38. *Students' achievements are high.*

1	2	3	4
---	---	---	---
39. *Relations between school principal, staff, students and parents are good.*

1	2	3	4
---	---	---	---
40. *The principal has the ability to advance and initiate meaningful changes.*

1	2	3	4
---	---	---	---
41. *Decision making process is appropriate.*

1	2	3	4
---	---	---	---
42. *School has good reputation in community.*

1	2	3	4
---	---	---	---
43. *There are good teachers at school.*

1	2	3	4
---	---	---	---
44. *Students have strong desire to study.*

1	2	3	4
---	---	---	---
45. *School's resources and finance are managed properly.*

1	2	3	4
---	---	---	---
46. *School's buildings, equipment, laboratories, etc. are appropriate.*

1	2	3	4
---	---	---	---
47. *There is a good social life at school.*

1	2	3	4
---	---	---	---
48. *Monitoring and evaluation of students is done well.*

1	2	3	4
---	---	---	---
49. *Teachers treat students properly.*

1	2	3	4
---	---	---	---
50. *Teachers treat parents properly.*

1	2	3	4
---	---	---	---
51. *School size is reasonable (not too big).*

1	2	3	4
---	---	---	---
52. *Class size is reasonable (not too big).*

1	2	3	4
---	---	---	---
53. *Teachers have high expectations towards students.*

1	2	3	4
---	---	---	---
54. *Students have high chance to succeed.*

1	2	3	4
---	---	---	---
55. *There is high pressure on students at school.*

1	2	3	4
---	---	---	---
56. *School has reasonable flexibility.*

1	2	3	4
---	---	---	---

57. *I am **satisfied** with my child's school because of the following reasons not mentioned above:*

58. *I am **not satisfied** with my child's school because of the following reasons not mentioned above:*

Appendix C: a questionnaire for students - main study

Dear student,

You are requested to answer the following questions concerning your attitudes towards school effectiveness. The questionnaire is anonymous and global results are intended to serve only academic purposes dealing with attitudes towards school effectiveness in order to improve schools.

Thank you very much for your cooperation.

Date _____
Class in which you study _____

The following sentences describe characteristics of six-year high schools. For each sentence you are requested to give two answers:

- a. How much (in your mind) each quality is important (or is right) for having good six-year high school.*
- b. What grade will you give to the same quality in your own school.*

The answers are to be given on a scale as follows:

- a. Importance or truth*** of qualities for effective six -year high school:

- 1 - very unimportant/not right at all.*
- 2 - unimportant/not right.*
- 3 - important/right.*
- 4 - very important/very right.*

- b. Situation at my school is:***

- 1 - very bad.*
- 2 - bad.*
- 3 - good.*
- 4 - very good.*

Collaboration at school

1. Collaboration between students and parents at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

2. Collaboration between students and teachers at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

3. Collaboration between teachers and parents at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

4. Collaboration between parents and principals at school. –

Importance	1	2	3	4
Situation at my school	1	2	3	4

5. Teachers' agreement to parental involvement at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

Evaluation of the six-year high school principal

6. Principal's vision, values and way of thinking.

Importance	1	2	3	4
Situation at my school	1	2	3	4

7. Principal's ability to manage changes and to make initiatives.

Importance	1	2	3	4
Situation at my school	1	2	3	4

8. Principal's personal relations with the staff, parents and students.

Importance	1	2	3	4
Situation at my school	1	2	3	4

9. Principal's ability to control, acquire and manage resources and budgets.

Importance	1	2	3	4
Situation at my school	1	2	3	4

10. Principal's ability to deal with difficult situations.

Importance	1	2	3	4
Situation at my school	1	2	3	4

11. Students' belief in the principal.

Importance	1	2	3	4
Situation at my school	1	2	3	4

12. Principal's motivation influences teachers' motivation.

Right	1	2	3	4
Situation at my school	1	2	3	4

13. Sharing leadership with staff and students.

Importance	1	2	3	4
Situation at my school	1	2	3	4

14. Principal's accessibility to teachers, students and parents.

Importance	1	2	3	4
Situation at my school	1	2	3	4

Teachers' characteristics

15. Teachers' knowledge and didactics.

Importance	1	2	3	4
Situation at my school	1	2	3	4

16. Teachers' ability to monitor and evaluate students properly.

Importance	1	2	3	4
Situation at my school	1	2	3	4

17. Teachers' personality.

Importance	1	2	3	4
Situation at my school	1	2	3	4

18. Teachers' communication with students.

Importance	1	2	3	4
Situation at my school	1	2	3	4

Additional issues

19. School and class size (number of students).

Importance	1	2	3	4
Situation at my school	1	2	3	4

20. Students' willingness to study.

Importance	1	2	3	4
Situation at my school	1	2	3	4

21. Teachers' willingness to teach.

Importance	1	2	3	4
Situation at my school	1	2	3	4

22. School culture and climate.

Importance	1	2	3	4
Situation at my school	1	2	3	4

23. Physical environment (buildings, furniture, laboratories, equipment, library, computers).

Importance	1	2	3	4
Situation at my school	1	2	3	4

24. Weekly timetable and number of subjects being taught simultaneously.

Importance	1	2	3	4
Situation at my school	1	2	3	4

25. Social life at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

26. Additional studies beyond regular programme.

Importance	1	2	3	4
Situation at my school	1	2	3	4

27. *Discipline at school.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

28. *High standards and expectations towards students held by teachers.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

29. *Grouping is a good system for studying.*

<i>Right</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

30. *Management of information at school.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

31. *A continuity between junior high school and secondary school.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

32. *The school counsellor functioning.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

33. *Students' continuous presence at school.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

34. *The existence of many studying opportunities.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

35. *Reasonable punishments.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

36. *Special treatment for students with special needs.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

37. *Focus on homework.*

<i>Importance</i>	1	2	3	4
<i>Situation at my school</i>	1	2	3	4

38. *In my mind, the most important qualities of good schools are as follows:*

39. *My own school is **good** because of the following reasons:*

40. My own school is **not good** because of the following reasons:

Self satisfaction

Give each sentence an indication reflecting your opinion to what usually exists in **your own school** as follows:

1 - strongly disagree.

2 - disagree.

3 - agree.

4 - strongly agree.

41. Teachers get enough satisfaction, achievement, etc.

1	2	3	4
---	---	---	---

42. Teachers get enough salary and material rewards.

1	2	3	4
---	---	---	---

43. General atmosphere at my school is positive.

1	2	3	4
---	---	---	---

44. Discipline at my school is appropriate.

1	2	3	4
---	---	---	---

45. Students' achievements are high.

1	2	3	4
---	---	---	---

46. Relations between school principal, staff, students and parents are good.

1	2	3	4
---	---	---	---

47. The principal has the ability to advance and initiate meaningful changes.

1	2	3	4
---	---	---	---

48. Decision making process is appropriate.

1	2	3	4
---	---	---	---

49. School has good reputation in community.

1	2	3	4
---	---	---	---

50. There are good teachers at my school.

1	2	3	4
---	---	---	---

51. Students have strong desire to study.

1	2	3	4
---	---	---	---

52. School's resources and finance are managed properly.

1	2	3	4
---	---	---	---

53. School's buildings, equipment, laboratories, etc are appropriate.

1	2	3	4
---	---	---	---

54. There is a good social life at my school.

1	2	3	4
---	---	---	---

55. *Monitoring and evaluation of students is done well.*

1	2	3	4
---	---	---	---

56. *Teachers treat students properly.*

1	2	3	4
---	---	---	---

57. *Teachers treat parents properly.*

1	2	3	4
---	---	---	---

58. *Students' number at school is reasonable (not too many).*

1	2	3	4
---	---	---	---

59. *Students' number at class is reasonable (not too many).*

1	2	3	4
---	---	---	---

60. *Teachers have high expectations towards students.*

1	2	3	4
---	---	---	---

61. *Students have high chance to succeed.*

1	2	3	4
---	---	---	---

62. *There is high pressure on students at school.*

1	2	3	4
---	---	---	---

63. *School has reasonable flexibility for students.*

1	2	3	4
---	---	---	---

64. *I am **satisfied** with my school because of the following reasons not mentioned above:*

65. *I am **not satisfied** with my own school because of the following reasons not mentioned above:*

Appendix D: a questionnaire for parents - main study

Dear parent,

You are requested to answer the following questions concerning your attitudes towards your child's school effectiveness. The questionnaire is anonymous and global results are intended to serve only academic purposes dealing with attitudes towards school effectiveness in order to improve schools.

Thank you very much for your cooperation.

Date _____
Child's class _____

The following sentences describe characteristics of six-year high schools. For each sentence you are requested to give two answers:

- a. How much (in your mind) each quality is important (or is right) for having good six -year high school.*
- b. What grade will you give to the same quality in your own school.*

The answers are about to be given on a scale as follows:

a. Importance or truth of qualities for effective six -year high school:

- 1 - very unimportant/not right at all.*
- 2 - unimportant/not right.*
- 3 - important/right.*
- 4 - very important/very right.*

b. Situation at my child's school is:

- 1 - very bad.*
- 2 - bad.*
- 3 - good.*
- 4 - very good.*

Collaboration at school

1. Collaboration between students and parents at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

2. Collaboration between students and teachers at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

3. Collaboration between teachers and parents at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

4. Collaboration between parents and principals at school. –

Importance	1	2	3	4
Situation at my school	1	2	3	4

5. Teachers' agreement to parental involvement at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

Evaluation of the six-year high school principal

6. Principal's vision, values and way of thinking.

Importance	1	2	3	4
Situation at my school	1	2	3	4

7. Principal's ability to manage changes and to make initiatives.

Importance	1	2	3	4
Situation at my school	1	2	3	4

8. Principal's personal relations with the staff, parents and students.

Importance	1	2	3	4
Situation at my school	1	2	3	4

9. Principal's ability to control acquire and manage resources and budgets.

Importance	1	2	3	4
Situation at my school	1	2	3	4

10. Principal's ability to deal with difficult situations.

Importance	1	2	3	4
Situation at my school	1	2	3	4

11. Students' belief in principal.

Importance	1	2	3	4
Situation at my school	1	2	3	4

12. Principal's motivation influences teachers' motivation.

Right	1	2	3	4
Situation at my school	1	2	3	4

13. Sharing leadership with staff and students.

Importance	1	2	3	4
Situation at my school	1	2	3	4

14. Principal's accessibility to teachers, students and parents.

Importance	1	2	3	4
Situation at my school	1	2	3	4

Teachers' characteristics

15. Teachers' knowledge and didactics.

Importance	1	2	3	4
Situation at my school	1	2	3	4

16. Teachers' ability to monitor and evaluate students properly.

Importance	1	2	3	4
Situation at my school	1	2	3	4

17. Teachers' personality.

Importance	1	2	3	4
Situation at my school	1	2	3	4

18. Teachers' communication with students.

Importance	1	2	3	4
Situation at my school	1	2	3	4

Additional issues

19. School and class size (number of students).

Importance	1	2	3	4
Situation at my school	1	2	3	4

20. Students' willingness to study.

Importance	1	2	3	4
Situation at my school	1	2	3	4

21. Teachers' willingness to teach.

Importance	1	2	3	4
Situation at my school	1	2	3	4

22. School culture and climate.

Importance	1	2	3	4
Situation at my school	1	2	3	4

23. Physical environment (buildings, furniture, laboratories, equipment, library, computers).

Importance	1	2	3	4
Situation at my school	1	2	3	4

24. Weekly timetable and number of subjects being taught simultaneously.

Importance	1	2	3	4
Situation at my school	1	2	3	4

25. Social life at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

26. Additional studies beyond regular programme.

Importance	1	2	3	4
Situation at my school	1	2	3	4

27. Discipline at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

28. High standards and expectations towards students held by teachers.

Importance	1	2	3	4
Situation at my school	1	2	3	4

29. Grouping is a good system for studying.

Right	1	2	3	4
Situation at my school	1	2	3	4

30. Management of information at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

31. A continuity between junior high school and secondary school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

32. The school counsellor functioning.

Importance	1	2	3	4
Situation at my school	1	2	3	4

33. Students' continuous presence at school.

Importance	1	2	3	4
Situation at my school	1	2	3	4

34. The existence of many studying opportunities.

Importance	1	2	3	4
Situation at my school	1	2	3	4

35. Reasonable punishments.

Importance	1	2	3	4
Situation at my school	1	2	3	4

36. Special treatment for students with special needs.

Importance	1	2	3	4
Situation at my school	1	2	3	4

37. Focus on homework.

Importance	1	2	3	4
Situation at my school	1	2	3	4

38. In my mind, the most important characteristics of good schools are as follows:

39. My child's school is **good** because of the following reasons:

40. My child's school is **not good** because of the following reasons:

Self satisfaction

Give each sentence an indication reflecting your opinion to what usually exists in your child's school as follows:

- 1 - strongly disagree.
- 2 - disagree.
- 3 - agree.
- 4 - strongly agree.

- | | | | | | |
|---|---|---|---|---|---|
| 41. Teachers get enough satisfaction, achievement, etc. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 42. Teachers get enough salary and material rewards. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 43. General atmosphere at my child's school is positive. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 44. Discipline at my child's school is appropriate. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 45. Students' achievements are high. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 46. Relations between school principal, staff, students and parents are good. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 47. The principal has the ability to advance and initiate meaningful changes. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 48. Decision making process is appropriate. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 49. School has good reputation in community. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 50. There are good teachers at school. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 51. Students have strong desire to study. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 52. School's resources and finance are managed properly. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 53. School's buildings, equipment, laboratories, etc. are appropriate. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |
| 54. There is a good social life at school. | <table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | | |

55. *Monitoring and evaluation of students is done well.*

1	2	3	4
---	---	---	---

56. *Teachers treat students properly.*

1	2	3	4
---	---	---	---

57. *Teachers treat parents properly.*

1	2	3	4
---	---	---	---

58. *Students' number at school is reasonable (not too many).*

1	2	3	4
---	---	---	---

59. *Students' number at class is reasonable (not too many).*

1	2	3	4
---	---	---	---

60. *Teachers have high expectations towards students.*

1	2	3	4
---	---	---	---

61. *Students have high chance to succeed.*

1	2	3	4
---	---	---	---

62. *There is high pressure on students at school.*

1	2	3	4
---	---	---	---

63. *School has reasonable flexibility.*

1	2	3	4
---	---	---	---

64. *I am **satisfied** with my child's school because of the following reasons not mentioned above:*

65. *I am **not satisfied** with my child's school because of the following reasons not mentioned above:*

Appendix E: Semi-structured interview for principals and teachers - pilot and main study

Headteachers and teachers were asked the following questions:

Part A: *Give your opinion of the importance and how each of the following qualities of the effective six-year high-school ought to be ideally and describe the situation of each of them in your own school:*

1. *Collaboration of students, teachers and parents.*
2. *Evaluation of school principal (vision, changes, management of resources, personal relations, motivation, accessibility).*
3. *Evaluation of teachers at school (professional knowledge, didactics, students' evaluation, communication).*
4. *School and class size (what ought to be the optimal students' number?).*
5. *Parental involvement at school.*
6. *Teamwork at school (students and staff).*
7. *Students' motivation to study (what influences students' motivation)?*
8. *Organisational culture and climate.*
9. *Discipline at school.*
10. *Teachers' standards and expectations towards students.*
11. *Teaching styles at school.*
12. *Social life at school.*
13. *Other characteristics not mentioned.*

Part B: *What is your satisfaction with the following descriptions as existing at your own school?*

14. *Teachers' intrinsic and extrinsic rewards.*
15. *Students' achievements.*
16. *Relations between school principal, staff, students and parents.*
17. *Principal's leadership and management ability.*
18. *Teachers' quality.*
19. *Management of school's resources.*
20. *School and classes' size.*
21. *Teachers' expectations towards students.*
22. *School's flexibility for students.*
23. *Other reasons for satisfaction/dissatisfaction with your own school.*

Appendix F: Pilot study: Results of students' questionnaires

(The scores' range is 1-4)

Pilot study: students - mean scores of closed questions

Population	Question	1	2	3	4	5	6	7	8	9	10
Whole school	importance	2.73	3.73	3.20	3.13	3.03	3.80	3.73	3.83	3.93	3.83
	situation	2.26	2.20	2.13	1.96	2.33	2.38	2.36	2.17	2.07	2.34
	Gap	0.47	1.53	1.07	1.17	0.70	1.42	1.38	1.66	1.86	1.49
8th class	importance	3.00	3.90	3.00	3.10	3.00	3.60	3.90	3.60	4.00	3.70
	situation	2.80	2.00	2.33	2.10	2.90	1.78	1.80	1.70	1.40	1.44
	Gap	0.20	1.90	0.67	1.00	0.10	1.82	2.10	1.90	2.60	2.26
10th class	importance	3.00	3.90	3.00	3.30	2.90	4.00	3.70	3.90	4.00	4.00
	situation	1.78	2.00	1.67	1.78	1.89	2.56	2.67	2.22	2.22	2.78
	Gap	1.22	1.90	1.33	1.52	1.01	1.44	1.03	1.68	1.78	1.22
12h class	importance	2.20	3.40	3.60	3.00	3.20	3.80	3.60	4.00	3.80	3.80
	situation	2.20	2.60	2.40	2.00	2.20	2.80	2.60	2.60	2.60	2.80
	Gap	0.00	0.80	1.20	1.00	1.00	1.00	1.00	1.40	1.20	1.00

Table F.1: Pilot study - students - questions 1-10

Population	Question	11	12	13	14	15	16	17	18	19	20
Whole school	importance	3.77	3.33	3.70	3.77	4.00	3.90	3.77	3.90	3.70	3.87
	situation	1.98	2.73	1.89	2.06	2.51	2.19	2.21	2.41	2.57	2.42
	Gap	1.79	0.61	1.81	1.71	1.49	1.71	1.55	1.49	1.13	1.44
8th class	importance	3.70	3.30	3.60	3.70	4.00	3.70	3.90	3.80	3.60	3.60
	situation	1.60	2.11	1.40	1.20	1.90	2.20	2.00	1.80	1.60	1.80
	Gap	2.10	1.19	2.20	2.50	2.10	1.50	1.90	2.00	2.00	1.80
10th class	importance	4.00	3.30	3.90	3.80	4.00	4.00	3.80	3.90	3.70	4.00
	situation	2.33	2.67	1.67	2.78	3.22	2.56	2.44	2.44	3.11	2.67
	Gap	1.67	0.63	2.23	1.02	0.78	1.44	1.36	1.46	0.59	1.33
12h class	importance	3.60	3.40	3.60	3.80	4.00	4.00	3.60	4.00	3.80	4.00
	situation	2.00	3.40	2.60	2.20	2.40	1.80	2.20	3.00	3.00	2.80
	Gap	1.60	0.00	1.00	1.60	1.60	2.20	1.40	1.00	0.80	1.20

Table F.2: Pilot study - students - questions 11-20

Population	Question	21	22	23	24	25	26	27	28	29	30
Whole school	importance	3.80	3.60	3.83	3.77	3.77	3.57	3.90	3.13	3.60	3.58
	situation	2.30	2.09	2.17	2.34	2.46	2.16	1.60	2.85	3.01	2.25
	Gap	1.50	1.51	1.66	1.43	1.31	1.41	2.30	0.29	0.59	1.34
8th class	importance	3.60	3.40	3.60	3.50	3.50	3.40	3.90	3.00	3.50	3.20
	situation	2.00	1.40	1.30	2.30	1.40	2.20	1.00	2.30	2.13	1.80
	Gap	1.60	2.00	2.30	1.20	2.10	1.20	2.90	0.70	1.38	1.40
10th class	importance	3.80	3.80	3.90	3.80	4.00	3.50	3.80	3.00	3.90	3.80
	situation	2.89	2.67	2.22	2.11	2.78	1.67	2.00	3.44	3.11	2.44
	Gap	0.91	1.13	1.68	1.69	1.22	1.83	1.80	-0.44	0.79	1.36
12h class	importance	4.00	3.60	4.00	4.00	3.80	3.80	4.00	3.40	3.40	3.75
	situation	2.00	2.20	3.00	2.60	3.20	2.60	1.80	2.80	3.80	2.50
	Gap	2.00	1.40	1.00	1.40	0.60	1.20	2.20	0.60	-0.40	1.25

Table F.3: Pilot study - students - questions 21-30

Question	34	35	36	37	38	39	40	41	42	43	44	45	46
Whole school	2.50	2.73	2.07	1.67	2.70	2.50	2.50	2.30	2.47	2.83	1.87	2.07	2.33
8th class	1.90	2.80	1.30	1.10	1.60	2.20	2.10	1.80	1.50	1.80	1.30	1.30	1.50
10th class	2.80	2.80	2.50	1.90	3.30	2.90	3.00	2.30	3.11	3.30	2.10	2.50	2.70
12h class	2.80	2.60	2.40	2.00	3.20	2.40	2.40	2.80	2.80	3.40	2.20	2.40	2.80

Question	47	48	49	50	51	52	53	54	55	56
Whole school	2.40	2.50	2.40	2.87	2.97	2.47	2.80	2.67	3.20	2.36
8th class	1.10	2.00	2.10	2.70	2.50	1.30	2.30	1.50	3.00	1.67
10th class	2.70	2.50	2.30	2.90	3.00	3.10	3.30	3.10	3.00	2.60
12h class	3.40	3.00	2.80	3.00	3.40	3.00	2.80	3.40	3.60	2.80

Table F.4: Pilot study - students - questions 34-56

Appendix G: Pilot study: Results of parents' questionnaires

(The scores' range is 1-4)

Pilot study: parents - mean scores of closed questions

Population	Question	1	2	3	4	5	6	7	8	9	10
Whole school	importance	2.79	4.00	3.07	3.05	3.29	4.00	3.83	3.95	4.00	3.95
	situation	2.37	2.32	2.36	2.45	2.60	2.73	2.75	2.75	2.57	3.06
	Gap	0.42	1.68	0.71	0.60	0.69	1.27	1.08	1.20	1.43	0.90
8th class	importance	4.00	4.00	4.00	4.00	3.86	4.00	4.00	4.00	4.00	4.00
	situation	3.00	2.29	2.57	2.86	3.00	3.43	3.00	3.00	2.71	3.17
	Gap	1.00	1.71	1.43	1.14	0.86	0.57	1.00	1.00	1.29	0.83
10th class	importance	2.86	4.00	3.71	3.14	3.00	4.00	4.00	3.86	4.00	3.86
	situation	2.60	2.67	3.00	2.50	2.80	3.25	3.25	3.25	3.00	3.00
	Gap	0.26	1.33	0.71	0.64	0.20	0.75	0.75	0.61	1.00	0.86
12h class	importance	1.50	4.00	1.50	2.00	3.00	4.00	3.50	4.00	4.00	4.00
	situation	1.50	2.00	1.50	2.00	2.00	1.50	2.00	2.00	2.00	3.00
	Gap	0.00	2.00	0.00	0.00	1.00	2.50	1.50	2.00	2.00	1.00

Table G.1: Pilot study - parents - questions 1-10

Population	Question	11	12	13	14	15	16	17	18	19	20
Whole school	importance	3.95	3.95	3.60	3.69	3.90	3.90	4.00	3.95	3.64	3.95
	situation	2.53	3.36	2.83	3.50	2.60	2.37	2.25	2.62	2.30	2.62
	Gap	1.42	0.59	0.76	0.19	1.30	1.54	1.75	1.33	1.34	1.33
8th class	importance	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.86	4.00
	situation	2.83	2.83	3.00	3.50	2.50	2.43	2.57	2.86	2.57	2.86
	Gap	1.17	1.17	1.00	0.50	1.50	1.57	1.43	1.14	1.29	1.14
10th class	importance	3.86	3.86	3.29	3.57	3.71	3.71	4.00	3.86	3.57	3.86
	situation	3.75	3.25	3.00	3.50	2.80	3.17	3.17	3.00	2.33	3.00
	Gap	0.11	0.61	0.29	0.07	0.91	0.55	0.83	0.86	1.24	0.86
12h class	importance	4.00	4.00	3.50	3.50	4.00	4.00	4.00	4.00	3.50	4.00
	situation	1.00	4.00	2.50	3.50	2.50	1.50	1.00	2.00	2.00	2.00
	Gap	3.00	0.00	1.00	0.00	1.50	2.50	3.00	2.00	1.50	2.00

Table G.2: Pilot study - parents - questions 11-20

Population	Question	21	22	23	24	25	26	27	28	29	30
Whole school	importance	3.95	3.83	3.90	3.90	3.60	2.79	3.07	3.48	3.81	3.67
	situation	2.26	2.51	2.13	2.35	2.72	1.86	2.28	2.63	3.35	3.06
	Gap	1.70	1.33	1.78	1.56	0.87	0.92	0.79	0.85	0.46	0.61
8th class	importance	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.86	3.71	3.86
	situation	2.57	2.86	1.71	2.71	2.00	2.29	2.50	2.71	2.71	2.83
	Gap	1.43	1.14	2.29	1.29	2.00	1.71	1.50	1.14	1.00	1.02
10th class	importance	3.86	4.00	3.71	3.71	3.29	2.86	3.71	3.57	3.71	3.14
	situation	3.20	2.67	2.17	2.83	2.67	1.80	2.83	3.17	3.33	2.83
	Gap	0.66	1.33	1.55	0.88	0.62	1.06	0.88	0.40	0.38	0.31
12h class	importance	4.00	3.50	4.00	4.00	3.50	1.50	1.50	3.00	4.00	4.00
	situation	1.00	2.00	2.50	1.50	3.50	1.50	1.50	2.00	4.00	3.50
	Gap	3.00	1.50	1.50	2.50	0.00	0.00	0.00	1.00	0.00	0.50

Table G.3: Pilot study - parents - questions 21-30

Question	34	35	36	37	38	39	40	41	42	43	44	45	46
Whole school	2.83	2.20	2.64	2.15	3.11	3.00	2.76	2.59	3.12	3.26	2.12	2.61	2.34
8th class	2.60	2.80	2.57	2.67	2.83	3.00	3.17	2.67	3.00	3.00	2.29	2.33	1.86
10th class	2.40	2.29	2.86	2.29	3.00	3.00	2.60	2.60	2.86	3.29	2.57	3.00	2.17
12h class	3.50	1.50	2.50	1.50	3.50	3.00	2.50	2.50	3.50	3.50	1.50	2.50	3.00

Question	47	48	49	50	51	52	53	54	55	56
Whole school	2.75	3.02	2.79	3.43	2.83	2.33	3.17	3.14	3.02	3.37
8th class	2.17	2.43	2.71	3.00	2.71	2.14	2.86	3.00	2.71	2.83
10th class	2.57	3.14	3.14	3.29	2.29	1.86	3.14	3.43	2.86	3.29
12h class	3.50	3.50	2.50	4.00	3.50	3.00	3.50	3.00	3.50	4.00

Table G.4: Pilot study - parents - questions 34-56

Appendix H: Pilot study: Questionnaires' answers - statistical validity

$$n = \text{sample size} \quad S.D = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n-1}} \quad \alpha = 0.01 \quad s = \text{sample variance} = \frac{\sum (x_i - \bar{x})^2}{n-1}$$

$$\text{Confidence Interval} = z_{\alpha} \frac{s}{\sqrt{n}} \quad \bar{x} - z_{\alpha} \frac{s}{\sqrt{n}} \leq \mu \leq \bar{x} + z_{\alpha} \frac{s}{\sqrt{n}}$$

Importance			Reality	
Question	S.D	C. Interval	S.D	C. Interval
1	0.6245	0.3217	0.9991	0.5253
2	0.4082	0.2103	0.6124	0.3220
3	0.7409	0.3896	0.9960	0.5350
4	0.8000	0.4121	0.9991	0.5253
5	0.7638	0.3935	0.8754	0.4603
6	0.5000	0.2576	0.8221	0.4416
7	0.4359	0.2246	0.9079	0.4774
8	0.5000	0.2576	1.0180	0.5352
9	0.2000	0.1030	1.0417	0.5477
10	0.4726	0.2435	0.9638	0.5176
11	0.4082	0.2103	1.0826	0.5692
12	0.7483	0.3855	0.8913	0.4787
13	0.5416	0.2790	0.9891	0.5200
14	0.4359	0.2246	1.1034	0.5801
15	0.0000	0.0000	0.9325	0.4903
16	0.3317	0.1709	0.8969	0.4716
17	0.5000	0.2576	0.7790	0.4096
18	0.3317	0.1709	0.9079	0.4774
19	0.4761	0.2453	1.1788	0.6198
20	0.3742	0.1928	0.9168	0.4821
21	0.4359	0.2246	0.9168	0.4821
22	0.5774	0.2974	0.9079	0.4774
23	0.5000	0.2576	0.9325	0.4903
24	0.4583	0.2361	0.9546	0.5019
25	0.5228	0.2693	0.9991	0.5253
26	0.7141	0.3679	0.9743	0.5123
27	0.3317	0.1709	0.8836	0.4646
28	0.7024	0.3618	0.9631	0.5064
29	0.8847	0.4751	1.0193	0.5598
30	0.7211	0.3791	0.7168	0.3850

Satisfaction		
Question	S.D	C. Interval
34	0.7118	0.3667
35	0.9695	0.4995
36	0.9129	0.4703
37	0.7638	0.3935
38	1.0801	0.5564
39	0.8226	0.4238
40	1.0456	0.5387
41	0.7638	0.3935
42	1.2091	0.6357
43	1.0214	0.5262
44	0.7638	0.3935
45	0.9129	0.4703
46	0.8794	0.4530
47	1.0801	0.5564
48	0.7071	0.3643
49	0.9452	0.4869
50	0.9434	0.4860
51	1.0132	0.5220
52	0.9950	0.5126
53	0.8165	0.4206
54	1.0456	0.5387
55	0.8327	0.4290
56	0.9546	0.5019

Table H.1: Pilot study - students - standard deviation and confidence interval

S.D range: 0-1.2091
Interval range: 0-0.6357

Importance			Reality	
Question	S.D	C. Interval	S.D	C. Interval
1	0.9811	0.5054	0.9288	0.4883
2	0.0000	0.0000	0.6325	0.3325
3	0.8921	0.4691	0.9103	0.4889
4	0.8062	0.4153	0.9103	0.4786
5	0.7188	0.3703	0.6993	0.3677
6	0.0000	0.0000	1.0377	0.5574
7	0.2500	0.1288	0.9541	0.5016
8	0.2500	0.1288	0.7596	0.3994
9	0.0000	0.0000	1.0316	0.5424
10	0.2500	0.1288	0.7930	0.4259
11	0.2500	0.1288	1.1146	0.5861
12	0.2582	0.1330	0.5774	0.3101
13	0.9103	0.4689	0.7006	0.3684
14	0.5936	0.3058	0.6742	0.3545
15	0.3416	0.0000	0.6504	0.3420
16	0.3416	0.1760	0.7368	0.3874
17	0.0000	0.0000	0.9103	0.4786
18	0.2500	0.1288	0.6761	0.3555
19	0.4787	0.2466	0.8281	0.4354
20	0.2500	0.1288	0.8619	0.4532
21	0.2500	0.1288	0.9376	0.4930
22	0.2500	0.1288	0.6172	0.3245
23	0.3416	0.1760	0.5345	0.2810
24	0.3416	0.1760	0.7368	0.3874
25	0.6191	0.3190	0.9155	0.4813
26	1.1087	0.5712	0.8771	0.4611
27	0.9639	0.4966	0.7596	0.3994
28	0.6191	0.3190	0.6761	0.3555
29	0.4472	0.2402	0.8338	0.4579
30	0.8921	0.4691	0.6157	0.3307

Satisfaction		
Question	S.D	C. Interval
34	0.6513	0.3355
35	1.0082	0.5194
36	0.7042	0.3628
37	0.8165	0.4206
38	0.7559	0.3894
39	0.5547	0.2858
40	0.6887	0.3548
41	0.5064	0.2609
42	0.6547	0.3442
43	0.6761	0.3483
44	0.7042	0.3628
45	0.6686	0.3444
46	0.7432	0.3829
47	0.9155	0.4716
48	0.7188	0.3703
49	0.7188	0.3703
50	0.6831	0.3519
51	0.8851	0.4560
52	0.7188	0.3703
53	0.6801	0.3504
54	0.5606	0.2888
55	0.6191	0.3190
56	0.5606	0.2948

Table H.2: Pilot study - parents - standard deviation and confidence interval

S.D range: 0-1.1146

Interval range: 0-0.8288

Appendix I: School A: Results of students' questionnaires

(The scores' range is 1-4)

School A: students - mean scores of closed questions

Population	Question	1	2	3	4	5	6	7	8	9	10
Whole school	importance	3.21	3.67	3.18	2.99	3.11	3.53	3.59	3.66	3.61	3.79
	situation	2.53	2.37	2.41	2.30	2.58	2.73	2.70	2.67	2.52	2.79
	Gap	0.69	1.31	0.76	0.69	0.53	0.80	0.89	0.98	1.09	1.00
7th class	importance	3.25	3.45	3.23	3.00	3.06	3.42	3.45	3.37	3.53	3.59
	situation	3.34	3.10	3.06	3.03	2.94	3.17	2.87	2.97	3.00	3.03
	Gap	-0.09	0.35	0.16	-0.03	0.13	0.25	0.58	0.40	0.53	0.55
8th class	importance	3.67	3.64	3.43	3.26	3.62	3.57	3.92	3.78	3.48	3.78
	situation	2.35	2.50	2.36	2.15	2.77	2.50	2.60	2.56	2.11	2.96
	Gap	1.32	1.14	1.07	1.11	0.85	1.07	1.32	1.22	1.37	0.81
9h class	importance	3.39	3.39	3.33	3.00	2.96	3.36	3.46	3.39	3.44	3.78
	situation	2.18	1.71	2.22	2.04	2.26	2.30	2.18	2.29	2.04	2.48
	Gap	1.21	1.68	1.11	0.96	0.70	1.06	1.29	1.11	1.41	1.30
10th class	importance	2.94	3.89	3.18	2.94	3.26	3.65	3.82	3.80	3.76	3.80
	situation	2.47	2.41	2.55	2.38	2.70	3.31	3.30	3.09	2.73	3.03
	Gap	0.47	1.47	0.63	0.56	0.57	0.33	0.52	0.71	1.04	0.77
11th class	importance	3.15	3.86	3.00	2.79	2.85	3.74	3.38	3.79	3.70	3.91
	situation	2.39	2.24	2.06	2.06	2.29	2.38	2.44	2.56	2.45	2.47
	Gap	0.75	1.62	0.94	0.74	0.56	1.35	0.94	1.24	1.24	1.44
12th class	importance	3.00	3.74	2.97	3.00	2.93	3.41	3.50	3.77	3.67	3.87
	situation	2.38	2.19	2.23	2.10	2.50	2.61	2.70	2.50	2.66	2.72
	Gap	0.63	1.55	0.74	0.90	0.43	0.81	0.80	1.27	1.01	1.14

Table I.1: School A - students - questions 1-10

Population	Question	11	12	13	14	15	16	17	18	19	20
Whole school	importance	3.54	3.26	3.61	3.65	3.79	3.73	3.59	3.79	3.39	3.62
	situation	2.45	2.59	2.41	2.54	2.60	2.51	2.52	2.52	2.91	2.39
	Gap	1.10	0.66	1.21	1.11	1.19	1.23	1.07	1.28	0.49	1.23
7th class	importance	3.33	3.37	3.54	3.63	3.77	3.65	3.57	3.77	3.23	3.43
	situation	2.70	3.17	2.89	2.74	3.19	3.10	3.10	3.30	3.35	2.87
	Gap	0.63	0.20	0.64	0.89	0.58	0.55	0.47	0.47	-0.13	0.56
8th class	importance	3.36	3.37	3.62	3.57	3.75	3.82	3.54	3.78	3.75	3.41
	situation	2.07	2.63	2.15	2.29	2.79	2.68	2.57	2.63	2.86	2.07
	Gap	1.29	0.74	1.46	1.29	0.96	1.14	0.96	1.15	0.89	1.33
9th class	importance	3.41	3.26	3.15	3.43	3.50	3.52	3.48	3.67	3.00	3.44
	situation	1.89	2.52	2.15	1.82	2.30	2.11	2.15	2.36	2.78	2.04
	Gap	1.51	0.74	1.00	1.61	1.20	1.41	1.33	1.31	0.22	1.41
10th class	importance	3.71	3.21	3.76	3.54	3.91	3.74	3.57	3.83	3.34	3.82
	situation	3.06	2.77	2.71	3.00	2.47	2.50	2.47	2.41	2.97	2.60
	Gap	0.65	0.43	1.05	0.54	1.44	1.24	1.10	1.42	0.37	1.22
11th class	importance	3.76	3.22	3.72	3.88	3.91	3.76	3.79	3.88	3.50	3.79
	situation	2.29	2.03	2.25	2.67	2.33	2.03	2.18	1.94	2.50	1.97
	Gap	1.47	1.19	1.47	1.21	1.58	1.73	1.61	1.94	1.00	1.82
12th class	importance	3.60	3.14	3.83	3.78	3.84	3.90	3.55	3.81	3.53	3.74
	situation	2.50	2.46	2.21	2.56	2.55	2.63	2.61	2.52	3.00	2.74
	Gap	1.10	0.68	1.62	1.22	1.29	1.27	0.94	1.29	0.53	1.00

Table I.2: School A - students - questions 11-20

Population	Question	21	22	23	24	25	26	27	28	29	30
Whole school	importance	3.72	3.52	3.63	3.50	3.70	3.23	3.56	3.23	3.48	3.41
	situation	2.75	2.44	2.47	2.55	2.71	2.33	2.39	2.69	2.89	2.73
	Gap	0.97	1.07	1.16	0.95	1.00	0.90	1.18	0.54	0.59	0.68
7th class	importance	3.58	3.52	3.67	3.48	3.65	3.13	3.52	3.37	3.35	3.42
	situation	3.42	2.90	3.03	3.19	3.23	3.10	2.77	3.23	3.03	3.58
	Gap	0.16	0.61	0.63	0.29	0.42	0.03	0.74	0.13	0.32	-0.16
8th class	importance	3.82	3.60	3.70	3.73	3.70	3.48	3.67	3.41	3.77	3.59
	situation	2.71	2.72	2.04	1.81	2.67	2.76	2.11	2.48	2.60	2.63
	Gap	1.11	0.88	1.67	1.92	1.04	0.72	1.56	0.93	1.17	0.96
9th class	importance	3.56	3.23	3.30	3.15	3.63	3.19	3.63	3.23	3.52	3.30
	situation	2.63	2.00	2.07	2.38	2.07	1.85	1.89	2.40	2.92	2.56
	Gap	0.93	1.23	1.22	0.76	1.56	1.33	1.74	0.83	0.60	0.74
10th class	importance	3.77	3.62	3.69	3.69	3.82	3.17	3.71	3.18	3.50	3.47
	situation	2.85	2.45	2.42	2.89	3.03	2.34	2.50	2.82	2.91	3.00
	Gap	0.92	1.17	1.26	0.80	0.79	0.83	1.21	0.36	0.59	0.47
11th class	importance	3.76	3.44	3.88	3.45	3.59	3.36	3.35	3.06	3.41	3.33
	situation	2.24	2.03	2.24	2.27	2.79	2.00	2.41	2.44	2.82	2.13
	Gap	1.53	1.41	1.65	1.18	0.79	1.36	0.94	0.62	0.59	1.20
12th class	importance	3.81	3.67	3.50	3.48	3.82	3.07	3.53	3.17	3.37	3.36
	situation	2.65	2.57	2.97	2.63	2.32	1.93	2.53	2.71	3.03	2.48
	Gap	1.16	1.10	0.53	0.85	1.50	1.14	1.00	0.45	0.33	0.88

Table I.3: School A - students - questions 21-30

Population	Question	31	32	33	34	35	36	37
Whole school	importance	3.03	3.46	3.43	3.62	3.26	3.72	3.16
	situation	2.41	2.68	2.50	2.45	2.65	2.82	2.66
	Gap	0.62	0.78	0.93	1.17	0.60	0.90	0.50
7th class	importance	3.40	3.55	3.20	3.45	3.19	3.65	3.29
	situation	3.13	3.23	3.13	3.13	3.00	3.27	3.10
	Gap	0.27	0.32	0.07	0.32	0.19	0.38	0.19
8th class	importance	3.23	3.52	3.81	3.70	3.46	3.81	3.31
	situation	2.44	2.59	2.00	2.52	2.80	2.63	2.54
	Gap	0.79	0.93	1.81	1.19	0.66	1.19	0.77
9th class	importance	3.16	3.59	3.52	3.37	3.33	3.56	3.38
	situation	2.72	2.37	2.07	2.00	2.22	2.70	2.54
	Gap	0.44	1.22	1.44	1.37	1.11	0.85	0.85
10th class	importance	3.15	3.69	3.61	3.68	3.54	3.71	3.23
	situation	2.76	3.00	3.04	2.42	2.82	2.79	2.56
	Gap	0.39	0.69	0.57	1.26	0.72	0.93	0.67
11th class	importance	2.66	3.50	3.27	3.81	2.91	3.88	2.97
	situation	1.42	2.50	2.06	1.91	2.52	2.70	2.50
	Gap	1.23	1.00	1.21	1.91	0.39	1.19	0.47
12th class	importance	2.66	2.89	3.24	3.67	3.14	3.70	2.83
	situation	2.07	2.32	2.57	2.72	2.52	2.83	2.73
	Gap	0.59	0.57	0.67	0.94	0.62	0.87	0.10

Table I.4: School A - students - questions 31-37

Question	41	42	43	44	45	46	47	48	49	50	51	52	53
Whole school	2.60	2.65	2.57	2.40	2.63	2.50	2.80	2.60	2.70	2.92	2.14	2.46	2.57
7th class	3.36	3.14	3.04	2.61	2.68	2.86	2.79	3.21	2.90	3.54	2.83	3.21	3.10
8th class	2.64	2.60	2.48	2.69	2.62	3.04	2.92	2.83	2.67	3.32	2.05	2.48	2.38
9th class	2.58	2.63	1.87	1.78	2.35	1.96	2.52	2.09	2.05	2.09	1.59	1.91	2.18
10th class	2.58	2.48	2.79	2.32	2.76	2.74	3.12	2.78	2.94	2.74	2.34	2.53	2.53
11th class	2.16	2.50	2.53	2.28	2.59	2.38	2.63	2.16	2.56	2.84	1.88	2.16	2.25
12th class	2.36	2.59	2.62	2.71	2.72	2.04	2.81	2.50	2.97	2.97	2.07	2.41	2.97

Question	54	55	56	57	58	59	60	61	62	63
Whole school	2.84	2.42	2.35	2.96	2.93	2.77	2.82	2.67	2.96	2.45
7th class	3.03	2.64	2.97	3.03	2.79	2.83	2.90	2.93	2.83	2.79
8th class	2.95	2.72	2.85	3.05	3.16	2.55	3.20	3.00	2.58	2.74
9th class	2.50	2.45	1.77	2.95	2.73	2.59	2.55	2.18	2.68	1.73
10th class	2.91	2.50	2.31	3.09	3.15	3.03	2.97	2.82	3.24	2.64
11th class	3.13	2.16	1.97	2.78	2.50	2.45	2.47	2.44	3.00	2.53
12th class	2.46	2.10	2.28	2.89	3.28	3.14	2.89	2.66	3.31	2.21

Table I.5: School A - students - questions 41-63

School A: students - the open ended questions

The open questions provided opportunities for respondents to comment on issues at school A. The numbers of students indicated each issue are in parenthesis. The issues found are as follows:

- **Teachers (65):** There are teachers who do not behave appropriately, have low motivation, lack of knowledge, bad didactics and bad communication with the students. Some of them are not qualified to teach students for the matriculation examinations. One student says: *"there are teachers who do not know how to teach and in what speed, they do not understand the students and do not consider them"*.
- **Discipline/violence (33):** There is much violence and no discipline.

- **Resources and equipment** (24): There is a lack of equipment and decoration (computers, furniture, plants), there are not enough resources and bad maintenance as one student says, *the yard is too small and the buildings are old and badly maintained. There are no extracurricular subjects.*
- **School pressure** (15): There is a very high pressure, too many tests in every week as one says, *the school is a 'grades' factory'. The situation causes despair.*
- **Social and cultural activities** (9): There are no social and cultural activities for students and teachers.
- **Links between schools** (8): The links between the secondary school and the junior high school are not effective. They should be separated.
- **Punishments** (5): Punishments are not reasonable.
- **The school principal** (5): The relationships with the principal are too bad.
- **Class crowding** (3): The classes are too crowded.
- **Unimportant subjects** (2): There are some unimportant subjects such as Arabic.
- **Bureaucracy** (2): The school is too bureaucratic and does not function well.
- **The timetable** (2): The timetable is very bad organised.
- **Homework** (2): There is no focus on homework.
- **Vandalism** (2): Many students damage the equipment and furniture.
- **Smoking** (2): Many students (even young ones) smoke cigarettes.
- **Absence** (1): There is a problem of student absence.
- **Students with special needs** (1): There is no special treatment for students with special needs.
- **Gender** (1): Most teachers are females and there are almost no males.

Appendix J: School A: Results of Parents' questionnaires

(The scores' range is 1-4)

School A: parents - mean scores of closed questions

Population	Question	1	2	3	4	5	6	7	8	9	10
Whole school	importance	3.59	3.84	3.64	3.48	3.42	3.81	3.86	3.84	3.81	3.84
	situation	2.66	2.52	2.46	2.57	2.87	2.94	2.62	2.85	2.79	2.81
	Gap	0.93	1.32	1.18	0.91	0.55	0.88	1.23	0.99	1.03	1.03
7th class	importance	3.65	3.80	3.70	3.40	3.63	3.75	3.85	4.00	3.65	3.75
	situation	3.00	2.74	2.74	2.06	3.12	2.88	2.71	2.76	2.88	2.94
	Gap	0.65	1.06	0.96	1.34	0.51	0.87	1.14	1.24	0.77	0.81
8th class	importance	3.62	3.77	3.85	3.62	3.42	3.92	3.85	3.85	3.92	3.85
	situation	2.58	3.00	2.82	2.82	2.73	3.45	2.67	3.17	2.90	2.50
	Gap	1.03	0.77	1.03	0.80	0.69	0.46	1.18	0.68	1.02	1.35
9h class	importance	3.75	3.75	4.00	3.50	3.25	3.50	4.00	3.50	3.75	3.75
	situation	2.75	2.00	2.00	2.25	3.00	2.25	2.25	2.50	2.00	2.25
	Gap	1.00	1.75	2.00	1.25	0.25	1.25	1.75	1.00	1.75	1.50
10th class	importance	3.22	3.89	3.33	3.33	3.00	3.89	3.78	3.89	3.78	4.00
	situation	2.11	2.56	2.44	2.44	2.56	3.00	2.89	3.22	2.78	2.89
	Gap	1.11	1.33	0.89	0.89	0.44	0.89	0.89	0.67	1.00	1.11
11th class	importance	3.70	3.80	3.70	3.70	3.70	3.80	3.70	3.78	3.80	3.70
	situation	2.60	2.50	2.10	2.50	2.40	2.70	2.50	2.44	2.60	2.70
	Gap	1.10	1.30	1.60	1.20	1.30	1.10	1.20	1.33	1.20	1.00
12th class	importance	3.67	4.00	3.33	3.33	3.50	4.00	4.00	4.00	4.00	4.00
	situation	3.00	2.33	2.67	3.33	3.50	3.33	2.67	3.00	3.50	3.50
	Gap	0.67	1.67	0.67	0.00	0.00	0.67	1.33	1.00	0.50	0.50

Table J.1: School A - parents - questions 1-10

Population	Question	11	12	13	14	15	16	17	18	19	20
Whole school	importance	3.78	3.60	3.59	3.78	3.82	3.85	3.55	3.79	3.59	3.76
	situation	2.85	2.86	2.68	2.85	2.62	2.52	2.64	2.65	2.64	2.66
	Gap	0.94	0.74	0.91	0.93	1.20	1.33	0.91	1.14	0.95	1.09
7th class	importance	3.80	3.55	3.60	3.80	3.79	3.79	3.84	3.89	3.63	3.72
	situation	2.71	2.81	2.72	2.18	3.06	2.82	3.24	2.94	3.00	2.76
	Gap	1.09	0.74	0.88	1.62	0.73	0.97	0.61	0.95	0.63	0.96
8th class	importance	3.77	3.75	3.38	3.77	3.77	3.85	3.77	4.00	3.85	3.85
	situation	3.09	2.90	3.09	3.33	2.92	3.00	3.08	3.00	2.75	2.83
	Gap	0.68	0.85	0.29	0.44	0.85	0.85	0.69	1.00	1.10	1.01
9th class	importance	3.75	3.75	3.75	3.75	3.75	3.75	3.00	3.25	3.25	3.75
	situation	2.25	3.25	2.25	3.00	2.00	2.50	1.75	2.00	2.25	2.50
	Gap	1.50	0.50	1.50	0.75	1.75	1.25	1.25	1.25	1.00	1.25
10th class	importance	3.89	3.56	3.33	3.78	3.89	3.89	3.78	3.67	3.33	3.67
	situation	3.00	3.00	2.89	2.89	2.44	2.56	2.67	2.78	2.75	2.22
	Gap	0.89	0.56	0.44	0.89	1.44	1.33	1.11	0.89	0.58	1.44
11th class	importance	3.50	3.70	3.50	3.60	3.70	3.80	3.50	3.90	3.50	3.90
	situation	2.50	2.30	2.60	2.50	2.30	2.00	2.10	2.20	2.40	2.40
	Gap	1.00	1.40	0.90	1.10	1.40	1.80	1.40	1.70	1.10	1.50
12th class	importance	4.00	3.33	4.00	4.00	4.00	4.00	3.33	4.00	4.00	3.67
	situation	3.50	3.00	2.50	3.33	3.00	2.33	3.00	3.00	2.67	3.33
	Gap	0.50	0.33	1.50	0.67	1.00	1.67	0.33	1.00	1.33	0.33

Table J.2: School A - parents - questions 11-20

Population	Question	21	22	23	24	25	26	27	28	29	30
Whole school	importance	3.79	3.74	3.66	3.73	3.71	3.50	3.90	3.40	3.58	3.53
	situation	2.60	2.47	2.51	2.71	2.69	2.27	2.36	2.87	2.90	2.70
	Gap	1.19	1.27	1.15	1.02	1.02	1.24	1.55	0.53	0.69	0.82
7th class	importance	3.74	3.79	3.58	3.74	3.68	3.63	3.89	3.47	3.58	3.42
	situation	3.12	2.76	2.65	2.82	2.71	2.53	2.47	3.06	2.88	2.93
	Gap	0.62	1.02	0.93	0.91	0.98	1.10	1.42	0.41	0.70	0.49
8th class	importance	3.77	3.92	3.85	3.77	3.62	3.54	3.85	3.38	3.62	3.64
	situation	2.64	3.00	2.92	3.17	2.75	3.09	2.73	3.09	3.00	3.09
	Gap	1.13	0.92	0.93	0.60	0.87	0.45	1.12	0.29	0.62	0.55
9h class	importance	3.75	4.00	3.50	3.75	3.25	3.50	4.00	3.25	3.75	3.50
	situation	3.00	2.00	2.00	2.25	3.00	2.50	2.25	3.00	3.25	2.50
	Gap	0.75	2.00	1.50	1.50	0.25	1.00	1.75	0.25	0.50	1.00
10th class	importance	4.00	3.67	3.56	3.89	4.00	3.11	4.00	3.44	3.44	3.56
	situation	2.44	2.67	2.44	2.67	2.78	2.33	2.33	2.78	3.11	2.89
	Gap	1.56	1.00	1.11	1.22	1.22	0.78	1.67	0.67	0.33	0.67
11th class	importance	3.80	3.80	3.80	3.60	3.60	3.60	3.70	3.80	3.50	3.70
	situation	2.20	2.10	2.10	2.40	2.30	1.67	2.40	2.40	2.56	2.20
	Gap	1.60	1.70	1.70	1.20	1.30	1.93	1.30	1.40	0.94	1.50
12th class	importance	3.67	3.33	3.67	3.67	4.00	3.67	4.00	3.00	3.67	3.33
	situation	2.33	2.33	3.00	3.00	2.67	1.67	2.00	3.00	2.67	2.67
	Gap	1.33	1.00	0.67	0.67	1.33	2.00	2.00	0.00	1.00	0.67

Table J.3: School A - parents - questions 21-30

Population	Question	31	32	33	34	35	36	37
Whole school	importance	3.23	3.56	3.57	3.79	3.48	3.80	3.43
	situation	2.66	2.75	2.80	2.88	2.78	2.69	2.93
	Gap	0.57	0.81	0.76	0.91	0.70	1.12	0.51
7th class	importance	2.89	3.53	3.58	3.74	3.67	3.78	3.47
	situation	2.81	3.00	3.06	2.63	2.80	2.69	3.00
	Gap	0.08	0.53	0.52	1.11	0.87	1.09	0.47
8th class	importance	3.18	3.69	3.85	3.91	3.58	3.85	3.55
	situation	3.30	2.82	3.08	3.09	2.70	2.45	2.90
	Gap	-0.12	0.87	0.76	0.82	0.88	1.39	0.65
9h class	importance	3.25	2.75	3.75	3.75	3.75	4.00	3.50
	situation	2.25	2.25	3.25	2.50	2.25	2.50	3.25
	Gap	1.00	0.50	0.50	1.25	1.50	1.50	0.25
10th class	importance	2.78	3.78	3.67	3.56	3.33	3.56	3.33
	situation	2.78	2.67	3.00	3.11	3.11	3.13	2.89
	Gap	0.00	1.11	0.67	0.44	0.22	0.43	0.44
11th class	importance	3.30	3.80	3.60	3.80	3.60	3.70	3.44
	situation	2.20	2.70	2.22	2.60	2.70	2.60	2.60
	Gap	1.10	1.10	1.38	1.20	0.90	1.10	0.84
12th class	importance	4.00	3.67	3.00	4.00	3.00	4.00	3.33
	situation	2.67	3.00	2.33	3.33	3.00	2.67	3.00
	Gap	1.33	0.67	0.67	0.67	0.00	1.33	0.33

Table J.4: School A - parents - questions 31-37

Question	41	42	43	44	45	46	47	48	49	50	51	52	53
Whole school	2.68	2.97	2.71	2.50	2.78	2.68	3.07	2.83	2.93	2.89	2.46	2.67	2.54
7th class	2.93	3.00	2.94	2.31	2.73	2.81	2.93	2.86	2.82	3.25	2.67	2.93	2.81
8th class	2.83	3.00	2.77	2.45	2.82	3.18	3.25	3.09	3.25	3.00	2.82	2.80	2.92
9h class	2.58	2.63	1.87	1.78	2.35	1.96	2.52	2.09	2.05	2.09	1.59	1.91	2.18
10th class	2.43	2.75	3.00	2.33	2.89	3.00	3.11	2.88	3.00	2.89	2.11	2.75	2.56
11th class	2.50	3.20	2.50	2.90	2.50	2.40	2.70	2.67	3.10	2.70	2.30	2.40	2.10
12th class	3.33	3.33	2.33	2.67	3.00	2.67	3.67	3.00	2.67	3.00	2.67	3.33	3.33

Question	54	55	56	57	58	59	60	61	62	63
Whole school	2.51	2.67	2.66	3.09	3.03	2.80	2.94	3.04	3.12	2.81
7th class	2.67	3.07	2.87	3.36	2.94	3.06	3.20	3.33	2.93	2.80
8th class	2.83	3.33	2.73	3.17	2.92	2.75	2.92	3.33	2.25	3.08
9h class	2.50	2.45	1.77	2.95	2.73	2.59	2.55	2.18	2.68	1.73
10th class	2.78	2.67	2.89	3.00	3.13	2.71	2.88	2.88	3.50	3.00
11th class	2.30	2.20	2.70	2.70	2.67	2.56	2.60	2.90	3.00	2.40
12th class	2.67	2.33	2.67	3.33	3.33	3.00	3.33	2.67	3.67	2.67

Table J.5: School A - parents - questions 41-63

School A: parents - the open ended questions

The open questions provided opportunities for respondents to comment on issues at school A. The numbers of parents indicated each issue are in parenthesis. Most issues mentioned relate to teachers' problems, discipline and violence: The issues found are as follows:

- **Teachers (58):** the teachers do not treat the students well and there are unqualified teachers. They do not understand that the school is for the students and not in order to obtain a good salary. There are many teachers who do not know how to teach and there are too many teacher absences. There is a too rapid turnover of teachers who are

not appropriate in relation to their knowledge and didactics. One of the parents says, *"there are teachers at school who are not qualified to teach. Because of that, there is a permanent conflict between students and teachers"*.

- **Discipline** (36): there is a problem of discipline and violence that should be handled by the school management. One parent says, *"the management does not deal with discipline and there is a feeling of total anarchy"*.
- **Flexibility** (5): There is no flexibility and recognition of students' necessities. There are not enough opportunities to choose courses
- **Resources** (3): the principal does not manage the financial resources that are given to her appropriately.
- **The new system** (1): The new system of a six-year high school is not effective. The old system was better (1).
- **Students' development** (1): The school does not develop students to be independent learners.
- **Students with special needs** (1): **There is no special treatment for students with special needs.**

Appendix K: School B: Results of students' questionnaires

(The scores' range is 1-4)

School B: students - mean scores of closed questions

Population	Question	1	2	3	4	5	6	7	8	9	10
Whole school	importance	3.04	3.66	3.18	2.94	3.06	3.59	3.70	3.71	3.61	3.83
	situation	2.48	2.79	2.59	2.56	2.67	3.17	3.24	3.35	2.93	3.22
	Gap	0.56	0.87	0.59	0.38	0.40	0.42	0.46	0.36	0.68	0.61
7th class	importance	3.06	3.55	3.16	2.68	3.06	3.53	3.58	3.55	3.13	3.94
	situation	2.61	3.03	2.48	2.42	2.77	3.10	3.06	2.97	2.84	3.13
	Gap	0.45	0.52	0.68	0.26	0.29	0.44	0.52	0.58	0.29	0.80
8th class	importance	3.26	3.82	3.50	3.09	3.29	3.66	3.74	3.72	3.67	3.88
	situation	2.71	2.97	3.13	2.70	2.94	3.31	3.48	3.41	2.81	3.39
	Gap	0.56	0.85	0.38	0.39	0.35	0.34	0.25	0.31	0.85	0.48
9th class	importance	3.24	3.63	3.19	3.21	3.13	3.61	3.78	3.52	3.48	3.57
	situation	2.54	2.96	2.62	2.71	2.83	2.91	3.13	3.13	3.00	3.26
	Gap	0.70	0.67	0.57	0.50	0.30	0.70	0.65	0.39	0.48	0.30
10th class	importance	2.94	3.44	2.89	2.56	2.76	3.47	3.67	3.78	3.94	3.83
	situation	2.41	2.71	2.33	2.69	2.76	2.94	2.94	3.44	3.22	2.83
	Gap	0.53	0.74	0.56	-0.13	0.00	0.53	0.72	0.33	0.72	1.00
11th class	importance	3.07	3.83	3.21	3.03	3.23	3.86	3.90	3.93	3.90	4.00
	situation	2.34	2.86	2.54	2.61	2.52	3.68	3.67	3.75	3.36	3.68
	Gap	0.72	0.97	0.67	0.43	0.71	0.18	0.23	0.18	0.54	0.32
12th class	importance	2.63	3.60	2.97	2.97	2.77	3.37	3.53	3.77	3.70	3.73
	situation	2.23	2.17	2.27	2.30	2.20	2.97	3.00	3.40	2.52	2.87
	Gap	0.40	1.43	0.70	0.67	0.57	0.40	0.53	0.37	1.18	0.87

Table K.1: School B - students - questions 1-10

Population	Question	11	12	13	14	15	16	17	18	19	20
Whole school	importance	3.65	3.25	3.50	3.52	3.77	3.71	3.51	3.70	3.36	3.59
	situation	3.01	2.91	2.70	2.92	2.82	2.66	2.50	2.80	2.93	2.54
	Gap	0.65	0.34	0.80	0.60	0.95	1.05	1.01	0.90	0.43	1.05
7th class	importance	3.55	3.03	3.41	3.23	3.87	3.77	3.42	3.74	3.39	3.58
	situation	2.58	2.83	2.63	2.61	3.10	2.90	2.80	3.23	2.90	2.55
	Gap	0.97	0.21	0.78	0.61	0.77	0.87	0.62	0.52	0.48	1.03
8th class	importance	3.81	3.27	3.63	3.64	3.79	3.61	3.38	3.71	3.42	3.73
	situation	3.28	3.24	3.03	2.82	3.32	2.79	2.71	3.09	3.15	2.85
	Gap	0.53	0.03	0.59	0.82	0.47	0.82	0.68	0.62	0.27	0.88
9h class	importance	3.35	3.17	3.23	3.32	3.54	3.71	3.46	3.29	3.26	3.21
	situation	2.91	2.83	2.55	2.59	2.75	2.83	2.33	2.79	2.83	2.13
	Gap	0.43	0.35	0.68	0.73	0.79	0.88	1.13	0.50	0.43	1.08
10th class	importance	3.83	2.94	3.29	3.50	3.94	3.88	3.39	3.78	3.22	3.61
	situation	2.50	2.50	2.35	3.22	2.89	2.65	2.33	2.44	3.11	2.33
	Gap	1.33	0.44	0.94	0.28	1.06	1.24	1.06	1.33	0.11	1.28
11th class	importance	3.86	3.68	3.83	3.86	3.93	3.86	3.76	3.90	3.48	3.76
	situation	3.61	3.11	3.07	3.28	2.72	2.55	2.72	2.76	2.86	2.82
	Gap	0.25	0.57	0.76	0.59	1.21	1.31	1.03	1.14	0.62	0.94
12th class	importance	3.52	3.28	3.50	3.53	3.57	3.53	3.60	3.73	3.33	3.57
	situation	2.93	2.76	2.39	3.10	2.07	2.23	1.97	2.27	2.77	2.37
	Gap	0.58	0.52	1.11	0.43	1.50	1.30	1.63	1.47	0.57	1.20

Table K.2: School B - students - questions 11-20

Population	Question	21	22	23	24	25	26	27	28	29	30
Whole school	importance	3.67	3.40	3.59	3.33	3.55	3.23	3.65	3.26	3.29	3.38
	situation	2.76	2.71	2.77	2.76	2.78	2.68	2.92	2.85	2.82	2.82
	Gap	0.91	0.69	0.82	0.58	0.77	0.54	0.73	0.40	0.46	0.56
7th class	importance	3.63	3.61	3.68	3.13	3.68	3.06	3.58	3.06	3.03	3.43
	situation	3.20	2.61	2.90	3.26	2.90	3.13	3.00	3.16	2.71	2.93
	Gap	0.43	1.00	0.77	-0.13	0.77	-0.06	0.58	-0.1	0.32	0.50
8th class	importance	3.70	3.42	3.76	3.30	3.73	3.24	3.79	3.67	3.50	3.48
	situation	3.33	2.91	3.27	2.97	3.21	3.00	2.85	2.88	2.87	2.91
	Gap	0.36	0.52	0.48	0.33	0.52	0.24	0.94	0.79	0.63	0.58
9th class	importance	3.42	3.30	3.25	3.21	3.25	3.50	3.70	3.27	3.33	3.18
	situation	2.67	2.78	2.63	2.46	2.79	2.91	2.96	2.83	2.86	2.74
	Gap	0.75	0.52	0.63	0.75	0.46	0.59	0.74	0.45	0.47	0.44
10th class	importance	3.78	3.35	3.39	3.22	3.28	2.89	3.56	2.89	3.12	3.44
	situation	2.28	2.35	3.22	2.94	2.39	2.28	2.83	2.61	2.94	2.63
	Gap	1.50	1.00	0.17	0.28	0.89	0.61	0.72	0.28	0.18	0.81
11th class	importance	3.79	3.76	3.79	3.76	3.79	3.52	3.72	3.28	3.38	3.43
	situation	2.93	2.97	2.57	2.48	2.90	2.48	3.17	2.97	3.03	3.21
	Gap	0.86	0.79	1.22	1.28	0.90	1.03	0.55	0.31	0.34	0.21
12th class	importance	3.70	2.93	3.53	3.33	3.40	3.07	3.50	3.17	3.28	3.30
	situation	1.83	2.50	2.10	2.40	2.27	2.10	2.70	2.55	2.59	2.40
	Gap	1.87	0.43	1.43	0.93	1.13	0.97	0.80	0.62	0.69	0.90

Table K.3: School B - students - questions 21-30

Population	Question	31	32	33	34	35	36	37
Whole school	importance	3.16	3.50	3.37	3.58	3.21	3.64	3.16
	situation	2.80	2.64	2.64	2.75	2.67	2.90	2.76
	Gap	0.36	0.86	0.72	0.83	0.54	0.74	0.41
7th class	importance	3.21	3.65	3.58	3.71	3.16	3.48	3.32
	situation	2.86	2.94	3.00	2.81	2.97	3.29	3.13
	Gap	0.34	0.71	0.58	0.90	0.19	0.19	0.19
8th class	importance	3.36	3.58	3.48	3.63	3.18	3.76	3.47
	situation	3.06	3.06	2.82	2.66	2.91	3.24	2.94
	Gap	0.30	0.52	0.67	0.97	0.27	0.52	0.53
9h class	importance	3.23	3.50	3.19	3.23	3.27	3.61	3.13
	situation	2.91	2.18	2.32	2.52	2.26	2.43	2.42
	Gap	0.31	1.32	0.87	0.71	1.01	1.17	0.71
10th class	importance	2.65	3.39	3.29	3.53	3.18	3.69	2.67
	situation	3.00	2.33	2.82	2.65	2.82	2.81	2.94
	Gap	-0.35	1.06	0.47	0.88	0.35	0.88	-0.28
11th class	importance	3.25	3.54	3.54	3.83	3.48	3.82	3.21
	situation	2.78	2.68	2.68	3.14	2.76	3.11	2.86
	Gap	0.47	0.86	0.86	0.69	0.72	0.71	0.34
12th class	importance	3.04	3.30	3.03	3.47	3.00	3.50	2.93
	situation	2.24	2.37	2.20	2.67	2.27	2.37	2.23
	Gap	0.79	0.93	0.83	0.80	0.73	1.13	0.70

Table K.4: School B - students - questions 31-37

Question	41	42	43	44	45	46	47	48	49	50	51	52	53
Whole school	2.78	2.82	3.00	2.94	2.96	2.99	3.20	2.75	2.87	3.00	2.32	2.73	2.93
7th class	2.97	2.85	2.94	2.77	2.84	2.94	3.28	2.82	2.81	3.16	2.42	2.55	3.06
8th class	3.24	3.09	3.48	3.06	3.28	3.36	3.48	3.12	3.00	3.33	2.70	3.12	3.36
9th class	2.58	2.63	1.87	1.78	2.35	1.96	2.52	2.09	2.05	2.09	1.59	1.91	2.18
10th class	2.72	2.06	2.82	2.83	2.94	2.83	3.17	2.44	2.82	2.88	2.17	2.89	3.11
11th class	3.00	2.71	3.46	3.43	3.14	3.07	3.33	2.93	3.36	3.29	2.29	2.73	2.75
12th class	2.10	2.89	2.55	2.66	2.79	2.76	2.62	2.34	2.66	2.31	2.10	2.29	2.72

Question	54	55	56	57	58	59	60	61	62	63
Whole school	2.81	2.71	2.62	3.06	3.05	2.82	2.98	2.94	3.02	2.56
7th class	2.80	2.93	2.77	3.20	3.07	2.47	3.13	3.13	3.00	2.71
8th class	3.33	3.15	2.94	3.45	3.50	3.15	3.24	3.38	2.94	2.88
9th class	2.50	2.45	1.77	2.95	2.73	2.59	2.55	2.18	2.68	1.73
10th class	2.67	2.89	2.50	3.11	3.00	3.22	2.94	2.94	2.72	2.61
11th class	2.96	2.71	2.71	2.92	3.21	2.96	3.32	3.14	3.75	2.81
12th class	2.07	2.14	2.17	2.69	2.55	2.48	2.34	2.41	2.79	1.96

Table K.5: School B - students - questions 41-63

School B: students - the open ended questions

The open questions provided opportunities for respondents to comment on issues at school B. most issues mentioned relate to teachers, school pressure, equipment and maintenance, discipline and social life. The numbers of students indicated each issue are in parenthesis. The issues found are as follows:

- **Teachers (61):** There are teachers who do not behave appropriately, have low motivation, are not professional and have bad communication with the students. One student in the junior high school says:

"The teachers are nervous, they use to shout, insult students and

discriminate low achieving students against high achieving ones.

There are teachers who want to cause the students to fail, do

not help them and do not give chances to study".

- **Timetable and school pressure** (21): There is a high pressure, too many tests and learning hours and too much homework.
- **Equipment and maintenance/cleaning** (19): The air-condition system has failures and the classes are not well cleaned.
- **Discipline/violence** (15): There are discipline problems especially in the junior high school. One student says, "*there are students who throw things out of the windows, smoke and disturb during lessons*".
- **Social life** (14): There are not enough social activities for students. There are students who are not friendly.
- **School buildings** (11): the buildings are old and not aesthetic.
- **The curriculum** (9): junior high school students say that the lessons and books are boring and there is not enough sport.
- **Studying opportunity** (8): there are not enough alternatives for studying.
- **Class crowding** (6): The classes are too crowded.
- **The school principal** (4): The complaints relate to promises that were not fulfilled and unequal treatment to students.
- **Punishments** (3): there are irrelevant punishments. One junior high student says, "*the teachers want us to behave like robots, otherwise they punish us*".
- **Students' motivation** (2): the students do not want to study.

Appendix L: School B: Results of Parents' questionnaires

(The scores' range is 1-4)

School B: parents - mean scores of closed questions

Population	Question	1	2	3	4	5	6	7	8	9	10
Whole school	importance	3.67	3.73	3.59	3.60	3.36	3.79	3.88	3.87	3.79	3.90
	situation	2.85	3.03	3.04	3.21	3.19	3.66	3.45	3.75	3.07	3.44
	Gap	0.82	0.70	0.55	0.39	0.17	0.13	0.43	0.12	0.72	0.46
7th class	importance	3.43	3.57	3.43	3.57	3.57	3.57	3.86	3.57	3.57	3.71
	situation	2.86	2.86	3.29	3.43	3.43	3.57	3.17	3.43	3.29	3.43
	Gap	0.57	0.71	0.14	0.14	0.14	0.00	0.69	0.14	0.29	0.29
8th class	importance	3.64	3.91	3.82	3.73	3.64	4.00	3.73	3.91	3.64	3.91
	situation	2.91	3.22	3.18	2.80	3.10	3.55	3.64	3.64	3.10	3.40
	Gap	0.73	0.69	0.64	0.93	0.54	0.45	0.09	0.27	0.54	0.51
9h class	importance	3.56	3.78	3.67	3.67	3.61	3.83	3.78	3.78	3.61	3.83
	situation	2.89	3.06	3.22	3.06	3.24	3.56	3.47	3.56	3.18	3.41
	Gap	0.67	0.72	0.44	0.61	0.38	0.28	0.31	0.22	0.43	0.42
10th class	importance	4.00	3.75	3.75	3.00	2.75	3.50	4.00	4.00	4.00	4.00
	situation	3.00	3.00	3.00	3.00	3.25	3.50	3.25	4.00	3.25	3.25
	Gap	1.00	0.75	0.75	0.00	-0.50	0.00	0.75	0.00	0.75	0.75
11th class	importance	3.67	3.67	3.33	4.00	3.33	4.00	4.00	4.00	4.00	4.00
	situation	2.67	3.00	2.67	3.67	3.00	4.00	3.67	4.00	2.67	3.67
	Gap	1.00	0.67	0.67	0.33	0.33	0.00	0.33	0.00	1.33	0.33
12th class	importance	3.86	3.71	3.57	3.43	3.00	3.71	4.00	4.00	4.00	4.00
	situation	2.86	3.00	2.86	3.29	3.14	3.71	3.43	4.00	3.00	3.43
	Gap	1.00	0.71	0.71	0.14	-0.14	0.00	0.57	0.00	1.00	0.57

Table L.1: School B - parents - questions 1-10

Population	Question	11	12	13	14	15	16	17	18	19	20
Whole school	importance	3.84	3.72	3.61	3.76	3.90	3.85	3.79	3.87	3.59	3.87
	situation	3.34	3.30	3.41	3.64	2.97	3.14	3.11	2.98	2.68	2.95
	Gap	0.50	0.42	0.19	0.12	0.93	0.71	0.68	0.89	0.91	0.92
7th class	importance	3.57	3.86	3.71	4.00	3.71	3.86	3.71	3.57	3.43	4.00
	situation	2.86	3.14	3.43	3.14	3.29	2.86	3.29	2.71	2.29	3.00
	Gap	0.71	0.71	0.29	0.86	0.43	1.00	0.43	0.86	1.14	1.00
8th class	importance	3.82	3.64	3.90	4.00	3.90	3.90	3.89	3.91	3.80	3.90
	situation	3.44	3.33	3.40	3.67	3.30	3.22	3.13	3.00	2.80	3.00
	Gap	0.37	0.30	0.50	0.33	0.60	0.68	0.76	0.91	1.00	0.90
9h class	importance	3.72	3.72	3.82	4.00	3.82	3.88	3.81	3.78	3.65	3.94
	situation	3.19	3.25	3.41	3.44	3.29	3.06	3.20	2.88	2.59	3.00
	Gap	0.53	0.47	0.41	0.56	0.53	0.82	0.61	0.90	1.06	0.94
10th class	importance	4.00	3.75	3.00	3.25	4.00	4.00	3.50	4.00	3.00	3.50
	situation	3.00	3.00	3.50	3.75	2.50	2.75	3.00	3.25	3.00	2.75
	Gap	1.00	0.75	-0.50	-0.50	1.50	1.25	0.50	0.75	0.00	0.75
11th class	importance	4.00	3.67	3.67	3.67	4.00	3.67	4.00	4.00	4.00	4.00
	situation	4.00	3.67	3.33	4.00	2.67	3.67	3.00	3.00	2.67	3.00
	Gap	0.00	0.00	0.33	-0.33	1.33	0.00	1.00	1.00	1.33	1.00
12th class	importance	4.00	3.71	3.29	3.43	4.00	3.86	3.71	4.00	3.43	3.71
	situation	3.43	3.29	3.43	3.86	2.57	3.14	3.00	3.14	2.86	2.86
	Gap	0.57	0.43	-0.14	-0.43	1.43	0.71	0.71	0.86	0.57	0.86

Table L.2: School B - parents - questions 11-20

Population	Question	21	22	23	24	25	26	27	28	29	30
Whole school	importance	3.92	3.88	3.88	3.64	3.71	3.73	3.97	3.22	3.77	3.49
	situation	3.12	3.20	3.19	2.89	2.66	2.95	3.34	3.07	3.24	2.91
	Gap	0.80	0.68	0.68	0.74	1.05	0.78	0.63	0.15	0.53	0.57
7th class	importance	4.00	3.86	3.71	3.43	3.71	3.86	4.00	3.50	4.00	3.43
	situation	3.57	3.29	3.43	3.14	2.43	3.14	3.14	3.17	3.29	3.14
	Gap	0.43	0.57	0.29	0.29	1.29	0.71	0.86	0.33	0.71	0.29
8th class	importance	3.90	4.00	3.82	3.70	3.90	3.73	3.91	3.45	3.50	3.70
	situation	3.00	3.45	3.40	3.11	2.60	2.45	3.30	3.00	3.11	3.11
	Gap	0.90	0.55	0.42	0.59	1.30	1.27	0.61	0.45	0.39	0.59
9th class	importance	3.94	3.94	3.78	3.59	3.82	3.78	3.94	3.47	3.71	3.59
	situation	3.22	3.39	3.41	3.13	2.53	2.72	3.24	3.06	3.19	3.13
	Gap	0.72	0.56	0.37	0.46	1.29	1.06	0.71	0.41	0.52	0.46
10th class	importance	3.75	4.00	4.00	3.75	3.50	3.25	4.00	3.25	4.00	3.00
	situation	2.50	3.00	3.25	3.00	3.00	3.75	3.25	2.75	3.67	2.67
	Gap	1.25	1.00	0.75	0.75	0.50	-0.50	0.75	0.50	0.33	0.33
11th class	importance	4.00	3.67	4.00	3.67	3.67	4.00	4.00	2.67	3.67	3.67
	situation	3.33	3.00	2.67	2.33	2.67	2.67	3.67	3.33	3.00	2.67
	Gap	0.67	0.67	1.33	1.33	1.00	1.33	0.33	-0.67	0.67	1.00
12th class	importance	3.86	3.86	4.00	3.71	3.57	3.57	4.00	3.00	3.83	3.33
	situation	2.86	3.00	3.00	2.67	2.86	3.29	3.43	3.00	3.33	2.67
	Gap	1.00	0.86	1.00	1.05	0.71	0.29	0.57	0.00	0.50	0.67

Table L.3: School B - parents - questions 21-30

Population	Question	31	32	33	34	35	36	37
Whole school	importance	3.45	3.76	3.63	3.87	3.80	3.63	3.64
	situation	3.31	2.97	3.29	2.99	3.45	3.08	3.13
	Gap	0.15	0.79	0.35	0.88	0.35	0.55	0.51
7th class	importance	3.57	4.00	3.57	3.71	3.71	3.29	4.00
	situation	3.43	3.29	3.29	3.29	3.17	2.86	3.29
	Gap	0.14	0.71	0.29	0.43	0.55	0.43	0.71
8th class	importance	3.50	4.00	3.82	3.80	3.73	3.80	3.82
	situation	3.40	2.90	3.27	2.90	3.27	3.11	3.36
	Gap	0.10	1.10	0.55	0.90	0.45	0.69	0.45
9th class	importance	3.53	4.00	3.72	3.76	3.72	3.59	3.89
	situation	3.41	3.06	3.28	3.06	3.24	3.00	3.33
	Gap	0.12	0.94	0.44	0.71	0.49	0.59	0.56
10th class	importance	3.00	3.67	3.00	4.00	3.75	3.33	3.33
	situation	3.25	2.67	3.25	2.75	3.75	3.00	2.33
	Gap	-0.25	1.00	-0.25	1.25	0.00	0.33	1.00
11th class	importance	3.67	3.33	4.00	4.00	4.00	4.00	3.33
	situation	3.33	3.00	3.33	3.00	3.67	3.33	3.33
	Gap	0.33	0.33	0.67	1.00	0.33	0.67	0.00
12th class	importance	3.29	3.50	3.43	4.00	3.86	3.67	3.33
	situation	3.00	2.80	3.29	2.86	3.71	3.17	2.83
	Gap	0.29	0.70	0.14	1.14	0.14	0.50	0.50

Table L.4: School B - parents - questions 31-37

Question	41	42	43	44	45	46	47	48	49	50	51	52	53
Whole school	3.22	2.52	3.56	3.45	3.08	3.47	3.42	3.46	3.44	3.38	2.75	3.33	3.27
7th class	3.33	2.86	3.29	3.29	3.00	3.14	3.29	3.43	3.29	3.57	2.86	3.14	3.43
8th class	3.10	2.67	3.45	3.45	3.27	3.55	3.73	3.45	3.50	3.45	2.91	3.56	3.40
9h class	2.54	3.00	2.55	2.88	2.71	2.82	3.25	2.65	2.48	2.92	2.09	2.82	2.50
10th class	3.50	1.75	3.50	3.00	3.00	3.50	3.25	3.25	3.25	3.50	2.50	3.25	4.00
11th class	3.00	2.67	4.00	4.00	3.00	3.67	3.33	3.67	3.67	3.00	2.67	3.33	2.33
12th class	3.33	2.14	3.71	3.43	3.00	3.57	3.29	3.43	3.43	3.29	2.57	3.29	3.29

Question	54	55	56	57	58	59	60	61	62	63
Whole school	2.94	3.09	3.16	3.66	3.15	2.70	2.98	3.29	2.81	3.12
7th class	2.86	2.57	3.00	3.71	2.29	2.14	2.71	3.29	2.57	3.14
8th class	3.18	3.18	3.36	3.55	3.27	2.80	3.00	3.45	2.55	3.00
9h class	2.96	2.41	2.52	2.91	2.87	2.74	2.83	2.48	2.78	2.32
10th class	3.00	3.25	3.25	3.75	3.75	3.25	3.25	3.00	3.25	3.00
11th class	2.67	3.33	3.00	3.67	3.33	2.67	3.00	3.33	3.00	3.33
12th class	2.86	3.29	3.14	3.71	3.57	3.00	3.14	3.14	3.14	3.14

Table L.5: School B - parents - questions 41-63

School B: parents - the open ended questions

The open questions provided opportunities for respondents to comment on issues at school B. Most issues mentioned relate to teachers, class crowding and discipline. The numbers of parents indicated each issue, are in parenthesis. The relevant issues are as follows:

- **Teachers** (20): there are teachers who do not treat the students well
- and do not know how to monitor and evaluate them properly.
- **Class crowding** (18): The classes are too crowded. One parent says, "*there are too many students in classes and therefore the teachers cannot and have no time to give students personal treatment*".

- **Discipline** (13): in the junior high school there is a complaint that the uniform is not convenient in wintertime. On the other hand, one parent in the secondary school says, *"there is no uniform in the secondary school and it hurts the discipline"*.
- **Social life** (7): there are not enough social activities.
- **Extracurricular activities** (7): the parents want more extracurricular activities such as music and dancing.
- **Equipment and buildings** (6): there are complaints concerning the buildings' condition, the furniture and air-condition. One parent says about the secondary school, *"the air-condition is not proper, the furniture, windows and the buildings' general view need renovation and replacement"*.
- **Timetable** (5): the timetable is not well organised. One parent says, *"there are too many free hours and the reason for that is the lack of subject teachers"*.
- **School reputation in community** (3): the school should improve its reputation in community.

Appendix M: School C: Results of students' questionnaires

(The scores' range is 1-4)

School C: students - mean scores of closed questions

Population	Question	1	2	3	4	5	6	7	8	9	10
Whole school	importance	3.11	3.70	3.08	2.99	3.20	3.71	3.77	3.69	3.72	3.85
	situation	2.56	2.68	2.68	2.34	2.63	2.71	2.70	2.64	2.36	2.56
	Gap	0.56	1.02	0.40	0.64	0.57	1.00	1.07	1.06	1.35	1.29
7th class	importance	3.23	3.73	3.39	3.10	3.42	3.81	3.84	3.81	3.74	3.97
	situation	2.77	3.32	3.39	2.68	3.06	3.35	3.32	3.26	3.03	3.16
	Gap	0.46	0.41	0.00	0.42	0.35	0.45	0.52	0.55	0.71	0.81
8th class	importance	2.97	3.75	3.03	2.66	3.03	3.47	3.66	3.46	3.42	3.78
	situation	2.54	2.72	2.66	2.14	2.69	2.58	2.51	2.26	1.67	2.28
	Gap	0.43	1.03	0.37	0.51	0.33	0.89	1.14	1.20	1.75	1.50
9th class	importance	2.91	3.53	2.91	3.06	3.19	3.75	3.75	3.75	3.88	3.81
	situation	2.23	1.97	2.19	1.87	2.16	1.81	2.03	1.84	1.72	1.75
	Gap	0.68	1.56	0.72	1.19	1.03	1.94	1.72	1.91	2.16	2.06
10th class	importance	3.26	3.77	3.13	3.17	3.26	3.74	3.81	3.81	3.83	3.94
	situation	2.53	2.90	2.71	2.63	2.80	3.29	3.26	3.23	2.80	3.10
	Gap	0.72	0.87	0.42	0.53	0.46	0.45	0.55	0.58	1.03	0.84
11th class	importance	2.94	3.53	2.59	2.59	2.88	3.82	3.76	3.59	3.59	3.71
	situation	2.53	2.65	2.12	2.24	2.31	2.65	2.47	2.53	2.41	2.47
	Gap	0.41	0.88	0.47	0.35	0.56	1.18	1.29	1.06	1.18	1.24
12th class	importance	3.42	3.85	3.30	3.35	3.39	3.79	3.85	3.75	3.90	3.85
	situation	2.83	2.42	2.84	2.58	2.63	2.53	2.47	2.79	2.89	2.68
	Gap	0.59	1.43	0.46	0.77	0.76	1.26	1.38	0.96	1.01	1.17

Table M.1: School C - students - questions 1-10

Population	Question	11	12	13	14	15	16	17	18	19	20
Whole school	importance	3.58	3.43	3.56	3.62	3.89	3.78	3.56	3.80	3.39	3.73
	situation	2.36	2.57	2.35	2.50	2.75	2.59	2.56	2.62	2.67	2.44
	Gap	1.22	0.86	1.21	1.12	1.13	1.19	1.01	1.17	0.72	1.29
7th class	importance	3.73	3.50	3.61	3.68	3.97	3.94	3.45	3.90	3.16	3.81
	situation	3.21	3.00	2.97	2.48	3.45	2.84	3.19	3.19	3.03	2.81
	Gap	0.53	0.50	0.65	1.19	0.52	1.10	0.26	0.71	0.13	1.00
8th class	importance	3.39	3.33	3.44	3.31	3.75	3.64	3.22	3.58	3.53	3.67
	situation	2.17	2.33	2.03	2.06	2.11	2.28	1.97	2.03	2.44	2.00
	Gap	1.22	1.00	1.42	1.25	1.64	1.36	1.25	1.56	1.08	1.67
9h class	importance	3.47	3.53	3.55	3.52	3.78	3.75	3.69	3.78	3.63	3.56
	situation	1.53	1.91	1.77	1.48	2.50	2.44	2.13	2.34	1.91	2.06
	Gap	1.94	1.63	1.77	2.03	1.28	1.31	1.56	1.44	1.72	1.50
10th class	importance	3.77	3.33	3.50	3.87	4.00	3.81	3.74	3.90	3.32	3.87
	situation	3.00	2.77	2.87	3.53	3.10	2.93	2.74	2.87	3.07	2.60
	Gap	0.77	0.57	0.63	0.33	0.90	0.87	1.00	1.03	0.26	1.27
11th class	importance	3.47	3.44	3.53	3.65	3.94	3.76	3.82	3.82	3.24	3.65
	situation	1.94	2.44	1.88	2.94	2.65	2.35	2.65	2.59	2.82	2.71
	Gap	1.53	1.00	1.65	0.71	1.29	1.41	1.18	1.24	0.41	0.94
12th class	importance	3.68	3.45	3.84	3.85	3.95	3.80	3.65	3.85	3.35	3.85
	situation	2.11	3.16	2.50	3.00	2.79	2.68	2.95	2.89	3.00	2.79
	Gap	1.57	0.29	1.34	0.85	1.16	1.12	0.70	0.96	0.35	1.06

Table M.2: School C - students - questions 11-20

Population	Question	21	22	23	24	25	26	27	28	29	30
Whole school	importance	3.79	3.52	3.73	3.45	3.67	3.38	3.77	3.24	3.59	3.56
	situation	2.67	2.36	2.60	2.62	2.72	2.34	2.45	2.78	3.10	2.58
	Gap	1.12	1.17	1.13	0.83	0.96	1.04	1.32	0.46	0.48	0.98
7th class	importance	3.87	3.50	3.71	3.26	3.90	3.42	3.77	3.30	3.81	3.74
	situation	3.17	2.87	3.39	3.10	3.29	3.61	3.16	3.20	3.45	3.32
	Gap	0.70	0.63	0.32	0.16	0.61	-0.19	0.61	0.10	0.36	0.42
8th class	importance	3.64	3.42	3.64	3.09	3.53	3.44	3.72	3.08	3.28	3.42
	situation	2.33	1.89	1.72	2.03	2.53	2.06	2.00	2.61	2.78	2.28
	Gap	1.31	1.53	1.92	1.06	1.00	1.39	1.72	0.47	0.50	1.14
9th class	importance	3.69	3.59	3.69	3.63	3.66	3.59	3.66	3.31	3.72	3.56
	situation	2.25	1.81	1.97	2.28	2.44	2.31	2.22	2.45	2.69	2.00
	Gap	1.44	1.78	1.72	1.34	1.22	1.28	1.44	0.86	1.03	1.56
10th class	importance	3.87	3.61	3.84	3.47	3.74	3.16	3.97	3.26	3.81	3.55
	situation	2.74	2.87	2.94	3.00	3.06	2.16	2.65	3.10	3.45	2.97
	Gap	1.13	0.74	0.90	0.47	0.68	1.00	1.32	0.16	0.35	0.59
11th class	importance	3.82	3.24	3.76	3.65	3.47	3.12	3.76	3.12	3.18	3.35
	situation	2.59	2.29	2.76	3.24	2.29	1.82	2.41	2.65	3.00	2.35
	Gap	1.24	0.94	1.00	0.41	1.18	1.29	1.35	0.47	0.18	1.00
12th class	importance	3.95	3.75	3.79	3.90	3.65	3.40	3.70	3.35	3.60	3.70
	situation	3.11	2.53	3.28	2.37	2.42	1.63	2.26	2.58	3.37	2.47
	Gap	0.84	1.22	0.51	1.53	1.23	1.78	1.44	0.77	0.23	1.23

Table M.3: School C - students - questions 21-30

Population	Question	31	32	33	34	35	36	37
Whole school	importance	3.27	3.63	3.50	3.63	3.21	3.75	3.21
	situation	2.72	2.70	2.62	2.40	2.64	2.84	2.80
	Gap	0.55	0.93	0.88	1.24	0.58	0.91	0.42
7th class	importance	3.70	3.77	3.57	3.67	3.35	3.55	3.40
	situation	3.63	3.45	3.07	2.97	3.19	3.35	3.17
	Gap	0.07	0.32	0.50	0.70	0.16	0.19	0.23
8th class	importance	3.03	3.36	3.34	3.44	2.47	3.64	3.25
	situation	2.25	2.25	2.29	1.83	2.53	2.22	2.83
	Gap	0.78	1.11	1.06	1.61	-0.06	1.42	0.42
9h class	importance	3.50	3.66	3.42	3.63	3.34	3.68	3.31
	situation	2.28	2.52	2.26	2.13	2.13	2.50	2.63
	Gap	1.22	1.14	1.16	1.50	1.22	1.18	0.69
10th class	importance	3.24	3.84	3.65	3.86	3.50	3.93	3.03
	situation	2.90	3.03	3.00	2.66	2.80	3.31	2.90
	Gap	0.34	0.81	0.65	1.21	0.70	0.62	0.13
11th class	importance	3.06	3.47	3.71	3.38	3.53	4.00	3.00
	situation	2.71	1.88	2.41	2.44	2.82	2.82	2.29
	Gap	0.35	1.59	1.29	0.94	0.71	1.18	0.71
12th class	importance	2.89	3.70	3.45	3.80	3.40	3.85	3.15
	situation	2.56	2.83	2.74	2.53	2.37	2.95	2.68
	Gap	0.34	0.87	0.71	1.27	1.03	0.90	0.47

Table M.4: School C - students - questions 31-37

Question	41	42	43	44	45	46	47	48	49	50	51	52	53
Whole school	2.72	2.75	2.63	2.57	2.81	2.70	2.91	2.60	2.11	3.04	2.25	2.49	2.94
7th class	3.13	2.52	3.29	3.10	2.84	3.16	3.45	3.20	3.03	3.45	2.94	3.23	3.71
8th class	2.56	2.86	2.14	2.34	2.48	2.49	2.69	2.29	1.94	2.50	1.97	2.03	2.37
9th class	2.53	2.81	2.41	2.38	2.63	2.16	2.31	1.97	1.71	2.72	1.84	1.91	2.44
10th class	2.79	2.71	2.83	2.72	3.20	3.14	3.33	2.93	1.97	3.24	2.17	2.86	3.21
11th class	2.65	3.18	2.76	2.35	2.88	2.65	2.94	2.82	2.12	3.06	2.47	2.29	2.94
12th class	2.61	2.50	2.45	2.40	3.00	2.58	2.75	2.55	1.85	3.58	2.25	2.74	3.15

Question	54	55	56	57	58	59	60	61	62	63
Whole school	2.69	2.56	2.49	2.93	2.98	2.96	2.97	2.90	3.12	2.44
7th class	3.37	3.13	3.20	3.40	3.43	3.38	3.23	3.17	3.13	2.97
8th class	2.29	2.41	1.86	2.57	2.46	2.51	2.80	2.47	3.17	1.89
9th class	2.31	2.16	2.03	2.56	2.53	2.29	2.88	2.53	3.34	1.88
10th class	2.97	2.79	2.72	3.07	3.31	3.24	3.10	3.14	3.20	2.83
11th class	2.71	2.35	2.41	3.06	3.29	3.29	2.71	3.24	2.35	2.71
12th class	2.50	2.37	3.00	3.15	3.15	3.45	3.05	3.20	3.15	2.72

Table M.5: School C - students - questions 41-63

School C: students - the open ended questions

The open questions provided opportunities for respondents to comment on issues at school C. Most issues mentioned relate to teachers' problems, discipline, school pressure and resources. The numbers of students indicated each issue are in parenthesis. The issues mentioned are as follows:

- **Teachers (47):** There are teachers who do not behave appropriately, do not support the students, are not listening and have bad didactics. One student says, "*it would have been better if we would have obtained other teachers who know how to teach and would teach appropriately*".

- **Discipline** (27): The students in the junior high school complain that the discipline is too tough.
- **School pressure** (25): There is a very high pressure, too many tests in every week, too many learning hours and high requirements. A 12th grade student says, "*all the matriculation exams are in the 12th grade, the timetable is terrible based on 53 weekly hours and the students do not have any influence*".
- **Resources and equipment** (24): There is a lack of equipment. There are not enough financial resources and bad maintenance especially improper cleaning.
- **Society and social activities** (14): the students' society is bad and there are not enough trips and parties. One junior high student says, "*the children behave badly and I dislike the society. I would prefer to register to another school*".
- **Punishments** (12): Punishments are not reasonable, are collective and are not linked to what have been done.
- **The school principal and management** (9): In the junior high school the principal does not treat the students appropriately. In the secondary school the students complain that the school management does not consider the students and there are unfitted regulations.
- **School reputation** (6): the school reputation in community is bad and that annoys the students.
- **Motivation to study** (4): the students have low motivation as says a junior high student, "*the students do not have motivation to study and that causes low achievements which damage the school's reputation*".
- **Class crowding** (3): The classes are too crowded.
- **The timetable** (2): The timetable is not well organised.

Appendix N: School C: Results of Parents' questionnaires

(The scores' range is 1-4)

School C: parents - mean scores of closed questions

Population	Question	1	2	3	4	5	6	7	8	9	10
Whole school	importance	3.30	3.82	3.58	3.55	3.35	3.81	3.79	3.88	3.65	3.72
	situation	2.57	3.28	2.61	2.64	2.79	3.43	3.47	3.55	2.93	3.10
	Gap	0.73	0.54	0.98	0.91	0.55	0.38	0.32	0.32	0.72	0.61
7th class	importance	3.50	3.83	3.67	3.67	3.50	4.00	4.00	4.00	3.83	4.00
	situation	2.50	3.17	3.00	2.83	2.83	3.40	3.60	3.80	3.25	3.75
	Gap	1.00	0.67	0.67	0.83	0.67	0.60	0.40	0.20	0.58	0.25
8th class	importance	2.67	3.67	3.83	3.67	3.50	3.50	4.00	3.67	4.00	3.67
	situation	2.00	3.17	2.17	2.17	2.33	3.50	3.50	3.40	2.60	2.50
	Gap	0.67	0.50	1.67	1.50	1.17	0.00	0.50	0.27	1.40	1.17
9h class	importance	3.43	3.71	3.43	3.43	3.14	3.86	3.71	3.86	3.43	3.57
	situation	2.86	3.29	2.86	2.71	3.00	3.17	3.29	3.57	3.00	3.14
	Gap	0.57	0.43	0.57	0.71	0.14	0.69	0.43	0.29	0.43	0.43
10th class	importance	3.47	3.93	3.47	3.47	3.27	3.87	3.60	3.93	3.47	3.67
	situation	2.73	3.40	2.50	2.71	2.92	3.50	3.46	3.50	2.92	3.07
	Gap	0.73	0.53	0.97	0.75	0.34	0.37	0.14	0.43	0.54	0.60
11th class	importance	3.43	4.00	3.43	3.29	3.14	4.00	3.71	4.00	3.57	3.86
	situation	2.71	3.57	2.33	2.83	2.67	3.83	3.80	3.50	2.83	3.17
	Gap	0.71	0.43	1.10	0.45	0.48	0.17	-0.09	0.50	0.74	0.69
12th class	importance	3.56	3.89	3.56	3.67	3.44	3.78	3.56	3.89	3.44	3.56
	situation	2.89	3.22	2.78	2.78	3.13	3.33	3.22	3.56	3.00	3.11
	Gap	0.67	0.67	0.78	0.89	0.32	0.44	0.33	0.33	0.44	0.44

Table N.1: School C - parents - questions 1-10

Population	Question	11	12	13	14	15	16	17	18	19	20
Whole school	importance	3.88	3.89	3.80	3.87	3.86	3.89	3.77	3.91	3.71	3.75
	situation	3.29	3.51	3.26	3.66	3.21	3.05	3.04	3.20	3.12	2.84
	Gap	0.60	0.38	0.54	0.22	0.65	0.84	0.73	0.71	0.59	0.91
7th class	importance	4.00	4.00	4.00	4.00	4.00	4.00	3.83	4.00	3.67	4.00
	situation	3.80	3.80	3.60	3.33	3.50	3.50	3.25	3.25	3.20	3.00
	Gap	0.20	0.20	0.40	0.67	0.50	0.50	0.58	0.75	0.47	1.00
8th class	importance	3.83	4.00	3.80	3.67	3.83	4.00	3.83	3.83	3.67	3.33
	situation	3.00	3.50	3.00	3.50	3.25	2.80	3.00	3.20	2.60	2.75
	Gap	0.83	0.50	0.80	0.17	0.58	1.20	0.83	0.63	1.07	0.58
9th class	importance	3.86	3.86	3.86	4.00	3.86	3.86	3.71	3.86	4.00	3.71
	situation	3.43	3.43	3.43	3.71	3.17	3.17	3.17	3.17	3.43	2.86
	Gap	0.43	0.43	0.43	0.29	0.69	0.69	0.55	0.69	0.57	0.86
10th class	importance	3.87	3.79	3.67	3.87	3.80	3.80	3.73	3.93	3.60	3.87
	situation	3.14	3.38	3.15	3.86	3.08	2.93	2.92	3.21	3.20	2.79
	Gap	0.72	0.40	0.51	0.01	0.72	0.87	0.81	0.72	0.40	1.08
11th class	importance	3.86	3.83	3.71	3.71	3.86	3.71	3.71	4.00	3.29	4.00
	situation	3.17	3.60	3.20	3.83	3.20	2.83	2.60	2.83	2.71	2.83
	Gap	0.69	0.23	0.51	-0.12	0.66	0.88	1.11	1.17	0.57	1.17
12th class	importance	3.89	3.78	3.67	4.00	3.78	3.89	3.78	3.89	3.89	3.78
	situation	3.11	3.33	3.11	3.89	3.00	3.00	3.13	3.44	3.67	2.78
	Gap	0.78	0.44	0.56	0.11	0.78	0.89	0.65	0.44	0.22	1.00

Table N.2: School C - parents - questions 11-20

Population	Question	21	22	23	24	25	26	27	28	29	30
Whole school	importance	3.95	3.78	3.82	3.62	3.66	3.55	3.67	3.64	3.37	3.55
	situation	2.94	3.22	3.39	3.17	2.71	2.38	3.00	3.24	3.21	3.26
	Gap	1.01	0.56	0.43	0.45	0.94	1.16	0.67	0.40	0.17	0.29
7th class	importance	4.00	3.83	4.00	3.33	3.50	3.67	3.67	3.83	3.17	3.67
	situation	3.20	3.20	3.33	3.00	3.20	3.00	3.20	3.60	2.33	3.20
	Gap	0.80	0.63	0.67	0.33	0.30	0.67	0.47	0.23	0.83	0.47
8th class	importance	4.00	4.00	3.67	3.33	3.83	3.67	3.50	3.83	3.17	3.50
	situation	2.80	3.60	3.00	3.20	2.60	1.80	3.00	2.80	3.50	3.20
	Gap	1.20	0.40	0.67	0.13	1.23	1.87	0.50	1.03	-0.33	0.30
9h class	importance	3.86	3.57	3.86	3.71	3.29	3.57	3.43	3.71	3.29	3.29
	situation	3.14	2.57	3.57	3.14	2.57	2.43	2.71	3.43	3.00	3.14
	Gap	0.71	1.00	0.29	0.57	0.71	1.14	0.71	0.29	0.29	0.14
10th class	importance	3.93	3.73	3.80	3.86	3.80	3.40	3.87	3.40	3.60	3.64
	situation	2.80	3.29	3.53	3.21	2.60	2.40	3.00	3.20	3.57	3.36
	Gap	1.13	0.45	0.27	0.64	1.20	1.00	0.87	0.20	0.03	0.29
11th class	importance	4.00	3.71	3.71	3.83	3.86	3.29	4.00	3.29	3.57	3.67
	situation	2.71	3.83	3.43	3.33	2.71	2.43	3.00	3.14	4.00	3.50
	Gap	1.29	-0.12	0.29	0.50	1.14	0.86	1.00	0.14	-0.43	0.17
12th class	importance	3.89	3.78	3.89	3.89	3.78	3.56	3.78	3.56	3.67	3.67
	situation	2.89	3.00	3.67	3.22	2.56	2.33	3.11	3.33	3.11	3.33
	Gap	1.00	0.78	0.22	0.67	1.22	1.22	0.67	0.22	0.56	0.33

Table N.3: School C - parents - questions 21-30

Population	Question	31	32	33	34	35	36	37
Whole school	importance	3.56	3.81	3.78	3.88	3.80	3.84	3.70
	situation	3.12	3.45	3.22	3.49	3.16	3.46	3.14
	Gap	0.44	0.36	0.56	0.40	0.64	0.39	0.56
7th class	importance	3.40	4.00	3.83	4.00	3.83	3.83	3.83
	situation	3.00	4.00	3.50	3.80	3.60	3.80	3.60
	Gap	0.40	0.00	0.33	0.20	0.23	0.03	0.23
8th class	importance	3.60	3.50	4.00	3.83	3.83	3.83	3.83
	situation	3.25	3.20	3.20	3.25	2.80	3.40	3.00
	Gap	0.35	0.30	0.80	0.58	1.03	0.43	0.83
9h class	importance	3.43	3.83	3.57	3.86	3.71	3.67	3.71
	situation	3.00	3.50	3.00	3.57	3.29	3.33	3.14
	Gap	0.43	0.33	0.57	0.29	0.43	0.33	0.57
10th class	importance	3.67	3.87	3.73	3.87	3.80	3.93	3.53
	situation	3.21	3.29	3.21	3.46	3.07	3.38	3.00
	Gap	0.45	0.58	0.52	0.41	0.73	0.54	0.53
11th class	importance	3.57	3.86	3.86	3.86	3.71	4.00	3.71
	situation	3.17	3.17	3.33	3.60	3.00	3.50	3.00
	Gap	0.40	0.69	0.52	0.26	0.71	0.50	0.71
12th class	importance	3.78	3.89	3.67	3.89	3.89	3.88	3.44
	situation	3.11	3.44	3.11	3.22	3.22	3.29	3.00
	Gap	0.67	0.44	0.56	0.67	0.67	0.59	0.44

Table N.4: School C - parents - questions 31-37

Question	41	42	43	44	45	46	47	48	49	50	51	52	53
Whole school	3.14	2.83	3.33	3.38	3.12	3.56	3.54	3.54	2.88	3.09	2.63	3.19	3.62
7th class	3.40	3.20	3.80	3.80	3.00	3.80	3.75	4.00	3.20	3.40	2.50	3.50	4.00
8th class	3.00	3.00	3.20	3.20	3.20	3.25	3.60	3.50	3.20	2.40	2.40	3.00	3.60
9h class	2.53	2.81	2.41	2.38	2.63	2.16	2.31	1.97	1.71	2.72	1.84	1.91	2.44
10th class	3.00	2.60	3.14	3.29	3.15	3.57	3.46	3.38	2.67	3.14	2.79	3.20	3.47
11th class	3.00	2.14	3.17	3.50	3.60	3.83	3.40	3.50	2.71	3.00	2.83	3.43	3.43
12th class	3.00	3.00	3.13	3.22	2.89	3.44	3.44	3.38	2.78	3.33	2.78	3.11	3.56

Question	54	55	56	57	58	59	60	61	62	63
Whole school	2.88	3.01	3.26	3.70	3.77	3.73	3.31	3.25	2.88	3.17
7th class	3.40	3.60	3.40	4.00	4.00	4.00	3.80	3.40	3.20	3.20
8th class	3.00	2.40	3.20	3.60	3.80	3.80	3.40	3.40	3.20	3.20
9h class	2.31	2.16	2.03	2.56	2.53	2.29	2.88	2.53	3.34	1.88
10th class	2.57	3.00	3.27	3.60	3.67	3.57	3.07	3.20	2.67	3.13
11th class	2.67	3.17	3.43	3.57	3.57	3.33	3.17	3.43	3.00	3.14
12th class	2.56	2.89	3.22	3.67	3.78	3.78	3.11	3.11	2.56	3.22

Table N.5: School C - parents - questions 41-63

School C: parents - the open ended questions

The open questions provided opportunities for respondents to comment on issues at school C. Most issues mentioned relate to teachers' problems, social activity and extracurricular studies. The numbers of parents indicated each issue are in parenthesis. The issues mentioned are as follows:

- **Teachers** (30): there are teachers who do not make enough effort, they should be more open and more accessible to students. One parent adds, "*the teachers should improve their education. Some of them do not have an academic degree*".
- **Social activities** (15): there is not enough social activity.
- **Extracurricular studies** (8): there is a shortage of extracurricular lessons.

- **School uniform** (4): There is no school uniform.
- **School pressure** (3): The school pressure is reasonable but in the upper classes, because of the matriculation exams the pressure is too high. It could have been better if there was enough data about the possibility to be examined again in matriculation examinations.

Appendix O: Schools A, B and C: results of questionnaires

(Students and parents)

Tables O.1-O.4 represent the total questionnaires' results for students and parents in all three schools together (A+B+C) and each school A, B and C separately (total view of all school's grades together). The gap is a result of the score of "importance" minus "situation". This gap describes the difference between desire and reality according to students' and parents attitudes.

School	population	Question	1	2	3	4	5	6	7	8	9	10
A+B+C	students	importance	3.13	3.68	3.15	2.97	3.12	3.61	3.68	3.68	3.64	3.82
		situation	2.52	2.60	2.55	2.40	2.62	2.86	2.87	2.88	2.60	2.85
		Gap	0.60	1.08	0.59	0.58	0.50	0.74	0.81	0.81	1.04	0.97
	parents	importance	3.52	3.80	3.60	3.54	3.38	3.81	3.84	3.86	3.75	3.82
		situation	2.70	2.93	2.69	2.80	2.95	3.32	3.16	3.36	2.92	3.11
		Gap	0.83	0.87	0.91	0.74	0.43	0.48	0.69	0.50	0.83	0.72
A	students	importance	3.21	3.67	3.18	2.99	3.11	3.53	3.59	3.66	3.61	3.79
		situation	2.53	2.37	2.41	2.30	2.58	2.73	2.70	2.67	2.52	2.79
		Gap	0.69	1.31	0.76	0.69	0.53	0.80	0.89	0.98	1.09	1.00
	parents	importance	3.59	3.84	3.64	3.48	3.42	3.81	3.86	3.84	3.81	3.84
		situation	2.66	2.52	2.46	2.57	2.87	2.94	2.62	2.85	2.79	2.81
		Gap	0.93	1.32	1.18	0.91	0.55	0.88	1.23	0.99	1.03	1.03
B	students	importance	3.04	3.66	3.18	2.94	3.06	3.59	3.70	3.71	3.61	3.83
		situation	2.48	2.79	2.59	2.56	2.67	3.17	3.24	3.35	2.93	3.22
		Gap	0.56	0.87	0.59	0.38	0.40	0.42	0.46	0.36	0.68	0.61
	parents	importance	3.67	3.73	3.59	3.60	3.36	3.79	3.88	3.87	3.79	3.90
		situation	2.85	3.03	3.04	3.21	3.19	3.66	3.45	3.75	3.07	3.44
		Gap	0.82	0.70	0.55	0.39	0.17	0.13	0.43	0.12	0.72	0.46
C	students	importance	3.11	3.70	3.08	2.99	3.20	3.71	3.77	3.69	3.72	3.85
		situation	2.56	2.68	2.68	2.34	2.63	2.71	2.70	2.64	2.36	2.56
		Gap	0.56	1.02	0.40	0.64	0.57	1.00	1.07	1.06	1.35	1.29
	parents	importance	3.30	3.82	3.58	3.55	3.35	3.81	3.79	3.88	3.65	3.72
		situation	2.57	3.28	2.61	2.64	2.79	3.43	3.47	3.55	2.93	3.10
		Gap	0.73	0.54	0.98	0.91	0.55	0.38	0.32	0.32	0.72	0.61

Table O.1: Questionnaires' results - question 1-10

School	population	Question	11	12	13	14	15	16	17	18	19	20
A+B+C	students	importance	3.59	3.31	3.56	3.60	3.81	3.74	3.55	3.76	3.38	3.64
		situation	2.60	2.69	2.48	2.65	2.72	2.58	2.52	2.64	2.84	2.45
		Gap	0.99	0.62	1.08	0.95	1.10	1.16	1.03	1.12	0.54	1.19
	parents	importance	3.83	3.73	3.66	3.80	3.86	3.86	3.70	3.85	3.63	3.79
		situation	3.14	3.21	3.10	3.36	2.92	2.89	2.92	2.93	2.81	2.81
		Gap	0.69	0.52	0.57	0.44	0.94	0.98	0.78	0.92	0.82	0.98
A	students	importance	3.54	3.26	3.61	3.65	3.79	3.73	3.59	3.79	3.39	3.62
		situation	2.45	2.59	2.41	2.54	2.60	2.51	2.52	2.52	2.91	2.39
		Gap	1.10	0.66	1.21	1.11	1.19	1.23	1.07	1.28	0.49	1.23
	parents	importance	3.78	3.60	3.59	3.78	3.82	3.85	3.55	3.79	3.59	3.76
		situation	2.85	2.86	2.68	2.85	2.62	2.52	2.64	2.65	2.64	2.66
		Gap	0.94	0.74	0.91	0.93	1.20	1.33	0.91	1.14	0.95	1.09
B	students	importance	3.65	3.25	3.50	3.52	3.77	3.71	3.51	3.70	3.36	3.59
		situation	3.01	2.91	2.70	2.92	2.82	2.66	2.50	2.80	2.93	2.54
		Gap	0.65	0.34	0.80	0.60	0.95	1.05	1.01	0.90	0.43	1.05
	parents	importance	3.84	3.72	3.61	3.76	3.90	3.85	3.79	3.87	3.59	3.87
		situation	3.34	3.30	3.41	3.64	2.97	3.14	3.11	2.98	2.68	2.95
		Gap	0.50	0.42	0.19	0.12	0.93	0.71	0.68	0.89	0.91	0.92
C	students	importance	3.58	3.43	3.56	3.62	3.89	3.78	3.56	3.80	3.39	3.73
		situation	2.36	2.57	2.35	2.50	2.75	2.59	2.56	2.62	2.67	2.44
		Gap	1.22	0.86	1.21	1.12	1.13	1.19	1.01	1.17	0.72	1.29
	parents	importance	3.88	3.89	3.80	3.87	3.86	3.89	3.77	3.91	3.71	3.75
		situation	3.29	3.51	3.26	3.66	3.21	3.05	3.04	3.20	3.12	2.84
		Gap	0.60	0.38	0.54	0.22	0.65	0.84	0.73	0.71	0.59	0.91

Table O.2: Questionnaires' results - question 11-20

School	population	Question	21	22	23	24	25	26	27	28	29	30
A+B+C	students	importance	3.73	3.48	3.65	3.43	3.64	3.28	3.66	3.24	3.45	3.45
		situation	2.72	2.50	2.61	2.64	2.73	2.44	2.58	2.77	2.94	2.71
		Gap	1.00	0.98	1.04	0.79	0.91	0.83	1.08	0.47	0.51	0.74
	parents	importance	3.88	3.80	3.78	3.67	3.69	3.59	3.85	3.42	3.57	3.52
		situation	2.88	2.94	3.01	2.92	2.69	2.52	2.88	3.05	3.10	2.95
		Gap	1.01	0.85	0.77	0.75	1.01	1.07	0.98	0.37	0.47	0.57
A	students	importance	3.72	3.52	3.63	3.50	3.70	3.23	3.56	3.23	3.48	3.41
		situation	2.75	2.44	2.47	2.55	2.71	2.33	2.39	2.69	2.89	2.73
		Gap	0.97	1.07	1.16	0.95	1.00	0.90	1.18	0.54	0.59	0.68
	parents	importance	3.79	3.74	3.66	3.73	3.71	3.50	3.90	3.40	3.58	3.53
		situation	2.60	2.47	2.51	2.71	2.69	2.27	2.36	2.87	2.90	2.70
		Gap	1.19	1.27	1.15	1.02	1.02	1.24	1.55	0.53	0.69	0.82
B	students	importance	3.67	3.40	3.59	3.33	3.55	3.23	3.65	3.26	3.29	3.38
		situation	2.76	2.71	2.77	2.76	2.78	2.68	2.92	2.85	2.82	2.82
		Gap	0.91	0.69	0.82	0.58	0.77	0.54	0.73	0.40	0.46	0.56
	parents	importance	3.92	3.88	3.88	3.64	3.71	3.73	3.97	3.22	3.77	3.49
		situation	3.12	3.20	3.19	2.89	2.66	2.95	3.34	3.07	3.24	2.91
		Gap	0.80	0.68	0.68	0.74	1.05	0.78	0.63	0.15	0.53	0.57
C	students	importance	3.79	3.52	3.73	3.45	3.67	3.38	3.77	3.24	3.59	3.56
		situation	2.67	2.36	2.60	2.62	2.72	2.34	2.45	2.78	3.10	2.58
		Gap	1.12	1.17	1.13	0.83	0.96	1.04	1.32	0.46	0.48	0.98
	parents	importance	3.95	3.78	3.82	3.62	3.66	3.55	3.67	3.64	3.37	3.55
		situation	2.94	3.22	3.39	3.17	2.71	2.38	3.00	3.24	3.21	3.26
		Gap	1.01	0.56	0.43	0.45	0.94	1.16	0.67	0.40	0.17	0.29

Table O.3: Questionnaires' results - question 21-30

School	population	Question	31	32	33	34	35	36	37
A+B+C	students	importance	3.15	3.53	3.43	3.61	3.23	3.70	3.18
		situation	2.63	2.67	2.59	2.53	2.65	2.85	2.73
		Gap	0.52	0.85	0.85	1.08	0.57	0.85	0.44
	parents	importance	3.41	3.70	3.66	3.84	3.68	3.76	3.58
		situation	3.01	3.04	3.09	3.11	3.11	3.06	3.06
		Gap	0.39	0.66	0.56	0.74	0.57	0.70	0.52
A	students	importance	3.03	3.46	3.43	3.62	3.26	3.72	3.16
		situation	2.41	2.68	2.50	2.45	2.65	2.82	2.66
		Gap	0.62	0.78	0.93	1.17	0.60	0.90	0.50
	parents	importance	3.23	3.56	3.57	3.79	3.48	3.80	3.43
		situation	2.66	2.75	2.80	2.88	2.78	2.69	2.93
		Gap	0.57	0.81	0.76	0.91	0.70	1.12	0.51
B	students	importance	3.16	3.50	3.37	3.58	3.21	3.64	3.16
		situation	2.80	2.64	2.64	2.75	2.67	2.90	2.76
		Gap	0.36	0.86	0.72	0.83	0.54	0.74	0.41
	parents	importance	3.45	3.76	3.63	3.87	3.80	3.63	3.64
		situation	3.31	2.97	3.29	2.99	3.45	3.08	3.13
		Gap	0.15	0.79	0.35	0.88	0.35	0.55	0.51
C	students	importance	3.27	3.63	3.50	3.63	3.21	3.75	3.21
		situation	2.72	2.70	2.62	2.40	2.64	2.84	2.80
		Gap	0.55	0.93	0.88	1.24	0.58	0.91	0.42
	parents	importance	3.56	3.81	3.78	3.88	3.80	3.84	3.70
		situation	3.12	3.45	3.22	3.49	3.16	3.46	3.14
		Gap	0.44	0.36	0.56	0.40	0.64	0.39	0.56

Table O.4: Questionnaires' results - question 31-37

Tables O.5-O.6 represent the total results of satisfaction for students and parents in all three schools together (A+B+C) and each school A, B and C separately (total view for all school's grades together). The gap is a result of the parents' score minus the students' score. This gap describes the difference between students' and parents' satisfaction towards their own schools. The results show that in most cases the parents are more satisfied with their children's school's effectiveness in comparison to the students.

School	population	41	42	43	44	45	46	47	48	49	50	51	52
A+B+C	students	2.70	2.74	2.73	2.63	2.79	2.72	2.96	2.65	2.56	2.98	2.23	2.55
	Parents	3.00	2.78	3.18	3.08	2.98	3.21	3.33	3.26	3.08	3.11	2.61	3.05
	Gap	0.30	0.05	0.45	0.45	0.19	0.49	0.37	0.61	0.51	0.13	0.38	0.49
A	students	2.60	2.65	2.57	2.40	2.63	2.50	2.80	2.60	2.70	2.92	2.14	2.46
	Parents	2.68	2.97	2.71	2.50	2.78	2.68	3.07	2.83	2.93	2.89	2.46	2.67
	Gap	0.07	0.32	0.14	0.09	0.15	0.18	0.26	0.23	0.24	-0.03	0.32	0.22
B	students	2.78	2.82	3.00	2.94	2.96	2.99	3.20	2.75	2.87	3.00	2.32	2.73
	Parents	3.22	2.52	3.56	3.45	3.08	3.47	3.42	3.46	3.44	3.38	2.75	3.33
	Gap	0.44	-0.30	0.56	0.51	0.12	0.48	0.23	0.71	0.57	0.38	0.43	0.61
C	students	2.72	2.75	2.63	2.57	2.81	2.70	2.91	2.60	2.11	3.04	2.25	2.49
	Parents	3.14	2.83	3.33	3.38	3.12	3.56	3.54	3.54	2.88	3.09	2.63	3.19
	Gap	0.42	0.08	0.70	0.81	0.31	0.86	0.63	0.94	0.77	0.05	0.38	0.69

Table O.5 : Questionnaires' results - question 41-52

School	population	53	54	55	56	57	58	59	60	61	62	63
A+B+C	students	2.80	2.78	2.56	2.48	2.99	2.98	2.85	2.92	2.83	3.03	2.48
	Parents	3.12	2.76	2.91	3.01	3.46	3.30	3.06	3.07	3.19	2.95	3.02
	Gap	0.31	-0.02	0.35	0.53	0.48	0.32	0.22	0.15	0.36	-0.08	0.54
A	students	2.57	2.84	2.42	2.35	2.96	2.93	2.77	2.82	2.67	2.96	2.45
	Parents	2.54	2.51	2.67	2.66	3.09	3.03	2.80	2.94	3.04	3.12	2.81
	Gap	-0.03	-0.33	0.25	0.31	0.12	0.10	0.03	0.12	0.37	0.16	0.36
B	students	2.93	2.81	2.71	2.62	3.06	3.05	2.82	2.98	2.94	3.02	2.56
	Parents	3.27	2.94	3.09	3.16	3.66	3.15	2.70	2.98	3.29	2.81	3.12
	Gap	0.34	0.12	0.37	0.54	0.60	0.10	-0.12	0.00	0.35	-0.20	0.56
C	students	2.94	2.69	2.56	2.49	2.93	2.98	2.96	2.97	2.90	3.12	2.44
	Parents	3.62	2.88	3.01	3.26	3.70	3.77	3.73	3.31	3.25	2.88	3.17
	Gap	0.68	0.19	0.46	0.77	0.77	0.79	0.77	0.33	0.35	-0.23	0.73

Table O.6: Questionnaires' results - question 53-63

Appendix P: Standard deviation of questionnaires' results

$$S.D = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n-1}}$$

Question	Importance				Reality			
	A	B	C	A+B+C	A	B	C	A+B+C
1	0.7220	0.8737	0.7491	0.7838	0.7874	0.8010	0.6687	0.7556
2	0.6508	0.6472	0.6369	0.6442	0.8777	0.8563	0.8879	0.8915
3	0.8311	0.7464	0.8917	0.8260	0.9601	0.8793	0.8695	0.9109
4	0.9324	0.9574	0.9528	0.9453	0.9748	0.9258	0.9647	0.9608
5	0.9254	0.9198	0.9079	0.9180	0.9293	0.9323	0.9333	0.9305
6	0.7816	0.6564	0.5832	0.6856	0.9422	0.8334	0.9346	0.9295
7	0.7662	0.5568	0.5354	0.6367	1.0350	0.7924	0.9829	0.9765
8	0.7068	0.6356	0.6097	0.6532	1.0280	0.7748	0.9821	0.9911
9	0.7116	0.8170	0.6683	0.7342	0.9542	0.7534	0.9750	0.9320
10	0.5465	0.4469	0.4476	0.4845	0.9377	0.8320	0.9751	0.9548
11	0.7305	0.6434	0.7673	0.7166	1.0047	0.9055	1.0364	1.0230
12	0.8169	0.8188	0.7184	0.7892	0.9414	0.8003	0.9169	0.9030
13	0.7013	0.7648	0.7769	0.7468	0.9629	1.0301	0.9265	0.9840
14	0.7170	0.7481	0.7609	0.7419	1.1029	0.9465	1.1538	1.0875
15	0.5542	0.5466	0.4168	0.5129	0.8756	0.9296	0.8630	0.8923
16	0.5529	0.6641	0.5532	0.5900	0.8684	0.9453	0.8834	0.8989
17	0.7341	0.7198	0.7160	0.7231	0.9423	1.0278	0.9567	0.9737
18	0.5539	0.6176	0.4726	0.5520	0.9956	0.9113	0.9569	0.9614
19	0.8540	0.8066	0.8492	0.8361	0.9000	0.8225	0.9261	0.8909
20	0.6846	0.6716	0.6154	0.6601	0.9273	0.8031	0.9518	0.8982
21	0.6471	0.6469	0.4900	0.6017	0.9553	0.9680	0.9722	0.9638
22	0.7657	0.8061	0.8217	0.7975	0.9989	0.8368	1.0049	0.9618
23	0.7128	0.6616	0.5657	0.6529	1.0982	1.0367	1.0931	1.0821
24	0.8474	0.7912	0.8440	0.8299	1.0570	0.8776	1.0109	0.9883
25	0.6141	0.6932	0.6056	0.6400	0.9683	0.9712	0.9588	0.9647
26	0.9144	0.7960	0.8616	0.8620	1.0197	1.0071	1.1012	1.0527
27	0.7583	0.6515	0.5698	0.6716	0.9071	0.8090	0.9633	0.9250
28	0.8290	0.8364	0.8084	0.8232	0.8723	0.8479	0.9070	0.8769
29	0.8324	0.9287	0.8084	0.8633	0.9686	0.9038	0.9700	0.9540
30	0.7892	0.7446	0.6749	0.7411	0.8983	0.8532	0.9003	0.8888
31	1.0844	0.9023	0.9497	0.9885	1.1351	1.0080	1.1128	1.0996
32	0.7627	0.7661	0.6886	0.7426	1.0274	1.0610	1.1360	1.0725
33	0.7732	0.8136	0.7221	0.7707	0.9293	0.8973	0.8468	0.8933
34	0.7405	0.7294	0.6845	0.7181	0.9996	0.8921	0.9425	0.9587
35	0.9031	1.0058	1.0079	0.9696	0.9672	0.9486	1.1267	1.0143
36	0.6045	0.6851	0.6229	0.6371	0.9249	0.9605	1.0351	0.9717
37	0.8993	0.8785	0.9550	0.9096	0.9081	0.8889	0.9908	0.9294

Table P.1: Students - standard deviation for schools A, B, C, questions 1-37

S.D range: A: 0.5465-1.1351 B: 0.4469-1.0610 C: 0.4168-1.1538 A+B+C: 0.4845-1.0996

Question	A	B	C	A+B+C
41	0.8487	0.8897	0.8406	0.8615
42	1.0807	0.9627	1.1349	1.0636
43	0.9080	0.8723	0.8863	0.9072
44	0.9310	0.8209	0.9916	0.9430
45	0.7428	0.6972	0.8131	0.7632
46	0.9704	0.8514	0.9580	0.9474
47	1.0292	0.8430	0.9866	0.9696
48	0.8499	0.8212	0.8694	0.8484
49	0.9877	0.9561	0.9962	1.0303
50	0.9949	0.9588	0.9675	0.9732
51	0.8937	0.9369	0.9159	0.9162
52	0.9114	0.8190	0.9274	0.8938
53	1.0134	0.9333	0.9826	0.9897
54	0.9174	0.9028	1.0105	0.9457
55	0.9205	0.9054	0.9457	0.9311
56	0.9513	0.8940	0.9387	0.9335
57	0.8106	0.8339	0.9502	0.8674
58	1.0275	0.8404	0.9997	0.9600
59	1.0495	0.9867	1.0207	1.0200
60	0.8644	0.8450	0.7652	0.8278
61	0.8127	0.8592	0.8931	0.8617
62	1.0210	0.9583	0.9161	0.9659
63	0.9594	0.9038	0.9797	0.9481

Table P.2: Students: standard deviation for schools A, B, C, questions 41-63

Question	Importance				Reality			
	A	B	C	A+B+C	A	B	C	A+B+C
1	0.6464	0.6312	0.5659	0.6144	0.7828	0.6590	0.8334	0.7681
2	0.5406	0.4314	0.3214	0.4399	0.9230	0.7762	0.7009	0.8344
3	0.4713	0.7494	0.5659	0.6008	0.9717	0.7183	0.8950	0.9041
4	0.7040	0.5714	0.6958	0.6639	0.9956	0.8411	0.9334	0.9659
5	0.7126	0.8609	0.6962	0.7530	0.9619	0.7707	0.7794	0.8584
6	0.4376	0.4949	0.3214	0.4181	0.8459	0.5714	0.6635	0.7472
7	0.4966	0.3703	0.5517	0.4853	0.8865	0.5819	0.6549	0.7998
8	0.7274	0.4677	0.3003	0.5255	0.9121	0.5511	0.8058	0.8421
9	0.5312	0.5360	0.6923	0.5976	0.7825	0.6058	0.7736	0.7378
10	0.5077	0.3283	0.5517	0.4816	0.9098	0.6469	0.8679	0.8594
11	0.5362	0.4041	0.3428	0.4360	0.8403	0.8547	0.8665	0.8699
12	0.6442	0.6074	0.4798	0.5791	0.8005	0.6810	0.6335	0.7516
13	0.7036	0.6945	0.4964	0.6380	0.7994	0.6469	0.7441	0.7794
14	0.4291	0.6431	0.3214	0.4667	0.9320	0.7790	0.6994	0.9025
15	0.4870	0.3342	0.3214	0.3901	0.8536	0.7672	0.5387	0.7527
16	0.4246	0.3342	0.3733	0.3799	0.8752	0.7250	0.6564	0.7782
17	0.6854	0.5126	0.4796	0.5670	0.8540	0.5537	0.5700	0.6970
18	0.4105	0.3703	0.3003	0.3608	0.8336	0.7426	0.6936	0.7770
19	0.6473	0.7096	0.7194	0.6884	0.9320	0.8078	0.9635	0.9338
20	0.4636	0.3342	0.5726	0.4753	0.8469	0.6309	0.7140	0.7485
21	0.4870	0.2793	0.2496	0.3608	0.8649	0.7730	0.5831	0.7609
22	0.4495	0.2740	0.6415	0.4950	0.9149	0.6829	0.8459	0.8714
23	0.5739	0.3703	0.3758	0.4568	0.8989	0.6174	0.7241	0.8517
24	0.5481	0.5696	0.5117	0.5412	0.9421	0.6100	0.7488	0.7951
25	0.6545	0.4376	0.6149	0.5819	0.9439	0.7033	0.9334	0.8700
26	0.6816	0.5360	0.7858	0.6893	0.9494	0.8722	1.0269	0.9841
27	0.3783	0.1979	0.5630	0.4200	0.9450	0.6174	0.8182	0.8749
28	0.6547	0.8588	0.5361	0.6820	0.7181	0.6978	0.6338	0.6861
29	0.7519	0.5348	0.8684	0.7489	0.9131	0.8030	0.6868	0.8252
30	0.7126	0.7223	0.5258	0.6504	0.8771	0.8627	0.6447	0.8052
31	1.0762	0.7133	0.8534	0.9087	1.0685	0.6684	0.8947	0.9273
32	0.7479	0.4436	0.4606	0.5832	1.0163	1.0116	0.8679	0.9824
33	0.6675	0.7494	0.5872	0.6627	0.9336	0.6074	0.5746	0.7388
34	0.4668	0.3766	0.3733	0.4071	0.8489	0.7146	0.7228	0.7867
35	0.7366	0.5175	0.5928	0.6268	0.9233	0.5696	0.8312	0.8245
36	0.6028	0.7142	0.3478	0.5691	0.9846	0.8340	0.7063	0.8882
37	0.6890	0.5259	0.5284	0.5946	0.8828	0.7133	0.8058	0.8105

Table P.3: Parents: standard deviation for for schools A, B, C, questions 1-37

S.D range: A: 0.3783-1.0762 B: 0.1979-1.0116 C: 0.2496-1.0393

A+B+C: 0.3608-0.9841

Question	A	B	C	A+B+C
41	0.7822	0.6773	0.5601	0.7063
42	0.9717	0.8857	0.9517	0.9507
43	0.8540	0.5799	0.5536	0.7311
44	0.9324	0.6389	0.8045	0.8901
45	0.7890	0.6724	0.6136	0.7113
46	0.8467	0.7045	0.6566	0.8006
47	0.8877	0.7068	0.7950	0.8186
48	0.8165	0.5014	0.6893	0.7185
49	0.9524	0.5774	1.0393	0.9575
50	0.8679	0.5771	0.5477	0.7039
51	0.9182	0.8081	0.6802	0.8098
52	0.9091	0.4815	0.6303	0.7443
53	1.0003	0.7614	0.5680	0.8818
54	1.0083	0.8571	0.9512	0.9533
55	0.8334	0.6688	0.7658	0.7617
56	0.9521	0.6999	0.5822	0.7870
57	0.8227	0.6928	0.5341	0.7227
58	0.9489	0.9442	0.5842	0.8788
59	0.9555	0.9070	0.4911	0.9007
60	0.8023	0.7426	0.6745	0.7454
61	0.7928	0.6207	0.6044	0.6756
62	0.9164	0.7835	0.8527	0.8530
63	0.7852	0.4039	0.5882	0.6233

Table P.4: Parents: standard deviation for for schools A, B, C, questions 41-63

Appendix Q: Confidence intervals

Level of confidence = 99% $\alpha = 0.01$ n = sample size S = sample variance = $\frac{\sum (x_i - \bar{x})^2}{n - 1}$

$$\text{Interval} = z_{\alpha} \frac{s}{\sqrt{n}} \quad \bar{x} - z_{\alpha} \frac{s}{\sqrt{n}} \leq \mu \leq \bar{x} + z_{\alpha} \frac{s}{\sqrt{n}}$$

Question	Importance				Reality			
	A	B	C	A+B+C	A	B	C	A+B+C
1	0.1356	0.1741	0.1502	0.0885	0.1491	0.1606	0.1353	0.0860
2	0.1223	0.1294	0.1273	0.0728	0.1653	0.1722	0.1775	0.1010
3	0.1582	0.1515	0.1777	0.0941	0.1838	0.1791	0.1744	0.1043
4	0.1766	0.1932	0.1916	0.1076	0.1861	0.1874	0.1946	0.1099
5	0.1767	0.1867	0.1826	0.1050	0.1789	0.1904	0.1895	0.1073
6	0.1484	0.1333	0.1166	0.0781	0.1814	0.1692	0.1868	0.1064
7	0.1463	0.1117	0.1070	0.0724	0.1998	0.1604	0.1971	0.1119
8	0.1342	0.1282	0.1219	0.0743	0.1957	0.1568	0.1969	0.1130
9	0.1362	0.1643	0.1336	0.0837	0.1832	0.1534	0.1955	0.1068
10	0.1044	0.0899	0.0892	0.0551	0.1805	0.1684	0.1950	0.1092
11	0.1387	0.1302	0.1543	0.0817	0.1918	0.1832	0.2097	0.1171
12	0.1577	0.1673	0.1445	0.0908	0.1833	0.1645	0.1850	0.1045
13	0.1366	0.1572	0.1563	0.0864	0.1886	0.2111	0.1869	0.1140
14	0.1384	0.1509	0.1526	0.0850	0.2135	0.1910	0.2321	0.1248
15	0.1047	0.1093	0.0831	0.0580	0.1667	0.1858	0.1725	0.1013
16	0.1050	0.1340	0.1103	0.0670	0.1667	0.1907	0.1771	0.1027
17	0.1394	0.1439	0.1427	0.0819	0.1809	0.2061	0.1913	0.1109
18	0.1052	0.1235	0.0942	0.0625	0.1917	0.1822	0.1913	0.1095
19	0.1617	0.1622	0.1693	0.0948	0.1714	0.1654	0.1857	0.1014
20	0.1307	0.1347	0.1227	0.0750	0.1775	0.1620	0.1909	0.1026
21	0.1222	0.1301	0.0980	0.0682	0.1814	0.1947	0.1949	0.1096
22	0.1470	0.1626	0.1643	0.0911	0.1934	0.1688	0.2015	0.1102
23	0.1357	0.1327	0.1131	0.0742	0.2103	0.2085	0.2192	0.1234
24	0.1622	0.1587	0.1692	0.0946	0.2041	0.1760	0.2033	0.1131
25	0.1176	0.1390	0.1207	0.0728	0.1864	0.1948	0.1917	0.1100
26	0.1756	0.1611	0.1717	0.0984	0.1974	0.2038	0.2229	0.1211
27	0.1440	0.1306	0.1136	0.0762	0.1732	0.1617	0.1926	0.1051
28	0.1587	0.1693	0.1616	0.0940	0.1689	0.1711	0.1824	0.1006
29	0.1589	0.1897	0.1611	0.0987	0.1865	0.1846	0.1957	0.1098
30	0.1537	0.1521	0.1353	0.0855	0.1759	0.1737	0.1811	0.1027
31	0.2106	0.1855	0.1916	0.1143	0.2210	0.2066	0.2252	0.1273
32	0.1452	0.1550	0.1373	0.0845	0.1973	0.2147	0.2285	0.1228
33	0.1484	0.1657	0.1452	0.0884	0.1799	0.1822	0.1709	0.1028
34	0.1418	0.1481	0.1381	0.0823	0.1935	0.1805	0.1913	0.1104
35	0.1729	0.2035	0.2015	0.1107	0.1862	0.1914	0.2259	0.1160
36	0.1148	0.1391	0.1253	0.0727	0.1781	0.1950	0.2095	0.1117
37	0.1717	0.1762	0.1915	0.1036	0.1739	0.1777	0.1987	0.1058

Table Q.1: Students' confidence intervals for schools A, B, C, questions 1-37
 Intervals' range: A: 0.1044-0.2210 B: 0.0899-0.2147 C: 0.0831-0.2321 A+B+C: 0.0551-0.1273

Question	A	B	C	A+B+C
41	0.1687	0.1801	0.1712	0.1002
42	0.2154	0.2005	0.2304	0.1249
43	0.1794	0.1776	0.1783	0.1051
44	0.1834	0.1661	0.1994	0.1090
45	0.1463	0.1415	0.1646	0.0884
46	0.1923	0.1728	0.1933	0.1099
47	0.2039	0.1717	0.1978	0.1124
48	0.1694	0.1683	0.1765	0.0991
49	0.1951	0.1941	0.2010	0.1194
50	0.1989	0.1940	0.1958	0.1133
51	0.1776	0.1896	0.1842	0.1062
52	0.1839	0.1678	0.1877	0.1048
53	0.2020	0.1895	0.1976	0.1149
54	0.1845	0.1833	0.2039	0.1103
55	0.1857	0.1844	0.1914	0.1089
56	0.1902	0.1815	0.1894	0.1086
57	0.1640	0.1714	0.1917	0.1018
58	0.2060	0.1717	0.2017	0.1120
59	0.2111	0.2003	0.2072	0.1192
60	0.1733	0.1710	0.1544	0.0963
61	0.1630	0.1750	0.1807	0.1006
62	0.2047	0.1945	0.1843	0.1124
63	0.1942	0.1846	0.1989	0.1112

Table Q.2: Students: confidence intervals for for schools A, B, C, questions 41-63

Question	Importance				Reality			
	A	B	C	A+B+C	A	B	C	A+B+C
1	0.1214	0.1258	0.1135	0.0694	0.1482	0.1321	0.1687	0.0874
2	0.1016	0.0863	0.0642	0.0497	0.1739	0.1561	0.1401	0.0945
3	0.0897	0.1521	0.1128	0.0685	0.1860	0.1463	0.1795	0.1035
4	0.1333	0.1153	0.1400	0.0756	0.1901	0.1702	0.1883	0.1105
5	0.1361	0.1748	0.1400	0.0861	0.1852	0.1574	0.1582	0.0990
6	0.0831	0.1005	0.0642	0.0476	0.1629	0.1160	0.1327	0.0856
7	0.0948	0.0743	0.1103	0.0552	0.1712	0.1178	0.1313	0.0917
8	0.1381	0.0944	0.0600	0.0598	0.1737	0.1115	0.1616	0.0960
9	0.1017	0.1078	0.1384	0.0681	0.1502	0.1234	0.1551	0.0846
10	0.0969	0.0660	0.1100	0.0548	0.1752	0.1309	0.1735	0.0983
11	0.1018	0.0818	0.0690	0.0497	0.1604	0.1730	0.1754	0.0996
12	0.1244	0.1241	0.0965	0.0666	0.1559	0.1400	0.1278	0.0870
13	0.1370	0.1428	0.0999	0.0738	0.1566	0.1326	0.1501	0.0903
14	0.0828	0.1297	0.0644	0.0534	0.1805	0.1572	0.1407	0.1035
15	0.0920	0.0668	0.0641	0.0441	0.1625	0.1534	0.1077	0.0854
16	0.0806	0.0674	0.0744	0.0432	0.1680	0.1463	0.1316	0.0889
17	0.1301	0.1025	0.0956	0.0642	0.1640	0.1110	0.1140	0.0794
18	0.0779	0.0740	0.0599	0.0409	0.1605	0.1485	0.1387	0.0885
19	0.1226	0.1427	0.1434	0.0781	0.1775	0.1625	0.1932	0.1063
20	0.0885	0.0670	0.1141	0.0540	0.1621	0.1273	0.1432	0.0855
21	0.0920	0.0562	0.0499	0.0409	0.1642	0.1555	0.1169	0.0865
22	0.0863	0.0553	0.1282	0.0565	0.1771	0.1378	0.1696	0.0999
23	0.1093	0.0743	0.0751	0.0519	0.1721	0.1242	0.1452	0.0971
24	0.1049	0.1142	0.1026	0.0617	0.1819	0.1223	0.1506	0.0910
25	0.1253	0.0878	0.1226	0.0662	0.1817	0.1410	0.1866	0.0992
26	0.1309	0.1085	0.1566	0.0787	0.1838	0.1765	0.2078	0.1133
27	0.0718	0.0397	0.1122	0.0476	0.1804	0.1234	0.1636	0.0994
28	0.1253	0.1738	0.1072	0.0779	0.1390	0.1408	0.1275	0.0787
29	0.1436	0.1092	0.1731	0.0856	0.1758	0.1640	0.1386	0.0950
30	0.1388	0.1476	0.1054	0.0750	0.1718	0.1757	0.1297	0.0930
31	0.2090	0.1466	0.1722	0.1051	0.2081	0.1370	0.1811	0.1074
32	0.1424	0.0898	0.0918	0.0664	0.1951	0.2047	0.1746	0.1125
33	0.1282	0.1526	0.1181	0.0760	0.1807	0.1233	0.1159	0.0850
34	0.0894	0.0765	0.0753	0.0467	0.1644	0.1446	0.1467	0.0906
35	0.1410	0.1047	0.1185	0.0716	0.1778	0.1149	0.1667	0.0943
36	0.1145	0.1450	0.0700	0.0650	0.1896	0.1693	0.1429	0.1021
37	0.1316	0.1055	0.1060	0.0677	0.1690	0.1426	0.1616	0.0923

Table Q.3: Parents: confidence intervals for for schools A, B, C, questions 1-37

Intervals' range: A: 0.0718-0.2090 B: 0.0397-0.2047 C: 0.0499-0.2098 A+B+C: 0.0409-0.1133

Question	A	B	C	A+B+C
41	0.1554	0.1371	0.1141	0.0822
42	0.1937	0.1845	0.1932	0.1117
43	0.1687	0.1181	0.1114	0.0847
44	0.1837	0.1293	0.1618	0.1028
45	0.1554	0.1365	0.1242	0.0824
46	0.1678	0.1430	0.1325	0.0929
47	0.1759	0.1439	0.1594	0.0949
48	0.1627	0.1028	0.1399	0.0839
49	0.1882	0.1172	0.2097	0.1110
50	0.1735	0.1168	0.1108	0.0819
51	0.1825	0.1635	0.1368	0.0939
52	0.1834	0.0987	0.1276	0.0872
53	0.1994	0.1546	0.1142	0.1024
54	0.2028	0.1740	0.1919	0.1112
55	0.1681	0.1362	0.1550	0.0891
56	0.1903	0.1421	0.1175	0.0916
57	0.1665	0.1424	0.1077	0.0848
58	0.1903	0.1929	0.1179	0.1026
59	0.1922	0.1841	0.0997	0.1052
60	0.1609	0.1503	0.1361	0.0867
61	0.1590	0.1264	0.1223	0.0789
62	0.1838	0.1591	0.1715	0.0993
63	0.1589	0.0825	0.1194	0.0731

Table Q.4: Parents: confidence intervals for for schools A, B, C, questions 41-63

Appendix R: Comparison of students' and parents' mean scores

(Two-sample hypothesis test)

\bar{X}_A : Parents' mean
score/students' gap

\bar{X}_B : Parents' gap/students'
mean score

$$d = \bar{X}_A - \bar{X}_B \quad \alpha = 0.01$$

$$H_0 : \mu_A \geq \mu_B$$

$$H_1 : \mu_A < \mu_B$$

$$d^* = Z_\alpha \sqrt{\frac{S_A^2}{n_A} + \frac{S_B^2}{n_B}}$$

If $d \geq d^*$ H_0 is accepted

If $d < d^*$ H_0 is rejected

Importance			Reality	
Question	d	d*	d	d*
1	0.38	-0.16	0.15	-0.19
2	0.14	-0.14	0.28	-0.22
3	0.50	-0.16	0.12	-0.24
4	0.50	-0.20	0.14	-0.24
5	0.36	-0.20	0.24	-0.23
6	0.28	-0.15	0.24	-0.22
7	0.25	-0.16	-0.04	-0.24
8	0.22	-0.17	0.20	-0.24
9	0.17	-0.15	0.26	-0.21
10	0.02	-0.13	-0.02	-0.23
11	0.22	-0.16	0.36	-0.23
12	0.36	-0.18	0.21	-0.22
13	-0.09	-0.17	0.36	-0.22
14	0.12	-0.15	0.20	-0.25
15	0.00	-0.13	0.11	-0.21
16	0.09	-0.12	0.12	-0.21
17	0.09	-0.17	0.27	-0.22
18	0.05	-0.12	0.21	-0.23
19	0.21	-0.18	-0.18	-0.22
20	0.15	-0.14	0.25	-0.22
21	0.07	-0.14	-0.06	-0.22
22	0.28	-0.15	0.16	-0.24
23	0.04	-0.16	0.08	-0.25
24	0.24	-0.17	0.21	-0.25
25	-0.01	-0.16	-0.04	-0.24
26	0.29	-0.20	0.09	-0.24
27	0.31	-0.15	0.06	-0.23
28	0.24	-0.18	0.20	-0.20
29	0.09	-0.19	0.01	-0.23
30	0.12	-0.19	0.02	-0.22
31	0.06	-0.27	0.33	-0.27
32	0.14	-0.18	0.11	-0.25
33	0.20	-0.18	0.38	-0.23
34	0.15	-0.15	0.38	-0.23
35	0.29	-0.20	0.13	-0.23
36	0.05	-0.15	-0.15	-0.23
37	0.30	-0.20	0.24	-0.22

Satisfaction		
Question	d	d*
41	0.10	-0.21
42	0.33	-0.26
43	0.20	-0.22
44	0.06	-0.23
45	0.12	-0.19
46	0.26	-0.23
47	0.21	-0.24
48	0.25	-0.21
49	0.27	-0.24
50	0.04	-0.24
51	0.35	-0.23
52	0.23	-0.23
53	0.01	-0.26
54	-0.26	-0.25
55	0.41	-0.23
56	0.38	-0.24
57	0.13	-0.21
58	0.03	-0.25
59	0.04	-0.26
60	0.12	-0.21
61	0.46	-0.21
62	-0.04	-0.25
63	0.37	-0.23

Table R.1: School A - students versus parents

Question	d	d*
1	-0.24	-0.22
2	0.13	-0.26
3	-0.39	-0.27
4	-0.33	-0.27
5	-0.10	-0.27
6	-0.02	-0.24
7	-0.33	-0.28
8	-0.01	-0.28
9	0.10	-0.25
10	-0.04	-0.27
11	0.14	-0.26
12	-0.14	-0.26
13	0.46	-0.27
14	0.05	-0.28
15	0.10	-0.23
16	0.02	-0.24
17	0.16	-0.27
18	0.12	-0.25
19	-0.34	-0.29
20	0.04	-0.26
21	-0.06	-0.24
22	-0.16	-0.28
23	0.02	-0.28
24	-0.05	-0.31
25	-0.05	-0.27
26	-0.20	-0.30
27	-0.31	-0.28
28	-0.08	-0.26
29	-0.10	-0.26
30	-0.12	-0.27
31	0.25	-0.30
32	-0.10	-0.26
33	0.18	-0.28
34	0.20	-0.26
35	-0.23	-0.30
36	-0.20	-0.28
37	-0.11	-0.28

Table R.2: School A - students versus parents - gaps

Importance			Reality	
Question	d	d*	d	d*
1	0.55	-0.19	0.20	-0.19
2	0.15	-0.14	-0.14	-0.21
3	0.50	-0.19	-0.05	-0.21
4	0.55	-0.20	-0.12	-0.23
5	0.40	-0.23	0.14	-0.22
6	0.22	-0.15	-0.21	-0.19
7	0.13	-0.12	-0.58	-0.18
8	0.17	-0.14	-0.48	-0.17
9	0.16	-0.18	-0.16	-0.18
10	-0.02	-0.10	-0.46	-0.19
11	0.11	-0.14	-0.21	-0.23
12	0.37	-0.19	-0.11	-0.20
13	0.02	-0.19	0.05	-0.23
14	0.24	-0.18	-0.20	-0.22
15	0.02	-0.12	-0.11	-0.22
16	0.12	-0.14	-0.03	-0.22
17	0.17	-0.16	0.28	-0.21
18	0.15	-0.13	-0.07	-0.21
19	0.24	-0.20	-0.21	-0.21
20	0.18	-0.14	0.10	-0.19
21	0.12	-0.13	-0.06	-0.23
22	0.39	-0.16	-0.11	-0.20
23	0.08	-0.14	-0.22	-0.22
24	0.41	-0.18	0.01	-0.19
25	0.14	-0.15	-0.10	-0.22
26	0.30	-0.18	-0.26	-0.24
27	0.23	-0.12	-0.48	-0.18
28	0.21	-0.22	0.04	-0.20
29	0.29	-0.20	0.08	-0.22
30	0.15	-0.19	-0.05	-0.22
31	-0.07	-0.21	-0.07	-0.22
32	0.10	-0.16	0.15	-0.27
33	0.27	-0.20	0.24	-0.20
34	0.18	-0.15	0.08	-0.21
35	0.34	-0.21	0.11	-0.20
36	0.13	-0.18	-0.23	-0.23
37	0.29	-0.19	0.15	-0.21

Satisfaction		
Question	d	d*
41	-0.08	-0.20
42	0.16	-0.25
43	-0.22	-0.19
44	-0.47	-0.19
45	-0.21	-0.18
46	-0.21	-0.20
47	-0.17	-0.20
48	0.11	-0.18
49	0.11	-0.20
50	-0.04	-0.20
51	0.18	-0.23
52	-0.03	-0.18
53	-0.35	-0.22
54	-0.23	-0.23
55	0.09	-0.21
56	0.11	-0.21
57	0.04	-0.20
58	-0.09	-0.23
59	0.01	-0.25
60	-0.04	-0.21
61	0.20	-0.19
62	-0.08	-0.23
63	0.26	-0.18

Table R.3: School B - students versus parents

Question	d	d*
1	-0.18	-0.21
2	0.22	-0.22
3	0.04	-0.23
4	-0.05	-0.26
5	0.17	-0.27
6	0.20	-0.20
7	0.02	-0.19
8	0.24	-0.19
9	0.09	-0.21
10	0.12	-0.19
11	0.08	-0.24
12	-0.09	-0.22
13	0.51	-0.25
14	0.33	-0.26
15	0.16	-0.22
16	0.17	-0.25
17	0.28	-0.25
18	0.00	-0.23
19	-0.47	-0.28
20	0.04	-0.21
21	0.19	-0.21
22	0.03	-0.21
23	0.14	-0.24
24	-0.04	-0.23
25	-0.36	-0.23
26	-0.18	-0.26
27	0.05	-0.19
28	0.18	-0.21
29	-0.08	-0.23
30	-0.06	-0.24
31	0.21	-0.26
32	-0.06	-0.26
33	0.37	-0.23
34	-0.09	-0.23
35	0.21	-0.23
36	0.17	-0.25
37	-0.19	-0.25

Table R.4: School B - students versus parents - gaps

Importance			Reality	
Question	d	d*	d	d*
1	0.48	-0.17	0.13	-0.20
2	0.11	-0.13	-0.04	-0.19
3	0.60	-0.18	-0.14	-0.23
4	0.50	-0.21	0.09	-0.24
5	0.26	-0.20	0.18	-0.22
6	0.10	-0.12	0.25	-0.20
7	0.06	-0.14	-0.05	-0.20
8	0.19	-0.12	0.23	-0.23
9	0.06	-0.18	0.41	-0.23
10	-0.04	-0.13	0.20	-0.24
11	0.18	-0.15	0.44	-0.24
12	0.19	-0.15	0.25	-0.20
13	-0.04	-0.17	0.41	-0.21
14	0.14	-0.15	0.23	-0.23
15	-0.09	-0.10	-0.04	-0.18
16	0.05	-0.12	0.04	-0.19
17	0.11	-0.15	0.23	-0.20
18	0.05	-0.10	0.10	-0.21
19	0.21	-0.19	0.06	-0.24
20	0.04	-0.14	0.20	-0.20
21	0.00	-0.10	0.02	-0.20
22	0.27	-0.19	0.25	-0.23
23	-0.06	-0.12	-0.04	-0.24
24	0.29	-0.18	0.14	-0.21
25	0.02	-0.16	-0.04	-0.24
26	0.14	-0.21	0.06	-0.27
27	0.11	-0.15	-0.01	-0.22
28	0.23	-0.17	0.11	-0.19
29	-0.02	-0.22	-0.19	-0.22
30	-0.02	-0.15	0.20	-0.18
31	-0.18	-0.21	0.02	-0.25
32	-0.03	-0.14	0.09	-0.26
33	0.13	-0.17	0.26	-0.18
34	0.14	-0.14	0.45	-0.20
35	0.34	-0.20	0.15	-0.24
36	0.02	-0.13	-0.16	-0.23
37	0.24	-0.19	0.11	-0.23

Satisfaction		
Question	d	d*
41	-0.01	-0.18
42	0.23	-0.28
43	0.15	-0.18
44	-0.10	-0.21
45	-0.06	-0.19
46	0.08	-0.20
47	0.11	-0.21
48	0.27	-0.18
49	0.87	-0.25
50	-0.08	-0.20
51	0.25	-0.20
52	0.21	-0.20
53	-0.35	-0.20
54	-0.10	-0.25
55	0.26	-0.20
56	0.24	-0.20
57	0.16	-0.19
58	-0.01	-0.20
59	-0.13	-0.21
60	-0.03	-0.19
61	0.23	-0.20
62	-0.17	-0.22
63	0.39	-0.20

Table R.5: School C - students versus parents

Question	d	d*
1	-0.24	-0.20
2	0.47	-0.20
3	-0.51	-0.26
4	-0.26	-0.25
5	0.06	-0.23
6	0.52	-0.20
7	0.75	-0.22
8	0.62	-0.23
9	0.69	-0.24
10	0.63	-0.23
11	0.45	-0.25
12	0.45	-0.21
13	0.72	-0.23
14	0.79	-0.25
15	0.42	-0.19
16	0.26	-0.21
17	0.23	-0.23
18	0.38	-0.21
19	0.24	-0.24
20	0.12	-0.21
21	0.02	-0.21
22	0.62	-0.26
23	0.67	-0.24
24	0.33	-0.24
25	-0.04	-0.25
26	0.06	-0.30
27	0.45	-0.23
28	0.20	-0.21
29	0.41	-0.23
30	0.61	-0.21
31	0.18	-0.24
32	0.37	-0.24
33	0.28	-0.21
34	0.76	-0.21
35	-0.12	-0.28
36	0.41	-0.22
37	-0.12	-0.23

Table R.6: School C - students versus parents - gaps

Importance			Reality	
Question	d	d*	d	d*
1	0.38	-0.10	0.15	-0.11
2	0.14	-0.08	0.28	-0.12
3	0.50	-0.10	0.12	-0.13
4	0.50	-0.12	0.14	-0.14
5	0.36	-0.12	0.24	-0.13
6	0.28	-0.08	0.24	-0.12
7	0.25	-0.08	-0.04	-0.13
8	0.22	-0.09	0.20	-0.13
9	0.17	-0.10	0.26	-0.12
10	0.02	-0.07	-0.02	-0.13
11	0.22	-0.09	0.36	-0.14
12	0.36	-0.10	0.21	-0.12
13	-0.09	-0.10	0.36	-0.13
14	0.12	-0.09	0.20	-0.15
15	0.00	-0.07	0.11	-0.12
16	0.09	-0.07	0.12	-0.12
17	0.09	-0.09	0.27	-0.12
18	0.05	-0.07	0.21	-0.13
19	0.21	-0.11	-0.18	-0.13
20	0.15	-0.08	0.25	-0.12
21	0.07	-0.07	-0.06	-0.13
22	0.28	-0.10	0.16	-0.13
23	0.04	-0.08	0.08	-0.14
24	0.24	-0.10	0.21	-0.13
25	-0.01	-0.09	-0.04	-0.13
26	0.29	-0.11	0.09	-0.15
27	0.31	-0.08	0.06	-0.13
28	0.24	-0.11	0.20	-0.11
29	0.09	-0.12	0.01	-0.13
30	0.12	-0.10	0.02	-0.12
31	0.06	-0.14	0.33	-0.15
32	0.14	-0.10	0.11	-0.15
33	0.20	-0.11	0.38	-0.12
34	0.15	-0.09	0.38	-0.13
35	0.29	-0.12	0.13	-0.13
36	0.05	-0.09	-0.15	-0.14
37	0.30	-0.11	0.24	-0.13

Satisfaction		
Question	d	d*
41	0.10	-0.12
42	0.33	-0.15
43	0.20	-0.12
44	0.06	-0.13
45	0.12	-0.11
46	0.26	-0.13
47	0.21	-0.13
48	0.25	-0.12
49	0.27	-0.14
50	0.04	-0.13
51	0.35	-0.13
52	0.23	-0.12
53	0.01	-0.14
54	-0.26	-0.14
55	0.41	-0.12
56	0.38	-0.13
57	0.13	-0.12
58	0.03	-0.14
59	0.04	-0.14
60	0.12	-0.12
61	0.46	-0.12
62	-0.04	-0.13
63	0.37	-0.12

Table R.7: Schools A+B+ C - students versus parents

Question	d	d*
1	-0.22	-0.12
2	0.24	-0.14
3	-0.31	-0.15
4	-0.22	-0.15
5	0.04	-0.15
6	0.21	-0.13
7	0.09	-0.15
8	0.26	-0.14
9	0.28	-0.14
10	0.22	-0.14
11	0.21	-0.15
12	0.06	-0.14
13	0.55	-0.15
14	0.36	-0.16
15	0.21	-0.13
16	0.14	-0.14
17	0.22	-0.15
18	0.14	-0.14
19	-0.21	-0.16
20	0.05	-0.13
21	0.03	-0.13
22	0.14	-0.15
23	0.26	-0.15
24	0.06	-0.15
25	-0.1475	-0.1452
26	-0.11	-0.17
27	0.05	-0.14
28	0.09	-0.13
29	0.06	-0.14
30	0.13	-0.14
31	0.21	-0.16
32	0.06	-0.15
33	0.27	-0.14
34	0.27	-0.14
35	-0.05	-0.16
36	0.10	-0.15
37	-0.14	-0.15

Table R.8: Schools A+B+ C - students versus parents - gaps

Appendix S: Analysis of variance - comparison of six grades

m : No. of samples. n : All samples' size

$$SS_w = \sum \sum (X_{ij} - \bar{X}_j)^2 \quad SS_t = \sum \sum (\bar{X}_{ij} - \bar{\bar{X}})^2 \quad SS_b = SS_t - SS_w \quad F = \frac{\frac{SS_b}{m-1}}{\frac{SS_w}{n-m}}$$

Question	Importance		Reality	
	F statistic	α	F statistic	α
1	4.47	0.00	11.11	0.00
2	3.34	0.01	9.84	0.00
3	1.43	0.21	4.79	0.00
4	0.77	0.58	5.17	0.00
5	2.76	0.02	2.67	0.02
6	1.17	0.33	7.34	0.00
7	2.60	0.03	4.72	0.00
8	2.77	0.02	2.86	0.02
9	1.00	0.42	4.89	0.00
10	1.28	0.27	2.51	0.03
11	2.16	0.06	6.22	0.00
12	0.36	0.88	5.52	0.00
13	3.67	0.00	3.43	0.01
14	1.63	0.16	4.54	0.00
15	2.36	0.04	5.03	0.00
16	1.71	0.14	7.37	0.00
17	0.65	0.66	4.38	0.00
18	0.48	0.79	7.30	0.00
19	2.78	0.02	3.35	0.01
20	2.62	0.03	6.54	0.00
21	0.96	0.44	5.97	0.00
22	1.21	0.31	4.36	0.00
23	2.44	0.04	5.22	0.00
24	1.71	0.13	7.23	0.00
25	0.84	0.53	6.67	0.00
26	0.81	0.55	8.74	0.00
27	0.98	0.43	3.79	0.00
28	0.76	0.58	4.25	0.00
29	0.94	0.46	0.75	0.59
30	0.51	0.77	12.63	0.00
31	2.59	0.03	11.67	0.00
32	4.40	0.00	4.14	0.00
33	3.02	0.01	12.11	0.00
34	1.52	0.19	7.48	0.00
35	2.19	0.06	2.55	0.03
36	1.13	0.35	1.88	0.10
37	1.77	0.12	2.01	0.08

Table S.1: School A, students: comparison among six grades - questions 1-37

Question	F	α
1	11.54	0.00
2	8.47	0.00
3	3.27	0.01
4	4.39	0.00
5	1.52	0.18
6	7.04	0.00
7	2.50	0.03
8	3.18	0.01
9	2.43	0.04
10	3.89	0.00
11	4.32	0.00
12	2.78	0.02
13	3.24	0.01
14	2.84	0.02
15	5.00	0.00
16	5.29	0.00
17	3.87	0.00
18	7.04	0.00
19	4.07	0.00
20	5.33	0.00
21	7.10	0.00
22	1.88	0.10
23	5.43	0.00
24	5.27	0.00
25	6.27	0.00
26	5.83	0.00
27	3.78	0.00
28	2.18	0.06
29	2.61	0.03
30	7.53	0.00
31	2.26	0.05
32	3.54	0.00
33	10.00	0.00
34	7.22	0.00
35	1.96	0.09
36	2.43	0.04
37	2.00	0.08

Table S.2: School A, students: comparison among six grades - gaps of questions 1-37
(importance minus reality)

Satisfaction		
Question	F statistic	α
41	8.10	0.00
42	1.48	0.20
43	5.24	0.00
44	3.90	0.00
45	0.99	0.42
46	6.34	0.00
47	1.24	0.29
48	8.62	0.00
49	3.33	0.01
50	7.35	0.00
51	7.20	0.00
52	7.54	0.00
53	4.31	0.00
54	2.64	0.03
55	2.04	0.08
56	7.44	0.00
57	0.62	0.69
58	2.67	0.02
59	2.07	0.07
60	2.70	0.02
61	3.90	0.00
62	2.20	0.06
63	4.62	0.00

Table S.3: School A, students: comparison among six grades - questions 41-63

Question	Importance		Reality	
	F statistic	α	F statistic	α
1	2.14	0.06	1.52	0.19
2	1.49	0.19	4.71	0.00
3	2.32	0.05	3.93	0.00
4	1.59	0.16	0.96	0.45
5	1.64	0.15	2.57	0.03
6	1.98	0.09	3.65	0.00
7	1.72	0.13	3.97	0.00
8	1.63	0.16	3.78	0.00
9	4.03	0.00	4.90	0.00
10	3.39	0.01	4.33	0.00
11	2.91	0.02	6.62	0.00
12	2.60	0.03	2.79	0.02
13	2.19	0.06	2.53	0.03
14	2.80	0.02	2.81	0.02
15	2.92	0.01	7.99	0.00
16	1.17	0.33	2.03	0.08
17	1.23	0.30	3.08	0.01
18	2.95	0.01	5.25	0.00
19	0.36	0.88	1.01	0.41
20	2.29	0.05	3.65	0.00
21	1.09	0.37	14.32	0.00
22	4.01	0.00	2.10	0.07
23	2.88	0.02	5.92	0.00
24	2.39	0.04	5.30	0.00
25	3.31	0.01	4.10	0.00
26	2.54	0.03	5.50	0.00
27	0.89	0.49	1.17	0.32
28	2.82	0.02	2.02	0.08
29	0.98	0.43	0.89	0.49
30	0.58	0.72	3.25	0.01
31	1.67	0.14	2.56	0.03
32	0.78	0.57	3.26	0.01
33	2.11	0.07	3.71	0.00
34	2.15	0.06	1.62	0.16
35	0.72	0.61	3.33	0.01
36	1.19	0.32	5.85	0.00
37	2.76	0.02	4.93	0.00

Table S.4: School B, students: comparison among six grades - questions 1-37

Question	F	α
1	0.82	0.54
2	4.21	0.00
3	0.49	0.78
4	1.23	0.30
5	1.10	0.36
6	1.03	0.40
7	1.62	0.16
8	0.87	0.50
9	3.79	0.00
10	3.25	0.01
11	3.92	0.00
12	1.45	0.21
13	0.91	0.47
14	0.82	0.53
15	4.87	0.00
16	1.38	0.23
17	2.99	0.01
18	6.12	0.00
19	0.77	0.57
20	0.69	0.63
21	13.80	0.00
22	1.84	0.11
23	4.38	0.00
24	8.18	0.00
25	1.82	0.11
26	4.50	0.00
27	0.79	0.56
28	2.94	0.01
29	0.95	0.45
30	2.04	0.08
31	1.90	0.10
32	1.43	0.22
33	0.58	0.71
34	0.34	0.89
35	1.68	0.14
36	3.76	0.00
37	2.02	0.08

Table S.5: School B, students: comparison among six grades - gaps of questions 1-37
(importance minus reality)

Satisfaction		
Question	F statistic	α
41	7.27	0.00
42	3.29	0.01
43	7.95	0.00
44	3.42	0.01
45	3.08	0.01
46	2.15	0.06
47	4.05	0.00
48	3.95	0.00
49	2.83	0.02
50	5.15	0.00
51	1.89	0.10
52	3.99	0.00
53	3.34	0.01
54	7.90	0.00
55	5.57	0.00
56	2.79	0.02
57	3.19	0.01
58	4.84	0.00
59	3.14	0.01
60	5.98	0.00
61	6.81	0.00
62	4.76	0.00
63	4.66	0.00

Table S.6: School B, students: comparison among six grades - questions 41-63

Question	Importance		Reality	
	F statistic	α	F statistic	α
1	2.01	0.08	2.98	0.05
2	1.06	0.38	10.39	0.00
3	2.40	0.04	9.79	0.00
4	2.46	0.04	3.61	0.03
5	1.22	0.30	3.92	0.02
6	1.65	0.15	17.20	0.00
7	0.53	0.75	10.40	0.00
8	1.70	0.19	14.07	0.00
9	2.54	0.08	17.71	0.00
10	1.25	0.29	12.64	0.00
11	1.33	0.27	16.79	0.00
12	0.42	0.66	8.74	0.00
13	0.73	0.49	11.80	0.00
14	2.49	0.09	18.17	0.00
15	2.09	0.13	13.20	0.00
16	1.00	0.37	2.94	0.06
17	3.05	0.05	9.63	0.00
18	2.25	0.11	7.49	0.00
19	1.30	0.27	9.27	0.00
20	1.19	0.31	4.94	0.01
21	1.76	0.17	4.98	0.01
22	0.97	0.38	8.20	0.00
23	0.51	0.60	18.42	0.00
24	3.47	0.03	8.39	0.00
25	1.82	0.16	5.55	0.00
26	1.17	0.31	16.19	0.00
27	1.12	0.33	6.71	0.00
28	0.50	0.61	3.64	0.03
29	3.22	0.04	4.22	0.02
30	1.28	0.28	12.08	0.00
31	3.02	0.05	7.96	0.00
32	2.25	0.11	7.64	0.00
33	1.00	0.37	6.30	0.00
34	1.96	0.14	6.76	0.00
35	5.82	0.00	3.60	0.03
36	2.18	0.12	7.12	0.00
37	0.70	0.50	2.10	0.13

Table S.7: School C, students: comparison among six grades - questions 1-37

Question	F	α
1	0.71	0.61
2	5.73	0.00
3	1.56	0.17
4	2.67	0.02
5	2.09	0.07
6	12.64	0.00
7	7.64	0.00
8	9.04	0.00
9	9.77	0.00
10	8.43	0.00
11	7.23	0.00
12	6.31	0.00
13	6.58	0.00
14	7.27	0.00
15	7.37	0.00
16	1.37	0.24
17	5.22	0.00
18	3.66	0.00
19	8.52	0.00
20	2.78	0.02
21	2.26	0.05
22	5.64	0.00
23	12.58	0.00
24	6.19	0.00
25	2.04	0.08
26	8.34	0.00
27	4.00	0.00
28	2.78	0.02
29	3.74	0.00
30	5.48	0.00
31	5.03	0.00
32	3.98	0.00
33	2.88	0.02
34	3.33	0.01
35	3.72	0.00
36	6.72	0.00
37	1.28	0.27

Table S.8: School C, students: comparison among six grades - gaps of questions 1-37
 (importance minus reality)

Satisfaction		
Question	F	α
41	2.25	0.11
42	1.01	0.37
43	7.86	0.00
44	2.95	0.06
45	3.21	0.04
46	5.91	0.00
47	6.82	0.00
48	10.57	0.00
49	8.50	0.00
50	6.26	0.00
51	6.58	0.00
52	13.00	0.00
53	11.02	0.00
54	6.11	0.00
55	4.74	0.01
56	13.43	0.00
57	4.20	0.02
58	6.45	0.00
59	8.22	0.00
60	1.82	0.16
61	5.12	0.01
62	3.01	0.05
63	9.59	0.00

Table S.9: School C, students: comparison among six grades - questions 41-63

Question	Importance		Reality	
	F statistic	α	F statistic	α
1	2.47	0.03	6.63	0.00
2	0.44	0.82	3.18	0.01
3	7.38	0.00	3.58	0.00
4	1.43	0.22	5.13	0.00
5	4.62	0.00	4.05	0.00
6	2.66	0.02	6.40	0.00
7	1.03	0.40	1.20	0.31
8	1.24	0.29	4.11	0.00
9	1.63	0.16	5.27	0.00
10	1.62	0.16	3.18	0.01
11	2.35	0.04	4.95	0.00
12	1.07	0.38	4.62	0.00
13	1.97	0.08	3.02	0.01
14	1.57	0.17	11.39	0.00
15	0.85	0.51	7.88	0.00
16	0.66	0.66	6.31	0.00
17	4.87	0.00	18.68	0.00
18	10.36	0.00	7.74	0.00
19	4.22	0.00	2.72	0.02
20	1.26	0.28	4.46	0.00
21	1.41	0.22	7.43	0.00
22	3.93	0.00	5.82	0.00
23	1.91	0.09	5.27	0.00
24	0.89	0.49	3.69	0.00
25	3.26	0.01	1.51	0.19
26	2.65	0.02	11.85	0.00
27	2.69	0.02	1.36	0.24
28	3.20	0.01	5.07	0.00
29	0.42	0.84	1.93	0.09
30	0.95	0.45	5.14	0.00
31	2.78	0.02	4.71	0.00
32	4.79	0.00	1.51	0.19
33	2.85	0.02	5.72	0.00
34	2.56	0.03	3.92	0.00
35	2.21	0.06	2.05	0.07
36	1.59	0.16	1.72	0.13
37	0.39	0.85	1.43	0.22

Table S.10: School A, parents: comparison among six grades - questions 1-37

Question	F	α
1	2.41	0.04
2	3.27	0.01
3	3.66	0.00
4	3.39	0.01
5	3.75	0.00
6	2.60	0.03
7	1.34	0.25
8	2.25	0.05
9	4.49	0.00
10	2.09	0.07
11	2.46	0.03
12	4.17	0.00
13	4.69	0.00
14	10.39	0.00
15	7.03	0.00
16	5.11	0.00
17	4.40	0.00
18	4.11	0.00
19	1.90	0.10
20	3.58	0.00
21	8.30	0.00
22	5.09	0.00
23	3.92	0.00
24	2.19	0.06
25	2.37	0.04
26	7.52	0.00
27	1.98	0.08
28	7.97	0.00
29	1.15	0.33
30	4.61	0.00
31	7.70	0.00
32	1.60	0.16
33	2.82	0.02
34	3.81	0.00
35	4.39	0.00
36	4.43	0.00
37	1.02	0.41

Table S.11: School A, parents: comparison among six grades - gaps of questions 1-37
(importance minus reality)

Satisfaction		
Question	F statistic	α
41	1.80	0.13
42	0.45	0.81
43	0.59	0.71
44	0.60	0.70
45	0.31	0.90
46	1.85	0.12
47	0.85	0.52
48	0.42	0.83
49	0.41	0.84
50	0.76	0.58
51	0.85	0.52
52	1.73	0.15
53	2.48	0.04
54	0.94	0.47
55	3.24	0.01
56	0.56	0.73
57	0.83	0.53
58	0.37	0.87
59	0.39	0.86
60	0.86	0.51
61	0.90	0.49
62	2.89	0.02
63	0.99	0.43

Table S.12: School A, parents: comparison among six grades - questions 41-63

Question	Importance		Reality	
	F statistic	α	F statistic	α
1	2.28	0.05	0.32	0.90
2	2.02	0.08	0.70	0.63
3	1.22	0.30	2.05	0.07
4	5.51	0.00	2.98	0.01
5	4.24	0.00	0.71	0.61
6	3.95	0.00	1.39	0.23
7	2.95	0.01	2.48	0.03
8	3.18	0.01	5.34	0.00
9	3.89	0.00	1.96	0.09
10	2.89	0.02	0.49	0.78
11	4.65	0.00	3.88	0.00
12	0.38	0.86	1.39	0.23
13	6.03	0.00	0.08	0.99
14	7.22	0.00	3.73	0.00
15	3.01	0.01	7.46	0.00
16	1.27	0.28	2.95	0.01
17	1.84	0.11	1.20	0.31
18	5.50	0.00	1.44	0.21
19	4.16	0.00	2.20	0.06
20	7.30	0.00	0.55	0.74
21	2.00	0.08	4.90	0.00
22	3.35	0.01	2.28	0.05
23	2.80	0.02	4.58	0.00
24	1.02	0.41	5.90	0.00
25	3.19	0.01	2.00	0.08
26	3.63	0.00	7.52	0.00
27	1.14	0.34	1.44	0.21
28	2.73	0.02	1.08	0.38
29	3.56	0.00	1.11	0.36
30	2.16	0.06	1.88	0.10
31	1.84	0.11	1.40	0.23
32	11.03	0.00	0.92	0.47
33	3.55	0.00	0.02	1.00
34	2.95	0.01	1.53	0.18
35	0.71	0.62	5.66	0.00
36	2.65	0.02	0.70	0.62
37	9.21	0.00	6.00	0.00

Table S.13: School B, parents: comparison among six grades - questions 1-37

Question	F	α
1	1.10	0.36
2	0.40	0.85
3	0.64	0.67
4	3.60	0.00
5	3.31	0.01
6	4.21	0.00
7	3.76	0.00
8	1.48	0.20
9	9.28	0.00
10	3.07	0.01
11	3.77	0.00
12	1.72	0.13
13	4.35	0.00
14	5.28	0.00
15	16.78	0.00
16	2.46	0.04
17	0.82	0.54
18	0.52	0.76
19	3.56	0.00
20	0.49	0.78
21	6.65	0.00
22	2.04	0.08
23	7.77	0.00
24	3.17	0.01
25	5.54	0.00
26	13.74	0.00
27	0.73	0.60
28	7.48	0.00
29	0.34	0.89
30	0.85	0.52
31	1.21	0.30
32	2.64	0.03
33	2.81	0.02
34	2.17	0.06
35	4.19	0.00
36	0.31	0.91
37	1.58	0.17

Table S.14: School B, parents: comparison among six grades - gaps of questions 1-37
(importance minus reality)

Satisfaction		
Question	F statistic	α
41	0.29	0.92
42	1.37	0.25
43	0.96	0.45
44	0.90	0.49
45	0.23	0.95
46	0.41	0.84
47	0.61	0.69
48	0.22	0.95
49	0.27	0.93
50	0.54	0.74
51	0.31	0.91
52	0.63	0.68
53	1.85	0.12
54	0.26	0.93
55	1.28	0.29
56	0.28	0.92
57	0.09	0.99
58	2.34	0.06
59	1.12	0.36
60	0.38	0.86
61	0.45	0.81
62	1.19	0.33
63	0.40	0.85

Table S.15: School B, parents: comparison among six grades - questions 41-63

Question	Importance		Reality	
	F statistic	α	F statistic	α
1	0.40	0.85	3.35	0.04
2	3.26	0.01	2.10	0.13
3	1.15	0.34	3.00	0.05
4	1.37	0.24	1.61	0.20
5	1.61	0.16	3.51	0.03
6	2.73	0.02	3.57	0.03
7	1.73	0.13	4.80	0.01
8	1.68	0.19	0.52	0.59
9	1.18	0.31	1.34	0.27
10	2.41	0.09	3.25	0.04
11	1.19	0.31	2.70	0.07
12	1.16	0.32	1.80	0.17
13	1.63	0.20	2.66	0.07
14	4.02	0.02	4.81	0.01
15	1.99	0.14	3.14	0.05
16	1.57	0.21	3.55	0.03
17	0.38	0.68	3.61	0.03
18	1.69	0.19	2.76	0.07
19	8.86	0.00	5.47	0.01
20	1.69	0.19	0.50	0.61
21	1.68	0.19	3.71	0.03
22	0.41	0.66	8.72	0.00
23	1.56	0.21	2.72	0.07
24	6.58	0.00	0.71	0.49
25	3.34	0.04	1.47	0.23
26	0.92	0.40	2.72	0.07
27	3.28	0.04	1.04	0.36
28	4.26	0.02	4.94	0.01
29	2.23	0.11	20.07	0.00
30	3.47	0.03	1.96	0.14
31	2.88	0.06	0.39	0.68
32	1.24	0.29	2.32	0.10
33	0.93	0.39	1.98	0.14
34	0.67	0.51	3.99	0.02
35	0.77	0.47	3.23	0.04
36	3.96	0.02	1.53	0.22
37	2.32	0.10	1.81	0.17

Table S.16: School C, parents: comparison among six grades - questions 1-37

Question	F	α
1	2.80	0.02
2	1.78	0.12
3	2.45	0.04
4	0.73	0.60
5	5.45	0.00
6	2.24	0.05
7	4.10	0.00
8	0.68	0.64
9	2.45	0.04
10	3.19	0.01
11	2.68	0.02
12	1.36	0.24
13	0.22	0.95
14	4.00	0.00
15	0.69	0.63
16	1.58	0.17
17	4.56	0.00
18	3.70	0.00
19	2.42	0.04
20	1.14	0.34
21	3.89	0.00
22	5.30	0.00
23	2.84	0.02
24	3.40	0.01
25	3.77	0.00
26	1.14	0.34
27	2.05	0.07
28	1.09	0.37
29	9.39	0.00
30	2.81	0.02
31	3.27	0.01
32	1.95	0.09
33	0.71	0.62
34	3.32	0.01
35	2.61	0.03
36	2.37	0.04
37	0.75	0.58

Table S.17: School C, parents: comparison among six grades - gaps of questions 1-37
(importance minus reality)

Satisfaction		
Question	F statistic	α
41	1.05	0.36
42	0.85	0.43
43	2.39	0.10
44	0.84	0.44
45	1.08	0.35
46	0.59	0.56
47	0.24	0.79
48	1.06	0.36
49	0.29	0.75
50	1.27	0.29
51	0.41	0.67
52	0.71	0.50
53	1.06	0.36
54	0.82	0.45
55	1.09	0.35
56	0.25	0.78
57	0.68	0.51
58	0.62	0.54
59	1.33	0.27
60	0.86	0.43
61	0.52	0.60
62	0.89	0.42
63	0.13	0.88

Table S.18: School C, parents: comparison among six grades - questions 41-63