

AN
EXPERIMENTAL STUDY
OF THE USE OF
ARCHIVE MATERIALS
IN THE
SECONDARY SCHOOL HISTORY CURRICULUM

by

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AN EXPERIMENTAL STUDY OF THE USE OF ARCHIVE MATERIALS IN THE SECONDARYSCHOOL HISTORY CURRICULUMABSTRACT

This study was prompted by the realisation that many teachers do not know how to make adequate use of the increasing amount of archive materials that have recently been made available in a form suitable for the classroom.

Consideration is given first to the several challenges to the position of history on the school timetable and the suggestion is made that a greater use of enquiry-based techniques might enable children to be made more aware of the social and practical relevance of history as a school subject. A review of the research into the mental processes of children learning history also suggests that changes in technique are required to encourage a somewhat earlier development of formal thinking than is the case at present. Source materials are one form of resource which history teachers can utilise for enquiry-based work, and the variety of these and the problems they present in the classroom are next considered. The methods used to construct the archive packs for the research are described, together with an outline of the educational objectives that these were intended to achieve,

The classroom trials are then considered. These were carried out in two stages. The aim of the first was twofold, to measure children's intellectual capabilities when handling unseen source materials and to assess the effect of a period spent using the archive packs on their levels of achievement in certain cognitive skills. The aim of the second was to examine how both the construction of the archive packs and the classroom conditions in which they were used affected children's achievement of the desired objectives.

Conclusions are then drawn concerning both the structure of archive packs designed for school use and their utilisation for maximum effect with children over a wide range of age and ability.

Marilyn Palmer M.A.

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SYNOPSIS

This study was prompted by the realisation that many teachers do not know how to make adequate use of the increasing amount of archive materials that have recently been made available in a form suitable for the classroom.

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Conclusions are then drawn concerning both the structure of the

archive packs designed for school use and their utilisation for maximum effect with children over a wide range of age and ability.

Some of the conclusions derived from this research have already been published as follows:-

'Using Stimulus Material' in Practical Approaches to the New History, ed. R.B. Jones, Hutchinson, 1973.

'Educational Objectives and Source Materials: Some Practical Suggestions', Teaching History, November 1976.

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CHAPTER 1

THE NEED FOR A NEW APPROACH TO THE TEACHING OF HISTORY IN SCHOOLS

"To books on the teaching of history", wrote J.J. Bell in 1945, "there is no end, for controversy on this topic shows no signs of dying down."¹

Discussion and debate on the teaching of history is by no means a recent phenomenon. Until the last decade, however, controversy has centred on the methods and content of history syllabuses in schools and not on the intrinsic value of the subject itself. Miss M.A. Howard suggested in 1906, in a paper read to a conference of teachers, that "we should profit by meetings ... to discuss the special problems of history teaching."² The outcome of this suggestion was the formation of the Historical Association, founded primarily to meet the needs of teachers of history. An analysis of the articles on the teaching of history published in the Association's journal, History, is an indication of the way in which history teachers have reacted to crises and new developments in the course of this century.

The two World Wars precipitated a spate of articles on naval history and military history³ in the schools; these were followed in 1946 and 1948 by articles on international understanding⁴ and education for citizenship.⁵

-
1. J.J. Bell, History in School: A Method Book, A. Wheaton, Exeter, 1945, 5.
 2. LCC Report of a Conference of Teachers 1906, p.39, as quoted in History, ix, (1924), 219.
 3. e.g. J. Corbett and H.W. Hodges, 'The Teaching of Naval and Military History', History, i, (April 1916), 12-24.
J.D. Mackie, 'The Teaching of History and the War', History, xxv, (September 1940), 132-42.
Sir Grant Robertson, 'The value of historical studies in time of war', History, xxiv, (March 1940), 289-94.
 4. C.H.D. Howard, 'International understanding and the teaching of history; a Discussion', History, xxxi, (March 1946), 64-69.
 5. W.H. Burston, 'The contribution of History to education in citizenship', History, xxxiii, (October 1948), 226-240.

Similarly, the introduction of the School Certificate and later the Hadow Report of 1926 led to several articles on the effects of examinations on school history, including those of F.C. Happold which have a very modern flavour.¹ These have been echoed recently by articles on the C.S.E. and G.C.E. in both History and the new journal of the Association, Teaching History.² The application of new developments in technology to history teaching was also considered by the Association.³ New ideas for syllabuses received an airing, notably those by M.V.C. Jeffreys on the 'Lines of Development' syllabus.⁴ Finally, the application to teaching in schools of every variety of history from ancient to contemporary, from local to international, from political to environmental, was considered in the pages of the journal between 1929 and 1956.

Significantly, after that date, the journal only published two articles on school history teaching in the next twelve years, both of

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1. C.H. Firth, 'How to mitigate the evils of examinations', History, iv, (July 1919), 79-84.
C.H.K. Marten, 'The First School Examination and the teaching of History', History, xiii, (April 1928), 17-29.
F.C. Happold, 'A new type of question in history papers', History, xiii, (July 1928), 126-30.
F.C. Happold, 'A Salisbury experiment in examination technique', History, xvi, (January 1932), 320-336.
 2. e.g. R.B. Jones, 'Towards a new history syllabus', History, lv, (October 1970), 384-96.
J. Docking, 'History and the C.S.E.', Teaching History, i, No.4, (November 1970), 292-6.
M. Gibson, '"O" Level History - some doubts and suggestions', Teaching History, i, No.1, (May 1969), 19-23.
 3. G.T. Hankin, 'The Cinematograph in the class-room', History, viii, (January 1924), 275-83.
D.P. Dobson, 'Wireless Lessons in History', History, xv, (April 1930), 34-8.
W.T. Maugh, 'History in Moving Pictures', History, xi, (January 1927), 324-9).
 4. M.V.C. Jeffreys, 'The teaching of history by means of Lines of Development', History, xxi, (December 1936), 230-8.
M.V.C. Jeffreys, 'The value of "Lines of Development" in stimulating the pupil's initiative', History, xxii, (December 1937), 219-27.

which were concerned with marginal aspects of the subject.¹ It may have seemed to many school history teachers that their Association was going the way of the Royal Historical Society before it and concentrating on higher historical studies only.² Or perhaps they themselves were growing complacent; history was still a favourite choice for first degrees at the Universities and was still compulsory to 'O' level in many schools. In the 1960s, however, controversy flared up again, only this time it was centred not on which aspects of the subject should be taught to children but whether the subject itself should be taught at all. A series of books and articles drawing attention to a 'crisis' in history teaching attempted to shock history teachers out of their complacency.³

Five major challenges to the teaching of history at the school level could be identified. Firstly, history was not regarded as 'relevant' to preparation for modern living by many schoolchildren, especially adolescents: secondly, history had therefore tended to be absorbed by subjects which seemed more relevant, like Social Studies or Humanities: thirdly, history had not defended itself against such groupings because no adequate definition of the nature and structure

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1. J.D. Standen, 'The Place of Music in the history syllabus', History, xlvi, (October 1963), 317-31.
C.M. Haworth, 'Ancient History in the Sixth Form', History, li, (October 1966), 300-7.
 2. R.H.C. Davis, 'Why have a Historical Association?', History, lviii, (June 1973), 233.
 3. e.g. J.H. Plumb, Crisis in the Humanities, Harmondsworth, Middlesex, 1964.
J.H. Chambers, 'What's the Use of History, Sir?', Teacher, vi, No.21, (19th November 1965), 10.
J. Rogers, 'History Needs a Revolution', ibid., x, No.13, (29th September 1967), 14.
Mary Price, 'History in Danger', History, lxi, (October 1968), 342-7.
Martin Booth, History Betrayed, Longmans, 1969.

of the subject had been determined and teachers were therefore unsure how it should be taught to children: fourthly, it had even been questioned whether history should be taught at all in schools because of the levels of mental maturity and experience its study was believed to need. The fifth challenge was of a different nature, the type of teaching methods used in history lessons in many schools which did not do justice to the scope of the subject and had resulted in its unpopularity with many children. Each of these five challenges to the inclusion of history on the school timetable will be considered in turn.

1. The challenge of 'relevance'

Before the 1960s history teachers had not felt the need to define the 'relevance' of their subject. It was recognised as an essential component in "the education of the individual as a member of society".¹

C.B. Firth in 1929, who devoted only 8 pages of her 215 page book to 'The Need of Children for History', suggested that the study of history was vital to the development of the personality:

"In short, in history a child sees human life as a whole, so far as anyone may yet see it, and all the powers of his mind are called out in response History in the elementary schools gives opportunity not so much for the cultivation of specific aptitudes as for the development and integration of the personality."²

A similar view was adopted only 20 years ago in the Ministry of Education pamphlet, Teaching History:

"History as moral example, and history as the bestowing of a heritage. ... to heritage and morality we may add imaginative experience as a basic motive for teaching history."³

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1. Great Britain, Board of Education, The Education of the Adolescent, (Hadow Report), H.M.S.O., 1927, 196.
 2. C.B. Firth, The Learning of History in Elementary Schools, Kegan Paul Trench Trubner and Co. Ltd., 1929, 7.
 3. Great Britain, Ministry of Education, Teaching History, Pamphlet No.23, H.M.S.O., 1952, 13 & 17.

The educational outcome of history fell within what has since been called the affective domain.¹ Its purpose was to broaden the experience of the child and to increase his understanding of the human situation.

Pritchard's study of the attitudes of 8000 Grammar School children towards the subjects in their school curriculum² suggested that children accepted the purpose of history as outlined above; he concluded that:-

"the investigation as a whole represents a triumph for the humanities: English, History and Geography stand high throughout, and it is always because they deal with people."³

Children frequently used the words 'exciting' and 'thrilling' in connection with their history lessons and the remark was often made that history was least like a lesson of all the subjects learnt.⁴

It is worth considering at this point what other subjects were in competition with History in the timetable of Pritchard's Grammar Schools in the 1930s: they were English, Geography, French, Latin, Arithmetic, Algebra, Geometry, Physics and Chemistry. None have a greater social relevance, nor even a great^{er} practical relevance, than History. When this list of subjects is compared with that of the 1960s as shown in the Schools Council Enquiry I⁵, Young School Leavers, the reasons for questioning the relevance of history become clear. The new timetable includes other socially relevant studies, such as Current Affairs and Social Studies, and many other practically relevant studies

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1. B.S. Bloom, Krathwohl et al., Taxonomy of Educational Objectives, Handbook I, The Cognitive Domain, Longmans, 1956, Handbook II, The Affective Domain, Longmans, 1964.
 2. R.A. Pritchard, 'The Relative Popularity of Secondary School Subjects at Various Ages', Educational Psychology, v (1935), 157-179 and 224-243.
 3. *ibid*, 236.
 4. *ibid*, 166
 5. Schools Council, Enquiry I, Young School Leavers, H.M.S.O., 1968.

such as Housecraft, Cookery and Commercial Subjects for girls and Metalwork, Engineering and Technical Drawing for boys. It is hardly surprising that among young school leavers, whose outlook was conditioned by the immediate prospect of starting work, only 29% of the boys and 29% of the girls taking history in their fourth and fifth years at school thought that the subject was useful.¹ More disturbing was the evidence that only 28-29% of parents thought the subject was important,² and that less than half the pupils taking history thought it was interesting.³

Taking the question of practical relevance first, it is clear that history is of limited use in obtaining a job to the young school leaver, although a surprising number of careers are open to history graduates.⁴ This should not have come as a surprise to history teachers in the 1960s: the title of Mary Price's article, 'History in Danger', which pointed out the significance of the Schools Council Enquiry for school history, exaggerates the extent of the crisis.⁵ The lack of immediate practical relevance in history inevitably results in its unpopularity with the school leaver group; Wall's 1935 survey of the attitudes of 14-16 year old industrial workers, all recent leavers from elementary schools, to various school subjects showed that only 2% of both boys and girls liked history very much, 20% of the boys and 7% of girls liked it quite well, but 69% of boys and 80% of girls disliked history.⁶ That girls disliked it more than boys may be due to their lack of interest in modern political history usually prescribed for this age-group. Uprichard's study of attitudes of pupils in Secondary Modern Schools in the 1940s found that history and geography were the most disliked subjects, pupils

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1. Schools Council, (1968), op. cit., 73.
 2. ibid, 63
 3. ibid, 74
 4. D. Sylvester, 'What's the Use of Learning History?', Times Higher Education Supplement, (11th February 1973) iv.
 5. M. Price, (1968), op.cit.
 6. W.D. Wall, The Adolescent Child, Methuen, 1948, 122-3.

finding it difficult to see any use in the facts when they had learned them.¹ It must be remembered that Pritchard's more optimistic view of the popularity of history in schools was based on a sample of Grammar School children following an academic timetable and not immediately faced with the prospect of starting work. Yet even he found some evidence of similar attitudes to those cited above.²

English was seen by the young school leaver group as having a practical relevance in that it taught the basic skills of writing, spelling and speaking correctly which were seen as essential in many jobs and very generally in life.³ English was not valued for the interests it might provide. History, too, could have similar practical relevance if history teachers were willing that this should be so. The remarks made about history lessons by the young school leavers in all these surveys suggest that memorisation of fact was the chief objective. Yet education is not just the acquisition of knowledge; it is also a process by which the development of certain abilities is encouraged in the learner. If he is concerned with the practical value of his subject, the teacher of history should not, therefore, have the learning of facts as his sole educational objective; he should try to see how his subject can help to educate the learner in a developmental sense. History is, in fact, uniquely suited to the development of some of the most vital of

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1. M. Uprichard, The Relationship between Interest, Aptitude and Achievement as shown by Enquiry into the Curricula of four Secondary Modern Schools, Unpublished Ph.D. thesis, University of London, 1947. (This reference was derived from Martin Booth, A Critical Analysis of the Secondary School History Curriculum with Particular Reference to Fourth Year Pupils, Unpublished M.A.(Ed.) thesis, University of Southampton, 1967, 17.)
 2. e.g. "I am not interested in what happened years ago, before I was born." "There is no sense in learning hundreds of dates and names of kings, when everything of those days has disappeared." Pritchard, (1935), op.cit., 167.
 3. Schools Council, (1968), op.cit., 64.

these abilities, for example the use of different types of evidence, the selection and weighing of information to support an hypothesis, the ability to see a connection between a series of events and so on. In this lies the practical relevance of history. The question of the cognitive outcomes and the methodology of history teaching is one that will be considered further later, but it must be stressed here that pupils as well as teachers must be able to see the practical relevance of the subject if it is ever to be considered a 'useful' school subject in the sense adopted by the Schools Council Enquiry.

Education is not, of course, concerned only with training in abilities but also with the formation of attitudes. The school leaver group, however, "attached only moderate importance to the role of the school in developing their interests and increasing their awareness of what was happening in the world."¹ This does not mean, as Hirst has warned, that the school should abandon this role and concentrate solely on vocational preparation:

"the frequent assumption is made that interests, like needs, are naturally given and are not the product of social factors. But interests can be created, and it is surely a basic function of education to create interests in what is worthwhile."²

Certainly among those whose outlook is not conditioned by the immediate need to seek a job, the social relevance of school subjects is a prime consideration. Martin Roberts questioned his sixth formers and found that many of them "were opting for history because it appears to be

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1. Schools Council, (1968), *op.cit.*, 45.
 2. P.H. Hirst, 'The Nature and Structure of Curriculum Objectives', in M. Golby, J. Greenwald and R. West, *Curriculum Design*, Croom-Helm for the Open University, 1975, 286.

'socially relevant' in a way few other subjects are."¹ On the other hand, his sixth formers were not entirely happy with their present history course; "it is interesting enough for the most part, though there is not enough connection with other subjects or with conditions today."² The problem is how to make history 'socially relevant' without destroying it as a discipline. Two solutions have been tried out at school level. One is to teach contemporary history, but this is not necessarily popular with adolescents, particularly girls, and may result in the pupil taking history through to the sixth form having to study the same period three times over. Another solution is to accept the view of the Schools Council that "many of the existing subject-disciplines in their present form are not seen as relevant by pupils"³ and therefore to seek 'social relevance' for history as part of a broader Humanities course. This is the approach adopted by Lawrence Stenhouse and the Humanities Curriculum Project Team, who believe that "with adolescents the call for relevance implies in the humanities the teaching of controversial and social issues."⁴ They have prepared materials on such topics as living in cities, war and society, the family, etc., to which history obviously contributes valuable evidence. The danger here is that such information will be considered out of context of the time in which it actually happened and so its significance will not be appreciated by the pupils who study it.

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1. Martin Roberts, 'Contemporary Problems in Sixth Form History', History, liv, No.182, (October 1969), 395.
 2. ibid.
 3. Schools Council, Working Paper 33, Choosing a Curriculum for the Young School Leaver, Evans/Methuen Educational, 1971, 10.
 4. ibid., 39.

It is not, of course, only recent events which have shaped modern society; 'social relevance' is not necessarily achieved by concentrating on so narrow a sector of the span of human history. Professor Plumb has made an impassioned plea for the acceptance of the social relevance of history at the professional level,¹ where he deplores the current dual trends of either overconcentration on the minutiae of historical fact or the idea that history does not exist outside the mind of the historian. Both of these deny to history any social purpose. He suggests that a re-acceptance of the idea of progress would solve the historian's dilemma; by progress he means that man's increasing control over his environment is historically verifiable and on the whole beneficial to mankind.² If this is accepted, then it is clearly not only twentieth-century history which helps to explain modern society; major world happenings like the Renaissance, the Reformation, the Discoveries, the Enlightenment, the Industrial and Agrarian Revolutions, are far more important. The teacher of history should not, therefore, be ashamed of the previously held idea that the purpose of history is to lead to an understanding of the human condition; it is this which makes history 'socially relevant'. What he needs to avoid is over-specialisation - be it on the question of whether or not the accession of George III brought about a break in constitutional practice,³ or how far the Treaty of Versailles was responsible for the Second World War. Plumb believes that "the whole sickening deadening process of increasing specialisation within history destroys its value for education in its broadest and best sense."⁴

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1. J.H. Plumb, 'The Historian's Dilemma'. in Crisis of the Humanities, Harmondsworth, 1964.
 2. *ibid*, 36 and 37.
 3. *ibid*, 9.
 4. *ibid*.

History itself, then, has a social purpose but, with practical relevance, in many cases a more careful selection both of material and of methodology needs to be made so that the pupil is aware of the purpose of what he is studying. The inviolate position of history on the school timetable for so many decades lulled history teachers into false complacency. The Schools Council Enquiry into the attitudes of young school leavers, and other surveys of the 1960s, although their significance for the history teacher may have been misunderstood, will at least have served school history a useful turn if teachers now realise the necessity of ensuring that the relevance of their subject, be it practical or social, is as clear to their pupils as to themselves rather than assume that its purpose is obvious.

2. The challenge from the Social Sciences

E.E.Y. Hales warned in 1966 of the growing danger to history of competition from the social science disciplines:-

"Far from developing a supra-subject structure, a dwelling house for other disciplines (as Trevelyan had hoped in the 1920s), History has, in fact, become one among a growing number of subjects and by no means the most conspicuous."¹

The appearance at 'O' and 'A' Level of the various social sciences, especially economics and sociology, is particularly dangerous to the survival of history as these subjects are more obviously and directly concerned with the functioning of contemporary society than history and so appear more 'relevant' to the adolescent. The second major challenge facing history teachers is the need to defend their subject against others which also appear to fulfil the function of history as "essential to the education of the individual as a member of society".²

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1. E.E.Y. Hales, 'School History in the Melting Pot', History Today, (March 1966), 205.
 2. Great Britain, Board of Education, (1927), Hadow Report, op.cit., 196.

Obsessed with the question of relevance, many have stood back and allowed their subject to become absorbed into monopolistic groupings such as 'Integrated Studies' or 'Social Studies'. Some have done so cheerfully according to research undertaken by P. Serai in 1968-9. His thesis is entitled 'An enquiry into the aims and ways of teaching history in the lower secondary school ...'¹ but he seems to have made the initial assumption that "social studies should be accepted as an integrated framework within which history should be taught."² The respondents to his questionnaire were asked to list 10 aims of teaching history in order of preference and at the same time to suggest in which integrated framework history could best be taught, two questions which are not necessarily compatible. Many of his respondents felt that the aims they professed could not be achieved in their present chronological syllabus which allowed little time for discovery methods. This led Serai not to criticise overlong history syllabuses and bad teaching methods but to state that:-

"Such goals may better be achieved through inquiry-based techniques which do not seem to be possible to implement if we adhere to the traditional subject boundaries "³

and

"History will become more interesting for children if it is correlated with the experiences which are provided by other allied fields of knowledge, such as geography, economics, civics, sociology, language, and human behaviour."⁴

The last statement provides a neat summary of the curriculum pack on 'Man' devised by J.S. Bruner⁵ which is at the moment being tried out in

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1. P. Serai, An Enquiry into the aims and ways of teaching history in the lower Secondary School to the age group 11-13 and to the full ability range, Unpublished M.A.(Education) thesis, University of Lancaster, 1968-9.
 2. *ibid.*, 4.
 3. *ibid.*, 3.
 4. *ibid.*, 9.
 5. J.S. Bruner, Towards a Theory of Instruction, Harvard, 1966, Chapter 4.

several British schools.¹ It is a popular belief that such diverse curricula are the panacea for problems in history teaching.² But to accept this is to miss the main point. The inquiry-based methods favoured by Serai, Bruner and many others are as equally applicable to history as a separate discipline as to history integrated into a broader framework. It is the methods of teaching, not the subject matter, which need re-thinking.

Furthermore, are the methodologies of history and the social sciences so similar that they can be so fully integrated? S.W.F. Holloway has advocated that "history and sociology must become one; such a union would be to the mutual benefit of both partners."³ He suggests that sociology can provide the concepts which guide the historian in his choice and analysis of historical data. This argument has been related to school history by Derek Heater, who believes that "history should be perceived not merely as a subject but rather as a mode of thought."⁴ Consequently, "history should be taught in such a way that it is used as a vehicle for the basic social science concepts."⁵ The examples of concepts that he gives - leadership, decision-making etc. - are all illustrated by material drawn from twentieth century history. It is doubtful whether this method could be applied to other than contemporary history; abstracting the material to define such concepts from the twelfth, or even the sixteenth, century would not be

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1. e.g. Anstey Martin and Heathfield High Schools in Leicestershire.
 2. cf. D.G. Watts, The Learning of History, Routledge Kegan Paul, 1972, 12. "integrated courses provide over-convenient solutions to the problem of what to do with currently embarrassing subjects like history ...".
 3. S.W.F. Holloway, 'History and Sociology; What History is and what it ought to be' in W.H. Burston and D. Thompson (eds), Studies in the Nature and Teaching of History, Routledge Kegan Paul, 1967, 13.
 4. Derek Heater, 'History and the Social Sciences' in M. Ballard (ed.), New Movements in the Study and Teaching of History, Temple Smith, 1970, 141.
 5. *ibid.*

possible in isolation because the mode of life and thought was so different: the concepts could only be fully understood after the whole period had been studied in depth.

The historian can, of course, utilise the methods of the social scientist, particularly in the quantification of statistical data such as census material in demographic studies ¹ or the consideration of social groups. Ian Lister has advocated greater use in schools of the works of historians such as Christopher Hill, George Rude and Asa Briggs who have 'offered us scholarly and socially relevant History - History 'from below' (and, it is worth remembering, that is where most of mankind have always been.)"². The social scientist makes use of historical material, but each subject has its own methodology and its own objectives as Professor Elton has stressed:-

"History must analyse and relate the story of past change and must concern itself with people as well as with categories"³

while "sociological enquiry is distinguished by its object and method, the object being the analysis of social relationships and the method the counting of heads in categories."⁴

Probably few social scientists would accept Elton's rather narrow definition of the scope of their subject, but nevertheless it is clear that history and the social sciences are separate disciplines. As one of Serai's respondents put it, "there is a place in any school curriculum for history as a definite study as well as integrated studies - no reason why the two should not take place in one school curriculum."⁵

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1. cf. Derek Turner, Historical Demography in Schools, The Historical Association, 1971.
 2. I. Lister, 'The Teaching of the Humanities in Schools', in Plumb, Crisis of the Humanities, (1964), *op.cit.*, 160.
 3. G. Elton, The Practice of History, Sydney, 1967, 23.
 4. *ibid.*
 5. P. Serai, (1968), op.cit., Appendices, lvii.

3. The challenge of the nature and structure of history as a discipline

That history teachers find it so difficult to resist the inducements of 'Social Studies' or 'Humanities' is partly due to the third of the challenges facing them, the continuing debate about what history is and what aspects of it should be taught to children. The latter cannot be decided until some decision has been reached about the former by each individual teacher of history, since the definition decided upon dictates both the syllabus and the methodology.

The body of professional historians, however, give little guidance to the school practitioner. Each historian has his own definitive view of the nature of his subject which often differs widely from the views of his colleagues. Arthur Marwick has proposed a more impersonal definition of the subject. History, he suggests, has three levels of meaning; it can "connote the entire human past as it actually happened", or "man's attempt to describe and interpret that past" or mean "the systematic study of history ... as a discipline."² The latter definition is obviously that used by undergraduates who go to University to 'read history'. The first and second definitions, however, present the history teacher with two alternatives. He can attempt to teach "the entire human past as it actually happened", i.e. a chronological outline syllabus which has long been the basis of traditional school history. He can, on the other hand, try to show his class "man's attempt to describe and interpret that past." This has frequently been done at sixth form level, when students are asked to consider various historical

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1. e.g. G. Elton, The Practice of History, 1967, op.cit.
G. Barraclough, History in a Changing World, O.U.P., 1956.
A.L. Rowse, The Use of History, London, 1946.
G. Kitson-Clark, The Critical Historian, Heinemann, 1967.
J.H. Hexter, Doing History, Allen and Unwin, 1971.
 2. A. Marwick, The Nature of History, Macmillan, 1970, 15.

controversies such as that between Tawney, Trevor-Roper and Stone over the origins of the English Civil War.¹ The teacher accepting this definition of history would have to decide how far this can be applied lower down the school. A younger child's conceptual level might not enable him to cope with the sophisticated arguments of professional historians, but it may allow him to see for himself how a historian works and to study history, on a very simple level, as a historian would do. This argument will be further developed later; it is introduced here to show how vital for the methodology of his subject it is for every history teacher to decide for himself the vexed question, 'What is History?'.²

Whichever view of history is taken, the content of the syllabus is a vital consideration. If an outline chronological syllabus is taught, some selection has to be made in order to fit the study of "man's past as it actually happened" into lessons for five, or even three, years. If methodology is the prime consideration, then selection has to be even more rigorous. Yet there are so many varieties of history, each with their own advocates at both professional³ and school⁴ levels.

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1. L. Stone, Social Change and Revolution in England 1540-1640, Longmans Problems and Perspectives in History Series (ed. H.F. Kearney) summarises the debate for sixth-formers and College students. There are two other similar series which include extracts from both important secondary and primary sources. Longmans Seminar Studies in History (ed. P. Richardson), e.g. D.G. Wright, Democracy and Reform 1815-1885, 1970. D.C.C. Heath, Problems in European Civilisation Series, (ed. J. Ratte), Lexington, Massachusetts, e.g. W.F. Church, The Greatness of Louis XIV, 1959.
 2. E.H. Carr, What is History?, Harmondsworth, 1964.
 3. see Fritz Stern, The Varieties of History, Macmillan, 1970.
J.H. Hexter, Reappraisals in History, Longmans, 1961.
 4. see in Teaching History:-
D. Heater, 'Contemporary History Justified', i, No.1, (May 1969).
G. Preston, 'The Value of Local History in the School curriculum', i, No.2, (November 1969).
E. Rayner, 'American History in Schools', ii, No.7, (May 1972).

Mary Price pointed out the dilemma faced by teachers of history who wish to ensure that "history takes its proper share in explaining the world which the child is to enter", i.e. to teach World History, but at the same time feel that "the pendulum must not be allowed to swing so far as totally to banish British history from the syllabus, since only through some knowledge of our past can we understand ourselves as a people today."¹ She concludes: "to achieve some compromise between the claims of world history and national history and local history would seem as urgent a matter as any before us."¹

After nearly a century's debate on the subject the need to achieve this compromise is still paramount. This underlines a further dilemma facing the makers of history curricula, namely that history is not an obvious developmental subject like mathematics, physics, languages and even geography. Many of the new curricula in America are based on the principle that "the curriculum of a subject should be determined by the most fundamental understanding that can be achieved of the underlying principles that give structure to that subject."² Distinguished scholars and scientists have tried to define the structure of their particular subjects so that educators can devise curricula for the schools. Bruner admits that most of the research has been in the sciences, but suggests that "it is an accident of historical developments over the last ten years "³ and that similar results could equally well be achieved in history.⁴ He gives an example: "once one has grasped the fundamental idea that a nation must trade in order to live, then such

1. Mary Price, (1968), op.cit., 345.

2. J.S. Bruner, The Process of Education, Harvard, 1960, 31.

3. ibid., 10.

4. ibid., 3, "What are the implications of emphasis on the structure of a subject, be it mathematics or history?"

a presumably special phenomenon as the Triangular Trade of the American colonies becomes altogether simpler to understand as something more than commerce in molasses, sugar cane and slaves in an atmosphere of violation of British trade regulations."¹

The idea of defining the structure of history in order to teach it may be a useful one if this type of research in arts subjects catches up with that in the sciences. Immediately, though, it presents several dangers to the history teacher. In the first place, what is defined in the new curricula as 'a learning sequence' is easily confused in history with a chronological sequence, and may lead teachers to believe "that by teaching children about the Tudors last year, the Stuarts this year and the Industrial Revolution next year, the children's understanding would be improved".² Secondly, there is no accepted corpus of knowledge essential to the study of history as there is in mathematics or physics, although it has been suggested that some idea of how history is written should be an essential part of every history course. Thirdly, the concept put forward by Bruner in the paragraph quoted above and those suggested in a history curriculum devised along Brunerian lines³ are very advanced and unlikely to be understood by children below, at any rate, the fifth form of the secondary school. Training children to understand historical concepts is undoubtedly very important; Jeanette Coltham⁴ and W.D. De Silva⁵ have shown how

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1. J.S. Bruner, (1960), op.cit., 23-4.
 2. Watts, (1972), op.cit., 50.
 3. E. Fenton, Teaching the New Social Studies in Secondary Schools, Holt, Rinehart and Winston, 1966, see 150-187 and 452-495.
 4. J. Coltham, Junior School Children's understanding of some terms commonly used in the teaching of history. Unpublished Ph.D. thesis University of Manchester, 1960.
 5. W.A. De Silva, Concept Formation in Adolescence through Contextual Clues, with special reference to History Material. Unpublished Ph.D. thesis, University of Birmingham, 1969.

inexact children's understanding of such concepts as 'war' and 'authority' really are. Other research, however, as will be considered in Chapter 2, suggests that history for children up to at least the age of 13 should be as concrete as possible. Bruner stresses that all material in teaching should be suited to the age and ability of the child, but claims that "any subject can be taught effectively in some intellectually honest form to any child at any stage of development."¹ Clearly, history teachers will have to plan curricula and materials with the greatest of care if this is to prove true for their subject.

4. The ultimate challenge - can history be taught at all at school level?

Many would argue that the claim made above by Bruner was an ideal just not capable of achievement in history; some would go further and argue that history should not be taught at all at the school level. This is the fourth of the challenges facing history teachers today and in some respects the most difficult to meet. The germ of the argument is that history is a study for the mature mind and not for the school-child. This is proposed on the one hand by professional historians from their knowledge of the subject and on the other by psychologists from their research into the levels of mental development in children.

The most eminent - and the most mis-quoted - of the first group is Professor Elton. Teachers tend to assume that Elton has questioned whether history should be taught at all in school, even at sixth form level.² What he actually wrote was that "history is not a good subject

1. Bruner, (1960), op.cit., 33.

2. see G.E. Jones, 'Towards a Theory of History Teaching', History, v, No.183, (February 1970), 55.
D.G. Watts, (1972), op.cit., 10.

to teach to children, or rather, the 'real thing' - academic history - is the wrong thing for them."¹ What he thought was right in schools he later elucidated in an article, 'What sort of History should we Teach?'.² Elton argues that the serious study of history requires some degree of maturity - a view also put forward by F.C. Happold in 1957,³ and one with which many history teachers would agree. School history, Elton suggests, "can really only hope to do two things, to maintain a passionate interest in the past and to create a willingness to think about the past as real - as real as the present and as fully entitled to its own existence."⁴ To achieve this, a history teacher should demonstrate to children the range of man's experience through time, and so broaden the range of their own experience. Elton therefore disagrees with the current emphasis on recent history and believes that school history should cover a sweeping range, stimulating the imagination and placing contemporary man in his true perspective.⁵ This, he believes, should promote maturity, which he defines as:

"the achievement of a balanced, receptive mind, flexible and open to new ideas but at the same time capable of assessing them against the traditional, aware of mankind in its variety and uncertainty, capable of appreciating the consequences of action, responsible to itself and to others."⁶

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1. G. Elton, (1967), op.cit., 146.
 2. G. Elton, 'What sort of history should we teach?' in M. Ballard, New Movements in the Study and Teaching of History, Temple Smith, 1970.
 3. F.C. Happold, 'The Salisbury Experiment - History in Examinations', Times Educational Supplement, (March 8th, 1957), 315.
"History can only be studied effectively when a boy's mind has reached a certain stage of maturity."
 4. G. Elton, (1970), in Ballard, op.cit., 226.
 5. This is a view similar to that expressed by J.H. Plumb in his essay 'The Historian's Dilemma', (1964), op.cit., (see page 10).
 6. G. Elton, (1970), in Ballard, op.cit., 226.

Professor Elton's attitude to school history may help to explain why eminent historians in this country have not taken part in the preparation of school curricula as they have in the sciences. Elton would not agree with Bruner's contention that "intellectual activity anywhere is the same, whether at the frontier of knowledge or in the third-grade classroom."¹ Elton does not, however, suggest that history should be banned from the classroom; he argues that the way in which history should be taught in schools should differ from that practised in the universities, since the school-child has not the mental capacity to deal with what he calls "the real thing" - academic history or, to use Marwick's third definition, history as a discipline. Many teachers, and certainly many psychologists, would agree with him. One of these is Leo J. Alilunas, who argues that:

"History for children is not the same as history for historians. For children, history is initially a process of relating the past to their direct experiences. With maturity they gradually develop a capacity for indirect intellectual experiences and thus become ready to study the past for its own sake. As children grow older and gain a sense of chronology, their history becomes more closely identified with the history of historians."²

The first point here concerns the need for children to experience directly what they learn. Based on the theories of John Dewey and Jean Piaget, this has become the basis of most work in the primary school and in some subjects in the early years of the secondary school, especially the sciences. Since history (in Marwick's first sense³) is in the past and cannot be recreated experimentally, children can gain no direct experience of it. The teacher has to recreate a situation in which children can live the past for themselves. G.W. Bassett

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1. J.S. Bruner, (1960), op.cit., 14.
 2. Leo J. Alilunas, 'The Problem of Children's Historical Mindedness', in J.S. Roucek, The Teaching of History, Peter Owen, 1968, 192.
 3. see page 15.

presented children with what he called 'conflict situations', telling them an historical story which dealt with characters in conflict and then getting the children to imagine that they were the characters and interpret the situation from their point of view. He saw that children found it difficult to depersonalise themselves; they referred to criteria external to the situation but which were part of their own social code.¹ Teachers could, however, exploit this situation to explain how social codes differ from age to age. This has been done very successfully by Dr John Fines and his colleagues at Bishop Otter College of Education through the medium of drama. They re-enacted a conflict situation between a lord of the manor and his tenants over the discovery of a treasure in the eighteenth century. The children did not at first grasp the nature of the relationship between a landlord and his tenants at that period, and the group went on to explore the nature of 'authority' in a variety of situations, past and present.² This method is time-consuming, but it does help children both to experience an accurate version of the past for themselves and to understand the concepts in which they become involved. It also gives them a fuller understanding of how adults behave. E.A. Peel has pointed out that "the complexity of adult intentions may be far removed from the experience of school pupils."³ Children's difficulties in this respect need to be recognised and possible solutions explored. History is, of course, the ideal medium for such training since its subject matter is man in his relations with men. A broad sweep of the past as

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1. G.W. Bassett, An experimental study of mental processes involved in the comprehension of historical narrative. Unpublished Ph.D. thesis, University of London, 1940, 156-8.
 2. Lecture by Dr Fines at an Historical Association Short Course on Curriculum Planning and Design for Teachers of History, 4th January, 1973.
 3. E.A. Peel, 'Some Problems in the Psychology of History Teaching' in W.H. Burston and D. Thompson, Studies in the Nature and Training of History, (1967), op.cit., 192.

advocated by Elton would reveal a whole range of relationships which the careful teacher could turn to advantage rather than regard as a disadvantage in the teaching of history to children.

The second point raised by Alilunas is that children develop the capacity for indirect intellectual experience as they grow older. The age at which this is achieved is a subject of dispute which will be further explored in Chapter 2. It is sufficient to note here that several psychologists do not believe that children develop the capacity for formal reasoning in history until as late as the age of 16.¹ On the other hand, as with the last point discussed, this may be subject to modification by good teaching.

Whether this is possible with the third problem touched on by Alilunas, children's understanding of chronology, is a matter for debate. In his review of research into the concept of time, Jahoda² suggests that the understanding of this concept "is more a function of mental maturation, coupled with the widening of experience, than of purely formal teaching."³ Nevertheless, if a teacher cannot accelerate the development of time-sense in his pupils, he can adapt his teaching to the present level of their understanding. Jahoda concludes that children develop a sense of objective time - "I'll ask my grandfather if it's true" - as early as the age of 7, and gain a sense of the relationship between past and present about the age of

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1. see R.N. Hallam, 'Piaget and Thinking in History' in Ballard, New Movements in the Study and Teaching of History, (1970), op.cit., 162-178.
and D. Case and J.M. Collinson, 'The Development of Formal Thinking in Verbal Comprehension', British Journal of Educational Psychology, xxii, (1962), 133-138.
 2. G. Jahoda, 'Children's concepts of time and history', xv, No.2, (February 1963), 87-104. Educational Review
 3. ibid., 97.

11. This would indicate that family history₁ and local and environmental studies₂ are the ideal type of history for the primary school child. In pre-adolescence the sense of historical continuity begins to develop and, as this is linked to the typology of concrete examples, a 'lines of development' syllabus₃ would seem to suit this age group. The adolescent begins to have a sense of cultural continuity, understanding such terms as 'the Bronze Age'₄, and at this point, perhaps, the study of historical periods could begin. The findings of psychologists are of value to the history teacher in helping him to select the most effective methods for the age-group he is teaching.

5. The challenge of teaching methods

It is arguable that all of the challenges to history in schools so far considered can be overcome by a reconsideration of teaching methods: the problems need to be understood and methodological solutions devised. This is, of course, by no means a straightforward process: a fifth challenge to history at school level might well be the type of teaching methods described in the already quoted Schools

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1. e.g. G.E. Evans, 'History in the Family', Times Educational Supplement, No.2808, (March 14th 1969), 851.
B. Murphy, 'History through the Family I'.
D. Steel and L. Taylor, 'History through the Family II' in Teaching History, ii, No.5, (May 1971), 1-14.
D. Steel and L. Taylor, 'Family History in the Classroom', Genealogists Magazine, xxvi, No.7, (September 1970), 329-333.
D. Steel and L. Taylor, Family History in Schools, Phillimore, 1973.
 2. e.g. E. Norton, 'Where do you live? A Primary School Project', Teaching History, i, No.2, (November 1969), 99.
S. Wheeler, 'Young Children, Documents and the Locality!', Teaching History, i, No.3, (May 1970), 181-187.
 3. M.V.C. Jeffreys, (1936/7), op.cit..
 4. G. Jahoda, (1963), op.cit., 101.

Council Enquiry I - "it was all notes, just sitting writing notes isn't very interesting". "They went on and on, the same thing over and over again." "It's the way we are getting it, no discussion, just questions".¹ Roy Wake has suggested that the reason why history has so frequently been replaced by other more 'relevant' subjects

"has undoubtedly been that history has been seen as a subject rather than a discipline. The result has been a pre-occupation with a body of information to be transmitted from teacher to pupil. The major criticism to be made here is that the role of the pupil is almost entirely passive; his place is to receive, remember and repeat."²

Martin Booth, in his survey of 5 Grammar Schools, concluded that "for most of the time, pupils do not feel involved or committed; the history which they are being taught does not affect them because they are not being made to grapple with it."³ He found that the classes he studied spent most of their time listening to the teacher, taking down notes, using textbooks to make their own notes and memorising the facts.⁴ The research described here supported Booth's findings on the whole, although a greater variety of method was found. This may be partly accounted for by the fact that most of the classes studied were younger than Booth's sample and not yet affected by the need to prepare for 'O' Level or C.S.E. It might also suggest that teachers have begun to use a greater variety of methods, encouraged by the flow of literature on the subject, since Booth's work in 1967.

Traditional teaching is not necessarily wrong if it has been considered carefully in the light of new research and new ideas. However, the content and method of much traditional history teaching

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1. Schools Council, (1968), op.cit., 66 and 67.
 2. Roy Wake, 'New Approaches to History Teaching', Education and Culture, xvii, (Autumn 1971), 4.
 3. M. Booth, (1967), op.cit., 126.
 4. ibid., 124.

has not been re-examined in these lights and is perpetuated not so much because it is the best way of teaching but because it is what has always been practised. If it is true that much school history is taught by teachers who understand neither the scope of their subject nor the capacity of the learners they teach, and some suggest that it is₁, then none of the previous four challenges can be adequately solved until drastic steps are taken to meet this one.

Roy Wake suggests that the training of history teachers is largely to blame; "it is possible to obtain a respectable degree in history without ever handling one primary source of evidence."₂ Apart from this, postgraduate courses in both University Departments of Education and Colleges of Education are so organised that 'history method' and 'education' are studied separately and the connection between the methodology of the subject and the capacities of the learner rarely explored. A system which redressed this fault would help both to improve history teaching in schools and to increase the relevance of postgraduate courses in history.₃

Apart from initial training, it is essential to disseminate information as widely and quickly as possible to teachers already in service. For this purpose, the Historical Association published in 1969 the new journal, Teaching History. It is entirely devoted to history at the school level; its articles are wide-ranging both in subject matter and applicability to age and ability ranges; its latest

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1. Roy Wake, 'Where have we got to?', Teaching History, ii, No.6, (November 1971), 171.
 2. Roy Wake, 'History as a Separate Discipline: The Case', Teaching History, i, No.3, (May 1970), 156.
 3. see D. Wheeler, 'Academic and Professional Studies in a College of Education: the Case of History', Education for Teaching, lxxxiv, (Spring 1971), 56-61.

issues are more fully packed than the earlier ones and its editors overwhelmed with material for publication. Yet it is surprising how few teachers in Leicestershire, for example, subscribe to the journal¹, and this may well reflect the national picture: Professor R.H.C. Davies has pointed out that Teaching History and other Historical Association publications for school history teachers did not seem to be making much impact on the Branches of the Historical Association. He suggested that articles in Teaching History are discussed "not so much in our own Branches as in the local 'associations' or groups of history teachers which have sprung up spontaneously in order to provide the sort of forum which used to be the very raison d'etre of the Historical Association".² Many of these groups, listed in Teaching History, are carrying out interesting work in the production of teaching materials, discussions of syllabuses and examinations. Nevertheless, their members form a very small proportion of the whole body of history teachers, many of whom remain "either unconvinced, or lethargic, or overwhelmed by their problems".³ Roy Wake suggests that "many people who teach history were not trained how to do so, and that they need a great deal of help to develop enough confidence to embark on new ways."⁴ He has shown how the A.T.C.D.E. History Committee, the Historical Association, the Inspectorate, L.E.A.s and Universities and Colleges of Education are

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1. A questionnaire on Resources for History Teaching was sent to 48 secondary schools in Leicestershire. 20 were returned, and of these, 5 teachers used Teaching History, and 15 did not.
 2. R.H.C. Davies, 'Why have a Historical Association', (1973), op.cit. 238.
 3. R. Wake, 'Where have we got to?', (1971), op.cit., 169.
 4. ibid.

attempting to solve this problem by organising courses and conferences.^{1,2} Inevitably, however, such attempts tend to appeal to the already converted. Only compulsory in-service training as suggested in the James Report³ will succeed in bringing new methods and ideas to a wider audience. Meanwhile, agencies such as those listed above are making some progress towards solving the all important challenge to history in schools of unconsidered and mechanical teaching.

The New History

Sufficient progress has been made in curriculum reform in school history in the last few years for it to be now possible to speak of 'the New History'.⁴ Unfortunately, efforts at reform have been sporadic and unco-ordinated, at least until the setting up of the two Schools Council History Projects in 1971 and 1972.⁵ A variety of new materials have been produced whose use is both unspecified and unevaluated. This is not only true of history: Professor Kerr pointed out in his inaugural lecture in the University of Leicester in 1967 that the lack of order in the process of curriculum reform as a whole was due to the lack of a coherent theoretical framework capable of guiding curriculum design.⁶ He proposed a model of the curriculum with four components - curriculum objectives, knowledge, learning experiences

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1. R. Wake, 'Where have we got to?', (1971), op.cit., 169.
 2. Roy Wake's list gives, I think, a truer picture of the situation than the comment in Rogers, 'History needs a Revolution', (1967), op.cit., that "the history teacher will be lucky to find even one course running locally for him."
 3. Great Britain, Department of Education and Science, Teacher Training and Education, H.M.S.O., 1972, Chapter 2, 'The Third Cycle', 5-17.
 4. cf. R.B. Jones, Practical Approaches to the New History, Hutchinson Educational, 1973,
 5. History, Geography and Social Science 8-13, Liverpool University, 1971-5.
History 13-16, Leeds University, 1972-6.
 6. J.F. Kerr, 'The Problem of Curriculum Reform' in J.F. Kerr (ed.), Changing the Curriculum, University of London Press, 1968, 15.

and curriculum evaluation. This model suggested four basic questions to be asked in the construction of a new curriculum. These were:

- (1) What is its purpose?
- (2) What subject matter can be used?
- (3) What learning experiences and school organisation are to be provided?
- (4) How are the results to be assessed?¹

These components and related questions echo the "four fundamental questions which must be answered in developing any curriculum or plan of instruction" put forward by Ralph Tyler in 1949.² Both Tyler and Kerr mean by the curriculum "all the learning planned and guided by the school"³, but the structure of the curriculum which they suggest can also be applied to curricula designed for a single subject discipline. It is proposed here to consider each of Kerr's four basic questions in relation to curriculum reform in 'the New History'.

1. What is its purpose?

The challenges to history teaching in schools described earlier, particularly the questions of the nature of history itself and its relevance to the learner, must prompt the teacher of history to define the educational purpose of his subject. This has frequently been done in syllabuses as generalised aims or goals, but for the purpose of designing a history curriculum the formulation must be more specific. An educational objective is framed in terms of learner behaviour and states what the learner should be able to do at the end of a course of

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1. J.F. Kerr, (1968), op.cit., 17.
 2. R.W. Tyler, Basic Principles of Curriculum and Instruction, University of Chicago Press, 1949, 1.
 3. J.F. Kerr, (1968), op.cit., 16.

instruction. The objective will also indicate the kind of teaching and practice the learner will need in order to attain that objective. If the objective is "to detect bias in historical sources"¹, then the learner obviously needs to work through a series of historical extracts in which bias is evident and by some means have his attention drawn to the different attitudes expressed.

A 'taxonomy' or classification of educational objectives was devised by Bloom, Krathwohl and their associates in America. They distinguished three areas of objectives, the cognitive, affective and psycho-motor, but handbooks to the first two only have been published.² These have become better known to history teachers through the effort made by Dr Coltham and Dr Fines to relate the Bloom taxonomy specifically to history teaching.³ The authors sought the advice of teachers and lecturers before publication and presented their 'Framework' to an Historical Association course for criticism and discussion.⁴ It was considered in relation to history teaching in Primary Schools, with non-examination forms in the secondary schools and with courses leading to public examinations. The latter have also been discussed

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1. From the C.S.E. Mode III syllabus of Longslade Upper School, Birstall, Leicestershire, by kind permission of Miss E. Newton.
 2. Bloom, Krathwohl et al., Taxonomy of Educational Objectives, (1956 and 1964), op. cit.
 3. J.E. Coltham and J. Fines, Educational Objectives for the Study of History: a suggested Framework, Historical Association, T.H.35, 1971.
 4. Historical Association, Short Course on Curriculum Planning and Design for Teachers of History, Tring, January 1973.

in articles in Teaching History,¹ while groups of teachers have explored², and are continuing to explore³, the use of the Framework in relation to different aspects of history teaching. The Tring Course concluded that "the 'Educational Objectives' approach was generally considered to be one of immense constructive potential."⁴ Yet it is open to question how many practising history teachers have heard of the Framework, let alone applied it to their syllabuses.⁵

A summary of the main categories of the Coltham and Fines 'Framework' is set out below:-

A. ATTITUDES TOWARDS THE STUDY OF HISTORY

1. Attending
2. Responding
3. Imagining

B. NATURE OF THE DISCIPLINE

1. Nature of Information
2. Organising Procedures
3. Products

C. SKILLS AND ABILITIES

1. Vocabulary Acquisition
2. Reference Skills

1. M. Roberts, 'Contemporary Problems in Sixth Form History', (1969), op.cit.
R.B. Jones, 'Towards a New History Syllabus', History, 1v, No.185, (October 1970), 384-396.
M. Roberts, 'Educational Objectives for the Study of History', Teaching History, ii, No.8, (November 1972), 347-350.
and most recently, R. Brown and C. Daniels, 'Sixth-Form History - An Assessment', Teaching History, iv, No.15, (May 1976), 210-222.
2. e.g. R.B. Jones, 'History, English and Geography in the first three years of the Secondary School', short course at Leicester University School of Education, 1970.
3. R.B. Jones ran another course on the objectives approach which was concerned mainly with examinations. The report of the Short Course cited above made provision for the setting up of similar groups in other areas.
4. Report of Tring Short Course on Curriculum Planning and Design for History Teachers, 1.
5. Of the 20 replies received to the Resources Questionnaire sent out to Leicestershire teachers, 16 had not heard of the 'Framework'.

3. Memorisation
 4. Comprehension
 5. Translation
 6. Analysis
 7. Extrapolation
 8. Synthesis
 9. Judgement and Evaluation
 10. Communication Skills
- D. EDUCATIONAL OUTCOMES OF STUDY

1. Insight
2. Knowledge of Values
3. Reasoned Judgement

The division between Section B, Nature of the Discipline, and Section C Skills and Abilities, is not very distinct. Below is a suggested reorganisation of those sections of the 'Framework', Sections A and D remaining the same. This makes Section B cover all that pertains to knowledge-gathering and Section C deal with the processing of the knowledge so gathered. It was this reorganised form of the 'Framework' which was used in the preparation of the Archive Teaching Unit on which this research is based, and so a short explanation of each section is given.

B. THE ACQUISITION OF KNOWLEDGE

1. Nature of the Information - the acquisition of reference skills, e.g. using indexes and bibliographies
2. Organising Procedures - handling the information. This could involve detection of bias, statistical analysis, etc.
3. Recording the information
4. Vocabulary Acquisition - knowledge of terminology, concepts, etc.
5. Memorisation

C. SKILLS AND ABILITIES

(The first four do not require a pupil to go beyond the material he is studying: the remainder require the application of external criteria to that material)

1. Comprehension - the ability to understand the content of a new unit of material.
2. Translation - the ability to turn information from one form to another for the purposes of understanding.
3. Analysis - the ability to recognise similarities or differences between two pieces of information, or to understand the significance of contemporary witness or the detection of bias. A complex objective.
4. Synthesis - the ability to select material from a variety of sources relevant to a given theme. This may involve the use of the imagination as well, and therefore the application of external criteria.
5. Recognition - the ability to recognise facts or ideas in a situation different from that in which they were learnt.
6. Inference-making - the ability to make inferences based on the subject being studied but demanding wider understanding of the field of historical knowledge. This could be called extrapolation but the term implies a predictive element which is sometimes difficult to apply to historical studies.
7. Evaluation - the ability to make a judgement and to cite the evidence on which that judgement is based.
8. Communication skills - the ability to present the results of the exercise of all these abilities in a variety of forms, e.g. reasoned essay, creative writing, diagram, etc.

Sections A and D of the 'Framework', namely 'Attitudes towards the Study of History' and 'Educational Outcomes of the Study of History', are concerned with what Bloom and Krathwohl define as the 'affective domain', the way in which history can contribute to the personal development of the learner. This, as has been suggested, has long been a function of the study of history and has been repeatedly stressed in recent years as part of the attempt to show that history has 'social relevance'. Pupils may learn through history "to show an interest in people from the point of view of their characteristics, actions and relationships"¹ to "acknowledge change as a normal and continuing part of the human situation"² and to "identify sets of values that are an integral part of beliefs, philosophies, cultures, etc."³ This is, in fact, what Professor Elton desires that school history should do.⁴ Furthermore, it is said, history can "be the means to enable young people to extend and deepen their understanding of the nature of social life - the responsibilities of individuals to societies and the recognition that the possession of rights implies the fulfilment of duties"⁵. This is what would be termed in America as "education for effective citizenship"⁶. It is surely not a travesty of history to try, through teaching, to ensure that its study has such outcomes.

The second area of objectives is that of the 'cognitive domain'. This includes both the acquisition of knowledge and its processing. The former means more than the collection of facts; it must also embrace the understanding of the basic concepts of history which have

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1. Coltham and Fines, (1971), op.cit., 6.
 2. ibid., 25.
 3. ibid., 26.
 4. see Elton, 'What sort of History should we teach?', in Ballard, (1970), op.cit., and page 20.
 5. P.H.J.H. Gosden and D.W. Sylvester, History for the Average Child, Blackwell, 1968, 73.
 6. Fenton, (1966), op.cit., 73.

been frequently discussed but never satisfactorily defined.¹ Also included with this kind of knowledge are the ways in which evidence is collected and what Coltham and Fines define as "the agreed ways of handling the information of history."² The processing of knowledge includes skills and abilities such as comprehension, analysis, extrapolation, synthesis and the use of language which are not purely the skills of history. Nevertheless, history can be used as a medium for teaching those skills and no-one would deny that such skills are essential to the handling of historical material. The objectives can be relatively simple - "to equip children to take their places in society by fostering skills which will enable them to be both articulate and literate."³, or more demanding - "to contribute to the development of the powers of selection, interpretation, critical appraisal and judgement of evidence or information"⁴. Such skills have equal 'relevance' to those of the affective domain; they can, in the Brunerian sense⁵, 'transfer' beyond the limits of the subject in which they were learnt to become part of the general outcome of education. The cognitive outcomes of the study of history are as important as its affective outcomes.

There are, however, two dangers in placing too great a reliance on the use of a framework of educational objectives in the teaching of history to schoolchildren. In the first place, "we may find that we

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1. see Heater, 'History and the Social Sciences', in Ballard, (1970), op.cit., and p.13.
 2. Coltham and Fines, (1971), op.cit., 12.
 3. From the history syllabus of Brockington High School and Community College, Enderby, Leicestershire, by permission of Mrs C. Dilger.
 4. Gosden and Sylvester, (1968), op.cit., 7.
 5. Bruner, (1960), op.cit., 17-18.

are treating history, like all other subjects, namely as classes of material contributing to cognitive development"¹. The 'Framework' possibly guards against this, by placing 'attitudes towards the study of history' at the very beginning and including in this objectives such as "shows interest in ...", "is curious about ...".² The first task of the history teacher is, undoubtedly, to stimulate his pupils to want to learn by utilising what is unique about history, its stories, details, incidents and characters. Having caught their interest, he can then utilise the 'Framework' in the preparation of teaching materials which can promote the development of the cognitive skills and evaluation procedures to test that his materials have achieved the desired objectives. These are the steps which were used in the preparation of materials for this research.

The second danger is that in their framing of objectives within the cognitive domain, teachers may be asking more of their pupils than they can achieve, inviting boredom and frustration. Equally, they may be doing exactly the opposite, asking too little of pupils, resulting in similar undesirable attitudes on their part. Tyler has suggested that educational objectives for a particular curriculum should be screened in various ways to eliminate unattainable, inconsistent or unimportant objectives. "The educational and social philosophy to which the school is committed can serve as the first screen."³ A second screen is "the criteria for objectives implied by what is known about the psychology of learning."⁴ The second chapter of this thesis

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1. Watts, (1970), op.cit., 48.
 2. Coltham and Fines, (1971), op.cit., 6-7.
 3. Tyler, (1949), op.cit., 33.
 4. ibid., 37.

explores the significance of work done on the capacities of school-children to understand the history they are asked to study.

2. What subject matter can be used?

The 'new history' has led to further reconsideration of school syllabuses, either for history in its own right or for history integrated into more comprehensive schemes. For the former, the traditional developmental or, to use a less misleading term, 'span of history' approach, has again come under fire. (Perhaps its strength is proven by the fact that it has withstood all past criticism). The grounds of criticism are on the one hand that "the order of events, rather than the emotional or mental development of the child's mind, determines what history is taught at what age-level"¹ and on the other that "the amount of historical material to be covered has become so unwieldy that it has to be compressed and summarised to such an extent that it is in danger of losing all meaning to the child."² Instead, the history teacher has been presented with a variety of alternatives. The 'concentric approach' (now re-vamped as Bruner's 'spiral curriculum'³) covers the same period more than once but presents children with increasingly complex concepts as they become more mature. The 'lines of development' approach first put forward by Jeffreys⁴ in the 1930s is still widely used in the lower levels of secondary schools where, as already seen⁵, its use seems to be particularly suitable on psychological grounds. It has, however, been criticised from the

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1. P. Carpenter, 'The Patch Method of Teaching History', Journal of Education, lxxxviii, No.1047, (October 1956), 433.
 2. ibid.,
 3. Bruner, (1960), op.cit., 52-54.
 4. Jeffreys, (1936), op.cit.
 5. Jahoda, (1963), op.cit., and see page 24.

historical standpoint that it is difficult to isolate the theme from its contemporary context at any one stage. The so-called 'patch' or 'era' approach avoids this drawback, allowing the child "the imaginative experience of entering into the spirit of another age and of feeling at home in it".¹ Eras are chosen partly because of their appropriateness to the stage of maturity reached by the pupils and partly because of their suitability for research by the pupils themselves.² They need not be in chronological sequence or related to one another, although Carpenter has suggested that the teacher would be wise to bridge the gaps between them by formal teaching. His syllabus has, in turn, been criticised for lacking continuity although possibly Jahoda's researches suggest that this is not such a drawback to the child as it is to the adult.³ A more recent proposal has been that of a 'thematic' approach, studying important and relevant problems in history that are not limited to a particular time period and at the same time cover "a wider spectrum of human activity" than the classic 'line of development'.⁴ Martin Booth's syllabus⁵ is very complex and could easily turn back into a 'span of history' approach, but it does include both world history at all levels with a consideration of contemporary problems in the last two years of the five year course. His lesson plans⁶ show how the other end of the spectrum, local history and fieldwork, could also be included and his syllabus is perhaps the best answer to the demand for compromise between the demands of local,

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1. Carpenter, (1956), op.cit., 434.
 2. P. Carpenter, The Era Approach, Cambridge, 1964, 42.
 3. Jahoda, (1963), op.cit., and see page 23.
 4. Booth, (1969), op.cit., 31.
 5. ibid., 32-52.
 6. ibid., 76-82.

national and world history.¹ Like the era approach, it allows the class to become involved in the process of 'finding out' about history for themselves.

Where history lessons as such no longer exist, there are alternative solutions. Roy Wake, while pointing out the danger to history of "its submersion in well intended but inadequately thought out schemes"² nevertheless suggests that "in many large secondary schools the best hope of survival for history as part of the ordinary education of pupils as they grow up lies in taking part in integrated studies."³ However, history is a separate discipline and many teachers will be concerned to keep it so. Peter Mitchell's description of the setting up of a humanities programme in the Thomas Bennett Secondary School in September 1969 indicates how history can be taught alongside social science in a single programme of work.⁴ The historians in the school feared that "association with the social sciences might have reduced historians to providing background information to contemporary studies." They stressed that the "analytical distinctions and 'model building' activities, which form the basis of social science methodology, are by their very nature exclusive of particulars and hence may be marginally, rather than centrally, appropriate to historical studies". They pleaded that due regard should be given to the literary and artistic qualities of the latter.⁵ A series of themes was chosen in order to "help children to comprehend some of the realities of the

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1. Price, (1968), op.cit., 345 and see p.17
 2. Roy Wake, (1971), op.cit., 171.
 3. ibid.
 4. Peter Mitchell, 'A Humanities Programme', in W. Lamont (ed.), The Realities of Teaching History, Chatto and Windus for Sussex University Press, 1972, 144-157.
 5. ibid., 148.

modern world." To each of the themes the subject specialists contributed where their discipline was appropriate. The approach adopted here therefore enabled history to retain its independence yet contribute to an integrated programme which achieved the objective of 'social relevance' desired by the adolescent group to whom it was taught.¹

3. What learning experiences can be provided?

This is probably the area of the history curriculum in which more change has taken place in recent years than any other. As R.B. Jones has said, the 'New History' lays less emphasis on content and more on the process of learning.² History teachers in secondary schools have learnt from their colleagues in the primary schools the value of methods which involve the children and make learning an active rather than a passive process. This has resulted in a decrease, and in some cases in the virtual disappearance, of formal 'chalk and talk' lessons. The pendulum has perhaps swung too far; as Martin Booth has warned;

"It does not necessarily follow that active learning is not taking place when children are sitting and listening. Too often the creative activity lessons are ill-directed periods of boredom for the child who may have few ideas of his own because of lack of experience."³

There will always be a place in history lessons for the well-told story or for the clarification of a complex event such as the Balkan Crisis by the teacher. Many of the children taking part in the research described in this thesis enjoyed listening to the teacher and taking part in question and answer sessions; few wanted to work on their

1. see M. Roberts, (1969), op.cit., and pages 8-9.

2. R.B. Jones, (1973), op.cit., 14.

3. M. Booth, (1967), op.cit., 14.

own all the time.¹

The corollary to the decrease of formal class teaching has been the vast increase in the use of source materials, by which is meant here not only primary sources but all types of material from which the child can derive information:

"History may be studied in its own right or as a dimension of the many topics in which children are interested. In either case, its quality will depend on the sources available for children and teachers alike."²

A large amount of historical source material is now available. No longer do pupils have to rely on "the outline of essential information ready to hand in the textbook or in the small sets of related books available to the class."³ The very abundance of material, however, brings its own problems.

In the first place, children no longer know exactly where to find the information they need and have to be guided by their teacher to a variety of sources. The Schools Council found that children preparing their personal topics for C.S.E. tended to rely on books as sources of information and ignored other types of materials.⁴ Even project work can result in methods of working very little different from the traditional precis of the textbook. The teacher therefore needs to direct children specifically to additional sources, which can include pictures, charts, filmstrips, tapes and slides which can be used individually by children as well as shown to a whole class, archaeo-

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1. See the Like/Dislike Charts used in the pre-test battery, which are included in the Appendix and discussed in Chapter 5.
 2. Great Britain, Department of Education and Science, Children and Their Primary Schools, (Plowden Report), H.M.S.O., 1967, 230.
 3. Great Britain, Ministry of Education, Teaching History, (1952), op.cit., 44.
 4. Schools Council, The Place of the Personal Topic in History, H.M.S.O., 1968.

logical exhibits which can often be obtained from Schools Museum Services, field evidence in the form of buildings, earthworks, etc., and primary source materials. But, as the Schools Council team also pointed out, "an outstanding problem was how much or how little guidance should be given by the teacher."¹ This is true not only of work for the personal topic in the C.S.E. examination, but in other project work from source materials, whether by groups or individuals. If the teacher gives too much assistance, the point of the discovery method is lost; if insufficient, the children fail to use the material adequately and experience neither the thrill of following up clues nor the satisfaction of handing in a thorough piece of work. The Schools Council found that many teachers experienced "the difficulty of persuading children to write notes of their findings to be transcribed into accounts in their own wording. Too many pupils were prepared to copy verbatim."²

One solution to this problem is the work-guide, setting children specific questions or problems to answer and stating sources of information to be consulted. This can be a very valuable method if the teacher words the questions in such a way that the pupils are encouraged to use a variety of skills and not simply to extract information from the sources. Here is an obvious use for the 'Framework' of educational objectives considered earlier, which was extensively used in preparing the worksheets used in this research. However, as with any other method of teaching, over-dependence on this one way of involving pupils in the lessons will result in their becoming as

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1. Schools Council, (1968); op.cit. 16.
 2. ibid.

stereotyped as, in some cases, traditional formal lessons had become. There are now history classrooms where the children enter, collect their worksheets, sit down and answer the questions, hand in their work to be marked and go away again.¹ True, the teacher's task is to help his pupils to develop their own individual powers of learning, but his personality can assist in this as much as his careful preparation of teaching materials.

The second problem for teachers faced with the recent boom in the production of packs of primary source and other materials is how to choose between the many offered,² and what to do with them in the classroom. The justifications for the use of primary source materials are many. The details of a document can kindle the imagination, and "the beginning of all historical work is the arousal of interest in something specific."³ Gareth Jones has suggested that this interest in "something specific" is the key to the study of history by both the professional and the amateur historian; therefore, he argues, the schoolchild, as an amateur historian, should follow the methods of the historian in order to gain the enjoyment that he derives from his historical research.⁴ This view is supported by Gosden and Sylvester, who argue that children (presumably 'average' children) can use "the actual sources of history ... to construct their own histories and so

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1. This kind of situation has been frequently observed by the author in Midland secondary schools.
 2. See R. Wood, 'Archive Units for Teaching', Teaching History, Part 1, ii, No.6, (November 1971), 158-165.
Part 2, ii, No.7, (May 1972), 218-227.
Part 3, ii, No.9, (May 1973), 41-45.
 3. J. Fines, 'Archives in School', History, liiii, (October 1968), 352.
 4. G. Jones, (1970), op.cit., 62.

obtain some experience of 'finding out' which differs only in degree rather than in kind from the historical research of the professional historian."¹ This echoes Bruner's statement that "any subject can be taught effectively in some intellectually honest form to any child at any stage of development"², but one wonders what Professor Elton's comment would be on this statement!

The educational benefits of the use of the method are also expressed in glowing terms. John West says that "the children will be encouraged to think of the material they collect as evidence and to evaluate it critically."³ He is supported by Gareth Jones, who believes that the use of sources "is highly likely to result in more active and enquiring minds, a more refined and critical judgement."⁴ Margaret Bryant has, however, pointed out the dangers of misusing primary source material: "the fatal fashion seems to be to turn such prizes of the imagination into exercises in comprehension."⁵ John Fines also stresses the value of primary sources for stimulating the imagination rather than encouraging cognitive development.⁶ Finally, because the study of history lacks the clear conceptual framework to make it immediately susceptible to a Brunerian treatment, its methodology has been seized upon as a means of imparting the desired 'structure' to the subject. Historical extracts have been used to show secondary school children "how the historian classifies information"

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1. Gosden and Sylvester, (1968), op.cit., 35.
 2. Bruner, (1960), op.cit., 33 and page 19.
 3. John West, History Here and Now, Schoolmaster Publishing Company, 1966, 57.
 4. G. Jones, (1970), op.cit., 63.
 5. M.E. Bryant, 'Documentary and Study Materials for Teacher and Pupil', Part 2, Teaching History, i, No.4, (November 1970), 26.
 6. J. Fines, (1968), op.cit.

or "how the historian proves a hypothesis"¹. One wonders how many of our secondary school children could grasp the meaning of such phrases.

Chapter 3 examines the different types of 'source packs' now available to the school history teacher and considers the variety of learning experiences that these can provide.

4. How are the results of learning experiences to be assessed?

Much has been written about what the use of primary source materials can do for the learner. When one looks for information on how actually to achieve the stated objectives, the material is far thinner.² As Professor Batho has said, "practice has in recent years run well ahead of properly validated thinking".³ The purpose of this research has been to attempt to remedy, on a necessarily small scale, the lack of knowledge about how primary source materials are actually used in the schools and their effect on children's learning, in the context of the new developments in history teaching described in this chapter.

First, however, one must consider briefly the processes of curriculum evaluation. Enthusiasm for the development of new curricula in most subjects, and certainly in history, was not at first accompanied by a concomitant development in evaluating them. Sizer in 1965 stated his belief that new curricula were being used unquestionably in schools without adequate pre-testing and called for a greater amount of 'scholarly rigour' in the whole process of curriculum develop-

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1. E. Fenton, (1966), op.cit., 150-187.
 2. See Teaching History, also John West, (1966), op.cit., J. Fines, (1968), op.cit., Glin Brent, 'Archive Kits', in W. Lamont, The Realities of Teaching History, (1972), op.cit., 93-110.
 3. G.R. Batho, 'The Crisis of the Source Method', Times Educational Supplement, (24th March, 1972), 51.

ment.¹ Professor Kerr echoed Sizer's warning in his inaugural lecture in 1967, when he pointed out that evaluation was an integral part of the curriculum model yet had not been adequately utilised.² In the same year at the Third International Curriculum Conference, held in Oxford, three papers on evaluation were given but few of the seminar groups discussed the topic at any length.³ Yet the Conference Programme notes stressed that "evaluation has all too often seemed to be the missing element in curriculum reform."⁴

Government sponsorship of large scale curriculum projects in the United States has now caused evaluation to be taken more seriously since the funding bodies have demanded proof of results. This has led not only to extensive evaluation schemes but also to attempts to formulate a conceptual framework for curriculum evaluation which will be considered below. In England, financial considerations have prevented similar large-scale efforts: most Schools Council Projects are initially funded for a period of three years and the cash available has permitted the employment of only a very small project team. This may help to account for the fact that many project teams have not had an evaluator attached to them from the beginning. The initial emphasis would seem to be on the production of materials rather than on the formulation of a coherent scheme in which materials are linked to methods of evaluating their effectiveness. A recent Schools Council Publication⁵, bringing together reports from evaluators of

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1. T.R. Sizer, 'Classroom Revolution; Reform Movement or Panacea?', Saturday Review, (June 19th, 1965), 52.
 2. J.F. Kerr, (1968), op.cit., 15.
 3. J. Stuart McClure, Curriculum Innovation in Practice, Report of the Third International Curriculum Conference, Oxford, 1967, H.M.S.O., 44.
 4. ibid., 37.
 5. Schools Council, Evaluation in Curriculum Development: Twelve Case Studies, Macmillan, 1973.

twelve of its projects, together with interim reports from the two Schools Council History Projects, History, Geography and Social Science 8-13 (University of Liverpool) and History 13-16 (University of Leeds) reveal that there are no generally accepted criteria of evaluation. In a few cases the evaluator has worked with the team from the beginning, helping them, for example, to clarify their objectives₁; in others, evaluators were appointed later₂ or called in as an independent unit once trials were under way₃. Equally, the degree of experimental rigour adhered to by the evaluator varied widely; some have utilised tests and statistical analysis of trial data₄ and of examinations₅ while others have concentrated on the collection of feedback information from children and teachers₆ and on observation in the classroom₇. While the wide range of circumstances under which the project materials have been used makes such a variety of evaluation techniques perhaps inevitable, it would seem that the results might be more meaningful to the potential consumers of the materials if the Schools Council itself adopted some common form, or at least a common policy, of evaluation, even though this would mean some loss of freedom for the project leaders.

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1. e.g. Science 5-13 Project.
 2. e.g. Nuffield Secondary Science Project, History 13-16 Project. (In the latter case the project was due to run from 1972-6, and an evaluator appointed in 1974 when more funds became available)
 3. e.g. Project Technology
 4. e.g. Science 5-13 Project, Humanities Curriculum Project.
 5. e.g. Nuffield 'A' Level Biological Science: History 13-16 Project is due to be examined at G.C.E. 'O' Level in 1976 by Southern Universities Joint Matriculation Board.
 6. e.g. History, Geography and Social Science Project, Science 5-13 Project
 7. e.g. Integrated Studies Project

The adoption of such a policy is hindered, of course, as Professor Kerr said in 1967, because a coherent theoretical framework capable of guiding curriculum design is lacking¹. Michael Scriven, in an important article on the methodology of evaluation², has attempted to remedy this by examining and clarifying the basic concepts of evaluation. He differentiates between the goals of evaluation, which are answers to questions about the effectiveness of the materials being considered, and the roles of evaluation, which concern the use to which the evaluation is put. In the latter case, he further differentiates between formative evaluation, which is the feedback information during field-testing concerning the improvement of the materials themselves, and summative evaluation, which involves judgments about the merit of the programme or materials when they are in use. Adopting this terminology, most of the Schools Council Project evaluations referred to above were formative. Scriven suggests that summative evaluation should be undertaken by someone not emotionally involved with the materials to secure greater objectivity, unlike formative evaluation where familiarity with the aims of the project team and with the materials are essential. Dr Douglas Pidgeon has put forward the same ideas about the roles of evaluation using different terminology; he uses the term 'on-going evaluation' which is to provide information for those concerned in the development of a new curriculum and 'final independent evaluation' to provide information for other teachers who may be interested in adopting it.³

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1. J.F. Kerr (Ed.), (1968), op.cit., 15.
 2. M. Scriven, 'The Methodology of Evaluation', in R.W. Tyler, R. Gagne and M. Scriven, Perspectives of Curriculum Evaluation, AERA Monograph I, Chicago, Rand McNally, 1967, 39-63.
 3. McClure, (1967), op.cit., 42.

Scriven emphasises that an evaluation should seek to fulfil both the formative and summative roles and that the latter involves comparison of the new curriculum with others already in existence. In this he is opposed by another influential writer on the methodology of evaluation, Professor Les Cronbach, who has stated that 'evaluation, used to improve the course while it is still fluid, contributes more to the improvement of education than evaluation used to appraise a product already on the market'.¹ There are many problems in attempting to compare the results of two groups working on different materials. The results of tests using control groups working on traditional materials have often proved difficult to analyse because the experimental group know they are receiving special treatment and tend to do better anyway - the so-called 'Hawthorn effect'. It has also been suggested that where a replacement course is so different in conception from a traditional course, it is difficult to determine criteria for judging between the two courses.² Cronbach therefore argues that the study of the post-course performance of a well described group, with respect to many important objectives and side effects, is the best form of evaluation. Scriven, however, suggests that there are ways of eliminating the 'Hawthorn effect'³ and that curriculum developers should not shirk their responsibility to test

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1. L. Cronbach, 'Course Improvement through Evaluation', Teachers College Record, lxiv, No.8, (May 1963), 672.
 2. P.J. Kelly, 'Nuffield 'A' Level Biological Sciences Project', Schools Council, (1973), op.cit., 106.
 3. Scriven, (1967), op.cit., 67-71.

their materials against others:-

"A little toughening of the moral fiber may be required if we are not to shirk the social responsibilities of the educational branch of our culture."¹

His viewpoint has been echoed by J.P. White:

"A curriculum has not been positively evaluated in its full sense until it has been shown to have clear objectives and appropriate means to achieve them; to have objectives which have been proved against all comers to be educationally respectable; to connect with the abilities of the pupils for whom it is designed; and to be more efficient than rivals in the field."²

If one of the roles of evaluation is to enable schools and colleges to choose between various curricula, then such comparative studies ought to be made. It must be added that they can be enormously expensive - Scriven suggests the production of additional new material to set against those actually under trial - and the resources of most British projects would be totally insufficient for such schemes. It is hardly surprising that all the Schools Council Project evaluations referred to earlier were formative or 'on-going' and not summative or 'final independent' evaluations. Perhaps, however, the time has come for a pause in the creation of new materials and finance made available for summative evaluations of materials already on the market.

Having considered the goals and roles of evaluation, it is now necessary to distinguish which aspects of a curriculum are subject to which type or types of evaluation. The emphasis until recently has been on what Scriven described as 'pay-off' evaluation, the measurement of the outcomes of a new course, which owes much to the work of Dr Ralph Tyler in America in the 1940s and 1950s. He emphasised the

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1. Scriven, (1967), op.cit., 42.
 2. J.P. White, 'The Concept of Curriculum Evaluation', Journal of Curriculum Studies, iii, No.2, (November 1971), 111.

behavioural specification of objectives followed by an evaluation to discover whether these objectives had been achieved:

"Since educational objectives are essentially changes in human beings, that is, the objectives aimed at are to produce desirable changes in the behaviour patterns of the student, then evaluation is the process for determining the degree to which these changes in behaviour are actually taking place."¹

Such an evaluation implies a pre- and post-test situation, but Dr Tyler was careful to stress that "any valid evidence about behaviours that are desired as educational objectives provides an appropriate method of evaluation."² This statement is ignored by his more recent critics, who tend to equate the Tylerian method with paper-and-pencil tests and feel it cannot be used in more flexible situations.³ Tyler also made the important point which needs constant re-iteration, that what is being tested is the course and not the individual.⁴ The total scores of individuals taking any one test are not so helpful in defining the strengths and weaknesses of the curriculum as a breakdown of scores in terms of each objective being sought. This implies the construction of tests designed not to discriminate between individuals, but to find out how many of those individuals have achieved various degrees of mastery of the objectives of the course - what are described as 'criterion-referenced' rather than 'norm-referenced' tests.⁵ Few standard tests are suitable for the

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1. R.W. Tyler, Basic Principles of Curriculum and Instruction, University of Chicago Press, 1949, 106.
 2. *ibid.*, 107.
 3. cf. Wynne Harlen, The Effectiveness of Procedures and Instruments for Use in Formative Curriculum Evaluation, Unpublished Ph.D. thesis, Bristol, 1973, 216.
 4. R.W. Tyler, 'Changing Concepts of Educational Evaluation', Tyler, Gagne and Scriven, (1967), *op.cit.*, 13. This is also echoed in Cronbach, (1963), *op.cit.*, 673.
 5. R. Glaser, 'Instructional Technology and Measurement: Some Questions', American Psychology, xviii, (1963), 519-521.

curriculum developer who is therefore forced to construct his own. He is faced with the problem of devising tests which are both valid, i.e. measure the mastery of the objectives which they are intended to measure, and reliable in their consistency of measurement over a number of different groups. Tyler has indicated that extensive pre-testing of the measuring instruments is essential if adequate validity and reliability are to be achieved.¹ Many project teams have neither the time nor the money to carry these out² and have abandoned objective testing³. But Cronbach has pointed out that in the testing of groups rather than individuals rather less precision is needed⁴ and that reliability is therefore perhaps less important than validity, which is more easily achieved. This can be done by persuading a number of people outside the project team to scrutinise test items and to say what objective each item is testing. The items can then be rewritten as necessary before the actual trials begin. Tyler believes that the whole area of diagnostic and mastery testing has been neglected in recent years, despite the advent of computers whose use would simplify data processing.⁵

Another objection to this type of evaluation is the cost, time taken and disruption of the classroom by the administration of a battery of pre- and post-tests. In some cases the post-tests at any rate could form part of normal school examinations. In addition, it is not necessary for all pupils using the materials to take these tests

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1. Tyler, (1949), op.cit., 117-120.
 2. An exception is the Humanities Curriculum Project, who in 1970 carried out pre-tests of 21 objective tests in the hope of employing a small but accurate test battery during 1971.
 3. W. Harlen, (1973), op.cit., 171. "If tests of low reliability are not sufficiently sensitive and yet it is not possible in the circumstances to produce tests of greater reliability, the value of testing at all must be questioned."
 4. Cronbach, (1963), op.cit., 673.
 5. Tyler, Gagne and Scriven, (1967), op.cit., 17.

if the number of schools used is large. Tyler himself pointed out that sampling, correctly done, 'may within small limits of error properly represent the kind of results which would have been obtained had all students been involved in the appraisal'.¹ The rigour demanded by this kind of evaluation would seem to be missing from many current projects.²

The tendency in recent evaluation schemes, certainly in England, has been to concentrate on what have been termed process-studies, the examination of the processes through which the outcomes of a course are achieved rather than the measurement of the outcomes themselves. For example, in the Schools Council Science 5-13 Project, the goal of the evaluation was changed from "how well does the material help children to achieve the stated objectives of the Units" to "how well does the material help teachers to provide learning experiences and interact with the children according to the stated intentions of the Units".³ Wynne Harlen explains that:-

"the change of focus in information-gathering was not to refute that change in behaviour is the ultimate aim of educational activities but to acknowledge that in short-term trials of curriculum material intended to be used flexibly by the teacher, measurements of behaviour changes did not reliably indicate the effect of treatment and gave little help in improving treatment."⁴

Most project teams have had limited resources and have preferred to devote these to formative rather than summative evaluations. Small-scale measurements of outcomes on early versions of materials have been carried out, but in formative evaluation it has been found firstly that whereas test results may clarify which parts of the curriculum

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1. Tyler, (1949), op.cit., 109.
 2. An exception is the study of primary school teaching carried out by Dr Nevil Bennett of Lancaster University, where extensive use has been made of achievement tests.
 3. Harlen, (1973), op.cit., 231.
 4. ibid.

may need revision, they do not indicate why, and secondly that methods of evaluation need to be as flexible as possible to keep pace with the development, modification of ideas and change of emphasis on the part of the project team.

This latter point has been emphasised by Parlett and Hamilton, who emphasise that in the 'learning milieu' the

"instructional system ... assumes a different form in every situation. Its constituent elements are emphasised or de-emphasised, expanded or truncated, as teachers, administrators, technicians and students interpret and re-interpret the instructional system for their particular setting."¹

They point out that many evaluation schemes were designed for use in experimental conditions where variables could be manipulated, as in the field of agricultural or botanical studies. They suggest that these cannot simply be transferred to the 'social anthropological' setting of the classroom, where "the attempt to simulate laboratory conditions by manipulating educational personnel is not only dubious ethically but also leads to gross administrative and personal inconvenience."² They propose the adoption of 'illuminative evaluation' where the evaluator accepts the complex classroom situation as he finds it and attempts to explain what he sees rather than to manipulate conditions according to a pre-determined plan of action. There is much truth in the contrast they draw between the 'agricultural-botany paradigm' and the 'social-anthropological paradigm'³ of evaluation, but an evaluation cannot be entirely concerned with the description of a process; the teacher thinking whether to adopt a new teaching technique or set of materials will want to know whether these are likely to have a certain outcome in particular situations, whether these are defined

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1. M. Parlett and D. Hamilton, Evaluation as Illumination: a New Approach to the Study of Innovatory Programs. Occasional Paper No.9, Centre for Research in the Educational Sciences, University of Edinburgh, 1972, 10.
 2. *ibid.*, 5.
 3. *ibid.*

in terms of cognitive objectives or not.

Nevertheless, it is clearly necessary to consider the objections that have been raised to an evaluation concerned with the measurement of outcomes. Firstly, the variability of classes needs to be taken into account. Their previous learning experiences will affect their performance on both pre- and post-tests, while the degree of perseverance and the aptitude of the class will affect the outcomes of the curriculum. Carroll has suggested that aptitude is "the amount of time the pupil needs to learn the task" and that therefore "the shorter the time needed for learning, the higher the aptitude."¹ It may well be true that many teachers cannot give their classes adequate time for them to justify themselves on the new curriculum and that in such cases measurement of outcomes will not reflect the potential of the course.² It is difficult, then, in short-term trials to estimate whether the results of the post-tests reflect the effect of the new curriculum or external factors such as increasing maturity, previous learning experience or time allotted to the course. There is the additional problem of deciding how many pupils should be seen to have achieved the objectives of the course before it can be said to be successful.

Secondly, many of the British projects provide materials for teachers to use with their classes as well as, or instead of,

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1. J. Carroll, "A Model of School Learning", Teachers' College Record, lxiv, (1963), 725-6.
 2. cf. the pleas by Margaret Baranowski in A Pilgrim's Progress through the Project, History, Geography and Social Science 8-13, Schools Council, 1975, 13. "How I wish I had TIME, TIME AND TIME to work out these lessons, but the demands of syllabus, needs of other classes, marking of books and clerical work all jostle for position."

materials for the children themselves. This means that the achievement of the course objectives depends as much on the teacher as on the course materials. If a teacher is not in sympathy with the objectives, they are unlikely to be achieved. If teaching is carried out in a didactic manner, answers to questions in the post-test may well show rote-learning rather than the ability to reason. The teacher is also free to utilise only parts of the materials and therefore measurement of the outcomes would only reflect which parts of the course had been tackled rather than comprehension of the course as a whole.¹ For these reasons, observation of the classroom situation and collection of data about teacher attitudes is now regarded as essential in most evaluation schemes.

Thirdly, although Tyler himself tried to avoid this, measurement of outcomes has tended to concentrate on the achievement of cognitive objectives since these are most easily measured. The Science 5-13 Project team found that

"many teachers had expressed an opinion that the objective tests had not sufficiently reflected the changes they had noticed in their children - changes such as in the children's enthusiasm, their questioning, their willingness to persevere. These were behaviour changes more highly valued by teachers of young children than changes towards achievement of cognitive objectives."²

This statement suggests that an attitude inventory could have been included in the post-tests, but this was perhaps difficult with young children. More important, however, is the implication that the goals of the course developers are not necessarily those of the schools

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1. My own research showed this to be a problem - see Chapter 5.
 2. Harlen, (1973), op.cit., 172.

and their teachers and that evaluation schemes need to be sufficiently flexible to register any side-effects not included in the original list of objectives.

Eisner has gone so far as to suggest that behavioural objectives should not be specified in advance, since "the amount, type and quality of learning that occurs in the classroom, especially where there is an interaction amongst students, are only in a small part predictable."¹ Parlett and Hamilton would agree that outcomes are not predictable in a given classroom situation. They suggest that in the first stage of an illuminative evaluation, the evaluator needs to note the common incidents, recurring trends or issues frequently raised in discussion in different schools. Only at the second stage of evaluation can observation and enquiry be more directed, systematic and selective.² There might, in fact, be a case for an open-ended curriculum in which the outcomes were used to identify the objectives, an approach adopted to some degree by the Schools Council Humanities Curriculum Project.^{3,4} Where objectives are specified in advance, it is certain that in most cases they will need revision after classroom trials and that curriculum developers must not allow themselves to become so enamoured of their original objectives that they fail to modify them should this prove necessary.

It has therefore become possible to identify other aspects of a curriculum which certainly in formative studies, need to be evaluated

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1. E.W. Eisner, 'Educational Objectives: Help or Hindrance?', School Review, (Autumn 1967), 250-260.
 2. Parlett and Hamilton, (1972), op.cit., 16.
 3. Schools Council, (1973), op.cit., 82
 4. The author's approach outlined in Chapters 4 and 5 to the formulation of objectives independently followed the same lines, and she found that classroom observation was to some extent necessary before the formulation of objectives.

in addition to, if not instead of, the measurement of behavioural outcomes. The first is what Scriven describes as 'intrinsic evaluation', the judgement of the goals themselves. Ideally, any curriculum project should be preceded by an investigation of the needs of schools rather than seeking to develop the particular theories of curriculum developers. Tyler suggests, however, that schools do not always know what they need:-

"The current climate in this country is to seek innovation, to get institutions active in learning how to serve their new clients. Evaluative instruments for this purpose must avoid using criteria based on the current judgements of schools and colleges because these criteria perpetuate the conviction that these institutions are, at present, satisfactory for the tasks to be done."¹

The idea that schools hinder rather than advance curriculum development has recently been put forward in Britain during the controversy over the introduction of a common examination at 16+. Yet if the schools are incapable of providing the goals of curriculum development, who is to do so? Bruner, as has been seen, has suggested that groups of subject experts should come together to define the structure of their subjects and so initiate a programme of curriculum reform. But, again, it has been pointed out that the goals of a particular course should be transferable not only to other courses but to the process of education as a whole. The question of goals needs considerably more research, difficult though it is, if the new curricula are not to result in a fragmented educational process in which each stage of course has different ends in view.

A second aspect needing to be evaluated in the investigation of any new curriculum is the readiness for learning on the part of the pupils about to undergo the new treatment. This implies more than

1. Tyler, (1967), op.cit., 17.

a Tylerian pre-test, involving measurement of mastery of factors other than the objectives which the course is intended to develop. One is the prior learning experience of the children, which may mask the actual gain they make by working through the course. Low pre-test scores may not suggest lack of mastery but unfamiliarity with the techniques required. Another factor is the aptitude of the children in Carroll's sense¹, the time they will take to master the material. The intellectual readiness of the children to understand the material also needs investigation, a point to be considered in the case of history in Chapter 2. Lastly, the attitude of the children towards the type of learning experience it is intended they should undergo requires investigation. All these considerations will affect the children's achievement of mastery of the desired outcomes of the course and will also assist in planning the curriculum for any particular school.

A third area of the curriculum needing investigation is the ability and attitudes of the teachers who mediate between the materials and the children. There are two aspects of such evaluation. In the first place, it is often only the teacher who can identify the strengths and weaknesses of a particular curriculum project and their comments are therefore vital to the formative process. Yet it is quite possible that many teachers will not be sympathetic towards the aims of the new curriculum. The Science 5-13 team found that "using the Units had no significant effect overall upon teachers' attitudes, as had been hoped. Thus it appeared that favourable attitudes were a prerequisite for making good use of the Units."² The evaluator

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1. Carroll, (1963), op.cit., 724.
 2. Harlen, (1973), op.cit., 234.

has therefore also to probe the attitudes of the teacher, perhaps by interview or questionnaire. A teacher's attitudes are reflected in his teaching and he may well not teach in accordance with the stated objectives of the curriculum. Members of the Schools Council team evaluating science teaching methods have found that many teachers have "out-Nuffielded Nuffield."¹ Observations of teaching methods in the classroom is therefore an essential pre-requisite to the interpretation of teachers' comments on the curriculum in their questionnaire or interviews, particularly where the curricula are not designed to be 'teacher-proof' (if this is possible) but see the teacher as the mediator between the materials and the children.

Similar classroom observation is also needed for the fourth area of evaluation, the learning environment. Where the new curriculum permits direct interaction between pupils and the materials as well as between teacher and pupils, the evaluator needs to know how such interaction was organised, whether it was successful, whether the suitability or otherwise of the classroom affected performance and so on. It is also valuable to know what other resources are available to children and how freely they are able to use these. Classroom observation can also be used to check at what stage of a course certain behavioural changes begin to appear, which is perhaps more valuable than knowing they were present at the end of the course. It is, in fact, Eisner's "dynamic and complex process of instruction"² which needs to be monitored by observation, interaction analysis, questionnaire and interview - techniques very dissimilar from objective testing.

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1. From a lecture given by Maurice Galton of the STOS team at Leicester University School of Education in November 1974.
 2. Eisner, (1967), op.cit., 254.

The final aspect of evaluation to be considered is the need to obtain information about the outcomes of the course which had not been behaviourally specified at its inception. Since the framework of most interaction analyses is cast in terms of the expectations of the curriculum developers, such information is perhaps best obtained from what has been termed 'participant observation'¹ or the informal observation of the day-to-day working of the curriculum, together with teachers' responses to questionnaires and comments on the course, with due regard to the prior attitudes of the teachers.

It can be seen that evaluation has become a very complex process involving the collection of both quantitative and qualitative data by a variety of techniques. All evaluators, from Tyler to the Schools Council Project evaluators, have stressed the desirability of collecting data on as broad a front as possible. Tyler's statement made in 1949 that:-

"any way of getting valid evidence about the kinds of behaviour represented by the educational objectives ... is an appropriate procedure"²

is not so far removed from Wynne Harlen's conclusion that:-

"the inadequacy of information from any one source was underlined throughout the study. It was difficult to use results from any one instrument without supporting evidence provided by the use of other instruments."³

In the account of the evaluation of the Archive Teaching Unit, Farming in Leicestershire,⁴ which follows in Chapters 4 - 6, every effort has been made to collect all available data, including measurement of behavioural outcomes.

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1. Parlett and Hamilton, (1972), op.cit., 19.
 2. Tyler, (1949), op.cit., 108.
 3. Harlen, (1973), op.cit., 236.
 4. Referred to as the Farming Unit, hereafter.

CHAPTER 2

THINKING IN HISTORY

What qualities of mind does the secondary school teacher of history expect from his pupils? In 1927, Dr F.C. Happold, Senior History Master at The Perse School, Cambridge, wrote

"Certain capabilities and qualities, we shall agree, are desirable; the ability to collect, examine and correlate facts and to express the result in clear and vivid form; freedom from bias and irrational prejudices; the ability to think and argue logically and to form an independent judgement supported by the evidence which is available and, at the same time, the realisation that every conclusion must be regarded as a working hypothesis, to be modified or rejected in the light of fresh evidence."¹

Miss Hekmat Abouzied, in her study of the factors involved in the learning of history by adolescent pupils aged 16-19, suggested that a pupil of that age group

"is expected to be good at reading and to have the imagination which is indispensable for understanding the past. An understanding of the relationships symbolised in abstract words is also required along with a grasp of the meaning of relationships in social, economic and political life. He is also expected to have a sense of time with its complicated patterns from the ideas of succession and simultaneity to those of duration and continuity. Last, but not least, he has to remember facts, analyse them and interpret them. By his detachment he is expected to give an unbiased judgement in a conflicting historical situation."²

These are formidable lists of requirements for the study of history by the older adolescent, and raise three related questions. Firstly, can pupils aged 16 be expected to exhibit all these qualities? Secondly, if they can, from how much younger pupils can teachers expect some of or all of, these qualities? Thirdly can history teachers play a

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1. F.C. Happold, The Study of History in Schools as a Training in the Art of Thought, Published by G. Bell for the Historical Association, 1927, 4.
 2. Hekmat Abouzied, An Enquiry into the Factors involved in the Learning of History by Adolescent Pupils between the Ages of 16 and 19. Unpublished Ph.D. thesis, London, 1955.

part in helping their pupils to develop these qualities or are they purely a result of maturation and experience? The qualities selected by Dr Happold and Miss Abouzied - verbal fluency, imaginative thinking and the ability to deal objectively with conflict situations - have all been the subjects of research undertaken by history teachers and educational psychologists in the last 35 years. An examination of this research may help to answer the questions raised and to decide whether, on the one hand, history teachers expect too much of their pupils or, on the other, whether they can directly assist their pupils to attain the goals that they themselves desire.

The Influence of Educational Psychology: the work of Jean Piaget,
E.A. Peel and J.S. Bruner

Much of the research, particularly into the development of logical thinking, has been dominated by the work of Jean Piaget. It is necessary to outline here those of his ideas which have direct relevance for research into historical thinking. Piaget's fundamental contribution to the study of the development of intelligence has been his description of the three main stages of mental growth. He himself did not stress the educational implications of his analysis, but others have used his work to suggest that what can be taught to a child of a given age is limited by the stage of mental growth which he has reached.

The first stage, the sensori-motor period, is of little direct relevance to the teacher of history. The long second stage lasts from the age of two to approximately the age of 11-12 years and is the period of preparation for, and realisation of, concrete operations. It is marked by the appearance of language and an increasing use of symbolism and representation until, from about the age of 8, organ-

isation and grouping of objects and to some extent of ideas, takes place mentally or is 'internalised'. Finally, from the age of 11-12, appears the third stage of formal operations in which powers of deduction and of abstraction develop and lead on to reflective thinking of the adult kind.

Most children to whom history is taught would seem likely to be in the later phases of the second stage or at the third stage. However, as will be seen, research has shown that vestiges of the earlier stage of concrete operations, often called pre-operational, linger on into the later years of the primary school and the early years of the secondary school and are therefore worthy of notice by the history teacher. At the pre-operational stage, children can deal only with one problem at a time and cannot co-ordinate relationships; consequently, if two problems are presented simultaneously, the child considers each independently of the other and so often produces inconsistent answers. He also tends to forget points of view previously adopted. Egocentricity is a further aspect of pre-operational thought; a child cannot get outside himself and consider a problem from a detached point of view, and he also tends to humanise abstractions. Finally, a pre-operational thought is irreversible; a child cannot think his way back to the start of a problem and begin again, and so tends to make spontaneous and intuitive judgements.

With the advent of the sub-period of concrete operations, organisation of objects begins to take place mentally instead of actually and the child begins to appreciate relationship between objects and between people. Thought also becomes reversible in that a child can see where he has gone wrong and start again. He cannot yet, however, compensate for his mistake and carry on from the point at which he

discovered it, which he becomes able to do with the advent of formal operations. To use Piaget's terminology, he can achieve reversibility by inversion or negation but not by reciprocity.¹ Nevertheless, limitation in verbal reasoning is characteristic of this period; Piaget stresses that "concrete thought remains essentially attached to empirical reality."² Children may be able to solve problems by manipulating objects in their minds, but they find it more difficult to solve similar problems expressed in purely verbal form. That internalised thinking can take place at this level may, Piaget's followers suggest, encourage teachers to expect greater powers of verbal reasoning from children than is in fact possible. "The danger still is very great that learning will be conducted verbally and thus fail to become attached to the activity which is essential if it is to have meaning."³

Piaget's experiments suggested that the third stage, the period of formal operations, begins around the ages of 11 and 12 years and reaches equilibrium at about the age of 14. This stage, then, would seem of vital importance to teachers of secondary school history. Its chief characteristic is the child's increasing ability to formulate hypotheses, to test them against evidence and finally to select those which best explain the situation with which he is confronted. Piaget suggests that:-

"in formal thought there is a reversal of the direction of thinking between reality and possibility in the subject's method of approach. Possibility no longer appears merely as an extension of an empirical situation or of actions actually performed. Instead, it is reality that is now secondary to possibility."⁴

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1. B. Inhelder and J. Piaget, The Growth of Logical Thinking, London, 1958, 271-273.
 2. *ibid.*, 250.
 3. R.M. Beard, An Outline of Piaget's Developmental Psychology, Routledge Kegan Paul, 1969, 92.
 4. Inhelder and Piaget, (1968), op.cit., 251.

Presented with a set of facts, a student at this stage can envisage these as part of a larger group of possibilities, the part which has actually come about but which cannot be explained without reference to the other possibilities. For the history teacher, this means a student is capable of verifying evidence, of realising that a number of statements do not necessarily tell the whole story and of explaining that set of statements by reference to external criteria. The pupil should have, in fact, by the age of 16, the power of logical thinking and the ability to formulate hypotheses qualities selected by Dr Happold and Miss Abouzied as necessary for the successful study of history.

The terminology used by two other educational psychologists has relevance to the research described in this chapter. E.A. Peel suggests that there are different types of thinking called up by different circumstances, an idea supported by J.S. Bruner. Peel uses the term 'thematic' to describe the imaginative thinking characteristic of the creative arts, 'explanatory' for the controlled thinking used in explaining events or objects, 'productive' for the type of thinking which extrapolates previous experience into new situations and finally 'integrative' for the rare kind of thinking which reveals itself in the creation of new theories and systems of thought.¹ Although the ability to use the more advanced types of thinking increases with age, the adolescent or adult may use at least the first three types of thinking according to need.

J.S. Bruner suggests that the conservation of experience, which is at the root of all thinking, may be carried out in three ways according to both the kind of experience and the stage which the

1. E.A. Peel, The Pupils Thinking. Oldbourne, 1960, 16-17.

learner has reached. These are the 'enactive' mode for actions with no words or imagery, like riding a bicycle; the 'iconic' mode for things perceived by the senses and remembered as pictures or sounds; the 'symbolic' mode where the means of conservation is language.¹ He agrees with Peel as to the co-existence of different modes of thought:-

"What is abidingly interesting about the nature of intellectual development is that it seems to run the course of all three systems of representation until the human being can command all three."²

There are many other ways in which different kinds of thinking can be described, for instance 'synthetic' and 'analytic' and 'A' thinking and 'R' thinking.³ None of these have as yet been used as a basis for investigation into the learning of history. Furthermore, research has on the whole been limited to controlled thinking expressed in words, i.e. to Peel's 'explanatory thinking' and Bruner's 'symbolic mode'. Peel himself attempted to trace the development of this type of thinking and suggested that adolescence witnesses the change from 'describer' to 'explainer' thinking; the first "entails no more than a relating of parts of phenomena with each other"⁴; the second "involves referring the phenomena to other previously experienced phenomena and to generalisations and concepts independently formed."⁵ Peel, like Piaget, lays particular emphasis on the part played by external criteria in the process of logical thinking. His attempt to study the differences in the judgements of adolescent pupils resulted in the formation of three main stages on a scale of maturity of judgement, with transitional stages in

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1. J.S. Bruner, Towards a Theory of Instruction, 1966, 10.
 2. *ibid.*, 12.
 3. D.G. Watts, The Learning of History, 1972, *op.cit.*, 21-22, referring to S. Wiseman, Intelligence and Ability, Penguin, 1967, and to P. McKellar, Imagination and Thinking, Cohen and West, 1957, respectively.
 4. E.A. Peel, 'Intellectual Growth during Adolescence', Educational Review, xvii, No.3, (June 1965), 171.
 5. *ibid.*

between. The first stage revealed irrelevancy, inconsistency and tautology in thought process and so is analagous to Piaget's pre-operational stage. This passed into a stage where the content of a passage and the circumstances described within it were the sole criteria for judgement. W.A. de Silva, who has made use of Peel's stages of thought in his own research into thinking in history₁, describes this stage as that of 'circumstantial conceptualisation'. Finally, the pupil passes gradually into a stage of thinking in which he realises that the evidence before him does not necessarily tell the whole story and looks around for alternative explanations. This involves the use of inductive rather than deductive thinking and is described by de Silva as the stage of deductive conceptualisation'.₂ In its final phases, the invocation of imagined possibilities gradually becomes more articulate in form to warrant the use of the terms hypotheses and propositions. The pupil also becomes able to eliminate unsupported alternatives, giving reasons for doing so.

An analysis of previous research into levels of reasoning displayed by schoolchildren learning history

Research into the learning of history has utilised the models of thought suggested by Piaget, by Peel and by Bruner. Three pieces of research in particular have sought directly to relate the levels of thinking expected by Piaget to those actually achieved by children

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1. W.A. de Silva, Concept Formation in Adolescence through Contextual Clues with Special Reference to History Material, (1970), op.cit.,
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 2. *ibid.*

studying history in English secondary schools. A.R. Lodwick in 1957,¹ suggested that there was a trend of development embodying pre-operational, concrete and formal stages as suggested by Piaget but that children did not use one type of thinking consistently. Intelligent children of 13-14 still needed to make some judgements in terms of concrete rather than formal operations, but equally some younger children were able to answer at the fully formal level.² Case and Collinson in 1962³ found that although "from 13+ to 15+ there is a considerable increase in the incidence of formal thought and a corresponding decrease in intuitive level answers"⁴, some children were able to make propositional judgements as early as the age of 11.⁵ Case and Collinson used geography and English texts as well as history ones in their tests, and found that "formal thought in history does not appear as early as it does in Geography or Literature".⁶

R.N. Hallam in 1966,⁷ supported Case and Collinson's view that children were late to use formal thought in dealing with historical materials. Like Lodwick, he found inconsistency in levels of reasoning but on the whole a Piagetian trend of a decline in pre-operational thought and a steady increase in formal thinking with age.⁸ However,

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1. A.R. Lodwick, An investigation of the question whether the influences that children draw in learning history correspond to the stages of mental development that Piaget postulates. Unpublished Dip.Ed. Dissertation, Birmingham, 1957.
 2. *ibid.*
 3. D. Case, The Development of Formal Thinking in Verbal Comprehension. Unpublished Dip.Ed. Dissertation, University of Birmingham, 1960.
D. Case and J.M. Collinson, 'The Development of Formal Thinking in Verbal Comprehension' British Journal of Educational Psychology, xxxii, (1962).
 4. Case and Collinson, (1962); op.cit., 167.
 5. Case, (1960), op.cit., 148.
 6. *ibid.*, 150.
 7. R.N. Hallam, An investigation into some aspects of the historical thinking of children and adolescents, Unpublished M.Ed. thesis, Leeds, 1966.
 8. *ibid.*, 152.

he suggested that "concrete thinking appears to begin between 12:4 and 13:2 years both chronologically and mentally."¹ Since only 9 of his testees out of a total sample of 100 were below the age of 12, there do not seem to be sufficient grounds for so disturbing a statement. Better evidenced is his assertion that "formal thinking in history appears to begin between 16:2 and 16:8 years, but mentally this stage starts between 16:8 and 18:2 years."²

Neither of the other pieces of research so far mentioned produced such definite age limits for the beginning of formal thinking, and it is Hallam's work that has led many history teachers to rethink their secondary school syllabuses.³

Before accepting the necessity for teaching history at the level of concrete operations for most of a child's secondary school career, these pieces of research must be examined in more detail. There are several defects in the research techniques which could well impose serious limitations on the wholesale acceptance of their conclusions. In the first place, the test materials were in each case passages of secondary history material concerned with remote periods which, as has been seen, are often of little interest to the adolescents being tested.⁴ Lodwick and Hallam wrote their own passages, Case and

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1. R.N. Hallam, 1966, op.cit.
 2. ibid., 154.
 3. See M. Honeybone, 'The Development of formal historical thought in schoolchildren', Teaching History, ii, No.6, (1971), and M. Bryant, 'Documentary and study materials for Teachers and Pupils; Part II, Theories and Practices', Teaching History, i, No.4, (1970).
 4. e.g. Lodwick - Stonehenge, Alfred and the Cakes, Florence Nightingale.
Case and Collinson - St. Dunstan, Tudor Government.
Hallam - Norman Conquest, Mary Tudor, The Civil War and Ireland.

Collinson used two passages from Arnold Forster's History of England written in dull and difficult language which required understanding of the concepts of greatness, loyalty, badness and goodness.¹

Secondly, the passages were given to the children out of context; the background was not explained to them, nor were they related to periods of history studied at school. Historical understanding is concerned with the notions of change, of contrast and of development, of the study of man in time. The passages selected could not test whether children had begun to think in this way. G. Bassett has stressed that passages of historical narrative used for such tests should be significant, by which he means that in each unit of narrative

"the character of the preceding situation is developed and that of the next is partly determined by it. The situation thus has an emergent quality connecting it with the preceding one and a developmental quality connecting it with the succeeding one."²

If it is desirable that children should be tested on out of context passages to eliminate the use of memory, then "the developmental quality" could be achieved by giving children two contrasting passages in which the notion of change is brought out. In the tests described, single out-of-context passages were given; the children were tested individually, each reading the passages to themselves and then hearing them read aloud by the interviewer, who followed up with the questions. Hallam did discuss difficult words and concepts with his subjects³, but no attempt was made to put the passages in context. The questions really tested verbal fluency and comprehension rather than any specific

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1. Case, (1960), op.cit., 137.
 2. G.W. Bassett, An Experimental study of mental processes involved in the comprehension of historical narrative, (1940), op.cit., 26.
 3. R.N. Hallam, 'Logical Thinking in History', Educational Review, xix, No.3, (June 1967), 184.

qualities of historical understanding.

Thirdly, the questions sometimes did not encourage children to use the highest level of thinking of which they were capable. Many adolescents would find Lodwick's question, "Could Alfred cook?"¹ hardly worth answering and would not therefore stretch themselves mentally to do so. Again, few adolescents would be interested in whether or not St. Dunstan improved the Church of England in the tenth century.² It is possible that lack of interest artificially lowered levels of thinking in the history passages of the tests.

Fourthly, the samples in each case were relatively small; Lodwick tested only 32 children, Case and Collinson 90 and Hallam 100. The fifth consideration is the importance of previous teaching methods. These could well have affected the results obtained by Lodwick and Hallam whose samples were derived from a single school in each case. Piaget has suggested that educational methods could well influence the timing if not the sequence of the stages of mental growth. Some consideration of the methods of teaching in use in the schools tested is surely essential but it is absent from these pieces of research. Lodwick's and Hallam's results probably demonstrate the levels of thinking obtained by the particular methods of teaching history in the schools they used rather than the levels of thinking that those children could attain. Case and Collinson attempted to test a random sample by using

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1. Lodwick, (1957), op.cit., 10.
 2. Case, (1960), op.cit., 19. It is probable that much educational research founders on the misconception that children are always doing their best. M.M. Hughes (A Four Year Longitudinal Study of the Growth of Logical Thinking in a Group of Secondary Modern School-boys, unpublished M.Ed. Dissertation, Leeds, 1965, 109) comments on the lack of spontaneity in his subjects compared with that reported by Piaget and Inhelder of Genevan schoolchildren.

different sectors of education, but again variations in teaching methods might well help to explain some of the inconsistencies in their results.

Finally, each of the pieces of research described was limited by the preconception of the Piagetian stages of mental growth. Questions were designed to test predetermined levels of thinking and answers placed in categories corresponding to these. For this reason the significance of certain of the results was not entirely appreciated, as will be further considered later. With all these limitations in mind, what do these pieces of research reveal about levels of thinking in children studying history at school?

Four similar conclusions emerge from each. In the first place, the validity of the Piagetian sequence was confirmed in that there was a steady decline in pre-operational thought and an increase in the incidence of formal thinking with age. Secondly, the age at which children achieved a fairly consistent level of formal thinking was late compared with the ages suggested by Piaget and, in Case and Collinson's research, with levels of thinking in Geography and English. Thirdly, children of higher intelligence appeared to reach the stage of formal operations earlier than their contemporaries of lower ability. Fourthly, the children tested did not use one level of thinking consistently, whatever their age and ability.

The first of these conclusions needs no further comment. For the second, neither Lodwick nor Case and Collinson give a definite age for the achievement of formal reasoning in history but Hallam places this at well over the age of 16. Piaget suggests that formal thought begins about the age of 12 and reaches equilibrium between 14 and 15 years. However, researches into levels of reasoning in subjects other than

history have suggested that Piaget's ages may in general be too young. M.M. Hughes, using similar tests to those of Piaget and Inhelder, admittedly on a small sample of 40 children, found that:-

"the ages at which the various stages make their appearance reveal a much slower and more limited move towards equilibration of formal operations than did the Genevan children".¹

E.A. Peel, using specially constructed comprehension passages with a large sample of 1381 children in England and America, suggested that:-

"in general, pupils up to the age of 13½ years judged circumstantially and only by 14+ years did they show a firm tendency to make comprehensive judgement involving the production of possible explanations."²

It is possible that some features of the English and American education systems slow down the progress towards formal reasoning, or that Piaget's suggested ages were too optimistic. If levels of formal thinking in history are achieved later than in other subjects, it is not by so great a margin as Hallam's emphasis leads one to believe.

The third conclusion suggests that we should perhaps consider mental rather than chronological age in the attempt to define the limits of the Piagetian stages. Jeannette Coltham found that "levels of understanding rise with increased scores for chronological and mental ages, the correlation being more marked with mental than with chronological age."³ Lodwick found that broadly the mental ages of his testees corresponded better to the ages suggested by Piaget than their chronological age. There were exceptions; Paul, aged 10:8, had a mental age of 9:5, yet exhibited more than one aspect of formal reasoning.⁴ Lodwick could not

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1. M.M. Hughes, (1965), op.cit., 107.
 2. E.A. Peel, 'A Study of Differences in Judgements of Adolescent Pupils', British Journal of Educational Psychology, xxxvi, Part 1, (February 1966), 78.
 3. J. Coltham, Junior school children's understanding of some terms commonly used in the teaching of history, (1960), op.cit., 91.
 4. Lodwick, (1957), op.cit., 102.

confirm that his study proved that the more intelligent children reached the formal level earlier than those of lesser mental ability.

Case and Collinson found that their sample of children of average or better intelligence had reached the equilibrium of formal thought by 15:3, but this conclusion was based on the History, Geography and English passages taken together.¹ M.M. Hughes, carrying out a four year longitudinal study on a group of average or below average intelligence, using practical science-based tests, found that "the evidence indicated that many children will remain at the level of concrete operations throughout their Secondary Modern careers."² These two studies would seem to suggest that intelligence is certainly a factor in the achievement of formal reasoning, although neither applied specifically to history.

Hallam's tests were concerned only with historical material and his sample included a range of intelligence. He concluded that there was little difference between chronological and mental age at the concrete level, but that an individual with a mental age higher than his chronological age would begin formal reasoning earlier than an individual in which the two ages corresponded more closely.³ W.A. de Silva, whose work on concept formation will be considered later, found that the grammar school children in his sample achieved twice as many answers at the level of deductive conceptualisation than did their contemporaries not at grammar schools.⁴

These rather tentative conclusions would seem to suggest that children with a mental age higher than their chronological age are likely to achieve the level of formal reasoning earlier than their contemporaries

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1. Case and Collinson, (1962), op.cit., 108.
 2. M.M. Hughes, (1965), op.cit., 107
 3. R.N. Hallam, (1966), op.cit., 152.
 4. W.A. de Silva, (1970), op.cit., 268.

whose mental and chronological ages are similar. However, each of the researchers found children with a low mental age for their chronological age who could nevertheless produce some answers at the formal level.¹ Though intelligence may be one factor in mental growth in historical studies, like maturation it cannot be the sole factor.

The significance of the fourth conclusion has been partly masked by the attention given to the Piagetian stages of mental growth. Inconsistencies in levels of thinking were found both in answers to different questions by one individual and to the same question by different children in one age group. The first inconsistency may be partly explained, as already suggested, by the fact that children will not make an effort to use the highest level of reasoning of which they are capable if the question can be answered at a lower level, and it would be interesting to study the questions and answers of the tests in this light. J.S. Bruner suggests, as has been shown, that less advanced levels of thought are not discarded as higher levels are achieved, but that each system of representation is used as the occasion demands.² Therefore, some regression to, in Bruner's terms, the enactive and iconic modes according to the object of his thought from an individual capable of the symbolic mode is only to be expected. Equally, regression to concrete operations from a student capable of formal operations should be seen in the context of the problem being studied and not immediately regarded as a cause for alarm.

The inconsistencies in levels of thinking among children of the same age group poses a wider problem. Most writers would agree that, despite the occasional regressions referred to above, most children progress through stages of mental growth, whether described in the terms of

1. see page 73, note 4.

2. J.S. Bruner, (1966), op.cit., 10-11.

Piaget, Bruner or Peel. The latter, commenting on Lodwick's research, suggests that "it would appear that each phase of development is necessary for the emergence of the later, more mature phases"¹, but supports the general sequence of Piagetian stages rather than their attachment to particular age ranges.² It would appear that some children progress through these stages faster than others, reaching the level of formal operations (while not entirely rejecting earlier modes of thought) earlier than their colleagues. This would suggest that maturation is not the sole factor in promoting mental growth, and the importance of intelligence has already been considered. Piaget emphasised maturation but did not regard it as the sole influence on mental development. As Bruner points out, Piaget was more concerned to describe the nature of knowledge that children exhibit at each stage of development rather than to explain it.³ Later, when his work was criticised, he defended his interpretation by considering the influences promoting each stage of growth. He concluded that maturation, experience and contact with the social and physical environment all played their part.⁴ Bruner has laid less emphasis on maturation, suggesting that "mental growth is in very considerable measure dependent on growth from the outside in mastering techniques that are embodied in the culture and that are passed on in a contingent dialogue by agents of that culture."⁵ Case and Collinson conclude as follows:-

"formal thought in language subjects appears to need more than the attainment of a certain chronological and/or mental age. This leads us to assume that other things such as cultural background, width of experience, and verbal repertoire may be essential pre-requisites for the development of formal thought."⁶

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1. E.A. Peel, 'Experimental examination of some of Piaget's schemata concerning children's perception and thinking and a discussion of their educational significance', British Journal of Educational Psychology, xxix, Part II, (June 1959), 100.
 2. ibid., 98.
 3. J.S. Bruner, (1966), op.cit., 21.
 4. J. Piaget, The Science of Education and the Psychology of the Child, Longmans, 1970, 167.
 5. J.S. Bruner, (1966), op.cit., 21.
 6. Case and Collinson, (1962), op.cit., 109.

Peel agrees that "the factors which enter into the changes we have described are maturation, experience, communication and instruction and the urge in every individual to come to terms with his environment."¹

Pre-requisites for the achievement of formal operations by children studying history at school.

The research considered earlier has inquired into the relationships between maturation and levels of mental growth in children studying history with not entirely conclusive results. It is therefore necessary to consider what pre-requisites other than mental or chronological age are necessary for the achievement of formal operations in this subject. The conclusions quoted above suggest three possible alternatives. The first of these is the extent of a child's verbal repertoire, that is, in Brunerian terms, his grasp of the symbolic mode of representation. The second is experience of both the physical and social environment, contact with the tangible evidence of that environment and also with people who transmit the elements of culture and the code of social behaviour which are equally part of that environment. This factor may well be important in a social study such as history. The third is the importance of instruction, giving a child on the one hand suitable material for the mental level he has reached by possibly also helping to advance that level. Bruner suggests that instruction in scientific ideas "need not follow slavishly the natural course of cognitive development in the child. It can also lead intellectual development by providing challenging but usable opportunities for the child to forge ahead in his development."² Can this apply to instruction

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1. E.A. Peel, (1965), op.cit., 177.
 2. J.S. Bruner, (1960), op.cit., 39.

in history? These three possible pre-requisites for the achievement of formal reasoning will now be considered in the order stated above.

A child cannot learn history by experiment as he can mathematics or science. History is past, and he can only learn its present interpretations by hearing them expounded to him or by reading them for himself. To achieve the qualities needed to study history effectively, as outlined at the beginning of this chapter, a child needs a reasonable verbal repertoire. What is the extent of this repertoire at a given age? It has been suggested that the adults who teach history to children or who write history books for them frequently overestimate both the extent and quality of a child's vocabulary of historical terms. As E.A. Peel points out, "historical ideas and institutions such as nobility, government, peasantry, kingship, mercantilism, and free trade have the qualities of concepts."¹ A single word is used to indicate what is in fact a concept, and the adult writing a book and the child reading it frequently do not attach the same meaning or range of meanings to that word. Jeannette Coltham studied the development of six common concepts used in history by asking junior school pupils to say what each meant to them. The concepts chosen were 'king', 'early man', 'invasion', 'ruler', 'trade', and 'subject'. For the concept 'king' she found three sequential stages which corresponded to the Piagetian stages. The earliest was that of 'king with pomp', which showed two features of pre-operational thought - "uni-directional point of view and dependence on visual perception"². The second stage was 'king with power', seen in relationship to other people and therefore analagous to the stage of concrete operations.

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1. E.A. Peel; 'Some problems in the psychology of history teaching', in W. Burston and D. Thompson, Studies in the Nature and Teaching of History, London, 1967, 165.
 2. J. Coltham, (1957), op.cit., 136.

The third stage showing transition to formal logic was achieved by only one boy, who showed an appreciation of change through time; "in modern days he isn't a ruler, but in olden times he used to have power in the country he was king of."¹

The mean mental ages of the children who achieved the three stages in the 'king' test were 12:0, 13:1 and 16:0 respectively.² These figures suggest that many of the children Dr Coltham tested (with a chronological age range of 7-11) were of above average intelligence, and that perhaps they needed to be in order to achieve any definition of such an historical concept. Her results also demonstrate that teachers need to be well aware of a primary school child's level of mental development in order to understand that their own definition of an historical term is unlikely to be the same as that of their pupils.

That concept development is also limited in secondary school children was more recently demonstrated by W.A. de Silva. He stated the language problem in history as follows:-

"the difficulty arises because in using language to communicate it is assumed that words carry the same meaning to the listener or reader as is intended by the speaker or writer ... On account of the limited linguistic experience of the pupils it is not always possible to establish perfect and precise communication."³

He tested children's understanding of historical concepts using a technique devised by Werner and Kaplan.⁴ An historical concept such as 'slump' was disguised in coded form MALMIR₅ and embedded both in an

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1. J. Coltham, (1957), op.cit., 151.
 2. ibid., 135.
 3. De Silva, Concept Formation in Adolescence through Contextual Clues, with special reference to History Material, 1969, op.cit., 5.
 4. H. Werner and E. Kaplan, 'The Acquisition of Word Meanings, a Developmental Study', Monograph of the Society for Research into Child Development, 1950, xv, No.19 (Whole No.51), (Ref. from De Silva, (1969), op.cit.).
 5. W.A. de Silva, 'The formation of historical concepts through contextual clues', Educational Review, xxiv, No.3, (June 1972), 175.

historical passage and a series of sentences. The children had to work out the meaning and word definition of the concept from contextual clues. Their answers were graded using four stages of thought based on the work of E.A. Peel. De Silva found that the break between logically restricted thinking and hypothetico-deductive thinking was "likely to fall between the ages of 14 and 15, although brighter (grammar school) children might be thinking deductively between 13 and 14."¹ Only at the level of hypothetico-deductive thinking were they able to deduce the meaning of the word correctly. De Silva concluded that many school textbook writers take account of style rather than the linguistic needs of children and would confirm E.A. Peel's assertion:-

"much of school history is taught through texts and new words are often introduced for fresh ideas and institutions merely through contextual passages without a precise definition being given. This makes for erroneous concepts."²

It is obviously necessary to point out directly to children that 'the Church'³ means an institution made up of priests and bishops and having its own laws as well as the old grey stone or red brick building with which they are familiar. De Silva's work suggests that attention to the precise definition of concepts needs to be continued with most children at least until the age of 15. But, as Bruner points out, "it is futile to attempt this by presenting formal explanations based on a logic that is distant from the child's manner of thinking and sterile in its implications for him."⁴ For example, Helen Johnson tried to introduce her history class to the idea of formulating an hypothesis. They were

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1. De Silva, (1969), op.cit., 268.
 2. Peel, (1967), op.cit., 166.
 3. Used in A. Forster's passage on St. Dunstan. Case and Collinson, (1962), op.cit., 110.
 4. J.S. Bruner, (1960), op.cit., 38.

eager to guess answers from questions which they themselves had formulated, but could not grasp the formal concept of an hypothesis. Miss Johnson concluded that her efforts to define the term in formal language added very little to the pupils' treatment of the material.¹ The concept must be defined in terms suitable to the child's level of mental development. That this is frequently not done and that many children have erroneous ideas as to the meaning of 'the Crown', 'the nobility'² and 'civil war'³ may help to account for the difficulty many children had in attaining the level of formal operations in the pieces of research described earlier in this chapter.

A good verbal repertoire which included precise definitions of historical concepts would, then, seem to be one pre-requisite for the achievement of formal operations in the study of history at school level. But, as Jeannette Coltham found, the meaning that a child attaches to a word "is frequently related to personal experience, both emotional and social."⁴ Adequate experience may well be a second pre-requisite for the achievement of formal operations in school history. Two kinds of experience must be considered; firstly, the direct experience of historical material which would seem to be vital at the stage of concrete operations; and secondly the personal experience or social competence which is brought to bear on the understanding of that historical material.

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1. J. Hancock and H. Johnson, 'Archive Kits in the Secondary School', Teaching History, ii, No.7, (May 1972), 209.
 2. Used in Text B, Arnold Forster's History of England, 434, Case, (1960), op.cit., 20.
 3. Used in the third test passage, Hallam, (1967), op.cit., 184.
 4. J. Coltham, (1957), op.cit., 202.

Piaget and his followers have repeatedly stressed the necessity for a child to have practical experience of a subject before formal operations are possible. Yet, as has been seen, the study of history is heavily dependent on language and difficult to conduct in relation to objects as is possible in mathematics or science. It has often been suggested that the indirect nature of history is partly responsible for the late development of formal thinking in this subject. G. Bassett in 1940 tested 195 pupils aged 11+ - 13+ in two London County Council Central Schools to ascertain the mental processes involved in the comprehension of historical narrative.¹ In one of his tests, the children read a passage describing a conflict situation, for example the different viewpoints of machine owners and textile workers in the Luddite Riots. The children were then asked to suppose they were one or both of the parties and to defend the viewpoint of the party they represented. Most children found it very difficult to do this, although Piaget has suggested that children of 11-12 are capable of such social conduct as to be aware of the reciprocity of viewpoint needed in actual human situations.² Although his sample was of above average intelligence, Bassett concluded that:-

"the results do not substantiate such a facile transference of the stage of socialisation of thought as described by Piaget at 11-12 from actual human action to even such slightly dissimilar material as recorded human action."³

A possible explanation might be that in the reconstruction of recorded or described human situations a more exacting demand is made than that required when there is actual participation in the situation.⁴ Jeannette Coltham

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1. G.W. Bassett, (1940), op.cit.
 2. ibid., 179.
 3. ibid., 180.
 4. ibid., 181.

also found that when Piaget's description of cognitive behaviour was used to interpret her results, the level of attainment in the field of history was not as advanced as in the fields of knowledge where understanding is achieved by means of first hand experience.¹

Yet it is not impossible for children to be given "first hand experience" of history. Much historical evidence is comprehensible to children - pictures, maps, buildings, furniture, castles, abbeys, archaeological finds and some written sources, as will be discussed later. But, if it is to mean anything to them, this material must be made to come alive. The key, Bassett suggests, is emotionality.² In actual situations, children grasp relationships intuitively whereas in artificial situations, relationships are apprehended through the medium of language. This tends to reduce the emotional content of the situation and forces children to use cognitive processes rather than intuition. The obvious course for the history teacher, then, as Bassett says, "will be to invest, by whatever means in his power, the recorded experience with something of the emotional turn of the original."³ One way of doing this is to use the historical evidence to recreate not just events but the motives and intentions of the people who participated in the events. However, the people usually associated with historical events are adults, and "the complexity of adult intentions may be far removed from the experience of school pupils."⁴ A teacher needs to recreate a situation using terms his pupils can understand, very often analogy with experience within the range of his pupils. A knowledge of the kind of social

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1. J. Coltham, (1957), op.cit., 211.
 2. G.W. Bassett, (1940), op.cit., 184.
 3. ibid.
 4. E.A. Peel, (1967), op.cit., 160.

experience his pupils are likely to have would seem to be an essential pre-requisite for the teacher in helping his pupils to understand the historical experience he is trying to put over to them.

The research already noted in this chapter has demonstrated the general importance of social experience in historical understanding. No attempt has yet been made, however, to correlate different levels of social competence with historical thinking; the affective domain does not lend itself as easily to measurement as the cognitive domain. Both Bassett's conflict situations test and Jeannette Coltham's work on concept development did demonstrate that children up to and after entry into the secondary school brought their own social codes to bear upon historical events and found it difficult to appreciate other social codes. In Bassett's test, the children, when asked to imagine they were factory workers, agreed they had no right to break up machines because these had taken a long time to build, and that they would benefit England greatly. But as factory owners, they said it was not right to use machines to put men out of work and it would be better to go back to spinning and weaving by hand.¹ This inability to stick to one line of argument and to follow up a chain of reasoning might be described in Piagetian terms as pre-operational thinking, but Bassett suggests that level of maturation is not the sole answer. The children considered each argument separately in relation to their own social code, not the situation as a whole:-

"The criteria external to the situation, in terms of which the judgements are made, is part of the rudimentary social code of the individual making the judgement."²

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1. G.W. Bassett, (1940); op.cit., 161.
 2. ibid., 163.

A few children over the age of 13 did manage to depersonalise their judgements, using their social criteria in relation to the particular situation they were asked to consider, Bassett offered no explanation for this phenomenon, but Jeannette Coltham suggests that such judgements are achieved through conscious realisation of the value of social experiences:-

"Two phases appear necessary before the attainment of understanding in history is reached; firstly, having the experience, and secondly, realising it consciously; and only after the achievement of the second phase is integration of experience with acquired information accomplished"¹

Children might be helped to achieve this stage by being encouraged to consider different viewpoints as early as possible. It must be realised that history is not only a study requiring some degree of social competence but also a means by which the development of social competence may be encouraged. So many human situations can be studied which can enlarge a child's range of social experience if they are trained to consider the relationships involved. John Fines, as was seen in Chapter 1, exploited a group's misunderstanding of the relationship between a nineteenth century landlord and his tenants to explore the meaning of the term 'authority' in a variety of situations.² R.N. Hallam has put forward many suggestions for encouraging a child to consider different viewpoints, for example setting essays like "Would you have liked to have been a mediaeval villein?" or "Give the views of a landlord and a villager about the enclosure of the open fields in the village where they both live."³ However, such exercises are more likely to be successful if they are related to the experience a child already possesses. Bassett found that his testees could deal with the question of unemploy-

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1. J. Coltham, (1957), op.cit., 203.
 2. see page 22.
 3. R.N. Hallam, (1966), op.cit., 250.

ment caused by the introduction of machinery far better than the religious issues involved in the conflict between the Bishop of Beauvais and Joan of Arc. Nevertheless, if adequate discussion is possible (which it was not in the test situation), the latter exercise would be beneficial in widening the child's experience. A compromise must be found between what is already known by the child and a new experience to which he is to be introduced. Such pedagogical considerations lead on to a discussion of the third possible pre-requisite for the development of formal reasoning, the part played by instruction.

In 1899 Mary Sheldon Barnes and her colleagues in America tested over 1000 schoolchildren aged 8-16. Their purpose was to throw light upon the comparative curiosity of children as to personalities, time, and cause and effect.¹ They were told an historical story and asked to write down what questions they would like answered. Her research technique was not therefore based on an assumed general level of thought like the research described earlier in this chapter, and was perhaps more likely to reveal what the testees were in fact capable of, although in a manner difficult to categorise. An interest in cause and effect was paramount, followed by the questions "who?", "where?" and a demand for personal detail in that order.² Interest in the time factor was slight. This was followed by a further story about which the children were asked to make inferences, which they clearly enjoyed doing:-

"I was greatly struck by the eagerness which the children displayed. It was as if I had opened a gate and they ran wildly hither and thither, making new discoveries."³

She found that the power of inference was present even in 8 year olds,

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1. M.S. Barnes, Studies in Historical Method, D.C. Heath, Boston, Massachusetts, 1899, 54.
 2. *ibid.*, 63.
 3. *ibid.*, 69.

but developed strongly into legitimate and imaginative inferences by the ages of 12 to 13. Not every child was capable of critical inferences but when this power was present, it developed strongly from the age of 13 onwards.¹ Her findings, therefore, agree with the results of the research described earlier, that some elements of logical thinking are present even in younger children although consistent logical thinking is unlikely before adolescence. It may therefore be possible for the history teacher to attempt to develop the power of legitimate and even critical inference earlier on. Mary Sheldon Barnes did not advocate this approach herself,² but she did note that inference "varies more from school to school, in regard to number and character of inferences, than in any other test set; from which I take it that inference is subject to great modification by teaching."³

Piaget did indicate that education might modify the ages at which each level of thinking began, although maintaining that the sequence of the stages was clearly fixed. The maturation of the nervous system could do no more, he suggested, than determine the totality of possibilities and impossibilities at a given stage,⁴ A particular social environment was indispensable for the realisation of these possibilities, and if this was achieved, acceleration of the stages might result:

"the age of 11-12 years may be, beyond the neurological factors, a product of a progressive acceleration of individual development under the influence of education, and perhaps nothing stands in the way of a further reduction in the average age in a more or less distant future."⁵

More recently, alarmed by perhaps over-eager attempts in the U.S.A. to

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1. M.S. Barnes, (1899), op.cit., 70.
 2. ibid., 101.
 3. ibid., 70.
 4. I. Inhelder and J. Piaget, (1968), op.cit., 337.
 5. ibid.

accelerate thought processes, he has urged caution and suggested that "there is not much to be gained by doing it beyond a certain measure."¹ Bruner, while acknowledging the importance of the Piagetian sequence, believes that it is the function of education to lead intellectual development by providing challenging but usable opportunities for the child to forge ahead in this development:

"Experience has shown that it is worth the effort to provide the growing child with problems that tempt him into the next stage of development."²

Educational Implications

It seems, then, that the history teacher must pay due regard to the intellectual stage of his pupils and provide work suitable for that stage (which is what Bruner means by 'usable opportunities'), but at the same time ensure that his exercises make it possible for his pupils to progress to the next stage as soon as they are ready. How can this be done? Three methods are worth considering. Firstly, the use of active methods of teaching. Secondly, provision of suitably graded materials and questions to encourage pupils to progress at their own pace. Thirdly, direct teaching of the structure of the subject, which involves training the pupil in some elements of historical methodology.

One aspect of the first method is to encourage children in more active questioning and discussion. Piaget and Inhelder suggested that social interaction and transmission played a vital part in the achievement of formal operations, each child being spurred on by his colleagues.³

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1. R.N. Hallam, 'Piaget and the Teaching of History', Educational Research, xii, No.1, (November 1969), 6., referring to M. Pines, Revolution in Learning, Allen Lane, 1969, 35.
 2. J.S. Bruner, (1960), op.cit., 39.
 3. J. Piaget and B. Inhelder, The Psychology of the Child, Routledge, Kegan Paul, 1966, 155.

E.A. Peel suggests the following:-

"More active questioning, answering and discussion in relation to reading in history and English would do much more than passive reading in providing the concrete experience (parallel to handling materials and models in arithmetic, geography and simple science) necessary for the child to progress to the stage of being able to reason more formally."¹

Hallam, too, emphasises the value of group discussions but points out its difficulty of organisation in many secondary schools, where classes are often large and children may not have the necessary cognitive skills to hold the attention of a group of their classmates.²

The second method, possibly more suitable for secondary school history, is to provide individuals (or perhaps groups) with materials which they are not expected just to read and to memorise but to use as a basis for personal discovery. Bruner suggests that this is vital in the development of formal reasoning:-

"Mastery of the fundamental ideas in a field involves not only the grasping of general principles but also the development of a certain attitude towards learning and inquiry, towards guessing and hunches, towards the possibility of solving problems on one's own."³

Increasing emphasis has been laid on individual discovery work in history lessons. It is a method which can be dangerous carried to the extreme as has been seen, of children entering a classroom, collecting their worksheets, giving them in completed at the end of the lesson and retiring from the room with hardly a word spoken by teacher or class.⁴ It is also a time-consuming method; many teachers feel they will not be able to cover so much ground if children are left on their own.

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1. E.A. Peel, (1960), op.cit., 78.
 2. R.N. Hallam, (1969), op.cit., 7.
 3. J.S. Bruner, (1960), op.cit., 20.
 4. Observed by the writer in some Midland schools.

Nevertheless, as F.C. Happold pointed out many years ago, how is the child ever to learn to think for himself if he is never allowed to do so?¹ It is also worth quoting M.S. Barnes' reaction to this particular criticism:-

"But it takes more time? Good friend, it does; and more time to read a play of Shakespeare than to read that Shakespeare was the greatest dramatist of all the ages; and more time to read the American Constitution and the American newspaper, and to make up your mind how to vote your own vote than it does to be put into a "block of five". But what is time for?"²

Certainly, since research has shown that children progress at different rates, it is vital that at least sometimes individuals should be given the opportunity to use the highest levels of thinking of which they are capable.

This is not to suggest that children should be left to work their way unaided through a mass of historical material; to be able to do this is the result rather than the means of teaching history. Both the materials chosen and the work devised around them must be carefully chosen. The former - be they written, pictorial or archaeological - need to be within the pupil's grasp; if written, the language and the level of conceptualisation needs to be geared to the intellectual stage of the pupils concerned and at least some of the subject matter within their experience. If not, "they will either assimilate it without understanding or will reject it with possible change in their whole attitude towards the subject."³

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1. F.C. Happold, (1927), op.cit., 14.
 2. M.S. Barnes, (1899), op.cit., 138.
 3. Hallam, (1969), op.cit., 6.

The questions, too, need to be carefully graded in order to evoke the full range of response, giving the child at the level of concrete operations the chance to use intuition and imaginative inference and the more advanced child the opportunity to use logical processes. Too many questions on historical material demand little more than comprehension, and so the child is never encouraged to develop other cognitive skills which, as has been suggested, are present to some degree even in young children.

What kinds of materials are suitable for such an approach?

F.C. Happold's pamphlet of 1927 has much to suggest to the modern history teacher.¹ He began his 'training in the art of thought' by means of simple exercises worked out with the help of a textbook and then encouraged children to collect information under headings from several books out of the library. Lastly - but only as an occasional event - they were thrown back on their own resources and asked to write a short thesis using books they found for themselves. He admitted that "they were, of course, very immature and undeveloped but their minds were flexible and they had had sufficient practice in the use of their tools and had developed a sufficient interest in their study to attempt the tasks demanded of them."² Too often, however, teachers expect pupils to attempt the last of Happold's tasks without having introduced children to the tools of the trade or the techniques required in their use. Adequate introduction to, and practice in the use of, indexes, bibliographies etc. needs to be given and the pupils should be shown how to collect information under headings to avoid the wholesale

1. F.C. Happold, (1927), op.cit.

2. ibid., 5.

copying out so often a feature of project work. Of course, the material need not all be written; younger children may well be better employed making deductions about pictorial or tangible evidence in the form of buildings or archaeological specimens, while older children may be encouraged to compare these types of material with written evidence.

The third method of encouraging children to reach the level of formal operations as quickly as possible is to teach them the structure of any discipline rather than a selection of facts culled from that discipline. The particular merits of the discipline - in history, for example, the detection of bias, or the presentation of evidence in support of an argument - will, it is thought, be applied to new problems and circumstances long after the facts have been forgotten. The structure of history, it has been argued, is its methodology:-

"In order to understand, the child should investigate the process by which the historian achieves his explanation. The concrete evidence which is available to the historian should be made available to the child."¹

Can the child, however, understand the meaning of 'evidence'? Mary Sheldon Barnes gave children two accounts of the defence of Fort Sumter by Major Anderson, one a secondary account and the other Anderson's own despatch to Washington. Asked which account was the better and which they would keep if they had to destroy one, most children from the age of 9 preferred the original material to the secondary. Their replies to the questions suggested that their choice rested on three bases; the love for a relic, the desire for a genuine piece of evidence, and, in older children, a critical sense of the difference between an original and a derived account.^{2,3} A child's frequent question, 'Is it true?', could

1. M. Honeybone, (1971), op.cit., 150.

2. M.S. Barnes, (1899), op.cit., 77.

3. The writer has carried out a similar exercise with comparable results. See Chapter 5.

well be utilised as a basis for teaching the methodology of history.

This point will be considered more fully in the next chapter.

The research described in this chapter indicates that present methods of teaching history may well hinder children's reaching the level of formal operations as early as they otherwise might. Two reasons for this may be suggested. In the first place, insufficient attention is often given to the intellectual stage reached by a particular child or class; they are presented with vaguely defined concepts often outside their experience and their verbal repertoire. Such teaching does not encourage children to stretch themselves mentally since they cannot utilise material beyond their understanding. Secondly - and this is perhaps a more recent trend - children may be given material within their grasp but not encouraged to use the full range of their intellectual powers upon it. Each child can only accept material he is ready for, but his particular intellectual ability, experience and social competence may enable him to utilise it in a way approaching the processes of formal reasoning which many of his contemporaries cannot achieve. The teacher of history perhaps needs to think less about the amount of subject matter he covers and more about the way in which his pupils are encouraged to consider that subject matter. There is clearly a need for materials and exercises to be chosen and set with the aim of encouraging the intellectual skills of pupils as well as that of increasing their knowledge, since it would appear that the achievement of formal operations is to some extent dependent upon teaching.

The research carried out by the writer and described in this thesis was devised to test whether children's cognitive skills could be improved through the use of carefully devised exercises set upon original materials, taking into account the methods by which children had previously been taught history and the ways in which the original

materials and exercises were used; classroom practice undoubtedly influences the children's performance. This is clearly only one way out of many of achieving the qualities of mind a secondary school history teacher might expect from his pupils, as outlined at the beginning of the chapter. It is the purpose of the next chapter to consider the particular merits of the 'source method' and the variety of applications that it has in schools.

CHAPTER 3

THE SOURCE METHOD IN SCHOOLS

The source method may be defined as the introduction of children to the original sources from which history is written. As a teaching method it has many purposes. Sources can be used by the teacher to create an atmosphere of reality in history lessons, to stimulate the imagination, to demonstrate the local application of national events or to show children how history is written. Recent trends in teaching have, however, increasingly encouraged the idea that source materials should be put directly into the hands of children. This has, of course, been made possible by improved reprographic methods which have enabled facsimile materials to be produced reasonably cheaply in bulk. More important, though, has been the growing belief that children should not be asked to accept the ready-made conclusions of experts but should experience the subject for themselves. Bruner, as has been seen, has argued that it is more important for children to learn the structure than the subject matter of a particular discipline. Source materials have been seized upon by history teachers as a means of imparting structure to their subject which, as G.R. Batho has pointed out, has added academic respectability to the source method.¹ William Lamont echoes the optimism of many other historians in his hope that "the excitements and uncertainties of historical research could be translated into the classroom."² This chapter looks at the types of materials available to school history teachers in their efforts to make this

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1. G.R. Batho, 'The Crisis of the Source Method', Times Educational Supplement, (24 March 1972), 51.
 2. W. Lamont, 'The Past and the Future', Times Educational Supplement, (26 April 1968), 1387.

dream a reality. It also seeks to outline the problems of the use of source material in the classroom which the research described later was designed to illuminate.

The Availability of Source Materials

Michael Honeybone has shown that the source method is by no means an innovation in the school history curriculum.¹ In the early years of this century, however, source materials were mainly confined to collections of printed documents which had been published as a result of the influence of Ranke and the German historians on the study of history, or to material in the national archive collections. The variety of material available today has been made possible by two related circumstances, firstly the growth and increasing accessibility of local record repositories and secondly a growing interest and expertise among teachers in their use. In 1919 a Royal Commission recommended that local record repositories should be established under the control of the Master of the Rolls. Some authorities were quick to establish these, stimulated both by the abolition of manorial courts in 1922 and the transference of their records to the care of the Master of the Rolls and by the establishment of the British Records Association in 1913 which among other activities collects old records from various private sources and distributes them to their counties of origin.² Twenty archive repositories had been established by 1939 and the number trebled by 1956. Today, all counties and many boroughs and cities have their own records offices, although some of these are in the process of amalgamation under reorganisation of local government schemes.³

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1. M. Honeybone, The Use of Primary Source Materials in the Teaching of History 1900-1970, Unpublished M.Ed. thesis, University of Birmingham, 1970.
 2. E.H. Sargeant, 'The County Record Office - What it is and what it has', Educational Review, (November 1952), 21.
 3. e.g. Leicester City and County Record Offices have been amalgamated.

Archivists were faced first of all with the tremendous task of classifying and cataloguing the records under their care. Once this was under way, some began to consider their educational function and the pioneer work of F.G. Emmison, archivist first of Bedford and then of Essex, is well known. A history teacher was seconded to the Essex Record Office as early as 1946, "charged with taking selected documents to colleges, schools and refresher courses and with helping the archive staff with exhibitions."¹ The endowment of a prize essay encouraged senior pupils of Essex schools to visit the County Record Office in Chelmsford and there is now a Students' Room, where pupils can work on C.S.E. and 'A' Level projects. An extension of this service was made possible by Essex County Council's leasing of a part of Ingatestone Hall from Lord Petre to act as an exhibition and teaching centre for the Record Office. Approximately 4500 children a year visit Ingatestone Hall each year between April and October to see the exhibitions and to work on general archives, guided by members of the Record Office staff and the County History Advisor.²

Another archivist who has encouraged schoolchildren to come into the Record Office is G.A. Chinnery, originally of Leicester City Record Office. Here children have worked particularly on urban records, which include maps, street directories, Census Returns, housing plans, public health records and so on. The children range in age from lower junior to top secondary.³

Other archivists have preferred to take required documents or prepared exhibitions to schools rather than encourage children to visit

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1. F.G. Emmison, 'Spotlight on Archives', Times Educational Supplement, (3 April 1964), 845.
 2. Information from the County History Advisor, Essex. January 1972.
 3. See G.A. Chinnery, Studying Urban History in Schools, T.H.33, Historical Association, London, 1971.

their already small and overcrowded search rooms.¹ (Both Essex and Leicester are fortunate in having additional teaching space.) The Lancashire Record Office,² sends round original documents mounted in glass cases on one-day loans to local schools.³ In this way children see the original rather than a photocopy but - and one can see the archivist's viewpoint - they are not allowed to handle them, a practice which could result in lack of interest on the part of the children. For as E.P. Lloyd of the Staffordshire Record Office points out:

"mere exhibitions of documents or copies thereof are one thing, and some good can rub off these on to the pupil, but systematic use of the raw materials is what we are really after."⁴

Mr Lloyd believes that it is the job of the archivist rather than that of the teacher to search the records, since the archivist is more familiar with his collections. Information concerning what is needed in the schools is obtained by mounting exhibitions of pilot copies of archives which are then reproduced in quantity for teachers who ask for them.

The Cheshire Record Office has achieved a compromise by allowing children to see what the originals look like but also providing photocopies for actual use. The originals are sent to schools under the personal supervision of one of the Record Office staff, together with exhibition boards, and photocopies of the documents are provided for the class.

Other County Record Offices now produce packs of local materials which can be bought by schools; Buckinghamshire was one of the first in

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1. Great Britain, Department of Education and Science, Archives and Education, H.M.S.O., 1968, lists many other County Record Offices who organise similar activities, e.g. Gloucestershire, Bristol, Glamorgan.
 2. Information from Lancashire County Record Office, Preston.
 3. The first two, Apprenticeship and The Jacobite Rebellions, were prepared as early as 1949; the others date from the 1960s.
 4. E.P. Lloyd, 'The Use of Historical Documents in Schools', Amateur Historian, vii, No.2, (1966), 49.

the field with its excellently produced and reasonably priced Weston Turberville Enclosure 1797-1800.^{1,2}

The second point concerns the familiarity of teachers with the use of source material. University history students have frequently worked with printed source collections such as Stubbs' Select Charters,³ or S.R. Gardiner's Constitutional Documents of the Puritan Revolution.⁴ But G.R. Batho found among his group of graduates who worked on the first Sheffield Archive Teaching Units in 1956 that "many of the dozen or so graduates from four Universities had never been confronted with a manuscript and made to consider the questions it posed."⁵ As in schools, however, the use of manuscript material has become more common in Universities since 1956. R.H. Campbell has shown that students of economic history at Glasgow University were given comprehensive, if brief, experience of the collections of the Scottish Record Office.⁶ Discussion at the two Conferences on The Teaching of Regional History in Universities and Colleges,⁷ has shown that some universities, particularly Kent, Liverpool and Lancaster, make extensive use of archives. Nevertheless, it is still possible for a history student to achieve a good degree without ever having worked from an original source.

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1. Others are produced by County Record Offices in Bedford, Berkshire, Cheshire, Derbyshire, Devon, Essex, Flint, Gloucestershire, Hertfordshire, Kent, Monmouthshire, Northamptonshire, Nottinghamshire, Oxfordshire, Surrey, East Sussex and Warwickshire. (These were produced before the reorganisation of local government)
 2. Since this chapter was written, the Society of Archivists has set up a Working Party on the educational use of archives under the chairmanship of R.A.H. Ward, Archives Department, Shepherd's Bush Library, Hammersmith, London W12 8LJ.
 3. W. Stubbs, Select Charters and Other Illustrations of English Constitutional History, O.U.P., 1st Edition, 1870.
 4. S.R. Gardiner, Constitutional Documents of the Puritan Revolution 1625-1660, O.U.P., 1st edition, 1889.
 5. G. Batho, 'Archive Teaching Units', Visual Education, (Aug 1957), 3.
 6. R.H. Campbell, 'Using Historical Records', Times Educational Supplement, (5 May 1964), 1556.
 7. Held at the University of Nottingham in December 1974 and 1975.

Teacher training institutions have, on the whole, realised the need to train both undergraduates and postgraduates in the use of records both for academic studies and for curriculum purposes. As early as 1956, F.G. Emmison envisaged a new world in which:

"a generation of university teachers is growing up which has been acquainted with original records from its schooldays, in sharp contrast to previous generations Teacher training colleges increasingly advise large numbers of students to collect material for the theses they are required to submit, thus breeding a generation of teachers which will use local records far more than their predecessors have done."¹

Perhaps that key word in the last sentence is 'advise'. Too many colleges still expect their students to do as Emmison suggests but do not give them adequate guidance on how to set about the task. Fines and Steel have rather deprecatingly indicated to archivists what College of Education students are seeking in their Record Offices, either material for long essays and dissertations or documents to use directly with school classes.² Many colleges, along with University Institutes of Education, do provide specific training and experience in the use of local records,³ and some also participate in the production of archive materials for schools.⁴ Sussex University have followed the pioneer work of Sheffield University by encouraging their students to produce archive kits and try them out in their practice schools.⁵ Institutes of Education, Local Authorities and the Historical Association run

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1. F.G. Emmison, 'New Sources of British History; the Service of a Local Record Office', History, xli, (1956), 179.
 2. J. Fines and D. Steel, 'College of Education Students in a County Record Office', Archives, ix, No.41, (April 1969), 22-28.
 3. e.g. Berkshire (Reading), C.F. Mott (Liverpool), Bishop Grosseteste (Lincoln) and Loughborough Colleges of Education.
 4. e.g. Bedford and Worcester Colleges of Education, Keele, Leicester, Newcastle, Nottingham and Sheffield University Departments of Education.
 5. J. Hancock and H. Johnson, 'Archive Kits in the Secondary School', (1972), op.cit.

courses on the production and use of archive material₁; teachers' centres are now available in many areas to provide teachers with technical assistance₂. Increasing expertise has encouraged the formation of numerous teachers' groups producing source packs for use in schools.₃ Local branches of the Historical Association₄, History Advisers to Local Authorities₅, Libraries₆, and Museums₇ have also contributed to the growing collection of source materials available to schools.

Types of Source Materials

It must be realised that the nature of the material in source collections varies widely and that therefore their potential use in the classroom is not always the same. An attempt has been made to distinguish between "the source method in general and the archive method in particular", including primary printed material in the former category but reserving the latter entirely for facsimiles of actual manuscripts.₈

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1. e.g. Historical Association Vacation School for Teachers of History (Birmingham, January 1974) included a seminar led by the author on 'The Use of Source Material in the Teaching of History in the Secondary School.'
DES/ATO In-Service Course held at C.F. Mott College of Education, Liverpool, included a seminar led by Mrs Joan Blyth on 'Archive Units and History Kits - Schemes of Work and Evaluation', (summer, 1972).
Historical Association Vacation School for Revision Courses in History, (Sheffield 1976) included a seminar led by Professor G.R. Batho on 'The Source Method in the Teaching of History'.
 2. e.g. Anglesey, Bangor, Dudley and Leicester.
 3. e.g. Bristol, Cambridgeshire, Cardiff, Coventry, Dudley, Huddersfield, Leicester, Liverpool, Walsall.
 4. e.g. Bristol, Manchester.
 5. e.g. Leicestershire, Lindsey, Oxfordshire, Staffordshire, Wiltshire.
 6. e.g. Manchester, Nottingham, Sheffield.
 7. e.g. Farnham, Guildford, Luton, Portsmouth.
 8. G. Jones and D. Watson, 'Archives in History Teaching - Some Problems', Teaching History, i, No.3, (May 1970), 188.

This is an unacceptable distinction based entirely on technological rather than archival grounds. Jones and Watson may be correct in stating that "the use of true archives ... is associated with the development of good and reasonably inexpensive means of producing facsimile documents in bulk"¹, but the significance of the term 'archive' does not lie in the manner of production of a primary source; it can be manuscript, printed, typewritten or in diagrammatic or pictorial form, but it must form part of a group of other primary sources. As an archivist has stated,

"The essential quality which distinguishes an 'archive' from looser terms, such as 'record' or 'document' is continuity of custody and the fact that archives accrue naturally in the course of business, official and unofficial, public or private."²

Documents on the other hand, are records which are "unique and irreplaceable, but which are 'strays' or which may have been artificially collected by some antiquary and thus divorced from their natural archive groups."³ In this sense, Magna Carta is a 'document' whereas a collection of records on the functions of a particular manor court would be 'archives'. In the same way, the scattered origins of the material in a 'Jackdaw'⁴ means that this is a collection of 'documents', whereas the last six groups of the experimental Archive Teaching Unit used in this research, being all from one source and concerned with a single period in a particular village, could reasonably be called 'archives'.

The archivist's distinction is useful to the teacher in that it defines the limitations of each type of material and suggests what use

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1. G. Jones and D. Watson, (May 1970), op.cit., 189.
 2. E.H. Sargeant, (1952), op.cit., 22.
 3. ibid.
 4. Jackdaw Publications Ltd., Jonathan Cape.

can be made of each. The document, being a 'stray', cannot always be used to show pupils that nature of cause and effect or the relations between certain events, whereas these are the main functions of a collection of archives. The document, on the other hand, is frequently more exciting in itself than a single manuscript in a collection of archives and so is particularly useful for imaginative and creative work and also for the development of certain mental skills and abilities. The characteristics and uses of the two types of record will now be considered.

Using Documents

There are three main ways of using single, unrelated documents in the classroom. Firstly, they may be used as a means of deriving information about a particular historical event. Secondly, certain documents can emphasise the reality of historical events and at the same time help to stimulate the historical imagination. Thirdly, documents may be given directly to the child as an exercise in certain cognitive abilities which may well include deductions about the nature of historical evidence. These three methods obviously cannot be isolated from each other and one document may well be suitable for all three purposes.

Firstly, then, a document may serve as a source of information about a particular historical event. This is not to say that a document should be used instead of a textbook to establish the main facts. Documents have a more subtle purpose in helping the student to understand the significance of the event being studied. A French Inspector of Primary Schools, Paul Maréchal, has suggested that there are four types of document which can be used in this way. Firstly, some documents may well help to clarify the meaning of an historical term or concept, such as feudalism.

Study of "le document-clé", as he terms it, "est le meilleur moyen de concrétiser et d'éclairer la vocable historique, en plaçant sous le mot l'idée ou le fait exact qu'il recouvre."¹ His second type of document, "le document-témoin, est celui qui consacre et enregistre un événement important de notre histoire"². Maréchal suggests that a pupil will gain more by reading the Edict of Nantes itself than a second hand account of it in a textbook. Thirdly, "le document-humain est particulièrement révélateur de l'homme, de son nature complexe."³ Under this heading would come a letter or policy statement which helped a pupil to understand the character of the man whose career he was studying and gain incidental insight into the problem of human motivation. Lastly, Maréchal suggests, documents may be used to recreate the atmosphere of a period: as an example he cites diaries and newspapers produced at the time of the French Revolution.

The problem for the teacher used to be that of assembling the variety of documents described above. The latest Handbook for History Teachers⁴ shows, however, that there are now a considerable number of source collections available specifically for schools.⁵ Essex teachers are particularly fortunate in possessing two anthologies of extracts

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1. Paul Maréchal, L'Initiation à L'Histoire par le Document, Vol.2, Paris, 1958; 40.
 2. *ibid.*, 46.
 3. *ibid.*, 51.
 4. London University Institute of Education, Handbook for History Teachers, Methuen, 1972.
 5. See A.D. Edwards, 'Source Material in the Classroom' in the Handbook cited above. Examples he gives are:
 J.S. Millward (ed.) Portraits and Documents, Hutchinson, 1960.
 D.B. Horn (ed.), Documents and Descriptions, Oxford.
 E. Royston-Pike, Human Documents of the Industrial Revolution, Allen and Unwin, 1966.
 E. Royston-Pike, Human Documents of the Victorian Age, Allen and Unwin, 1967.
 see also Wayland Documentary History Series, e.g. M. Gibson, The Vikings 1972, and L. Cowie, Plague and Fire, 1970. The publishers indicate that these are "designed to introduce students to research from primary sources which are presented here in short, lively extracts".
 Macmillan, Sources of History, e.g. E.K. Milliken, Chivalry in the Middle Ages, 1968.

from local material which can be used to demonstrate the effect of national events on the local scene,¹ although John West has stressed that it is not difficult for teachers to make their own source books, either of local records or of extracts from national documents.² The mobility of teachers might perhaps make the latter more useful.

The second use of a document is to bring home to children that history actually happened. An obvious source for this purpose is an eye-witness account of an important event, many of which have been made readily available for teachers in the important They Saw it Happen series.³ The widespread use of facsimile material has made it possible for reality to be communicated visually as well as verbally to the child. Children can see for themselves that Cromwell signed Charles I's death warrant⁴, while "the signature of Montrose on the National Covenant makes him a real person in a way that textbook mentions of him cannot."⁵ Equally, "that Nelson really did lose an arm at Santa Cruz becomes emphatically clear when we see his right and left-handed letters"⁶. As has been seen, both Bruner and Piaget stress the need of the child for concrete images to provide a basis for logical thinking.

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1. A.C. Edwards and A.J. Brown, English History from Essex Sources, Vol. I 1550-1750, Vol. 2 1750-1900, Essex County Council Records Committee, 1952.
 2. J. West, History Here and Now, Schoolmaster Publishing Company, 1966, 19.
 3. They Saw it Happen, published by Blackwell.
e.g. They Saw it Happen 55 B.C. - 1485, ed. W. Hassall, 1957.
They Saw it Happen 1485 - 1866, ed. C.R.N. Routh, 1957.
They Saw it Happen 1689-1897, ed. T. Charles-Edwards and B. Richardson, 1958.
They Saw it Happen 1897-1940, ed. Asa Briggs, 1960.
They Saw it Happen in Europe 1450-1600, ed. C.R.N. Routh, 1965.
 4. Jackdaw No.21, The Trial and Execution of Charles I, ed. J. Langdon-Davies.
 5. I. Thorburn, 'Exploring the very stuff of history', Times Educational Supplement, (27 February 1970), 46.
 6. Department of Education and Science, Archives and Education, 1968, op.cit., 2.

Illustrations, whether verbal or pictorial, satisfy this need and are therefore integral to the structure of knowledge and not a dispensable adjunct to it. Margaret Bryant has pointed out that "the word 'illustration' has become debased. Too often it means a vapid picture tacked on to an overgeneralised account."¹ Consequently, "the advocates of the 'new' or 'documentary' history in schools therefore tend to underplay or condemn this legitimate and indeed necessary and professional use of documents to illuminate the imagination, to convey a sense of reality."² She suggests that when well chosen documentary extracts are neatly framed alongside the pictures in a textbook, they invite comparable attention.³ John Fines has also emphasised the importance of the imagination, choosing documents that would stimulate inquiry and writing about the past as starting points for historical projects. For this purpose, he points out, he needed to treat the County Records Office as if it were the editor's room of a popular newspaper.⁴

With younger children, at any rate, such imaginative inquiry can be expressed in dramatic form. John West has pointed out how situations hinted at but not fully explained are particularly valuable. A play produced by a second year class after a six week period of research into the Halesowen Court Rolls "resulted in an authentic imaginative response which was more than merely imitative of the records."⁵ John Fines, as was seen in Chapter I, has also used drama in connection with documents,

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1. Margaret Bryant, 'Documentary and Study Materials for Teachers and Pupils; Part II, Theories and Practices', Teaching History, i, No.4, (November, 1970), 274.
 2. *ibid.*
 3. *ibid.*, 277, citing as an example E.H. Dance, Man's Heritage, Longmans, 1951.
 4. J. Fines, 'Archives in School', History, liii, (October 1968), 352.
 5. J. West, (1966), op.cit., 23.

(in this instance, fabricated) to verify a dramatic episode and to correct it when it went wrong.¹ The time-consuming nature of these methods prevent their use at least in the upper levels of secondary schools, but it is perhaps at the junior secondary level that they are most useful. In primary schools the flexibility of timetabling makes possible an open-ended scheme of work where the imaginative response can be tremendous, as articles in Teaching History have shown.² However, children have not outgrown the use of their imagination by the early years of the secondary school, when their increasing maturity could make such exercises as those described above even more valuable:

"The maturity of the child's response from the romance of role-play towards the authenticity of verified situations and precise recording must move alongside developing skills, offering its own opportunities for their use and development and the stimulus for creative work. Thus, eventually, imagination is fed and quickened to become a precise, creative faculty."³

Yet it is at this point that children are often forced to move rapidly into the realms of logical thinking before they are ready for it.

Imaginative exercises in the secondary school are frequently confined to the lower ability ranges - admittedly, with success,⁴ - but imagination fed by images derived from original material would be of great value to the brighter child in enabling him to progress from the concrete image towards further historical exploration and understanding more rapidly than he might do otherwise.

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1. See page 22.
 2. e.g. J. Blyth, 'Archives and Source Material in the Junior School', Teaching History, i, No.1, (May 1969), 24-31.
S. Wheeler, 'Young Children, Documents and the Locality', (May 1970), op.cit.
R. & S. Wheeler, 'History in the Cupboard', Teaching History, ii, No.6, (November 1971), 117-124.
 3. J. West, Archives in Schools, Schoolmaster Publishing Company, (no date), 11.
 4. J. Hancock & H. Johnson, (1972), op.cit.

A third use of documents is as an exercise in cognitive skills, although this is obviously closely linked to the first described use as a means of obtaining various kinds of historical information. The source method in the early years of this century was particularly concerned to develop intellectual skills through the use of documents. This was partly due, as has been seen, to the limited sources then available - mainly constitutional documents from national collections - but also to the influence of a group of history teachers led by J.W. Allen and M.W. Keatinge who sought to popularise the method in English schools. Dr Keatinge believed that history lessons should be used to develop the intellectual powers of his pupils: "our subject must be reduced to problem form and our pupils must be confronted with documents and forced to exercise their minds upon them."¹ Documents provided the basis of the method since the pupil would be obliged to use similar material later in life:

"his success in life will probably, will almost certainly, depend upon the ease and correctness with which he observes words, both written and spoken, and draws inferences from them; he will, on countless occasions, need to analyse documents, to abstract them and to compare them."²

Keatinge stressed that he was not trying to "convert schoolboys into historians"³. He was, in fact, concerned with educational transfer from school exercises to adult activities, and his aims are comparable with those of Bruner and of Bloom and Krathwohl.

The material for his exercises was, he thought, plentiful: "the documents from which history has been written, and is to be written,

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1. M.W. Keatinge, Studies in the Teaching Of History, A & C Black, 1910, 38.
 2. *ibid.* 35.
 3. *ibid.* 38.

are to be had for the asking."¹ He also believed that they were not for the exclusive use of the teacher:

"Contemporary documents must be supplied; and not merely brought into the classroom for illustrative purposes, to be used as an expansion of the textbook, but placed straight into the boy's hand for him to use his wits upon."²

He and N.L. Frazer published a textbook of English history³ in which documents with problems and exercises were included as an appendix; the latter was also printed separately as Documents of British History in six volumes covering from A.D.78 - 1900. A specimen of one of the documents and the problems Keatinge set his pupils is included in the Appendices.

Keatinge's method of using documents did not become widely accepted in schools. The questions set on the extract from the Domesday Book cited above, for example, indicate the high level of cognitive ability he expected his pupils to possess; one wonders how many schoolchildren could have tackled them successfully. In addition, the difficult style of language and vocabulary of many of the documents, together with their unattractive appearance, did not serve to popularise the method.

Dr F.C. Happold, although he too stressed the idea of using history as a means of mental training, rejected the use of primary source materials with schoolchildren. The School Certificate history papers he devised contained extracts from secondary sources "to test the skills and abilities a student had gained through the study of history as well as their factual knowledge"⁴. He believed that Keatinge's system of teaching history

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1. M.W. Keatinge, (1910), op.cit.
 2. ibid., 40.
 3. M.W. Keatinge and N.L. Frazer, A History of England for Schools, with Documents, Problems and Exercises, A & C Black, 1912.
 4. F.C. Happold, 'The Salisbury Experiment - History in Examinations', Times Educational Supplement, (8 March 1957), 315.

by means of original sources failed because the material was not suited to its purpose.¹ Nevertheless, several recent series of printed documentary collections have followed the lines Keatinge set. The Archive Series² and the Society and Industry in the Nineteenth Century series³ both contain extracts from documents linked by commentary together with problems and exercises set either on each document or at the end of each section. Many of the questions, however, demand not the exercise of cognitive skills but the abstraction of information or the illumination of historical problems. This, as suggested earlier, is a legitimate use of a document, but as the series are designed for the upper forms of secondary schools who may be expected to tackle some degree of abstract thinking, the elementary nature of many of the questions does not fully exploit the potential of the documents included. On the other hand, the authors of the History Alive Source Book⁴ include in the outline of the criteria on which their exercises are based the acquisition of such skills as evaluating, extending information, thinking creatively and "using historical methodology". They suggest that "unless a pupil can master the methods of historical interpretation, he is not really learning history at all"⁵. While this claim may seem rather exaggerated, the criteria adopted in this book have resulted in more searching questions being set than in the Society and Industry in the Nineteenth Century series despite the fact that the former are

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1. F.C. Happold, The Study of History in Schools as a Training in the Art of Thought, Historical Association, Pamphlet No.69, 1927, 5.
 2. The Archive Series edited by C.P. Hill and G.H. Fell, Arnold; e.g. F.W. Stacey, Britain and Russia from the Crimea to the Second World War, 1968.
 3. K. Dawson and P. Wall, Society and Industry in the Nineteenth Century, O.U.P., e.g. No.5, The Problem of Poverty, 1968. See extract from this in Appendices.
 4. I. Bereson and W. Lamb, History Alive Source Book, Mond Educational, 1970.
 5. *ibid.*, Introduction.

designed for the junior secondary age group. A.D. Edwards has also suggested that this age group are capable of examining evidence critically. He has found that first formers could detect bias in Sir John Froissart's account of the Peasants Revolt and could also state what questions they would like to ask before accepting his narrative as true.¹

Developments in technology have now made available a far greater variety of documentary material than can be included in a reasonably priced book. Packs of documents are often more visually attractive and are certainly more flexible in that items can be distributed for individual or group work. Above all, in today's unstreamed, mixed ability classes, documentary materials can provide that choice and variety necessary to deal with the many different intellectual needs within a single class. The current emphasis on the achievement of educational objectives in the teaching of history, especially those of the cognitive domain, is very similar to the aims of Dr Keatinge. His methods continue although the materials may be different.

Documents can, then, be used to illustrate and explain historical problems, to train pupils in various cognitive abilities and to develop their imaginative powers. Many of the source packs produced commercially are not archive units, whatever they may be called, but consist purely of documents which can be used in the ways outlined above. An example of this type of pack is the first production of the Yorkshire Resource Bank, Waterways,² where an attempt has been made to include at least one document referring to each canal in the county. It is useful illustrative

1. A.D. Edwards, (1972), op.cit., 208.

2. Educational Productions Ltd., Yorkshire Resource Bank No.1, Waterways.

material but does not enable a sequence of events to be followed through as would have been possible with a set of archives dealing with a single canal. Similar in content are the Nottinghamshire Record Office production, A Century of Education 1870-1970, containing 23 documents, and Manchester Public Libraries, Peterloo 1819, containing 20 documents and an introduction to the topic. In each case the source material is attractive and varied, containing maps, drawings, photographs, cartoons, posters and newspaper extracts. The sources are not stated; they are, in professional terms, 'strays', and again their main use is as an illustration of an historical problem.

These are collections of local documents, but there are two important series of collections of national documents which fall into the category being discussed. Most Jackdaws contain documents rather than archives. When they first appeared in 1964, G.R. Batho suggested that they could "be used by the experienced teacher to bring history alive for his pupils."¹ Unfortunately, they are frequently used solely in the first way described above, that of obtaining information, and the factual broadsheets are exploited for this purpose more than the documents themselves.² Many Jackdaws contain documents which, although visually attractive, are incomprehensible to children as they are in a foreign language or are undecipherable. Nevertheless, they are still the most comprehensive collection of national and international documents available to the teacher. More carefully selected, perhaps, are the documents in the History in Evidence³ folders produced by the B.B.C. to accompany a series of broadcasts. These, too, illustrate

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1. G.R. Batho, 'New Dimensions in History Teaching', Visual Education, (April 1964), 9.
 2. See specimen worksheet from a Leicestershire school on The Armada in Appendices.
 3. British Broadcasting Corporation, History in Evidence, 6 folders, e.g. No.5, The New Britain, compiled by Lira Winston.

national themes but all are capable of being used directly by the children. Follow-up work undertaken by the B.B.C. has shown that the folders have been used mainly by 1st to 3rd forms, at which they were aimed, and that a variety of methods of work have been possible. Many teachers used the folders illustratively:

"some simply passed it round during or after the broadcasts, some made wall displays, some placed documents in polythene wallets and others copied them for multiple distribution or made overhead projector transparencies".¹

Other teachers used the material as a basis for project work, providing workcards or assignment sheets "to provide structure and to ensure efficient circulation of the evidence".² The History in Evidence series³ has made available a collection of vivid and exciting material which provides an ideal example of the potential value of documents in the classroom.

Using Archives

Individual items in a collection of related documents or archive pack can often be used in the ways described above. The pack as a whole, however, has the additional function of enabling the user to understand something of the nature of evidence and the writing of history in addition to the historical information with which the documents are concerned. The latter is obviously important in two respects; the pupil is interested not in the technique of abstracting information from a document but in the information itself, and the syllabuses of most secondary schools require him to demonstrate knowledge as well as

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1. Personal information from Alan Ereira, producer of the History in Evidence folders and programmes, 1973.
 2. ibid.
 3. A new series of broadcasts is planned for 1976-1977 on the themes of Landscape, Seascape and City Skyline with pamphlets replacing the original folders. The pupil's pamphlet will include "organised pieces of historical evidence which may be used for individual and group work in the classroom." (publicity leaflet)

skills and abilities. Nevertheless, most pupils gain more, both in interest and the amount of information remembered, by following a sequence of events through a series of documents and constructing their own historical narrative. By doing this, they can discover for themselves the interrelations of cause and effect and the variations in the reliability of evidence. They will have to compare and contrast pieces of evidence and consider different viewpoints in constructing their narrative. Finally, the older pupils at any rate can be led to see that history has not been written once and for all, but that variations in the interpretation of evidence are possible. An archivist wrote concerning the use of archive material by post 'O' level pupils:-

"It ought in some degree to disabuse them of the notion that the facts of history are solid, indisputable pieces of knowledge which only have to be learnt. It ought to suggest that 'facts' are build up by the historian from the documentary evidence available to him, and that subsequent discoveries may modify or even abolish the artificial unit of 'fact' so created."¹

This raises once again the suitability of archive material for the younger age group. It has already been suggested that single dramatic documents are perhaps more useful for younger children in that they stimulate the imagination rather than demand elements of formal reasoning as indicated above. Nevertheless, perhaps younger children can also be introduced to the nature of evidence by the selection of material related to their own experience or to a visual image, such as a building, to which they can relate the written word. As Bruner suggested the suitability of material is the key factor.

How should an archive pack be constructed in order to achieve the aims described? The first important consideration is the choice of topic in relation to the age and ability range with which the unit is to be used.

1. M.C. Hill, 'County Archives and Local Education in Schools', Educational Review, v, No.1, (November 1952), 26.

For the younger age group, the family and the home would seem suitable topics. Much has been written about Family History¹ but no unit has yet been compiled on this topic, perhaps because most children endeavour to research into the history of their own families. There are, however, serious limitations here where family archives have been destroyed or do not exist, as in many immigrant families.² Mr Murphy warns of the dangers of 'skeletons in the cupboard' and suggests that children not able to research into their own families should study an important local family.³ It might be useful to have a general unit showing the types of documents which a family might be expected to have, which could be used as a lead in and a guide for individual research, and local units presenting these documents for a particular family for children not able to work on their own personal documents.

There is no extant example of the first type of pack, although some local packs do provide examples of inventories which can be used to discover the home life of the sixteenth to nineteenth centuries.⁴ Inventories often present problems of palaeography. The Worcester College of Education Unit, Powick Inventories and Rural Life in Worcestershire 1677-1755⁵, attempts to solve the problem by concentrating mainly on transcribed material, much of it in extract form, with a few facsimiles to show what an inventory looked like. The Borthwick Institute of Historical Research has produced a pack of various probate documents

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1. See D. Steel & L. Taylor, Family History in Schools, (1973), op.cit., and footnote 1, page 24.
 2. I have worked successfully with students on family history in schools in good residential areas, but it proved impossible in the immigrant areas of Loughborough.
 3. B.J. Murphy, 'History through the Family I', (1971), op.cit., 4.
 4. e.g. Surrey Record Office, Inventories 1500-1700 and Inventories 1700-1900; Wiltshire Education Department, Homes in the Seventeenth Century; Northampton Record Office, A Woman's Work: Housekeeping in Northamptonshire 1600-1900. (see list of contents of latter in Appendices.)
 5. Worcester College of Education, Powick Inventories and Rural Life in Worcestershire 1677-1755. Work Unit 1, compiled by J.A. Johnston.

in which the documents are listed in order of difficulty and suggestions made for reading them, although transcripts are provided.¹

Equally little attention has been given to documentary collections of local families, despite the wealth of material of this kind in most County Record Offices. These packs could also be used as a means of teaching social history not only in the primary school but also in secondary schools, particularly for C.S.E. and 'O' Level candidates who often study this topic. One example is the excellent Liverpool unit on Speke Hall², in which the study of the Norris family is related directly to the house in which they lived, so providing the visual link so necessary for the younger age group. A similar idea has been explored by a teacher in a preparatory school housed in what was once the home of the Nevills of Holt in Leicestershire. The boys have related documentary evidence such as letters and sales catalogues to the fabric of the building and the records of Parliamentary enclosure to the estate around the school.³ A suggestion as to how this information could be incorporated into an archive unit is included in the Appendices, but since users of the unit would not be able to visit the building it would not make such an impact as the Speke Hall Unit.

The relationship between documents and physical evidence can be explored in other ways than family records and stately homes. Joan Blyth has described how primary school children studied the Liverpool-Prescot-Warrington turnpike road using an archive unit available on loan and relating it to milestones, public houses and other visible remains

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1. York University, Borthwick Institute of Historical Research, Borthwick Wallet No.4, Sixteenth and Seventeenth Century Wills, Inventories and other Probate Documents (see specimen sheet in Appendices)
 2. Liverpool Teachers' Archive Study Group, A Tudor House; Speke Hall and the Norris Family 1500-1700. edited by M.Cook and J.E. Blyth, 1970.
 3. Personal information from Roger Willson, Nevill Holt School, Leicestershire.

of the turnpike era along the road.¹ The use of physical remains as the focal point of a collection of archives would seem a valuable one for the younger age group and could be followed up using buildings available for public access like Cusworth Hall, Doncaster; Wollaton Hall, Nottingham, and Newarke Houses, Leicester. Such archive collections would enable useful follow up work to be done after visits to these buildings in which children could relate the written to the visual evidence and so become more convinced of the reality of the former.

At secondary school level, choice of a topic for archive work is more likely to be dictated by consideration of the syllabus rather than the availability of additional physical evidence, and the lists of archive units reflect this tendency.² A useful criterion might be the collection of archives for a topic well represented locally which has national significance.³ Particular examples are the Nottingham University pack on Laxton, which demonstrates the organisation of the sole surviving open field village in England⁴; the Liverpool Unit on the Slave Trade and the Bristol unit on the Sugar Trade⁵, topics of national significance but of particular interest to children in the two cities once greatly concerned with these trades. G. Batho has also stressed that the topic chosen should be in the nature of an historical problem requiring investigation⁶ and also that it should be limited in scope.⁷ Topics

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1. J.E. Blyth, 'Archives and Source Material in the Junior School', (1969), op.cit.
 2. See R.G.E. Wood, 'Archive Units for Teaching, Part 2', (1972), op.cit.
 3. G. Batho, 'Archive Teaching Units: the Progress of an Experiment in History Teaching', Visual Education, (December 1958), 8.
 4. Nottingham University Department of Manuscripts, Laxton: Life in an Open Field Village, Archive Teaching Unit No.4.
 5. Liverpool Teachers' Archive Study Group, Liverpool and the Slave Trade, (A revised version entitled Liverpool Slave Trade is in preparation), Bristol Branch of the Historical Association, History Pack No.2, The Sugar Trade in the Eighteenth Century.
 6. G. Jones, (1970), op.cit., 62, echoes the point made by Batho.
 7. G. Batho, (1958), op.cit., 8.

such as "Transport" could lead to generalisations about the national scene based on the local area without due consideration of local modifications. The titles of most of the Sheffield Archive Teaching Units reflect Batho's criteria.¹

A second characteristic of an archive pack is well expressed by John West:-

"The Archive Teaching Unit should be at one and the same time as self-contained as possible, but capable also of expansion and continuation by personal investigation to libraries, museums and archives outside the classroom. In case we cannot get away from the classroom, the Unit should aim to provide all the material we are likely to need. If we can make excursions, the Unit should encourage us to go and lead in the right direction."²

A similar view was put forward by G. Batho concerning the compilation of the first Sheffield Units in 1956:-

"The primary object of the Units were to motivate rather than to inform the pupils, to help them gain an understanding of the period studied, to stimulate them to ask questions of their teachers and to seek further information themselves."³

Many published units include book lists, and some supplementary material seems desirable if only to vary the type of evidence on which

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1. Sheffield University Institute of Education, Teaching Units for History, 1956-1960.
 - I. The Yorkshire Election of 1807.
 - II. The Sheffield-Wakefield Turnpike Road.
 - III. Apprenticeship in the Cutlery Industry in Hallamshire.
 - IV. An Eighteenth Century Charity School.
 - VI. Parliamentary Enclosures - A Study of the Sheffield Act of 1791.
 - VII Ebenezer Elliot the Corn Law Rhymer (1781-1849).
 - IX Mary Queen of Scots in Captivity.
 2. J. West, 'Archives in Schools', op.cit., 8.
 3. G. Batho, (1958), op.cit., 8.

the children are working. But as R. Wood has pointed out,

"If the supplementary materials become too vital a part of the Unit, then not only do they inhibit the freedom of the user but they may actually involve him in far more work than if he devised his own in the first place."¹

The information given in generalised commercial packs such as the Macmillan and Longmans series² is often too sparse for an adequate answer to the questions on the assignment cards to be given without recourse to additional material, and so the teacher has to ensure a supply of books for his pupils as well as purchasing the initial units. This may be desirable in itself, but it does present problems of cost and organisation for the teacher.

A corollary of the requirement that archive collections should "motivate rather than inform" might be that the place of origin should be clearly stated on all the records it contains. This is occasionally done in broadsheets or in the teachers' notes, but it is important that the children themselves should know the source of the material they are studying. This should both help to convince them that it is real material on which they are working and not a novel form of textbook, and also motivate some to follow up their studies at the source of the document. The Essex Record Office include in their packs notice of a transcript service through which extra teaching or discovery material can be provided.³ The Gloucestershire Record Office take pains to inform the teacher (but not the pupil) of the whereabouts of the original and

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1. R. Wood, 'Archive Units for Teaching: Part III', (1973), *op.cit.*, 43.
 2. Macmillan, Exploring History, e.g. Houses and Homes, The Industrial Revolution, Transport, Nelson's Navy, Victorian Britain, Longmans, History Project Kits, e.g. Roman Britain, The Norman Realm. More comprehensive, and more source-orientated, are the Longmans Secondary History Packs, Social Problems arising from the Industrial Revolution, e.g. Pack 7, Urbanisation.
 3. Essex County Record Office, Seax Teaching Portfolios, e.g. No.2, Essex Towns 1540-1640, compiled by N. Rowley, 1970.

how extra facsimiles can be obtained.¹ The editors of the Newcastle Series of Archive Teaching Units express their hope that:-

"It may be that they (the pupils) will be encouraged through their introduction to documentary sources to pursue more deeply their own independent investigations at the Record Office or libraries where a rich wealth of material awaits them."²

The University of Nottingham Manuscripts Department indicate further sources that are available for consultation.³ The County Archivist for East Sussex has taken this one stage further by producing a Unit which illustrates the range of contents of the average County Record Office and suggesting how each type of documents could be used, thus encouraging teachers to take their pupils into the Record Office itself.⁴ A description of the work of a County Record Office is included for the pupils.⁵

The third and final consideration in the construction of an archive pack is how far it is the responsibility of the compiler and how far that of the teacher to provide structure within the pack. Opinions differ considerably on this point:

"Any teacher worth his salt doesn't need to be told by me what use he can make of a document. Just give him the copy and leave the rest to him."⁶

"It is the responsibility of the teacher to decide which items are appropriate to his particular class."⁷

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1. Gloucestershire Record Office, Sources Illustrating Gloucestershire in National and Local History (SIGNALS), e.g. No.1, The Gloucester Cloth Industry 1700-1840.
 2. Newcastle University Department of Education, Archive Teaching Unit No.1., Coals from Newcastle, Introductory pamphlet.
 3. University of Nottingham Manuscripts Department, Archive Teaching Unit No.4, Laxton: Life in an Open Field Village, Handbook, p.39, see Appendices.
 4. East Sussex County Record Office, Local History Research Unit No.8, Discovering County Records.
 5. Included in the Appendices.
 6. E.P. Lloyd, (1966), op.cit., 51.
 7. G.R. Batho, The Caribou Wagon Road 1858-1868, University of British Columbia, 1964, Introduction.

"The editors say that they are content that the use of the units shall be determined by the ability and enthusiasm of the individual pupil, but a teacher attempting this approach for the first time needs specific guidance in its use."¹

A teacher selecting material for his own use in a County Record Office needs guidance from the archivist in discovering whether a particular topic is worth following up, or what good collections of material are available. He will, however, have some idea of the educational use which the material is to serve. A group preparing a collection of materials for publication or loan to many different schools is in the difficult position of knowing how they would like the material to be used but of not knowing the details of age, ability and organisation at classroom level. They are faced with the choice of providing either a structured pack based on their knowledge of the material or a collection of materials which the teacher must utilise as best he can in the light of his knowledge of his own class. Perhaps the former should be known as an Archive Teaching Unit and the latter as an Archive Pack. This distinction would indicate to the teacher how much of the preparation was his responsibility.

The unstructured Archive Pack usually contains a large amount of material to give the teacher maximum freedom of use. These frequently emanate from County Record Offices because most archivists, as already suggested, feel that the application of source material is within a teacher's professional sphere rather than theirs. Some contain no supplementary materials of any kind and are often primarily designed to enable children to study the local effects of national events.

1. Stella Wilde, review of Coals from Newcastle, Archives, ix, (1965/6), 112.

Examples of this type are the Bristol Association for the Teaching of History Archive Teaching Sets ¹, Caernarvonshire County Record Office Local History Teaching Files ² and Warwickshire County Record Office Archive Teaching Unit No.1, The Manor of Thurlaston before and after Inclosure 1717-1729.

On the other hand, some archive packs contain supplementary material of an historical nature. The Northamptonshire County Record Office publications ³ contain notes pointing out the significance of each document and stating its accession number, enabling follow-up work to be undertaken at the County Record Office. The Gloucestershire SIGNALS include in each pack 20 booklets of documents (25-30 in each) and a separate booklet of teachers' notes, again commenting on each document. The University of Nottingham Manuscripts Department pack, Public Health and Housing in Victorian Nottingham, provides not only background material but also classifies the several printed extracts it contains into sections such as "sewerage", "water", etc. with an introduction to each. The Newcastle Units ⁴ and the first 'Manchester Manuscript', Orphan Annie ⁵, are similar unstructured packs with historical supplementary material produced by bodies other than Record Offices; both also contain suggestions for topic work. ⁶

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1. e.g. Bristol and Slavery, Bristol Topography, The Poor in Bristol.
 2. e.g. Industry in Caernarvon, The Slate Industry.
 3. e.g. Crime and Punishment 1700-1900 and A Woman's Work; Housekeeping in Northamptonshire 1600-1900 (see Appendices).
 4. University of Newcastle Department of Education Archive Teaching Units, e.g. Coals from Newcastle, The Tyne 1800-1850.
 5. Manchester Branch of the Historical Association, Manchester Manuscript I.
 6. See examples from the Newcastle Units in Appendices.

In an Archive Teaching Unit, structure can be imparted either by very careful selection of material whose use is obvious or by the provision of suggestions for use or actual workcards. The choice depends on the amount of material to be included and the experience of the compiler. Examples of the first type are the original Sheffield Units first produced in 1956. Each Unit, as has been seen, concentrated narrowly on a specific historical problem. Included were single copies of several large classroom illustrations and multiple copies of a small number of documents, ranging from six to eleven over the nine units. The amount of material was manageable; a very detailed background book for the teacher was included, and teachers could obtain reference sets prior to borrowing the whole Unit so that a scheme of work could be decided upon. A worksheet for use in the local museum was included in one Unit.¹

The first two Liverpool Units also provided structure by choice of documents rather than the provision of detailed instructions for use. John West, responsible for the group which compiled the first unit on Liverpool and the Slave Trade, made the following suggestion:

"the piecing together of as many complementary sets of archives as possible around a central document which is also our starting point results in an Archive Teaching Unit."²

The Slave Trade unit contained twelve large wall pictures, a central document of several pages (the account book of the slave ship 'Lottery') and six other documents; all but the wall pictures were duplicated in sets of thirty for class use. Also included were supplementary published materials such as Jackdaws and the 'Then and There' book on John Newton and the Slave Trade. These set the Liverpool scene against the national

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1. No.III, Apprenticeship in the Cutlery Industry of Hallamshire.
 2. J. West, Archives in Schools, op.cit., 35.

background. Teachers' Notes and lists of key dates and statistics completed the Unit,¹ but an arrangement was made with the City Museum to circulate "a gruesome set of shackles, chains and neck-irons which were handled and tried on by schoolchildren."²

The second Unit on The Liverpool-Prescot-Warrington Turnpike Road³ was structured into seven sub-topics, the documents being of uniform foolscap size all stapled or folded within one cover. This was a more manageable format both for the children and for the group who prepared the Unit, since each person had charge of one folder.

The third of the Liverpool Units, A Tudor House; Speke Hall and the Norris Family 1500-1700³, was still of manageable proportions, having the Norris family and their home as a central theme. It included nine photographs, six plans, two maps and eleven documents with six transcripts. However, the compilers did on this occasion see fit to include not only introductory notes, a reading list and glossary, but also notes on the use of the Unit, on model making, brass rubbing and heraldry and fifteen worksheets for use with pupils aged 9-13⁴. Possibly the uniqueness of the Unit in being related to a specific building made such assistance desirable. Only three other local Archive Teaching Units contain actual workcards⁵, but they are a feature

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1. Available on loan to schools from Gilmour Development Centre, Duncome Road North, Liverpool 19.
 2. J. West, Archives in Schools, op.cit., 24.
 3. Available from Parry Books Ltd., 49 Hardman Street, Liverpool.
 4. See examples in Appendices. (Note that the questions are intended to aid the discovery of fact from the documents.)
 5. Bedfordshire County Record Office and College of Education History Department, Archive Teaching Unit No.1, The Old Poor Law (Work programmes for pupils aged 13+)
Keele University Institute and Department of Education, Thomas Telford, (work cards).
Manchester Branch of the Historical Association, The Princes of Loom Street; a Cotton Spinner's Family, (6 research cards), (Examples in Appendices).

of commercial publications.¹ Many Units do, however, include explanatory notes on the documents themselves and suggestions for use², and nearly all include some background notes on the topic for either teacher or pupil.

The type of supplementary material included in an Archive Teaching Unit largely depends on the experience of the compiler. An archivist may only feel justified in providing explanatory notes showing why he has chosen those particular documents. This is of value to the teacher who, understanding the reasons for the choice, may be better able to make use of the Unit. A teachers' group may, on the other hand, feel justified in compiling a list of suggestions for use in the classroom or even work-cards. The teacher using the Unit is, of course, under no obligation to use the workcards but they may assist him to devise his own work scheme. This suggestions was made by the compiler of the Princes of Loom Street:

"no more than six research cards have been devised, not because these schemes of work are the only ones, but because six is considered the minimum number required to occupy a class of 36 pupils working in six groups. Any number of research cards is possible and it is hoped that the teacher will use the six printed ones merely as a guide to future schemes".³

The technique of providing research cards which cover topics rather than specific documents is perhaps a useful one since it enables the teacher to organise group work and so to make the maximum use of the limited amount of material available.

The growth of the County Record Offices, together with an increased interest in local history and the formation of numerous teachers' groups concerned with curriculum reform has, then, led to a rapid development

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1. e.g. of Macmillan Exploring History series.
 2. e.g. Essex Record Office, Seax Teaching Portfolios
Hertfordshire County Record Office, Hertfordshire Sources.
Sheffield City Libraries, The Sheffield Canal.
 3. Manchester Historical Association, Princes of Loom Street, Handbook, 5.

in the use of source material in schools. The Historical Association journal, Teaching History, is endeavouring to keep teachers informed of output.¹ It would be helpful if the published lists could indicate the different types of source pack to assist teachers in planning courses. It would be valuable to know if the packs contained a collection of documents of the Jackdaw type whose use was largely as stimulus or illustrative material, or whether the contents were archives from the use of which children could be helped to understand the nature of historical evidence. An indication of the structure and supplementary material included would inform teachers how much preliminary research they needed to do themselves. R.G. Wood's first article² is most satisfactory in this respect, but only deals with examples; his classified list³ deals with periods and topics for which material is available but does not differentiate between various types of source collections. The distinction between documentary collections, Archive Packs and Archive Teaching Units would be useful in this instance.

Other Resource Packs Available to History Teachers

Not to be confused with the source collections outlined above are the published 'history kits' now available. The source method, although it may use some common techniques, is distinct from the discovery method as practised in individual and group projectwork. The latter must utilise a wide variety of sources which may include documents but can also involve the use of books, tapes, filmstrips, pictures, cartoons and so so. Unfortunately, some publishers have climbed on

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1. R.G.E. Wood, 'Archive Units for Teaching Part III - Some Recent Units and Addenda to Parts I and II', Teaching History, iii, No.9, (May 1973), 46, makes a plea for information to help keep the lists up to date.
 2. R.G.E. Wood, 'Archive Units for Teaching Part I - Alphabetical List of Record Offices and other Bodies Producing Archive Units', Teaching History, ii, No.6, (November 1971), 158-165.
 3. R.G.E. Wood, 'Archive Units for Teaching Part II - List of Titles of Archive Units, Classified by Subject', Teaching History, ii, No.7, (May 1972), 218-227.

the bandwagon of the source method and have produced materials pur-
porting to be for this which are in reality more suited to general project
work. An example is the Macmillan Exploring History series. The pub-
lishers hope that these are:

"designed to bring source materials into the classroom ... The major purpose of the kits is to introduce pupils to documents and pictures that illustrate the topic, period or event they are studying. It is hoped that by handling these materials the children will come into contact with the everyday activities of the past and will gain a deeper understanding of history."¹

The pack Houses and Homes covers the period from the Iron Age to the twentieth century and is presumably intended for use with a "lines of development" syllabus. It contains 45 source cards, only two of which are documents. Both of these are completely unreadable by the age group for whom they are intended, but transcripts are provided and the location of the documents is stated. The other cards are all diagrams and pictures, many of them not from contemporary sources. Each assignment card contains some information, therefore acting as a secondary source, and five or six questions which can be answered both from the secondary material and from the source cards - but the difference between the two types of information is nowhere stated. None of the questions demand any understanding of the nature of historical evidence, as the publishers seem to hope that they will.² Other packs in the series, for example, The Industrial Revolution³, do contain a higher proportion of source material but would still seem to be a flexible textbook for project work rather than a source collection. The suggested method of work

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1. Macmillan, Exploring History Series, Houses and Homes, compiled by Ruth Brandon.
 2. "Linked to each item of source material is an Assignment Card which suggests ways in which pupils can analyse and interpret these sources.", *ibid.* Teachers' Handbook, 8. (See Appendices for examples of Assignment Cards).
 3. Alan Jamieson, (ed.), The Industrial Revolution, Macmillan Exploring History series.

emphasises this:

"Class teaching can be cut to a minimum. The intention of the kits is to allow children to work in groups, or individually, at their own pace ... The pupil can move on to another topic, exchanging his card for another held by the teacher in a central bank."¹

This is surely project work at its worst!

The teacher needs to decide if his sole desire is to use discovery methods with his pupils. If so, assignment cards of his own devising using a collection of well-written topic books would meet his need and enable him to keep in touch with his class more than in the system described above. If he wishes to apprise his pupils of the nature of historical evidence, as did Dr Keatinge, then archive materials must be carefully chosen and work designed on these to achieve the desired aim and not just that of the collection of information by discovery methods. It has been stressed that in order to do this effectively, the teacher needs himself to be familiar with archives. The need for training teachers in their use has already been discussed, and perhaps more than this is necessary if the teacher is to work with his class towards the discovery of historical truth:

"Every teacher of history must be a historian, in the sense that his study of the subject continues at the practical level where source material confronts him posing problems and requiring interpretation. In this sense the teacher is actively practising what he teaches, asking of himself the questions he asks in class of his pupils".²

This is a very different picture of the role of the teacher in the source method than that of the controller of the assignment card bank described earlier. It is also a far more demanding one.

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1. Ruth Brandon, (ed.), Houses and Homes, Teacher's Handbook, 9.
 2. K. Charlton, 'Source Materials and the Teaching of History', Educational Review, ix, No.1, (November 1956), 61.

Problems in Using Archives in Schools

The use of documents in the classroom is a relatively straightforward process. In many cases they are read aloud by the teacher, difficult words and technical terms explained and the pupil's attention drawn to their significance. Since, as has been suggested, most single documents chosen for use in the classroom are by their very nature exciting or historically important, it does not usually prove too difficult to set cognitive or imaginative exercises on them, although training pupils to criticise them as historical evidence is a more exacting task. A collection of archives which is to be put directly into the children's hands presents the teacher with considerable more organisational problems. The research described in this thesis was concerned largely with archives rather than with documents, and this section seeks to outline some of the problems which the research programme was designed to illuminate.

These problems can be assigned to four main areas. The first group concern the selection of material to be used; the second include problems such as that of palaeography which are associated with the material itself; the third area is that of the organisation of classroom work, while the fourth is concerned with the educational outcomes of that work.

The first problem, then, is the selection of material to be used in the classroom. If the children are genuinely to experience the methods of the historian, then logically they ought to select the material for themselves. This would have the obvious advantages of novelty, of the continuous use of fresh material and of allowing children to follow up a topic of their own choice. G.A. Chinnery has stressed that children

would rather work on the history of their own house than that of someone else¹, and the author also found this to be true when working with top juniors in an effort to trace back the occupants of a street over the last hundred years.² On the other hand, local libraries and Record Offices rarely have adequate space to cope with large numbers of schoolchildren and, if they do, the children require considerable assistance with bibliographies and indexes. The problem can be partly solved by copying standard local records on to microfiche cards³ which can then be used in as many schools within the county as require them by means of a relatively inexpensive reading machine. We have come a long way from the days described by W.E. Tate when manual transcription was the only method open to a teacher wishing to use parish records with her class.⁴

Many teachers, bound both by the desire of their classes for 'relevance' and by the limitations of their syllabuses, prefer to concentrate on national and international rather than local issues. Where local material is used it is intended to illustrate a national theme. If the teacher himself gathers materials from the Record Office, the problems of selection are not so acute as he has a clear idea of how the material is to be used and selects it accordingly. But an archivist suggested that:

"It is no good leaving local history to the teachers: most of them are as much in the dark as their pupils and haven't the resources of a record office with which to find their way; and they are all desperately short of spare time."⁵

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1. G.A. Chinnery, Studying Urban History in Schools, (1971), op.cit.
 2. M. Palmer, 'A Town Street', Bulletin of the Society for Environmental Education, viii, i, (June 1976), 6-8,
 3. e.g. R.P.A. Edwards, Leicestershire Towns and Villages 1700-1900, Oxford Microfilm Publications. This is described in R.P.A. Edwards, Resources in Schools, Evans, 1973. See also Section FB, Individual Towns, in R.G.E. Wood (May 1972), op.cit., 221 for published collections of Directory material.
 4. W.E. Tate, 'The Use of Archives in Education', Archives, i, (1949), 24.
 5. H.A. Taylor, 'Local History: an Experiment with Slides and Tapes', Archives, v, No.27, (1962), 142.

The point of the familiarity of teachers with archive collections has already been discussed, and one must concede that Mr Taylor may be right in many cases. The question of how much time teachers can spend in the Record Office is one that requires investigation. Many teachers will, however, fall back on the archive packs and teaching units described in the earlier part of this chapter and it is therefore on the compilers of these rather than on the teacher that the onus of selection falls. Many compilers are archivists rather than practising teachers and therefore select documents for their historical significance rather than their educational potential. They need to know if teachers find this a problem, and therefore whether it is better for someone with educational experience to be involved in the construction of archive packs. What criteria do teachers think are important in the selection of archives for classroom use? Do they need to know why the particular records in a pack were chosen, or is it sufficient for them to be, as E.P. Lloyd said, given the copies and left to work on these themselves?¹ How far would teachers appreciate some sort of structure in a pack? Do they in fact prefer the more flexible but unstructured archive pack to the more closely delineated archive teaching unit? These are some of the questions concerning the selection of records which need to be answered by practising teachers.

The second problem area is the physical nature of the archive pack and its contents. The format of much archive material is not as stimulating as documents like cartoons and contemporary drawings. This raises several issues. In the first place, how far do children realise

1. See page 121.

that the photocopies or typewritten extracts on which they are working are original source materials and not a novel type of textbook? Secondly, many archives are of a technical nature which children may well find daunting. Does the compiler of an archive pack need to simplify these, or select extracts from them, rather than present children with an unadulterated original archive? If simplification is necessary, it is obviously difficult to include a facsimile in the pack; either a fabricated document¹ or a printed extract must be substituted. Is the appearance of source material important in convincing children of its reality? This raises the third issue, that of palaeography. G.R. Batho suggested in his review of the original Jackdaws that students should have the opportunity of puzzling out lesser palaeographic difficulties for themselves as an integral part of the intellectual satisfaction of studying history from sources.² On the other hand, he criticised the inclusion of a facsimile of an extract from Pepys' Diary in its original shorthand form:

"this is an instance where the difficulties of deciphering outweigh the advantages of close examination of the original."³

The compiler of an archive pack has to decide when this point is reached. He needs to know at what stage children tire of puzzling out the intricacies of an original manuscript and would be better working from a transcript, and whether children realise that the latter is also an original source.

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1. These have been produced very successfully for the B.B.C. History in Evidence series, e.g. 'The Act of Union of the Two Kingdoms of England and Scotland' in The New Britain, where the spelling is modernised and the type easy to read, but the document looks authentic.
 2. G.R. Batho, 'New Dimensions in History Teaching', Visual Education, (April 1964), 7.
 3. *ibid.*

The physical nature of an archive pack or teaching unit is also important to the teacher, who has to distribute and collect in again a large number of loose sheets of paper. Do teachers prefer bound volumes like the History at Source series¹? In archive packs or teaching units, do they prefer the materials to be stapled together or put in plastic envelopes in sets, or left loose for maximum flexibility of use? The compiler needs to know what form of archive pack is most manageable in the classroom.

The third set of problems arise once the material has been collected together or purchased as a set, and the teacher sets about devising work on it for his class. From the compiler's point of view, it would be useful to know if teachers value suggestions for class work included in the pack or regard these as an implied criticism of their professional judgement. If they do value such suggestions, it would be useful to know what form these could best take. The teacher himself needs to be aware of what he can expect his pupils to gain from using that material. Should he work through the material with them or are they better left to handle it on their own? If he chooses the latter course, should he seek to structure the interpretation they put on the materials or should his pupils be left to make their own judgements? At what age can they be expected to ask their own questions of the evidence and not need specific guidance from the teacher? If he does seek to guide them through the materials, on what criteria should the exercises be based? Should he set specific worksheets or generalised questions to allow more open-ended work? Some source collections, as has been seen, answer some of

1. Evans Bros. Ltd., History at Source, General Editor J.M. Thomas, e.g. History at Source No.3: Law and Order 1725-1886 comp. R. Wood, (1970).

these questions for the teacher: in most cases he is left to make the decisions himself.

The final problem area concerns the educational outcomes of the use of archives in the classroom. How far can the use of pre-selected material encourage "historical research in the classroom?"¹ A review of archive teaching units was highly critical of this possibility:

"to compare the mature work of historical research with the exercises conducted by children from limited and pre-selected material of this kind is the sort of claptrap that brings the scholarship of educationalists into doubt."²

If this is true, how much use can be made of these pre-selected materials to introduce children to the craft of the historian? Is this, in fact, what teachers want their classes to gain by using source materials? Are they more interested in using them to discover facts for themselves or to train them in certain cognitive abilities or in the use of their imagination? Do the children themselves like using archives? If so, what do they feel they gain from using them? If they dislike source material, what alternative forms of teaching do they prefer and why? It must be stressed, as Mr Edwards has pointed out, that the source method is not the panacea for all the ills of history teaching.³ What needs to be determined is firstly on what occasions the source method is appropriate and secondly how its use on these occasions can be conducted for the maximum benefit of both teacher and class.

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1. Introduction to Coals from Newcastle, an Archive Teaching Unit (or pack?) produced by the University of Newcastle Department of Education, ed. J.C. Tyson and L. Turnbull.
 2. W.B. Stephens, review of Newcastle Archive Teaching Units Nos 1, 2 and 3 (including Coals from Newcastle), Archives, iv, No.1, (April 1970), 84.
 3. A.D. Edwards, (1972), op.cit., 206.

CHAPTER 4

PILOT TRIALS AND THE CONSTRUCTION OF THE ARCHIVE

TEACHING UNIT, "FARMING IN LEICESTERSHIRE"

The origins of the research described in this thesis stem from work carried out by the author first as a postgraduate student and then as a practising teacher for the Research Unit for Assessment and Curricular Studies at Leicester University School of Education between 1966 and 1968. The work of this Unit has been fully described by Professors Eggleston and Kerr¹, and it is sufficient here to indicate its relevance to the present research.

The Unit was set up with the help of a grant from the Department of Education and Science to study ways of examining schoolchildren's work other than by conventional written papers in the context of the new Certificate of Secondary Education. Most of the work of the Unit was concerned with science subjects in schools, but it did become involved with a project already started by a small group of secondary school history teachers meeting under the leadership of M.V.J. Seaborne, then Lecturer in History in the School of Education. The group had as its object the study of problems relating to the teaching and examining of history at C.S.E. level and had already begun to consider the possibility of continuous assessment of coursework by teachers replacing the idea of an examination. The discussions of the history group therefore dovetailed into the objectives of the Research Unit, who helped to direct their project and undertook the analysis of results.

The history teachers' group had formulated a list of ten objectives

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1. J. F. Eggleston and J.F. Kerr, Studies in Assessment, English Universities Press, 1969.

which they believed a pupil of 16 might achieve as the result of a secondary school history course. They proposed to test for the attainment of some of these objectives using items devised around extracts from contemporary sources which were to be given unseen to the pupils taking the tests. The reason for the group's choice of original material is not clear; they seem to have felt that on the one hand some of their objectives involved interpretative skills best tested using this type of material and on the other that the testing techniques they devised should help to encourage "the adoption of enlightened teaching methods"¹. As Eggleston and Lobel have pointed out, their decision meant the initiation of an important piece of curriculum development as well as an attempt to devise a new form of assessment.²

The choice of original source materials to test attainment in behavioural objectives, however, created certain difficulties which have also been noticeable in the course of this research. One cannot write an item to test a specific objective; a document has to be chosen for the purpose with the result that the objective itself is often modified to suit the test item. Eggleston and Lobel pointed out that in the history project the normal procedure was reversed, behavioural objectives often being the outcome rather than the starting point of many items. Nevertheless, the attempts to devise test items using original source materials did result in more specific formulations of two objectives in the group's original list, the ability to recall relevant facts and the ability to enter imaginatively into the past. A new objective also emerged which

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1. M.V.J. Seaborne, The Assessment of History at C.S.E. Level, unpublished report, 1965.
 2. J.F. Eggleston and R.F. Lobel, 'Assessing Attainment in History', Study No.2 in Eggleston and Kerr, (1969), op.cit., 81.

was directly related to the nature of the test materials, the ability to make legitimate inferences from evidence. The interplay of source materials and teaching objectives would seem to be an intrinsic element in this kind of curriculum development and probably a valid way of arriving at a list of the intended behavioural outcomes of studying history by the source method.

A pilot run using extracts from twentieth century source materials showed that the abilities referred to above could be used as a basis for test item design¹, and a more extended trial was planned. From the point of view of the Research Unit, this was to ascertain whether continuous assessment by teachers was a valid method of assessment in history in schools. From the point of view of local history teachers, it also gave them an opportunity to teach with original source materials which would afterwards be made permanently available on loan from the School of Education Library. Since the original teachers' group had dispersed, another larger group suggested topics on which they would like to teach using source materials. These were mainly social and economic topics from the eighteenth to the twentieth centuries. The author was able to assemble collections of materials from the Leicester and Leicestershire Record Offices on topics such as Elections, Education, Enclosures, Public Health, Turnpike Roads, Canals and Railways. The collection of records on each topic were Archive Packs rather than Archive Teaching Units in the sense defined in the previous chapter. They were related archives on closely defined subjects which enabled children to follow through a

1. Eggleston and Kerr, (1969), op.cit., 83-93.

sequence of events but they were chosen to enable the specified behavioural objectives to be developed rather than to demonstrate the nature of historical sequence. For example, the series of documents on Election-eering and the Development of the Franchise were carefully chosen to include examples illustrating each enlargement of the franchise during the nineteenth century and therefore to enable children to use inference in working this out for themselves from the materials, gaining at the same time information on which to base factual recall. A list of election expenses incurred by two of the candidates in the Leicester Election of 1761 made an historical point by cataloguing the various canvassing methods used at the time and also enabled children to enter imaginatively into the past by recreating the scene from the wealth of minute detail which the records supplied. The teaching notes which accompanied each Archive Pack pointed out the potential use of each of the sources for the development of the desired abilities rather than its value as historical evidence, although teachers could pursue the latter if they so desired.

Thirteen teachers, including the author, took part in the main trial using these source collections during the Spring Term of 1967. The results did not entirely prove the validity of continuous assessment by teachers of history in schools¹, but a valuable by-product was the enthusiasm of both the participating teachers and their pupils for the use of original materials:

"There seemed to be a general consensus of opinion that the use of documents had added a new dimension to their teaching which had interest and potential value."²

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1. Eggleston and Kerr, (1969), op.cit., 112-117.
 2. ibid. 97.

Unfortunately, this pool of local interest in the source method was not long maintained as many of the participating teachers soon left the area. In addition, the necessary follow-up work of the Research Unit meant that the source collections were not made available in the School of Education Library for a considerable time, and Leicestershire then had no other collections of local material ¹ which history teachers could have utilised. It seemed essential to remedy this situation before the new-found interest waned, and work was begun with a group of history teachers meeting in Loughborough College of Education. The construction of an Archive Pack by a group of practising teachers is, in theory, an ideal method of production, but in practice often makes impossible demands on their already overcrowded timetables. It was not until 1970 that Law and Order in Leicestershire in the Nineteenth Century was finally produced.

A small group of about eight teachers originally expressed interest in the project, but the actual production was undertaken by the author and a teacher from the local grammar school who were both fortunate enough to have a free afternoon a week on which to visit the County Record Office. This was impossible for other members of the group unless work were confined to the holidays. The topic of "Education" was initially suggested by the group, but it proved difficult to find enough suitable linked documents for an Archive Pack on this topic. Guided by the Deputy County Archivist, who knew of some recently catalogued records, the topic of law and order in Leicestershire in the nineteenth century was adopted with the consent of the rest of the group. Experience showed that the advice of the archivist was essential in selecting a suitable topic.

1. The unit, Leicestershire Railways, by R.P.A. Edwards, was in preparation.

The process of selecting the materials was split between the two compilers so that visits to the County Record Office could be made separately as time permitted. The author took the section on the police force and her colleague that on prisons. The compilers attempted to select records which provided local examples of an event important in national history and enabled the sequence of that event to be followed through at the local level. Care was also taken to select materials which supplied interesting detail not met with in textbooks, such as the clothing issued to a new police recruit and the diet of prisoners in Leicester Gaol. The three abilities that the Research Unit for Assessment and Curricular Studies had already shown to be capable of development by the use of documents, factual recall, inference and historical imagination, were also borne in mind. Documents were chosen which, for instance, mentioned the Act of 1839 which empowered local authorities to set up police forces, or enabled children to use inference to see why the police abandoned their original top hat for a helmet, or helped them to imagine the problems of a constable sent to apprehend a prisoner on the other side of the county in the days before motor cars.

The archives finally chosen for the police section fell into three sections, law and order before the Municipal Corporations Act of 1835, the creation of the borough and county police forces and the life and work of a constable. The division of the prison records was similar; the work of John Howard and prison reform before 1823, prison reform 1823-1877 and life inside a prison. Most of the materials came from the Leicester City and County Record Offices and were archives which had "accrued naturally in the course of business"¹ rather than single documents. Specimens of

1. E.H. Sargeant, 'The County Record Office - What it is and what it has', (1952), op.cit., and see page 103.

the latter in the form of photographs and a recruiting poster for the Police Force were added for illustrative purposes, and these too could be used to stimulate cognitive development and the use of the historical imagination.

Specimens of the materials were presented to the rest of the group and discussed. It was decided to produce broadsheets giving sufficient background information to enable children to see the significance of each of the sources while avoiding telling them so much that the freshness of the document as a source of information was spoilt. Suggestions for the use of the materials, for follow up work, specimen question sheets and a booklist were also to be included. The group felt that since so many history teachers, especially in Leicestershire High Schools, were not history specialists, they would welcome the assistance of worksheets. The intention was, in fact, to produce an Archive Teaching Unit in which the compilers used their knowledge of the documents to assist teachers in preparing their own schemes of work. Use of the worksheets was, of course, entirely optional.

Meanwhile, various sources of finance for the production of the Unit had been tried and it had proved necessary to accept the offer of the County Education Committee that it should be produced by the Curriculum Resources Development Project recently set up at Thurmaston.¹ While fully appreciative of the assistance and ability in reprographics of the Project Team, two major problems resulted. In the first place, the Unit could only be produced for loan and not for sale to schools with the resultant complications of assigning a loan period to schools and arranging

1. E. Garnett, Area Resources Centre - an Experiment, Arnold, 1972.

collection and delivery. Secondly, the compilers of the Unit were obliged to conform to the outlook of the Project team, who were very resistant to the idea of dictating work schemes to teachers by the provision of question sheets. These had to be abandoned and a Teacher's Book produced instead which included background notes, a booklist and a description of each of the sources pointing out its significance so that teachers could see why it had been chosen and structure work on it accordingly. This really meant translating the questions already compiled into suggestions for the teacher and so avoiding the appearance of dictation of methods of work. The preface to the Teacher's Book pointed this out:

"We have tried in this Teacher's Book to provide relevant background information and to point out the potential use of each document while leaving it to teachers to utilise the documents as best suits the needs of their pupils. We would like to point out, however, that we chose the documents partly on the basis of legibility but more that each one illustrated a particular point in the history of law and order at this period which we hoped the children could find out for themselves. While obviously realising that each teacher knows his own class far better than we do, we would hope that by the use of workcards the children would be encouraged to use the documents as a mine of information rather than as illustrations."¹

In its final form, then, Law and Order in Leicestershire was an Archive Pack in which teachers were left to utilise the material as best they could, although the selection of the materials provided some inbuilt structure.

The Curriculum Resources Development Project produced 32 folders each containing 15 xeroxed documents and four beautifully produced photographs mounted on stiff black card. Three photocopied sources were too large to be included in the folder and were packed separately in a cardboard tube. This was later abandoned as the photocopies were spoilt by being rammed down the tube and they were trimmed to fit in the folder.

1. Introduction to the Teacher's Book, Law and Order in Leicestershire in C19.

Another fault of the Unit was that the sources were not clearly numbered and so it was difficult to relate them to the relevant teaching notes. This, too, was remedied after a trial run in the schools. One hundred Teacher's Books were produced and sent out to schools to advertise the Unit and a list of schools asking for the full Unit was compiled for loan purposes. This was not an easy task since the schools, usually following some form of syllabus, wanted the Unit at specific times of the year and requests often clashed. Thurmaston undertook all collection and delivery, but the author visited many of the schools using the Unit to observe children working on it and to persuade teachers to fill in a questionnaire. The following is based on information gathered in eight schools, three Upper Schools, three High Schools and two secondary modern schools, one boys' and one girls', in the city and county of Leicester.

The Unit was, on the whole, used with pupils aged 13-15. In one High School it was used with success by pupils aged 12. Few pupils over 15 used it, and of the older children most were those classified as the less academic who were not preparing for public examinations.¹ One exception was a fourth year 'O' Level class who used the Unit as resource material for work on nineteenth century social and economic history after they had finished their end of term examinations. At that time, the pressure of examination syllabuses prevented the more able pupils of an age where cognitive development would perhaps have enabled them to derive most from the use of original sources from being able to spend adequate time on such a method of learning.

With the exception noted above, the Unit was used as the basis for project work. In one case, the teacher considered the materials too difficult for her class to grasp unaided and read them together with her

1. These trials were carried out before ROSLA and so most pupils over 15 were engaged on examination syllabuses.

pupils, who then referred to them when working on individual assignments. Three schools used the Unit as part of a larger Humanities project on law and order, linking it with work done on the twentieth century police force which included visits from the Leicestershire and Rutland Constabulary and a visit to the Guildhall where the old borough force was once stationed. The other two schools used it as a project in its own right, the teachers designing workcards based on suggestions in the Teacher's Book and allowing groups to work directly with the materials using these workcards. The 'O' Level group also used workcards which were designed to make them elicit information for examination purposes from the materials rather than to use their powers of inference and imagination. This group also made extensive use of topic books and of the background notes in the Teacher's Book.

The ability to read the archives varied considerably, and it was not always the least able who had the most difficulty. Four teachers said that their classes could not read all the materials, and one added that children with English as a second language needed a little help. The other four indicated that their classes could read them. One of the latter taught a class in the lowest stream of the fourth year who made great efforts to transcribe the records before working on them. On the other hand, the 'O' Level group disliked having to decipher difficult handwriting in order to derive information necessary to answer the questions on their workcards. The difference would seem to be one of attitude rather than ability; the slower group were willing to spend time and trouble reading the sources, regarding it as a challenge; the brighter group resented the time taken in eliciting information more quickly arrived at from their textbooks. A similar difference in attitude was noted by

Miss C.A. Howard, one of the compilers of the Cambridgeshire Archive Teaching Unit, Riot and be Hanged. She found that two of her brighter pupils lagged behind others they had previously beaten, and disliked the need for selection involved in using documents. They could no longer rely on their greater speed of delivery to carry them through.¹

In every case the children, on the whole, enjoyed using the pack although the 'O' Level group expressed the reservations noted above. The reasons for their enjoyment varied; they appreciated using authentic records of their own area; events became more real to them; they liked the details not available in textbooks - one teacher wrote that her pupils were horrified by the penalties prescribed for offenders and by police pay. They also liked the variety of materials as opposed to the stereotyped form of a textbook. It was noticeable that the archives and photographs were handled carefully and that few were marked or lost.

The teachers had a variety of answers to the question, "What do you want children to gain from using original sources?" Only two teachers mentioned the actual experience of handling authentic archives. Two others regarded them as an interesting form of resource material useful for the stimulus of creative writing or drawing. Some mentioned that value of local material which encouraged children to discuss their work with their families and neighbours. As one teacher wrote, "they have taken their interest out of the classroom, which is what I always want." Only two teachers said that they used the materials largely as sources of information. Local detail stimulating interest and imagination was perhaps seen as the chief value of the Unit.

The teachers were asked whether they would have appreciated more suggestions for the use of the Unit. Four said no, four yes; of the

1. C.A. Howard, 'The Ely and Littleport Riots, 1817 - An Archive Teaching Unit', Cambridge Institute of Education Bulletin, iii, No.9, (July 1969), 8.

latter, one wrote "very much so" and another pointed out that many teachers probably felt as she did when opening a Jackdaw, that she did not know where to start. She added that clear numbering of the documents and stapling some together would help teachers to sort the Unit out. Several teachers said that they needed the Unit more in advance of beginning their project in order to devise schemes of work and project cards. This would have been easier had the Unit been on sale to schools: the loan system made advance delivery difficult.

Eight Units and four Teacher's Books were issued to each school. Most teachers found the provision inadequate unless backed up by collections of books. One would have appreciated more illustrative material in the packs, a wish probably shared by many of the teachers since the Unit was largely used with younger pupils or the less able. Most would also have liked simplified background material available for the children as well as the teacher, although some teachers did make their own background sheets based on information in the Teacher's Book. Inevitably, the comments about the adequacy of the Unit really reflected how much extra work the teachers themselves were prepared to undertake.

In the first experiment with resource materials run in conjunction with the Research Unit for Assessment and Curricular Studies, the abilities to be tested had been defined by a group of practising teachers but the ways in which the sources could be used were restricted by the nature of the experiment. The Law and Order in Leicestershire Unit, in its final form, was loaned to teachers to use exactly as they wished and therefore observations in the classroom revealed more fully the potentialities of the source method with children. It was clear that even, or perhaps one should say especially, with the less able, their use in the hands of an imaginative teacher could help to develop a wider range of abilities

than the three originally envisaged. The latter again appeared in work done on the sources; children were encouraged to relate the facts found in the materials to those already learnt in class, which involved understanding as well as memory and might be defined as "the ability to recall facts in contexts different from that in which they were learnt." Some of the sources encouraged the use of inference: the Recruiting Poster of 1876 for the Leicestershire Constabulary listed the following qualifications for a constable:

"Not to exceed 30 years of age. Not less than 5 feet 8 inches in height without their shoes. They must be able to read and write, intelligent and active, certified free from any bodily complaint and of strong constitution and recommended as possessing good character and respectable connections."

The children were asked to say why they thought each of these qualifications was necessary, keeping in mind the qualifications required by the old parish constables. The photographs of policemen first in their top hats and then in helmets, together with newspaper accounts of the first occasion when helmets were worn at the Grand National Hunt steeplechases at Melton Mowbray in 1864, were used by one teacher to stimulate the historical imagination as follows:

"You are the senior salesman of the company making the new helmets (perhaps you could call it the Metropolitan Hat and Helmet Company). After a successful sales tour in Yorkshire, you stop off in Leicester on your way back to London to see if you can sell your new police helmet to the County Chief Constable. Either

- (a) Write your letter to him explaining the advantages of the new helmet, or
- (b) Write a script recording your interview."

Such exercises inevitably involved the use of other skills and abilities. A very slow class laboriously transcribed the sources, taking more trouble over reading them than they did their conventional textbooks. Particularly useful here was the Recruiting Poster which made use of different sizes of printing and of capital letters. The

interesting detail in other records provided an incentive to reading. Although the use of original sources obviously has a novelty value which will not last if the technique is used too often, it does seem that the occasional use of materials which at first sight appear far more difficult than the conventional book will in fact help to stimulate the slow reader to make an effort to come to terms with them. Another simple skill developed through the use of sources was that of translating material from one form to another for the purposes of understanding its significance. Children drew a picture of an early police constable from a written description of his clothing and then compared their efforts with the actual photographs or with drawings in books. A bar graph was made to show the ten most common crimes in Leicestershire in 1839 from the Chief Constable's list of 36 crimes. This enabled children to see more clearly the social conditions of the early nineteenth century when many of the crimes involved getting food one way or another. A third ability given frequent exercise was that of selecting material from a variety of sources relevant to a given theme. For example, the children chose one prisoner receiving sentence before the Lutterworth magistrates in 1883 and then looked back through the archives to find out how he might have been arrested and on through the prison records to see what his life might have been like in Leicester Gaol. The question about the qualifications on the Recruiting Poster encouraged them to look through the sources to find out what a policeman had to do; the page from the daily log of a Lutterworth constable showed them why he had to be able to read and write.

The school use of the Law and Order in Leicestershire Unit, then, further emphasised the value of the source method in cognitive develop-

ment and the exercise of the historical imagination and understanding. The teachers, without exception, recorded both their own and their pupils' enjoyment of work using the Unit: one teacher wrote:

"It is an excellent aid to teaching and I think that any six week project could be fitted into the syllabus without holding up the working of the scheme, and the children could gain so much."

Some suggested possible topics on which future Units could be based, such as the local industry of framework knitting, travel, canals, the poor, farming, witchcraft and the local stately homes. Few could suggest any ways in which future Units could be produced. One teacher wrote "probably impossible - not commercially viable and I know of no teachers who have sufficient time." Another suggested that the local Colleges of Education or University students might assist in production, a method adopted in some areas as was shown in Chapter 3, but not yet successfully applied in Leicestershire. Nevertheless, it was made clear that if another Archive Unit could be produced, many Leicestershire teachers would use it.

In the meantime, experiments were under way in the presentation of local documentary materials through the new media of local radio. With the help of a group of postgraduate students from Leicester University School of Education, the author devised short dramatic sketches on the Luddites and the Chartists in Leicester, using actual reported speech where possible. This formed part of a series of programmes called 'Stand Up and Fight' intended for the school leaver. Schools who took the series could obtain folders of xeroxed copies of some of the documents and a few suggestions for discussion and topic work. It was difficult to follow up the series in schools, but it does not appear to have been very successful. This was partly because Radio Leicester was then a still unfamiliar medium whose transmission strength did not enable schools outside the city to take the programmes although they could obtain

tapes of these if required. Publicity for the series was also inadequate. It seems likely that schools were not then ready for such unstructured material and found it difficult to organise work schemes around the programmes and follow up materials. Lack of liaison between the author, the Education Producer at Radio Leicester and Thurmaston Teachers' Centre who produced the folders hindered the production of structured Units like the B.B.C. History in Evidence series. Nevertheless, the idea of dramatising actual documents to provide lead lessons for pupils working on similar documents was a useful one which was tried again in connection with the Unit Leicestershire Farming on which most of this research has been based.

The idea for this second Unit arose out of a Short Course on 'Archives in Schools' run by the author at Leicester University School of Education in the autumn of 1971. In the eight meetings of this course it was intended to illuminate the problems in the use of archive materials in history teaching, to examine materials already available and to plan the production of a further Unit using Leicestershire material. It was then hoped that work might continue on a practical basis constructing a pack for use in schools. The early meetings were attended, perhaps inevitably, by enthusiastic teachers who already had many commitments and would find it difficult to devote much time to the proposed practical outcome of the course. Once more, the author and one other teacher agreed to do the bulk of the work in the record repositories while other members of the group would write the background notes and work scheme.

The criteria established for the construction of the pack were as follows:

1. It should be a pack from which children could work and not just one used for illustrative purposes.

2. Therefore, all the source materials should be legible. This limited the choice of a topic to one whose records were in English and to seventeenth century handwriting at the earliest.
3. Each of the sources should make a point in itself, but should fit into a sequence so that the children could progress from one to another, i.e. it should be an Archive Pack rather than a collection of documents.
4. The pack should contain sufficient material to make class use feasible.

The group, mainly secondary school teachers committed to a syllabus, were anxious to choose a topic for which local records could be used to illustrate a national theme. Farming and Enclosure seemed a good choice, since Leicestershire had made important contributions to national history through the work of Robert Bakewell and other agricultural pioneers. There was also clear field evidence in the county for both deserted mediaeval village settlements and for the field patterns of Parliamentary enclosure, which could be linked to documentary evidence, and an excellent collection of agricultural implements in the Rutland County Museum in Oakham. The documents would be, on the whole, of eighteenth and nineteenth century date and therefore legible. In addition, the author had already constructed a skeleton pack on Enclosure and knew that sufficient archive material was available to satisfy the third criterion, that children should be able to follow a sequence of events through the archives. Finally, consultation with the Deputy County Archivist revealed that a collection of material on the enclosure of Congerstone, a small village in West Leicestershire, had recently been deposited at the County Record Office. The title of Farming in

Leicestershire was decided upon and the selection of the documents began.

The other compiler of this Unit was a primary school teacher, whereas the author taught history in a College of Education specialising in the training of secondary school teachers. It proved valuable to have compilers from different spheres of teaching, since while the author tended to choose documents for their historical significance the primary teacher tended to regard them as the basis for creative work. This enabled more varied and open-ended work schemes to be devised. We were also able to visit the record repositories together, as had not been the case with Law and Order in Leicestershire, and so both compilers had a clear overall picture of the Unit which also contributed to the effectiveness of work-schemes devised.

As selection proceeded, separate groups of records began to emerge as had been the case with the previous Unit. It would seem better to allow the source materials to dictate the structure of an archive pack rather than to begin with preconceived sections for which suitable material may not be available. Ten groups or 'patches' were finally decided on as follows:-

1. Leicestershire before Parliamentary Enclosure
2. Robert Bakewell
3. Wages and Prices
4. Farmhouses
5. The village of Congerstone before enclosure
6. The Act of Parliament for the enclosure of Congerstone
7. The Commissioner and his Work
8. Carrying out the Act
9. The Roads
10. The End of Enclosure in Congerstone.

The first four were introductory patches and they were not true 'archive packs' since they comprised documents artificially collected from a variety of sources, although on a common theme. The sources included eighteenth century histories of Leicestershire, the Board of Agriculture Report of 1808 for the county, County Record Office material, photographs from the English Museum of Rural Life in Reading and a letter of Robert Bakewell from the British Museum. Children could use them both for information and to compare different types of historical evidence. For example, the 'Farmhouses' patch contained two inventories, one of a wealthy farmer and one of a blacksmith who was also a smallholder and so contrasts could be made between these. Also included were illustrations of farmhouses and contemporary plans of their interiors, and so comparisons could be made between written and visual evidence.

The last six patches contained true archives which had all come from a naturally accumulated collection of records concerned with a single topic over a short period of time. Although the patches followed the sequence of the enclosure process, each was self-contained and could be worked on separately. The handwriting of the clerk to the Enclosure Commissioners was not too easy to read but since many of the records were in his handwriting it was thought that the children would soon become accustomed to it. Printed extracts from the Enclosure Act, the local newspapers and John Nichols' History of Leicestershire provided some visual relief. Actual visual material was difficult to find, apart from the pre- and post-enclosure maps. The inclusion of contemporary prints and engravings would have destroyed the cohesion of the archive groupings and might have confused the children since they would not have been of Congerstone. Even if these problems had been passed over, the

cost of copyright fees would probably have been prohibitive for reasons described below. However, experience with the Law and Order in Leicestershire Unit had shown that teachers valued the inclusion of pictorial materials and it was perhaps unwise to have ignored this.

While the selection of the materials was proceeding, negotiations had been in hand for funds to launch the Unit. An approach to the County Record Office was unsuccessful since the County Archivist felt that his small staff had enough to do without undertaking the production of an Archive Unit. He was willing to undertake the initial photocopying and xeroxing of the documents in his care but would not permit these to be used without copyright fees in a Unit produced for sale outside the county. This once again limited production to loan copies for schools within the county boundary. The University of Leicester and the two Colleges of Education were unable to help. Radio Leicester was interested in using the Unit as follow-up material for a series of programmes on agriculture in a similar manner to the 'Stand Up and Fight' series. The documents accompanying the latter had been produced at Thurmaston Teachers' Centre. The Curriculum Resources Development Project, which had produced the Law and Order in Leicestershire Unit, had by now completed its work there, but the Centre still continued its interest in the production of resources. The County Education Officer permitted the use of its equipment and staff time for the production of the Farming in Leicestershire Unit as resource material for county schools in conjunction with a Radio Leicester Education series entitled "One Man Went to Mow".

Once again the author wrote a series of programmes based partly on materials in the Unit, but also including a tape-recording of a meeting of the Court Leet of the village of Laxton in Nottinghamshire, a

dramatised visit of schoolchildren to a deserted mediaeval village site and a talk by a modern farmer. These were recorded with the help of schoolchildren and other volunteers and broadcast in the autumn of 1972. Unfortunately, the production of the Farming in Leicestershire Unit was delayed until the spring of 1973 and it was therefore impossible to use the two in conjunction as had been originally planned. Schools could obtain tapes of the broadcasts from Radio Leicester but the quality of reproduction was poor. Enquiries into the methods of history teaching which children prefer₁ has revealed that listening to tapes and broadcasts was not popular, possibly because television has made children accustomed to a visual image accompanying sound. The author had taken a series of slides of Laxton to be used in conjunction with one of the tapes in a Radiovision programme, but here again production of the slides and the broadcasting of the programmes did not coincide. Publicity of the series as a whole was not very effective, and so the idea of using the broadcasts to provide lead lessons for work on the documents did not materialise. This has been exploited successfully by the B.B.C. History in Evidence series and it would seem that it was the execution of this particular scheme rather than the idea as a whole that was at fault.

The staff at Thurmaston Teachers' Centre were responsible for the high quality of reproduction and the imaginativeness of layout and packaging which has been commented upon by teachers using the Unit Farming in Leicestershire. Since the topic of enclosure necessitated the provision of large maps, it was decided to follow the example of the Sheffield Units₂ and the University of Nottingham packs₃ in

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1. See Chapters 5 and 6.
 2. See page 119.
 3. *ibid.* see page 118.

providing single copies of wall illustrations and multiple copies of the smaller documents. Since money was strictly limited, the maps were xeroxed in sections and stuck together. The durability of the maps and the quality of reproduction has not proved satisfactory and these are certainly the poorest element of the Unit. Three copies of each of the smaller documents were included in each pack from master stencils cut on an electronic stencil cutter. The sources in each of the ten patches were printed on a different coloured paper. This in some cases has detracted from the quality of reproduction, particularly of illustrations, but it was intended to enable rapid sorting out of the materials at the end of a lesson in the classroom. Each source was clearly numbered and all the materials of a single patch were included in a plastic folder. The folders were identified both by name and number of patch but also by a small drawing representing the theme of the patch. This has proved a very useful idea since children working through several patches have reproduced the drawings to identify their work on the various sections. All ten drawings were reproduced on the cover of the Teachers' Book and the Background Books. The inclusion of both of these was suggested by the 'Archives in Schools' Group. The former stated the intentions of the compilers of the Unit and the criteria used in its construction, and also included a list of the archives and documents included with their places of origin, suggestions for work on each patch and for follow up visits and other activities. Useful books were also listed, including aids to the study of old handwriting. The Background Books were written for children, mainly by the secondary school members of the 'Archives in Schools' Group and perhaps in language too difficult for many of the classes who have used the Unit. Each contains an introduction

attempting briefly to describe the difference between primary and secondary sources and how a historian works, background information on farming and enclosure in the Midlands, a glossary of technical terms¹, and a short list of books on the subject obtainable in most school libraries. Five Background Books, one Teachers' Book and ten patches in plastic folders were included in the box which formed the Unit, together with separate copies of the wall maps. The staff of the Teachers' Centre considered that some of the sources were very difficult to read. Transcripts of these were therefore also included in the Unit with the suggestion that they should only be used for reference where necessary rather than as straight replacements for the documents in question.

The Teachers' Centre was by now prepared to permit the provision of work schemes with resources. It was therefore decided to test further whether the use of archive materials could help to develop both the three abilities which had formed the basis of the first experiment run by the Research Unit for Assessment and Curricular Studies and also those noted during classroom observation of work on the Law and Order in Leicestershire Unit. Considerable local interest had been shown in the educational objectives approach to curriculum development. It had proved possible to discuss objectives for history teaching with teachers on a course aimed at the design of a common syllabus for history, geography and English in the first three years of the secondary school², with a group of in-service teachers studying for the B.Ed. degree at Loughborough College of Education, and with Heads of Departments in local schools

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1. Suggested by users of the Law and Order in Leicestershire Unit.
 2. Held at Leicester University School of Education, 1970 (See Chapter 1, page 31.)

planning history syllabuses around their own lists of objectives. The publication of the Historical Association Pamphlet, Educational Objectives for the Study of History: a Suggested Framework ¹ in 1971 enabled a more generally accepted wording of objectives to be used than had been possible in previous experiments.

Professor Eggleston, as has been seen, had pointed out in the first experiments that it was more natural for history teachers to devise questions on archive materials, see what learning outcomes these would achieve and then adopt them as objectives. This is perhaps an over-statement, but it is very difficult, when using documents which cannot be rewritten to test a specific objective, to begin with a list of objectives which is intended to be the final list. It is, however, important to start with a provisional list so that questions can be set which promote as wide a range of objectives as possible. But this list will inevitably be subject to modification. The documents on which the questions are set have been chosen not only to promote learning outcomes but also to tell a story, and they therefore to some extent dictate which objectives they can be used to achieve. This is particularly true of cognitive objectives; more historical objectives can be achieved by careful selection of the documents themselves.

The list below was, then, in existence in skeleton form before work on document selection and question setting began but only achieved its final form when most of this work had been done. The main categories are general educational objectives, the subdivisions more specific learning outcomes. Two points must be stressed. Firstly, the list is one of desired outcomes of a specific unit of learning, not of an entire history

1. Coltham and Fines, (1971), op.cit.

course. Secondly, in the context of an experiment in curriculum evaluation, it is a list of objectives whose attainment is fairly readily measured. The list does not therefore include such general objectives as "awareness of different conditions, societies and civilisations yesterday and today" or "awakening glimpses of human motivation" which are equally valid outcomes both of units of learning and of entire history syllabuses.

A. COGNITIVE

1. KNOWS SPECIFIC FACTS

1a Knows main characteristics of Leicestershire farming before Parliamentary Enclosure.

1b Identifies the significance of Robert Bakewell's work.

1c Describes the process of enclosure.

1d Identifies the effect of enclosure upon the landscape and people.

2. KNOWS TERMINOLOGY

2a Gives meaning of terms, e.g. glebe.

2b Identifies technical terms in their context.

3. KNOWS OF AND CAN HANDLE SOME OF THE MATERIAL OF THE HISTORIAN

3a Knows the major sources for the history of Leicestershire farming and where they can be found.

3b Transcribe the simpler forms of old handwriting.

3c Appreciates the value of contemporary witness.

3d Identifies bias, reliability, etc. in a piece of evidence.

3e Recognises the incompleteness of evidence for a particular purpose.

3f Knows how to deal with gaps in evidence by further search, etc.

4. UNDERSTANDS MATERIAL ON THE BASIS OF INTERNAL EVIDENCE

4a Summarises the content of the material

4b Translates material from one form to another for the purposes of understanding, e.g. describes photograph, tabulates written information.

- 4c Differentiates between various pieces of source material.
 - 4d Selects material from a variety of sources relevant to a given theme, and presents the material in communicable form, e.g. creative writing, essay, etc.
5. APPLIES EXTERNAL CRITERIA TO THE MATERIAL
- 5a Recognises a fact in a context different from that in which it was learnt.
 - 5b Draws inferences from the material in relation to a wider historical context.
 - 5c Makes a judgement on the basis of the material, citing the evidence for that judgement.
6. APPRECIATES THE DANGERS OF GENERALISATIONS IN HISTORY
- 6a Recognises that the application of a national happening like enclosure may vary from one part of the country to another and even from village to village.
 - 6b Explains why these differences should occur.
- B. AFFECTIVE
7. SHOWS INTEREST IN THE SUBJECT
- 7a Expresses pleasure in using source material.
 - 7b Initiates further personal research.
 - 7c Visits places mentioned in the Unit.

Categories 1 and 2 both involve the attainment of knowledge, the one of facts and the other of terminology. Use of the Law and Order in Leicestershire Unit had shown that children find historical knowledge exciting in itself, particularly details which are more often found in documents than textbooks. From the secondary school teacher's point of view, knowledge is a necessary outcome of any unit of learning.

Particularly difficult in history is the acquisition of correct definitions of technical terms which, as was seen in Chapter 2, often have the quality of concepts. The discovery of these in context in archive materials should help children to understand and remember them correctly.

Category 3, the knowledge of and ability to handle some of the sources of the historian, could only be partly achieved by the Unit since the collection and classification of material had already been completed. Teachers could encourage children to seek additional information in books, maps, field and museum evidence and so on and so demonstrate the different types of evidence a historian uses. The location of the sources used was stressed in the Background Books and the difference between primary and secondary sources pointed out. While using the Unit, children could see how a story can be pieced together from a number of sources and find out that sometimes the evidence is contradictory. This might teach them to study their sources for reliability. Realisation of gaps in evidence and compensation by further search demand fairly advanced cognitive development, but might be capable of achievement by some children. It seemed important that users of the Unit should be led to realise that not every historical problem can be solved.

Categories 4 and 5 are the cognitive outcomes already noted from previous experiments. The first requires only an understanding of the material itself and the learning outcomes are common to most school subjects. Translation of materials from one form to another and the selection of materials from a variety of sources relevant to a given theme had been particularly noted as outcomes of work on the Law and Order in Leicestershire Unit. The latter also involves the ability

tested for by the Research Unit in the first experiment, the ability to enter imaginatively into the past, since the exercise of historical imagination is dependent on knowledge gained from the materials studied. The first two learning outcomes of Category 5, factual recall and the ability to make inferences, had also been tested for by the Research Unit while the third outcome, the ability to reach independent but supported judgement, was thought important by all the teachers with whom the list of objectives was discussed.

The sixth category, the appreciation of the danger of generalisations in history, was perhaps a marginal one if the Unit was to be used, as Law and Order in Leicestershire had been, by the less able or younger pupils. Even so, the latter had realised that the establishment of Peel's Police Force had applied only to London and that their county had not gained a police force until much later. It seemed important with a topic so closely related to the environment as farming that pupils should realise how local differences affected the application of national policy. Teachers had previously laid much emphasis on the interest value of local material but had not always used this material to demonstrate regional differences. Postgraduate students with detailed knowledge of particular historical events had expressed their doubts at communicating textbook generalisations to their pupils, and it was decided to see whether pupils could, by the use of original sources, learn to appreciate the limitations of generalisations.

The final category includes three affective outcomes whose attainment could be recognised by observation and questioning. It was obviously extremely important that children should enjoy using archive material. If they did not, it was unlikely that many of the cognitive objectives would be realised. The complete list of objectives, together with a

brief explanation of the categories, was included in the Teachers' Book so that the intent of the compilers was known to teachers using the Unit. It was stated that these objectives were subject to amendment after trial in the classroom and teachers were invited to comment on the list in the questionnaire accompanying the Unit.

Each patch in the Unit also contained three copies of a worksheet on the materials it contained, and several copies of a general worksheet were included in the box. The use of the worksheets was, of course, entirely optional: they were not physically attached to the documents. The worksheets for each patch were printed on the same colour paper as the documents in that patch. Each usually began with an introduction to the patch and then a brief description of each document followed by questions on it. Some questions asked for comparisons or contrasts to be drawn between sources. Some questions either on a particular source or on the patch as a whole were felt to be more difficult or more time-consuming than others. A dotted line separated these off from the other questions on the worksheet and the reason for this was explained in the Teachers' Book. Since previous Units had been used by unstreamed classes where the children worked at radically different paces, it seemed desirable to include more difficult questions which the children at a higher level of cognitive development could tackle when they had finished the basic set. The general worksheet was set for the same reason, with assignments covering the Unit as a whole and referring children to further sources of information.

The questions on the worksheets were set with four aims in mind. The first was to encourage children to read the sources carefully by asking for transcripts to be made in some cases where the handwriting was

difficult or for a precis to be made of a section of the source.

Secondly, questions directed the children to consider the significance of a document itself - when it was written, who wrote it, what sort of person he was. For example, it was important in Patch 1 that they should realise that the extract about the Cotesbach riots of 1807 from the nineteenth century History of Leicestershire was not written by an eye-witness. Equally, Robert Bakewell would eulogise his new breeds of sheep and cattle in a letter to the eminent writer on agriculture, Arthur Young. This aim was related to the objectives of Category 3, the ability to handle some of the materials of the historian. The third aim was to encourage children to extract relevant information from each of the sources about the history of Leicestershire farming in the eighteenth and nineteenth centuries - how an enclosure commissioner went about his task, what effect enclosure had on road patterns and so on. The final aim was to enable children to make use of the information they had obtained by using the cognitive abilities defined in Categories 4 and 5. For example, in Patch 4 they had to decide what trade Thomas Seal followed from a list of tools in the inventory of his house and workshop and to draw a plan of the house from the written information in the inventory. In Patch 9 they had to decide why the Commissioner refused to build a road requested by the inhabitants of the next village to Congerstone and say whether they thought his decision was a fair one. Such questions enabled them not only to develop the various skills and abilities but also to understand fully the historical information they had extracted from the sources. The exercise of cognitive abilities is not an end in itself.

Such detailed worksheets were perhaps the most controversial feature

of the Unit, but it must again be stressed that teachers were entirely at liberty to dispense with them; the loan of the Unit to a particular school was not contingent upon the use of the worksheets. Something could be learnt however the Unit was utilised. If the worksheets were not used, it might be possible to discover further ways of using original sources as in the classroom observations of the Law and Order in Leicestershire Unit in action. If they were used, it would enable a more detailed analysis of the learning outcomes of the source method in history teaching than had been possible before. Such a flexible approach was necessary as the research was entirely dependent on the co-operation and other commitments of the teachers involved. The practical limitations of this type of educational research, obvious throughout the pilot trials described in this chapter, were also a factor in the main body of research next to be considered.

CHAPTER 5

THE FIRST TRIALS

The Farming Unit was first put into schools in January 1974 and has been in use intermittently ever since. Since the materials deal with the County of Leicestershire, the schools have been confined to that area. Six packs were produced, one of which the author retained for demonstration purposes. The Unit was publicised by Leicestershire Education Committee and Thurmaston Teachers' Centre. The latter at first processed requests for use of the Unit, but difficulties at the Centre eventually compelled the author to undertake both publicity and delivery of materials. It must be emphasised that apart from the Leicestershire Education Committee's financing the actual production of the Unit, the author has received no financial backing for the evaluation and has been working entirely independently. Without Schools Council or Local Authority backing it is difficult to achieve anywhere near ideal experimental conditions and the author was obliged (with due gratitude to the schools concerned) to accept any offers to try out the materials. This made it impossible to randomise the sample in any way or to control the age and ability ranges using the materials. To some extent it also meant that the teachers had favourable attitudes towards experimentation in history teaching, although this was not entirely the case. It was also impossible to dictate methods of use or the time to be spent on the Unit, which perhaps provided more information about its flexibility but made measurement of behavioural outcomes more difficult. Controlled comparative studies were also impossible to carry out, but some attempt was made to compare the outcomes of learning about the Agrarian Revolution by means of the Archive Unit with those of learning by traditional methods.

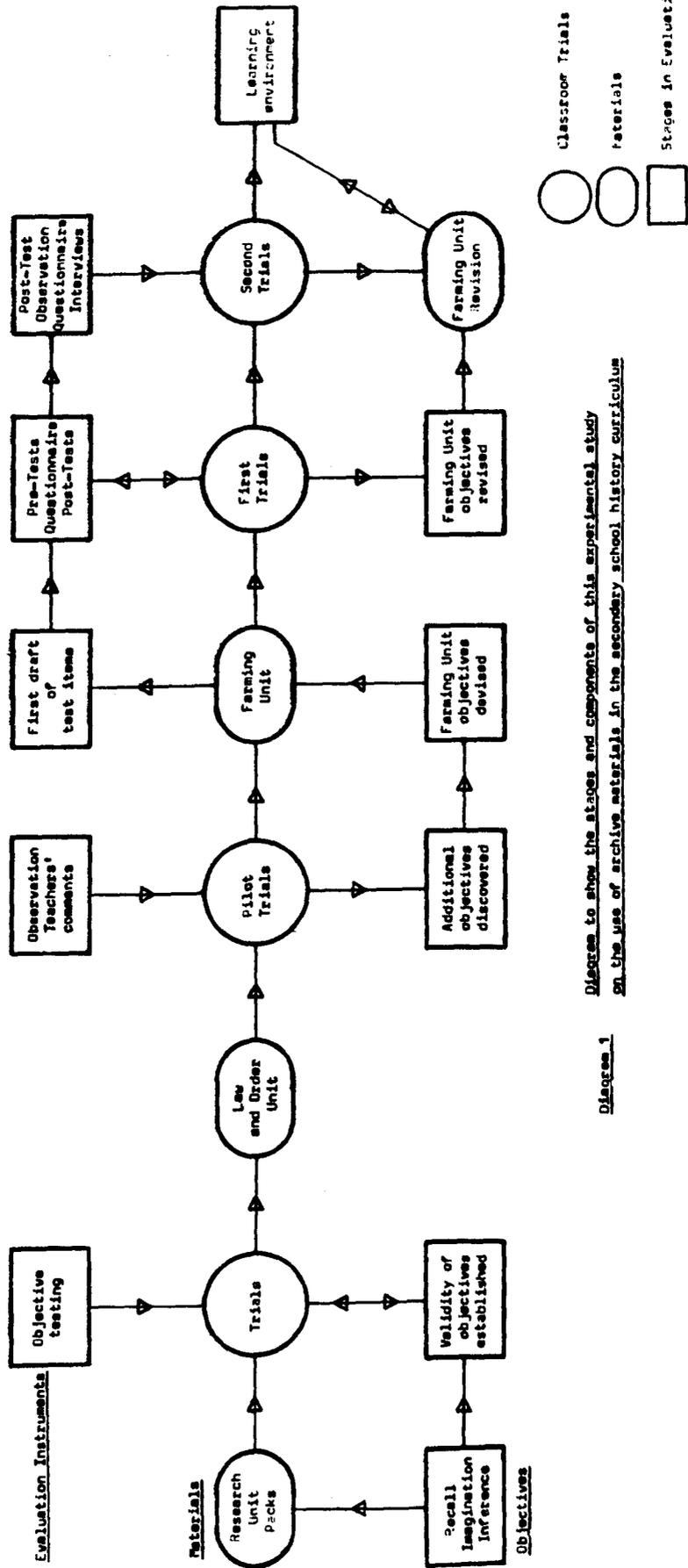


Diagram 1 Diagram to show the stages and components of this experimental study on the use of archive materials in the secondary school history curriculum

The author was also affected by problems in the school environment which must affect any studies where the initial sample is not large, that is the drop-out of subjects due to illness, accidents or transference² to other courses. Because of the small size of sample, the results of such children have been included where relevant (e.g. in some pre-tests) but not, of course, where achievement on the whole course is to be considered. Such problems are perhaps inevitable in small-scale independent research, but it must be recognised that the conditions under which this evaluation was undertaken were far from ideal.

THE ROLES OF THE EVALUATION OF THE FARMING UNIT

1. As a formative evaluation, to discover in what ways the Unit needed revision before any re-issue took place. This included both the materials themselves and the guidance given to teachers and children using them.
2. Since the Unit was issued (cf Chapter 4) in a final form (although revision of later versions would be possible) the evaluation was to some extent summative. Attention was therefore given to measurement of outcomes and to the effect of using the Unit on the learning environment and the teachers' and children's attitudes. Independent evaluations of the material were obtained from people outside the Leicestershire area.
3. Since the source method in history has, to the best of the author's knowledge, not been evaluated in schools, an attempt was made to discover the effectiveness of the method as a whole in the present school environment. As comparative studies were impossible, the criterion of its acceptability to teachers and pupils had to be utilised.

THE GOALS OF THE EVALUATION OF THE FARMING UNIT

1. The Objectives of the Unit

- (a) Were they worthwhile objectives?
- (b) Were they the only objectives possible?
- (c) Were they suitable for the age and intelligence ranges using the Unit?
- (d) To what degree were they achieved?

2. The Materials

- (a) Were the children able to read and understand the documents?
- (b) Were the worksheets suitable for the age and intelligence ranges using them?
- (c) Was there sufficient material in the Unit for class use?
- (d) Was there too much or insufficient guidance given to the teachers in the Unit?

3. The Learning Environment

- (a) How far did the previous learning experience of the class affect their performance on the Unit?
- (b) Was the time the teachers were able to give to the use of the Unit adequate for the full exploitation of its potential?
- (c) To what extent did supplementation by other resources affect the success or otherwise of the Unit?
- (d) How far was the learning environment responsible for any ambiguities or failures in the achievement of the Unit's objectives?
- (e) How far did the attitudes of both teachers and pupils affect the use of the Unit?

4. The Value of the Source Method

- (a) Is it a worthwhile method of achieving certain objectives in the learning of history?

- (b) Do the children understand the nature of source material?
- (c) Do the children enjoy working with source material?
- (d) Do the teachers value both the objectives of the approach and the medium of achieving them?
- (d) Does the source method necessitate drastic changes in the learning environment?

THE TEST BATTERY 1

A. Pre-Tests

1. AH4 Intelligence Test

This was administered to all users of the Unit to determine the intellectual range of the sample. It was also hoped to correlate verbal scores with scores gained on the tests of cognitive ability, since it has been suggested that a reasonable level of verbal skill is a pre-requisite to cognitive achievement in history and this would seem even more likely for children working with materials demanding reading ability.

This test was chosen as being reasonably attractive to the children doing it (an important factor when presenting a class with a battery of tests). The scores are not standardised to a mean of 100 but ranked according to norms for different age and ability groups. This made comparison between the schools difficult but did enable ability groups to be separated out across the age range.

2. Sources Test

The first part of this was a multiple choice test to discover if children had been introduced to major sources of history such as archaeological evidence, the Bayeaux Tapestry, etc. It was difficult to make the choices completely unambiguous and several versions were tried out before the final one was drafted for use in the main trials. It was popular with children, and also with their teachers who approved of its intent, but it

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- 1. The tests referred to are included in the Appendices.

did not add much information for evaluation purposes.

The ninth question was an open-ended one to see whether children had ever been told about local sources for history and where they could be found. The last question gave the children two passages about the Battle of Agincourt, one by an eye-witness, Jehan de Wavrin, and one by H.A.L. Fisher, a twentieth century historian. They were asked questions to see how far they appreciated the difference between the two accounts. The answers they gave - particularly those in the younger age groups - were unexpectedly informative and it proved possible to analyse relationships between age, ability and powers of inference.

3. Documents Test

This was the key test in the pre-test battery as it provided scores for comparison with scores gained on the post-test and therefore some measure of whether the Farming Unit had helped to develop certain cognitive abilities in its users. Some objectives, particularly those concerned with factual recall, could not, of course, be pre-tested. The children were given two passages about farming in late seventeenth and early eighteenth century Leicestershire and asked questions to test their powers of comprehension, analysis, synthesis, inference and judgement. The test took much longer to complete than had been anticipated and once again the questions needed revision after pre-trial testing. Since the marking of the answers was subjective, cross-marking and correlation of the resulting scores had to be carried out to ensure reliability. A school not participating in the trials was also given the test and the scores correlated with those of trials schools to check reliability. The test proved very informative on the relationship between age, ability and the achievement of certain cognitive objectives.

4. Activity Charts

The trial classes were given sheets listing various techniques of learning history and asked to complete them firstly with regard to how often they had experienced each technique in the previous year and secondly whether they liked or disliked the techniques. This was intended to provide information on the previous learning experiences of the children and their attitudes towards them. The information could then be compared with their pre- and post-test levels of cognitive ability and also with their attitude towards the source method at the end of the trials. The children were told that their teachers would not see individual charts, only the total scores, in an effort to ensure greater objectivity.

The author administered the AH4 test in each school, together with the Sources Test and Activity Charts. This usually took a double lesson of circa 80 minutes. The Documents Test was completed in an additional single period of 40 minutes. Although the children enjoyed doing most of the tests - the Documents Test was least popular - the time taken proved a burden to the teachers concerned. Although the tests provided useful information, the value of a pre-trial test battery has to be set against the inconvenience caused.

B. During the Use of the Unit

The author visited each school at least twice. The techniques of interaction analysis were not at that time fully worked out and an untimed observation chart was used. This enabled the observer to note additionally unexpected effects and reactions which were later incorporated into the framework of the more sophisticated observation schedule used in the second set of trials.

C. Post-Tests

1. Post-test of Educational Objectives

This was designed as a test of the main categories of educational objectives which the Unit was designed to fulfil. The objectives tested in the Documents Pre-Test were weighted so that comparison could be made between the scores achieved. The main problem with this type of pre- and post-test situation is setting two tests of exactly equal difficulty. Since the children had to read long documentary extracts and interpret maps, it was impossible to set a large number of questions on each objective and therefore a statistical test of equal difficulty could not be used. The direct comparison of the scores of the two tests must therefore be treated as tentative.

An analysis of the results of the post-test could be used to ascertain which objectives were not adequately fulfilled by the Unit and so to initiate a check of either the level of difficulty of the objectives or the materials or the classroom situation to find out why this was so. This would lead to a revision of the materials or the objectives, or both.

2. Teachers' Questionnaire

This was completed by all teachers who used the Unit, including one who gave up using the materials and whose class therefore did not complete the post-tests. It was intended both to supplement direct observation in the classroom and also to underline more firmly where the objectives of the Unit had not been, or could not be, met in the classroom situation. It was also hoped to discover which objectives teachers thought were most important for their particular age and ability range.

3. Activity Charts

The trial classes were asked to complete once again the charts in which

they had shown their preferences for various techniques of learning history. It was hoped to use this to gauge their attitude towards the source method, but in the first place many children did not see (without being told) the connection between 'using original materials' on the chart and what they had just been working on, and secondly a few teachers just did not find the time to get their classes to complete the chart again. It was decided in the second set of trials that direct interview with a sample of the children was a better way of gauging their attitudes than attempting to use a chart for the whole class.

4. Roads Post-Test

An attempt was made to test the expected improvement in children's cognitive abilities on unseen documentary material similar to that of the Documents Test. Two passages on the state of roads in the eighteenth century were chosen, one by Arthur Young and the second from a modern text book by R.J. Cootes.¹ Questions testing similar abilities to those of the Documents Test were set and multiple marking arranged for. Unfortunately, as teachers had spent a considerable time working with children on the Unit, few classes completed this test and the results could not be included in the final evaluation. This once again underlined the problem of attempting batteries of pre- and post-tests in schools already subject to crowded syllabuses.

METHODS OF ANALYSIS OF RESULTS

The majority of the tests resulted in the accumulation of quantitative data which was analysed by the author with the help of a desk calculator. At a later stage the author was able to use parts of a statistical package for use with a computer, the Statistical Package for

1. The author was grateful to the Schools Council History 13-16 Project at Leeds for assistance, and regrets that better use could not have been made of their materials.

the Social Sciences.¹ The computer analysis confirmed the validity of deductions based on calculations already made manually from the test results, but enabled these to be compared with attitudes as expressed in the Like/Dislike sections of the Activity Charts. Since the main emphasis of the first trials was on the first goal of the evaluation, objective testing, the information derived from the computer analysis concerning the attitudes of children to different teaching methods and the relationship of these to the results of the objective tests is discussed separately at the end of this chapter.

Future research of this kind, particularly where a larger sample is involved, could with benefit make greater use of this statistical package at an earlier stage than the author was able to do so, although undoubtedly the manual method results in greater familiarity with both the techniques being used and the results obtained.²

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1. For the use of which the author is indebted to Paul Croll, a member of the S.S.R.C. team working on Observational Research and Classroom Learning Evaluation in the School of Education, University of Leicester.
 2. The computer print-out, because of its bulk, has not been included in the thesis. It has been retained by the author and can be inspected on request. Examples of the four parts of the programme are included in the Appendices.

THE SAMPLETable IAnalysis of the Sample in the First Trials

School	Type	Age Group	Pre-Test No.	Post-Test No.
(A	Primary	9 - 11	45	0)
B	Secondary Modern	11 - 12	27	0
C	Junior High	12 - 13	27	19
D	Preparatory	12 - 13	7	7
E ₁	Junior High	13 - 14	32	8
E ₂	Junior High	13 - 14	25	9
F	Upper School	14 - 15	26	21
G	Adult Education	over 21	14	8
			<u>158</u>	<u>72</u>
		(excluding A)		

1. In Leicestershire, the schools within the City of Leicester at the time of testing still retained the 11+, hence the secondary modern school. In the County of Leicester, children go to a Junior High School from 11-14 and then to an Upper School from 14-18. Four of the schools were therefore part of the Leicestershire comprehensive scheme, one from selective schools within the city, one primary, one private and one an adult education class.
2. Schools A and B did not take the post-tests. School A did not take a full part in the trials and only completed part of the pre-tests. School B dropped out of the trials.
3. The drop-out between pre- and post-test numbers in the cases of Schools C, F and G reflects normal school conditions. In the case of the two classes in School E, only one group in each class worked on the Unit although all took the pre-tests.

The pre-tests were taken by 158 children in six schools, plus a large primary school class who were unable to complete the full battery of pre-tests. Only one school gave up using the Unit before the time anticipated

and therefore did not complete the post-tests. In other schools not all the children who had taken the pre-tests either used the Unit or took the post-tests, which were completed by only 72 children. The results of the larger pre-test sample have been used where direct comparison with the post-test sample is not involved, since analysis of the pre-test scores proved to have a value in their own right.

The Schools

School A was a primary school in a middle-class residential area on the outskirts of Leicester. The Deputy Headmaster of the school helped to construct the Farming Unit and was therefore interested in using it in his school, although the way in which it was used prevented direct measurement of behavioural outcomes. He was interested in creative rather than cognitive outcomes and the class used the Unit as part of an open-ended project on the environment. The class of 45 ranged in age from 9-11 and in intelligence from A to E for the norms of their age group. They took only the AH4 test and part of the Sources Test, and their scores have not therefore been used for comparative purposes but only to illustrate certain aspects of the analysis of the Sources Test.

School B was a boys' secondary modern school in a poor district of Leicester. The Unit was used by a first year class, nearly half of whom had English as a second language. The class were all average or below in intelligence for the norms of their age group. The level of discipline was also low. The class used the Unit as a project in itself without any additional resources; two single periods a week, both last in the afternoon, were allotted to the work. After a few weeks' struggle the teacher decided to give up the attempt to use the Unit.

School C was a Junior High School in the Leicestershire Comprehensive

scheme. The school was situated in a rural part of the county close to the village of Congerstone which was the subject of the enclosure documents in the Unit. The Humanities Centre of this school was purpose-built and housed an excellent resources area and library close to the classroom where the Unit was used. The school produced much of its own resources, some of which were used additionally to the Unit. Lessons were blocked and the Unit could be used for periods of an hour and a half at a time. It formed part of a course on farming lasting a term in the Social Science syllabus of the school. The class were aged from 12-13 and ranged in intelligence from A to E.

School D was a preparatory school in a rural area of south Leicestershire. The small class of seven were highly intelligent (all A on the AH4 norms) and were familiar with the source method which was used frequently by their teacher. They were working on the enclosure of their own area and used the Unit as additional resource material for several lessons a week for a term.

School E was of similar composition to School C, a Junior High School in a rural area of Leicestershire. Two classes participated in the trials; both aged 13-14. E_1 was average and above in intelligence, while E_2 contained a wider range of intelligence from A to E using the norms for 13 year old comprehensive school children. Both classes were used to working on their own using worksheets, although these had previously been based on textbooks rather than archive collections. All members of both classes took all the pre-tests and then a group from each class volunteered to work with the material while the rest used the teacher's own worksheets on the Agrarian Revolution. The groups worked in a cramped corridor library as well as in the classroom and consequently received rather less help from the teacher than was the case in School C. They used the Unit twice a week for half a term.

School F was an Upper School in the Leicestershire comprehensive scheme.

The class using the materials was aged 14-15 and were average and above in intelligence. They were studying the Agrarian Revolution as part of their 'O' Level Social and Economic History course and their teacher consequently stressed the acquisition of factual knowledge, adapting the worksheets provided. They were only able to use the material for a fairly short period of two lessons a week for six weeks. They were reasonably familiar both with worksheets and with document and archive collections.

School G was an adult education class working for 'O' Level in Social and Economic History. They attended an evening class for two hours a week and used the materials as additional resource material at home on their own for half a term. They ranged widely both in age and intelligence: the former was difficult to ascertain but in the latter the range was from A to E with the weighting at the lower end of the scale. As with the other examination class, emphasis was laid on factual knowledge rather than the fulfilment of all the objectives of the Unit.

Nature of the Sample

Since the tests were administered to schools willing to co-operate, it was impossible to obtain a random sample. The intelligence test could, however, be used to estimate whether the incidental, or accidental₁, sample obtained was representative of the school population as a whole. Since the AH4 test was not standardised to an expected mean over all age groups, it was necessary to take each class or sub-section of the sample and test this separately against the expected mean for that age group. In all the schools except School B the post-test sample only was used. School B, which did not take the post-test, is included for comparative

1. See D.G. Lewis, Statistical Methods in Education, University of London Press, 1972, 99.

purposes. Since the sample was small, the 't' distribution was utilised. The null hypothesis stated that the intelligence level of the children in each class was not above or below the average for children of that age group.

Table 2

Means obtained on the AH4 Test in sample schools
compared with the expected norms

School	n	Expected mean (Me)	Obtained Mean (Ms)	Value of 't'
B	27	51.6	41.7	5.11*
C	19	54.4	50.63	1.0731
D	7	54.4	91.14	9.4959*
E	17	58.8	78.86	3.8449*
F	21	65.0	70.81	1.362
G	8	91.4	89.25	0.3087

* significant at 1% level

The null hypothesis was sustained in the cases of Schools C, F and G and rejected in the cases of Schools B, D and E. School B was well below average, the significance level required for 1% significance for the sample size being 2.779. School D, on the other hand, was well above average (3.707 required for 1% significance) and School E slightly above average (2.977 required for 1% significance). The sample actually taking the post-tests (excluding School B) was probably somewhat above average in intelligence.

The computer analysis, using the Statistical Package for the Social Sciences₁, confirmed the above conclusion. Of the total sample of 72 completing all the tests, the breakdown of the five AH4 categories A to E

1. Discussed on page 176.

(corrected for age using the age-group norms) was as follows:-

A	30.6%
B	16.7%
C	31.9%
D	16.7%
E	4.2%

47.3% of the sample were therefore in the upper A and B categories, and only 20.9% in the lower D and E categories.

Using the numerical equivalents 1-5 to represent grades A to E, the mean was 2.472 and the median 2.587, both of which are in the upper half of the scale. The sample was, then, above average in intelligence as represented by AH4 scores.

The AH4 test included items concerned with mathematical and spatial ability and with verbal skills. However, since history, and particularly the study of archives is concerned with words, the latter were abstracted and analysed separately. The results were as follows, using the five categories A to E:

A	2.8%
B	19.4%
C	33.3%
D	41.7%
E	2.8%

22.8% of the sample fell into the two upper categories and 44.5% into the two lower categories. Again using the numerical equivalents 1-5 to represent grades A to E, the mean was 3.222 and the median 3.333, both in the lower half of the scale. The standard deviation (0.892) was also considerably lower than that for the test as a whole (1.210), suggesting a consistently mediocre performance on verbal items in the AH4 test.

The reasons for the comparatively low standard of verbal skills compared with mathematical and spatial skills cannot be discussed here, but would merit further investigation, particularly with reference to teaching methods and to children's reading habits. It is worth noting that in replies to the question probing children's attitudes to reading in history lessons in the Like/Dislike section of the Activity Charts, one-third of the children liked reading and only one-sixth disliked it, but half the children expressed indifference.¹

With reference to the present research, the analysis of verbal grades obtained in the AH4 test shows that while the sample may have been above average in general intelligence, they were average and below in the verbal skills which were the ones they would be required to use both in the tests and in using the archives themselves.

ANALYSIS OF RESULTS

1. THE SOURCES TEST

Validation

The items of this test were first submitted to colleagues and teachers for criticism and several ambiguous items rewritten. The first version of the test² was then tried out on four classes in three schools, two classes in an independent school (O₁ and O₂) and one in each of an Upper School (P) and Junior High School (Q).

Table 3 indicates the facility value (expressed as a percentage) for each question in the four schools.

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1. See page 276, Table 47.
 2. Included in the Appendices.

Table 3

Facility values obtained on questions in the
Sources Test during validation

School	n	av. age	1	2	3	4	5	6	7	8	9	10	11	12
O ₁	21	15.11	95.8	91.4	71.9	87.5	91.4	41.7	95.8	67.8	79.2	91.4	95.8	95.8
P	23	15.4	100	78.2	73.9	100	73.9	60.9	91.2	26.5	69.5	87.0	52.3	95.8
O ₂	23	15.0	95.8	91.2	65.2	95.8	91.2	60.9	100	78.3	74.0	87.0	78.3	95.8
Q	27	13.1	96.2	71.1	71.1	89	59.2	59.2	81.5	37.2	44.5	37.3	51.9	92.7
	74		97.0	82.9	70.5	93.2	78.8	55.8	91.8	52.4	66.8	75.8	69.8	95.0

Questions 6 and 8 were clearly difficult. Question 6 demanded the knowledge of a technical term (paleography) and was abandoned. In Question 8 ("We know that Charles I was executed because ...") the distinction between (b) "Cromwell signed his death warrant" and (c) "We still have accounts written by eye-witnesses of the event" was rather too subtle, particularly for the younger age group. A question of similar intent, i.e. to see whether children understood that the facts of history are obtained from contemporary sources and not from their text books, was substituted.

Questions 9, 10 and 11 were found difficult by the younger age group, and these items were criticised by one of the trials teachers as being outside the experience of the majority of 11-14 year olds. A more open-ended question was therefore substituted. Finally, Question 10 was rewritten, partly to lead the children into the question by getting them to examine the similarity of the two accounts and partly to probe more deeply into

their understanding of the relationship between contemporary sources and modern history books. The second version₁ of the Test was used in the Trials.

The first eight Questions

Table 4 shows the number of times each alternative answer to each question was chosen. School A did not do this test and, since the correct answers depended on previous learning experience, School B was excluded as so many of them were immigrants. The correct alternative for each question is underlined.

Table 4

Analysis of choices made in the first eight questions
of the Sources Test

Question	(a)	(b)	(c)	(d)	no answer
1	4	<u>122</u>	5	0	0
2	16	<u>108</u>	6	0	1
3	23	<u>83</u>	12	0	13
4	0	2	<u>124</u>	0	4
5	16	5	17	<u>93</u>	0
6	0	25	<u>95</u>	7	4
7	8	<u>120</u>	3	0	0
8	7	6	<u>118</u>	0	0

Total Sample 131

The questions are discussed below in descending order from the most correct to the least correct number of choices.

1. Included in the Appendices.

Question 4 presented few difficulties. No-one chose (a) which suggests that children knew prehistoric man was illiterate.

Question 1 was again well answered; the few children choosing (c) were possibly confusing Joan of Arc with the French name 'Bayeaux'. Four out of five of the children choosing (c) came from the same school.

Question 7 was surprisingly well answered since it concerned knowledge of archaeological evidence.

Question 8 showed that most children had heard of Samuel Pepys Diary. No-one committed the anachronism of choosing (d). Of the 13 who made wrong choices, seven chose (a), probably having learnt that the rebuilding of London followed the Great Fire, and only six chose (b). Most of them clearly saw that the historian's knowledge of the Great Fire depended on an eye-witness account rather than a history book.¹

Question 2. The choices made here were somewhat more widespread. Of the 16 children who chose (a) seven came from one school and six from another, while four of the six who incorrectly chose (c) came from the second of these two schools. That more chose (a) than (c) may perhaps be explained in that children see monks as 'long ago' and therefore Roman Britain fits this time concept better than Victorian England.

Question 6. The same idea of 'long ago' may have affected the choices made in answer to this question, as most of those making the wrong choice believed that Domesday Book was written in picture writing rather than printed on a printing press. None again chose the anachronistic alternative of the typewriter.

Question 5, like question 6, demanded knowledge of technical matters and the choices were similarly more widespread than in the question previously

1. This tallied with the answers to Question 10(c) where 75.5% preferred the eye-witness account of the Battle of Agincourt to that of H.A.L. Fisher to inform future generations about the event.

considered. Of the 38 incorrect choices, 17 chose papyrus, 16 clay tablets and only five paper as the materials on which monastic chronicles were written; again, the concept of 'long ago' seems to have affected their choices.

Question 3 showed the widest spread of marks of any of the questions and suggests that Sutton Hoo has not figured largely in school syllabuses.¹ The alternatives offered were close both in chronology and type; if children remembered only the shield and helmet of the Sutton Hoo treasure they would have difficulty in making their choice.

In general, the scores in these first eight questions of the Sources Test revealed that children had, on the whole, been introduced to many of the well-known sources of history: in every item the majority of children made the correct choice. Apart from the perhaps unfamiliar Sutton Hoo ship burial, the majority of wrong choices were made to questions demanding technical knowledge, e.g. of writing styles and materials. In the two instances where historical anachronisms were offered as alternatives, these were not chosen at all. The children's previous learning experiences, then, had included some introduction to different types of historical sources.

Question 9

Answers to Question 9 suggested that the children were far less familiar with the sources of local history. Only eight of them mentioned a County Records Office, six of whom came from School C and the other two from the adult education class. Two children mentioned Somerset House and one Domesday Book. Seventy-seven children cited the local or school library, 74 the parish church and 56 museums. Eleven mentioned old people as sources of information, and a few children local shops, particularly newsagents -

1. This may well change since the Schools Council History 13-16 Project has included a study of the treasure in its materials.

a confusion between local gossip and local history? They were clearly more familiar, as one might expect, with the visual rather than the written evidence for the history of their own area.

Question 10

The answers to the various parts of Question 10 provided the most valuable information in the Sources Test, particularly concerning the ability to detect similarities in two pieces of evidence and the ability to use either internal evidence or external criteria in the comparison or judgement of sources.

Question 10a asked children to pick out two similar details which appeared in both accounts. Table 5 shows the number of correct choices made in each school.

Table 5
Analysis of choices made in Question 10a of
Sources Test

School	1 correct	2 correct	0 correct
A	17	26	2
C	10	15	2
D	0	7	0
E ₁	4	27	1
E ₂	11	11	3
F	9	17	0
G	0	14	0
	51	117	8
	28.97%	66.47%	4.54%
<u>Total Sample 176</u>			

The chi-square test was used to see if age or intelligence level played any part in the ability to see similarities in two pieces of evidence. The choices made by the children were parcelled out according to age and ability.

Table 6

Contingency Table: age and the ability to see similarities in two pieces of evidence. Question 10a.

Age	Both	One	Neither	
9 -10	4	6	0	10
10-11	22	11	2	35
12-13	22	9	2	33
13-14	37	15	5	57
14-15	17	9	0	26
over 15	14	0	0	14
	116	50	9	175

On the null hypothesis that age does not affect ability to see similarities in two pieces of evidence,

$$\chi^2 = 16.327.$$

With 10 d.f. freedom this is not significant at 1% or 5% levels.

1. The degrees of freedom are the number of cells in a contingency table, such as Table 6, which could be changed without changing the total score of any row or column. In a table with r rows and c columns, the degrees of freedom are $(r - 1)(c - 1)$. In Table 6, therefore, $r = 6$ and $c = 3$, therefore $(6 - 1)(3 - 1) = 10$ degrees of freedom. The term 'degrees of freedom' has been abbreviated to d.f. throughout the text.

Table 7

Contingency Table: intelligence and the ability to see similarities in two pieces of evidence. Question 10a

AH4 Grade	Both	One	Neither	
A	26	6	0	32
B	19	8	1	28
C	40	21	4	65
D	20	4	3	27
E	5	3	1	9
	110	42	9	161 ₁

On the null hypothesis that intelligence level does not affect ability to see similarities in two pieces of evidence,

$$\chi^2 = 7.59.$$

With 8 d.f. this is not significant at the 1% or 5% levels.

The null hypothesis was therefore sustained in both cases and it can be concluded that age and intelligence levels play little part in the ability to see similarities in two pieces of evidence.₂

Question 10b asked children to suggest a reason why the same details about the battle appeared in both accounts, that is, asking them to make an inference about the relationship of the two passages. Attention was directed not so much at the correctness of their answers but at the

-
1. No norms were available for 9 and 10 year olds who could not therefore be classified according to ability level.
 2. Compare with the test for the ability to see differences in two pieces of evidence in the Documents Test, page 216.

criteria used in the reasons given. Their answers were analysed in three categories:-

- (a) Those deriving reasons from the details in the passage given, albeit including additional information from historical knowledge, etc.
- (b) Those deriving reasons from information given about the authors of the two passages.
- (c) Those unable to cite any reasons at all.

Category (a) was therefore based mainly on internal evidence in the passages; category (b) implied critical understanding of the nature of the two passages using external criteria. Examples from both categories are given below.

Category (a)

Many children chose the obvious explanation:-

"Because the battles were the same in each case" (School A, aged 9)

"Because the details were the main ones" (School A, aged 10)

"Because it was true" (School E₁, aged 14)

"Because it is important: we want to know how they won the battle and with what weapons" (School E₂, aged 14)

"It was these points which caused the battle to be lost" (School F, aged 14)

"Because facts are facts and no-one can change history, although it can be made simpler" (School F, aged 14)

Others brought historical knowledge to bear on the details in the passage:-

"Armour was a common thing in those days" (School A, aged 10)

"Because guns weren't invented in those days" (School A, aged 11)

"Because the British were famed for their longbowmen" (School E₁, aged 13)

and a very erudite one:-

"Because of possible burials in the area of knights and lords who were

buried with their armour on, and possibly fragments left over from the battle" (School E₁, aged 14).

Category (b)

"Because the second man looked at the first account before writing his" (School C, aged 12).

"Because the historian had read the first passage" (School C, aged 13).

"A was written by Jehan de Wavrin, which was the true one; B took his information from A" (School F, aged 14).

"Possibly because A was the best known account of the battle and B decided to take his information from it" (School F, aged 14).

This part of Question 10 was found more difficult than the first part. 26.29% of the sample could not give any reasons at all: 50.85% gave Category (a) answers and 22.85% Category (b) answers.

The chi-square test was again used to see if age α intelligence level played any part firstly in the ability to answer the question at all and secondly in the ability to give Category (a) or (b) reasons.

Table 8

Contingency Table: age and the ability to infer the relationship between two pieces of evidence. Question 10b.

Age	(a)	(b)	(c)	
9-10	5	0	5	10
10-11	21	6	8	35
12-13 ₁	13	6	14	33
13-14	27	15	15	57
14-15	13	10	3	26
over 15	10	3	1	14
	89	40	46	175

1. School B was excluded as in the first part of the Sources Test.

On the null hypothesis that age plays no part in the ability to infer the relationship between two pieces of evidence,

$$\chi^2 = 18.584.$$

With 10 d.f. this is significant at the 5% level and therefore the null hypothesis can be rejected.

A further attempt was made to determine the relationship between age and the ability to infer the relationship between two pieces of evidence excluding Category (c) (no answer).

Table 9

Contingency Table: age and the use of different criteria to infer the relationship between two pieces of evidence. Question 10b.

Age	(a)	(b)	
9-10	5	0	5
10-11	21	6	27
12-13	13	6	19
13-14	27	15	42
14-15	13	10	23
over 15	10	3	13
	89	40	129

On the null hypothesis that age plays no part in the ability to use either internal evidence or external criteria to infer the relationship between two pieces of evidence,

$$\chi^2 = 7.7812.$$

For 5 d.f. a value of 11.07 is needed for 5% significance and so the null hypothesis is sustained. The differences between the totals of the

two categories must be attributed to accidents of sampling. It is noticeable how small a proportion of the over 15 group gave Category (b) answers, which helps to unbalance the sample.¹

On this evidence it must be concluded that age plays some part in the ability to infer relationships between two pieces of evidence but not in which type of criteria are used to fulfil this ability.

Table 10

Contingency Table: intelligence and the ability to infer the relationship between two pieces of evidence. Question 10b

AH4 grade	(a)	(b)	(c)	
A	18	11	3	32
B	72	12	9	28
C	34	13	18	65
D	11	8	8	27
E	1	3	5	9
	71	47	43	161 ₂

On the null hypothesis that levels of intelligence play no part in the ability to infer the relationship between two pieces of evidence,

$$\chi^2 = 14.428.$$

With 8 d.f. this is just below the level required for 5% significance (15.51) and therefore the null hypothesis was sustained.

-
1. cf. Documents Test, Question 6, where this over 15 group also failed to use external criteria (page 231)
 2. As before, no AH4 norms for under 11s.

Table 11

Contingency Table: intelligence and the use of different
criteria to infer the relationship between two pieces
of evidence. Question 10b.

AH4 Grade	(a)	(b)	
A	18	11	29
B	7	12	19
C	34	13	47
D	11	8	19
E	1	3	4
	71	47	118

On the null hypothesis that intelligence plays no part in the ability to use internal evidence or external criteria to infer the relationship between two pieces of evidence,

$$\chi^2 = 9.585.$$

For 4 d.f.

a value of 9.49 is required for 5% significance.

The value of χ^2 exceeds this and the null hypothesis may therefore be rejected. The difference between the values obtained in both these tests and the values needed for 5% significance is so slight as to warrant the conclusion that intelligence in this particular question had played some part in the ability to infer the relationship between two pieces of evidence.

On this evidence, it may be concluded that age plays some part in the ability to infer the relationship between two pieces of evidence, but not in the kind of criteria used. Intelligence plays a greater part in determining whether a child uses internal evidence or external criteria; the higher the intelligence level, the more likely a child is to use external criteria.

Question 10c asked children which of the two accounts they would keep to inform future generations about the Battle of Agincourt. This was intended to determine whether they appreciated the value of an eye-witness account.

As before, the answers were divided into three categories:-

- (a) those basing judgements on the content of the passage
- (b) those utilising the information given about the two authors
- (c) those unable to make any judgement at all.

Category (a) was therefore based on internal evidence and Category (b) utilised external criteria. Examples of both categories are given below:-

Category (a)

Some of the younger children became personally involved in the passage:-

"I chose B because I think the French were cowards because of all the armour they wore" (School A, aged 10).

"I chose B because the French should have let the archers go forward first" (School A, aged 11).

Others made their judgement on the style and content of the passage:-

"The one lettered A had more detail in it" (School A, aged 10).

"I would keep A because it shows you more about the fight" (School C, aged 12).

"A because it seems more realistic and is written in an historical style, with old phrases such as 'arrows on the French with great vigour'" (School C, aged 12). (That it was old does not seem to have occurred to the last writer).

"I would cross out A because it is harder to understand" (School C, aged 13).

"I would choose B because it is more up to date and explains it in easier language" (School E₁, aged 13).

Category (b)

Many of the children of all ages appreciated the value of an eye-witness account:-

"Because A was written in the year of the battle and gives a better story" (School A, aged 10).

"A, because H.A.L. Fisher was not at the battle" (School A, aged 10).

"H.A.L. Fisher did not see the battle himself but Jehan de Wavrin did" (School A, aged 11).

"A, because it is original, the first copy" (School E₂, aged 13).

"The man who wrote about the battle could be more accurate in the description as he fought there" (School F, aged 14).

"A was the obvious choice as it was written by an eye-witness" (School F, aged 14).

Some had reservations about choosing A:-

"Although A is original, it is rather one-sided" (School E₁, aged 13).

"I would throw A away because it was written by a man-at-arms" (School A, aged 10).

"I would keep B because A is out of date and all about the French". (School E₂, aged 13).

"B is more up to the present date" (School E₂, aged 13).

A few had reservations about B:-

"A, because the historian would get his details from many people and might get something wrong" (School A, aged 10).

It is clear that some even of the younger age group could utilise external criteria in making a judgement. Some had progressed beyond appreciation of an eye-witness account to the beginnings of understanding of bias, although some clearly felt that the more modern a piece of writing was, the better it must be.

Most children found this question easier to answer than Question 10b; only 14.85% could not answer the question at all. 31.42% gave category (a) answers and 53.71% category (b). 74.5% of the children said they would keep A and 25.5% B. 60.4% choosing A gave category (b) answers utilising external criteria, and 14.09% category (a). Most of those choosing B did so for its style and content (21.47%), only 4.02% choosing it for other reasons. The majority, then, preferred to keep the eye-witness account while those choosing B did so, on the whole, because it was easier to understand. The majority of the latter were in the younger age groups.

The chi-square test was again used to determine the parts played by age and intelligence.

Table 12

Contingency Table: age and the ability to
pass a judgement. Question 10c.

Age	(a)	(b)	(c)	
9-10	3	2	5	10
10-11	13	14	8	35
12-13	18	11	4	33
13-14	15	34	8	57
14-15	3	22	1	26
over 15	3	11	0	14
	55	94	26	175

On the null hypothesis that age plays no part in the ability to pass a judgement on the respective merits of a contemporary source and a

modern text,

$$\chi^2 = 36.871.$$

With 10 d.f. a value of 23.21 is required for 1% significance and the null hypothesis may be confidently rejected.

A further attempt was made to determine the relationship between age and the ability to make judgements excluding category (c) (no answer).

Table 13

Contingency Table: age and the use of different criteria in passing judgement. Question 10c

Age	(a)	(b)	
9-10	3	2	5
10-11	13	14	27
12-13	18	11	29
13-14	15	34	49
14-15	3	22	25
over 15	3	11	14
	55	94	149

On the null hypothesis that age plays no part in the ability to use either internal evidence or external criteria in making a judgement between a contemporary source and a modern text,

$$\chi^2 = 19.042.$$

For 5 d.f. 15.09 is required for 1% significance and the null hypothesis may therefore be rejected.

On this evidence it may be concluded that age is an important factor in the ability to make a judgement between a contemporary source and a modern text, and that the older a child is, the more likely he is to use external criteria to arrive at this judgement.

Table 14

Contingency Table: intelligence and the ability
to pass a judgement. Question 10c

AH4 Grade	(a)	(b)	(c)	
A	9	21	2	32
B	8	18	2	28
C	20	35	10	65
D	11	10	6	27
E	3	5	1	9
	51	89	21	161

On the null hypothesis that intelligence plays no part in the ability to make a judgement between a contemporary source and a modern text,

$$\chi^2 = 7.976.$$

For 8 d.f. 15.51 is required for 5% significance and therefore the null hypothesis is sustained.

Table 15

Contingency Table: intelligence and the use of different
criteria in passing judgement. Question 10c

AH4 Grade	(a)	(b)	
A	9	21	30
B	8	18	26
C	20	35	55
D	11	10	21
E	3	5	8
	51	89	140

On the null hypothesis that intelligence plays no part in the ability to use either internal evidence or external criteria in making a judgement between a contemporary source and a modern text,

$$\chi^2 = 3.193.$$

For 4 d.f. 9.49 is required for 5% significance and so the null hypothesis is sustained.

On this evidence it may be concluded that intelligence plays little part in either the ability to make a judgement between a contemporary source and a modern text or in the use of internal evidence or external criteria to make that judgement. It would appear that these abilities are more affected by chronological age than by levels of intelligence.

The analysis of the answers given to the three parts of Question 10 would then, appear to be somewhat contradictory. Clearly, the ability to detect similarities between two pieces of evidence was found relatively easy and age and intelligence played little part in the achievement of the ability: it was within the range of most of the children. Question 10c, demanding a demonstration of the ability to judge between an eye-witness account and a modern text describing the same historical event was not within the capacity of as many children as Question 10a. Interestingly, it was chronological age rather than intelligence level which counted both in actually being able to answer the question and in utilising external criteria to do so. Nevertheless, it is clear from the range of answers that many of the younger children could utilise external criteria in this respect. The inconsistency in levels of reasoning is perhaps as important as the general trend towards greater use of external criteria with age, since it implies that some younger children need to be given the opportunity to utilise an ability not as yet possessed by many

of their colleagues and, clearly, many 13 and 14 year olds are still unable to utilise external criteria as perhaps one might expect them to do.

Question 10b, asking for an inference to be made about the relationship of a contemporary source to a modern text, was clearly the most difficult part of the question. Age rather than intelligence once again counted in the ability to answer the question at all, though not as strongly as in Question 10c. On the other hand, intelligence rather than chronological age determined the ability to use external criteria in answering the question. Possibly the unfamiliarity of the concept required meant that fewer children saw the point of the question and that these were mainly children with a higher mental than chronological age. In fact, the specific ability required was not within the capabilities of the majority of children. Once again, though, one must note the exceptions, particularly in the younger age groups.

2. THE DOCUMENTS TEST

This test was intended to examine children's levels of achievement in the main cognitive objectives in Categories 4 and 5 of the Farming Unit prior to using the materials. Various historical passages were chosen and items set on these, each designed to encourage the use of one of the abilities desired. The answers were marked on a 1-5 scale by two markers, the scores correlated and a reasonably objective standard of marking achieved.

Validation

In a test of this kind it is clearly desirable to set as many items as possible to examine each of the objectives. The first version of the test₁ therefore contained three pairs of historical passages with 20

1. Included in the Appendices

questions set on the objectives in Categories 4 and 5. The questions were then given to colleagues to see if they could state which objective each question was designed to test and some questions were accordingly reworded.

The test was tried out on the same two forms in the independent school (School 0) who had taken the Sources Test, a fourth year whose average age was 15 and a fifth year whose average age was 15.11. Both classes were above average in ability. It was found that the test was far too long both in the amount the boys could grasp at one time and in the length of time a teacher would be prepared to spend on it. Since the Unit was concerned with farming, it was decided to concentrate on the two passages by Celia Fiennes and Daniel Defoe which described farming in Leicestershire in the late seventeenth and early eighteenth centuries. A full item analysis of the answers to questions on these two passages in the first pre-trial test was impossible as not all the class had completed them due to the length of the test. Some changes were, however, clearly needed:-

Question 11, designed to test factual recall was impractical as it resulted in guesswork. This objective is difficult to test in a pre-test situation.

Question 12 was badly worded and needed rewriting to make the answers more specific and related to the Fiennes/Defoe period.

Questions 10 and 13 encouraged children to duplicate information given in answer to Question 7.

The questions were then rewritten. The first three questions were intended to test the use of internal evidence. Question 1 involving comprehension and getting the children to read the documents intel-

ligerly; then Question 2 demanded analysis of the information gathered in Question 1, and Question 3 involved the use of that information in a form different from that in which it was originally presented. This had been found to be important in setting questions to test synthesis which can all too often lead to plagiarism of the original material. Question 3 could also involve the use of the historical imagination. The last three questions were intended to encourage children to use external criteria, inferring from the material to a wider historical context in Questions 4 and 5 and making a judgement in Question 6, for which additional information about the authors was supplied.

Reliability

The new test₁ was then tried out on a wide range of age groups in a local girls' grammar school (School R), which volunteered, in the hope of obtaining scores which could be set against those of the trial schools to determine the reliability of the test.

The marking of these tests involved the establishment of certain criteria. Each questions was marked on a 1 to 5 scale and a standard of marker reliability had to be achieved. Two sets of papers, one from School B and one from one of the classes in School R, were marked independently by the author and by Mr D.K. Jones, M.A., of Leicester University School of Education. A Pearson coefficient of correlation was then calculated for each questions as follows:-

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1. Included in the Appendices.

Table 16

Pearson coefficients of correlation for question scores in Documents Test, Control Class R and School B

Question	Control Class R	School B
1	r = 0.6327	r = 0.4581
2	0.7253	0.8027
3	0.1831	0.5996
4	0.3930	0.6976
5	0.5918	0.8982
6	0.7464	0.8814
	<u>0.6535</u>	<u>0.8354</u>

Although the overall correlations were both positive, it was clear that the marking of Question 3 and Question 4 needed further discussion. The criteria for marking were then redefined and a further set of cross-marking undertaken on the papers of School C. The correlations for each question were as follows:-

School C

Q.1	0.7549 = r
Q.2	0.6243
Q.3	0.8435
Q.4	0.3370
Q.5	0.8491
Q.6	0.8353

Question 4 was still the main area of disagreement and further re-definition of criteria was carried out. Once this was done, since positive correlations had been achieved on all the other questions, it was felt that

the author could safely undertake the rest of the marking on the criteria agreed.

The documents test was taken by a total sample of 190 in School R, two forms in each year with an age range of 12-16. The forms were streamed and therefore separate scores could be obtained for 'A' and 'B' groups. The first three questions, testing the use of internal evidence, and the last three questions, testing the use of external criteria, were totalled separately; the mean total score for each year group is also given in Tables 17-19. The totals at the foot of each column in these tables are the mean score (out of 5) of each question and the mean totals achieved.

Table 17

School R, Overall Year Group Means, Documents Test

Year	Av. Age	n	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Total 1,2,3	Total 4,5,6	Total
1	12.4	53	3.98	2.43	2.47	1.84	1.94	1.75	8.94	5.58	14.52
2	13.3	58	4.07	3.14	2.72	2.28	2.29	2.51	10.08	7.68	17.76
3	14.5	53	4.13	3.05	2.93	2.41	2.85	2.9	10.27	8.17	18.44
4	15.3	26	4	3.85	3.12	2.54	2.58	2.89	11.08	8	19.08
Question means over all years		190	4.04	3.12	2.81	2.26	2.41	2.51	10.09	7.36	17.45

Table 18

School R, 'A' Forms, Year Group Means, Document Test

Year	Av. Age	n	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Total 1,2,3	Total 4,5,6	Total
1	12.4	25	4.28	2.84	2.68	1.8	2.16	1.8	9.92	5.68	15.6
2	13.3	31	4.19	3.48	2.93	2.64	2.64	2.93	10.61	8.5	19.11
3	14.5	29	4.14	3.45	3.21	2.41	3.06	2.88	10.93	8.35	19.28
4	15.3	13	4.08	3.69	3.08	2.61	3	2.62	11	8.15	19.15
Question means over all years		98	4.17	3.36	2.97	2.36	2.71	2.56	10.61	7.67	18.28

Table 19

School R, 'B' Forms, Year Group Means, Document Test

Year	Av. Age	n	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Total 1,2,3	Total 4,5,6	Total
1	12.3	28	3.71	2.07	2.89	1.89	1.75	1.71	8.07	5.5	13.7
2	13.2	27	3.95	2.81	2.52	1.92	1.95	2.1	9.55	6.86	16.41
3	14.5	24	4.12	2.66	2.66	2.41	2.66	2.92	9.62	7.99	17.61
4	15.3	13	3.92	4	3.15	2.77	2.61	3.15	11.15	7.85	19
Question means over all years		92	3.92	2.88	2.8	2.25	2.24	2.47	9.6	7.05	16.68

Notes to Tables

1. This test was carried out at the end of the Summer Term of 1972. Therefore the first year have an average age of 12.3 and are therefore more or less equivalent to the second year in Schools C and D of the trials group who used the material earlier in the school year.
2. The tests were also carried out in the post-examination period when motivation was not high.

3. Most forms were only given half-an-hour for the test, which helps to account for the low level of marks in the second part of the test, particularly in the younger forms.
4. There is a general tendency for the older children, and also for the 'A' stream in each age group, to do better on the test, although there are exceptions to this.
5. The second part of the test was in all cases done less well than the first part, although the difference between the two parts is not so extreme in the older age groups.
6. The older forms tended to mask the achievement of a particular objective by cramming in a large amount of historical information and lacking the power of selectivity. This reflected their normal method of learning, and indicates how achievement of objectives is not only affected by age and intelligence but also by previous learning experience.

The question means for each age group were directly compared with the means for the equivalent age group in the trial schools.

Table 20

Comparison of means obtained to each question
of Documents Test in School R and Trial Schools

R	T	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6						
1	C/D	3.98	3.73	2.43	2.49	2.47	2.31	1.84	2.18	1.94	2.12	1.75	1.73
2	E	4.07	3.73	3.14	2.06	2.72	2.29	2.28	2.04	2.29	2.10	2.51	1.60
3	F	4.13	4.00	3.05	2.62	2.93	2.62	2.41	2.67	2.85	2.52	2.90	2.52
4	G	4.00	3.79	3.85	3.93	3.12	2.93	2.54	3.36	2.58	2.50	2.89	2.86

1. The means for the control school, R, are in the first column under each question and those for the comparable trial school, T, in the second.
2. That the control school was selective and the others unselective is partly compensated for by the shortness of time given to the control school to complete the test.

The two sets of mean scores were correlated, and the Pearson coefficient obtained was $r = 0.783$.

Using Lindquist's table to determine the significance of τ for a sample of 24, the value of τ was found to exceed the value necessary for significance at the 1% level. This suggests a high level of agreement between the two sets of scores. The Documents Test was therefore proved reasonably reliable in consistency of scoring over two quite large samples of similar age range.

Results in the Trials Schools

School A did not take the Documents Test and so no scores were available. The scores for School B, where English was a second language to nearly half the class, were excluded from the calculation of overall means but are included for comparative purposes where the question means for age groups are being considered. In schools C and F, where a few children dropped out between the pre- and post-tests, only the post-test sample was used to make comparison easier. In School E, where both classes took the pre-tests but only a small group in each class used the Farming Unit and took the post-tests, the whole sample was included and separate values have been calculated for the post-test group where necessary. A similar procedure has been followed with School G, where only half of those taking the pre-test were available for the post-test. To have eliminated this number would have made the sample too small to be reliable.

Table 21

Documents Test, Question Means in each Trial School

School	n	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6
B	27	3.37	1.30	0.63	0.37	0.37	0.33
C	19	3.32	1.84	1.63	1.37	1.53	0.89
D	7	4.41	3.14	3.00	3.00	2.71	2.57
E ₁	32	4.03	2.72	2.47	2.44	2.37	1.84
E ₂	25	3.44	1.4	2.12	1.64	1.84	1.36
F	21	4.00	2.62	2.62	2.67	2.52	2.52
G	14	3.79	3.93	2.93	3.36	2.50	2.86

Table 22

Documents Test, Question Means in Age Groups

Age Group	n	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6
11-12	27	3.37	1.3	0.63	0.37	0.37	0.33
12-13	26	3.73	2.49	2.31	2.18	2.12	1.73
13-14	57	3.73	2.06	2.29	2.04	2.10	1.60
14-15	21	4.00	2.62	2.62	2.67	2.52	2.52
over 15	14	3.79	3.93	2.93	3.36	2.5	2.86

Table 23

Documents Test, Question Means in Intelligence Groups

Ability Group	n	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6
A	27	4.15	2.78	2.85	2.93	2.78	2.44
B	20	3.60	2.50	2.75	2.30	2.35	2.10
C	57	3.80	2.09	1.92	1.77	1.70	1.54
D	31	3.48	0.62	1.48	1.32	1.32	0.90
E	10	3.00	1.60	1.00	1.00	1.00	0.91

Notes to Tables 21-23

1. Since it is clear from Tables 18 and 19 that intelligence levels do affect scores, the bias of the sample already referred to on page 181 must be borne in mind:-
 - (a) School B provided the only examples of 11-12 age group and they were all average or below in intelligence. This may help to account for the jump in scores between the 11-12 and 12-13 age group (Table 22).
 - (b) Equally, School D were all well above average in intelligence and therefore the scores for the 12-13 age group artificially high.
 - (c) The omission of School B from the tables would have unbalanced the sample in another way, namely that nearly all the 'D' and 'E' categories remaining would have come from the adult group, School G. Since age is clearly also a factor in scoring, this would have left the scores in the 'D' and 'E' categories artificially high.
2. In general, the scores became progressively higher with both age and intelligence level.
3. The questions, clearly, were set in a progressive order of difficulty, which suggests that the objectives they were designed to test were also listed in progressive order of difficulty. This is an important factor to be borne in mind when setting objective worksheets or tests, since the children obviously need to start with the easiest objective and work upwards.

Item Analysis

Table 24

Documents Test, Question Means (excluding School B)
based on scores of Total Sample

School	n	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6
C	19	63	35	31	26	29	17
D	7	29	22	21	21	19	18
E ₁	32	129	87	79	78	76	59
E ₂	25	86	35	53	41	46	34
F	21	84	55	55	56	53	53
G	14	53	55	41	47	35	40
Total Scores		444	289	280	269	258	221
Total Sample	118						
Question Means		3.76	2.45	2.37	2.28	2.19	1.87

The first three questions, it will be remembered, were designed to test whether a pupil could understand and utilise the material on which he is working without having to go beyond it, except possibly to utilise his imagination.

Question 1 was designed to encourage children to read and understand the material and to select facts relevant to a given theme. It would seem essential to devise such a question at the outset for any new material children are asked to work with; if comprehension cannot be achieved, it is unlikely that any higher level objectives will be.

It was by far the best answered question in the test and the scores are less differentiated across the age groups than in other items, although

upward progression in the intelligence groups is marked. The older children may have resented being asked to answer what appeared to be so simple a question. It took some of the children so long to answer this question that they failed to complete the rest of the test. There seemed to be two reasons for this. Firstly, slower readers found the unbroken print rather heavy going, a factor to consider when determining the number of questions to set on a worksheet on a document. Secondly, many of the older pupils tried to include a great deal of information that was not strictly necessary, displaying a lack of selectivity. Whereas the younger children just listed clues, some of the older ones also tried to interpret the clues, thus using inference as well as comprehension. For example:-

"seed crops are suggested when the writer mentions good corn and grasses; she mentions herbage - mint, basil etc. Sheep and cattle are suggested by the yarne and leather. Red land may be meant to apply to ploughed land." (School E₁, aged 14).

Such an answer illustrates the difficulty of setting an item to test one objective only.

Question 2 was intended to test powers of analysis in asking children to differentiate between two pieces of evidence. It will be remembered that Question 10a of the Sources Test asked children to pick out similarities in two pieces of evidence, and that they found little difficulty in doing this. The same cannot be said for their selection of differences. 54.48% of the sample could find no disagreement at all, 36.5% some disagreement and 9% gave no answer. Many children could show that both authors agreed on pastoral farming but few could select the major difference, that Fiennes mentions corn and arable farming whereas Defoe does not - and this although they had just listed the clues each separate author gave about Leicestershire farming. Fairly typical was:-

"They mention sheep, cattle, horses and crops. I don't think they disagree with each other" (School C, aged 12).

Some of the minority finding disagreement noted differences other than the one stated above:-

"Sheep and cattle are mentioned by both authors, also horses; Celia Fiennes says that the landlord just looks after them, whereas Defoe said they bred, fed and sold the horses." (School C, aged 13).

"The two authors disagree over some kinds of farming, because Celia Fiennes only mentions sheep but Defoe mentions cattle, sheep and horses" (School C, aged 12), (i.e. not attaching any significance to the 100 horses at the inn in Fiennes account).

"The two authors usually agree about most things, but Defoe adds that they manufacture (framework knitting)". (School F, aged 15).

"Defoe writes more about the produce of the county, i.e. wood, cattle and horses. Fiennes writes more about the county itself, the good soil for farming, the marketing of the produce and the methods of farming" (School F, aged 15).

"The kinds of farming talked about by both authors are breeding cattle or sheep. Celia Fiennes gives the impression of it being a place where the land is rich and Daniel Defoe gives the impression that it is an empty place" (School E₁, aged 14).

Some did detect the main difference:-

"Both agree that cows and sheep are bred but they don't both say that corn is grown", (School C, aged 12).

"The kinds of farming mentioned by both authors are hosiery production with sheep and cattle raising. Celia Fiennes mentions corn and grass growing which Daniel Defoe did not appear to notice." (School E₁, aged 14).

"Although Celia Fiennes says that the landlord had 100 horses set up at his inn, she does not say the horses were bred in the area, as does Defoe, while he does not mention the corn and grain grown there" (School G). (All School G noted that Defoe did not mention corn.)

The answers of some of the older and brighter children suggested that they may have found the question ambiguous in that they interpreted 'disagreement' as direct contradiction.

"the two authors don't disagree in any parts because they are usually talking about different things" (School D, aged 13).

"Both authors mention that sheep farming is good, producing very big sheep. They also agree that great quantities of wool are produced and good, plentiful cattle are reared. The authors do not actually disagree over the types of farming, but Defoe does not mention the corn crops being very good." (School F, aged 15).

"The writers do not appear to disagree on the surface but Celia Fiennes mentions the growing of corn twice and it is not mentioned at all by Defoe. By writing of it twice, Celia obviously thinks its growth is quite important but Daniel Defoe does not think it is important enough to mention. However, he does not actually say it is not grown so they do not really disagree although this is hinted at." (School F, aged 15).

As in Question 10b of the Sources Test, then, the levels of answer varied tremendously and emphasise a point to be stressed later, that children will answer a question at the level of which they are capable, regardless of the objective involved.

The chi-square test was again used to see if age played a part in the ability to differentiate between two pieces of evidence.

Table 25

Contingency Table: age and the ability to differentiate between two pieces of evidence, Question 2

Age	Not disagree	Disagree	No answer	
11-12	19	0	8	27
12-13	14	10	2	26
13-14	37	17	3	57
14-15	9	12	0	21
over 15	0	14	0	14
	79	53	13	145

On the null hypothesis that age plays no part in the ability to differentiate between two pieces of evidence,

$$\chi^2 = 55.392$$

For 8 d.f. a value of 20.09 is needed for significance at the 1% level, and therefore the null hypothesis can be confidently rejected. Age obviously plays a very important part in the ability to differentiate.

Table 26

Contingency Table: intelligence and the ability to differentiate between two pieces of evidence, Question 2

AH4 Grade	Not Disagree	Disagree	No Answer	
A	12	15	0	27
B	8	12	0	20
C	38	15	4	57
D	18	7	6	31
E	3	4	3	10
	79	53	13	145

On the null hypothesis that intelligence plays no part in the ability to differentiate between two pieces of evidence,

$$\chi^2 = 23.398$$

For 8 d.f. a value of 20.09 is needed for significance at the 1% level and therefore the null hypothesis can be rejected. Intelligence clearly plays a part in the ability to differentiate, although not so strong a part as age.

These results may be compared with those of Question 10a in the Sources Test,¹ where age and intelligence were found to play little part in the ability to see similarities between two pieces of evidence. It

1. See pages 190 and 191.

would appear that the ability to see differences (which are not, of course, explicitly stated) is a more advanced cognitive skill, in terms of both mental and of chronological age, than the ability to see similarities between two pieces of evidence.

Question 3 was designed to test the power of synthesis, the ability to select material relevant to a given theme. It is easy for the exercise of this ability to become just another exercise in precis work or comprehension, but this can be avoided if the task involves presentation of the synthesised material in a form different from that in which it was originally given. Inevitably, this also involves the use of the imagination but in the marking of this question credit was given for the degree of synthesis achieved rather than for historical imagination. The latter is an important faculty that was neglected both in the list of objectives and in the test, an omission made clear by some of the answers to this question.

Children were asked to write an advertisement to sell a Leicestershire farm, using information given in both passages. Wrongly, the question did not specify whether the advertisement was concerned with the eighteenth century or the present day, but most children took it to mean the former, and, as in the first eight questions of the Sources Test, there were few historical anachronisms such as telephone numbers or local newspaper box numbers.

A few children found synthesis difficult and tended to copy part of one of the passages given:-

"£500 farm for sale. Situated in the heart of the very rich countryside of Leicestershire. The land is red and there are all sorts of good corne and grass which is grown in both fields and enclosures. There are many hills where at the bottom are many enclosures, woods and different sorts of manuring and herbage, among which are many little towns." (School E₁, aged 14).

An answer from the same school shows how the basic information given

could be synthesised into a meaningful advertisement:-

"Farmers, are you looking for a farm with the richest land in England, the best cattle and the finest sheep and strongest horses? If so, come and look around our delightful and highly profitable farm in Whetstone, Leics. Set against a beautiful rural background, this farm has some of the highest annual profits in England. The rent is £1,300 per annum, a bargain at the price."

The younger children, on the whole, synthesised only the basic details of red soil, good grass and corn, and animal rearing. They seem to have found it difficult to utilise a large number of separate ideas in a single theme.

For example, an answer from School D:-

"There is a very rich farm with rich soil in Leicestershire and it is the best place where one can grow crops; also you can breed cattle on the rich grass and sheep can graze on the hillside."

Yet many children in the 12-14 age group compensated by making greater use of their imagination than did the older age group.

Many of School C set out their advertisements in boxes:-

LAND FOR SALE

15 acres of rich, good land.

Enough for herds of cattle,

sheep and corn as well.

CHEAP PRICE

Must be sold

AUCTION TOMORROW

FOR SALE

Farm 1000 acres

Good grazing land

Good for breeding

horses, cows or sheep.

Very cheap

NO POACHERS

John Bloggs,

Manor Farm, Durant,

Leicestershire

Others included selling points such as:-

"For sale, Manor House Farm, famous for its prize-winning livestock."
(School C).

"Buy this farm and you'll make yourself a bargain." (School E₂).

or personal information for the buyer:-

"all the people in the village are very friendly." (School E₂).

"This is a beautiful county with picturesque villages, so any wife would
be contented." (Girl, School E₂).

Yet it would appear that the use of the historical imagination is partly
dependent on previous learning experiences, since none of the 12-13 year
olds from School D made use of this faculty. Their work had been consid-
erably more academic than that of Schools C or E.

The brighter 14 year olds and some of the older age group made less
use of the imagination but greater use of the details given in the passages
to create interesting advertisements, perhaps being able to synthesise

more ideas into a whole than the younger age group. They derived selling points not from the imagination but from the information given about stone quarries, local markets, bad roads, local industry, acreages and rents of farms. For example:-

"Traditional country farm set in beautiful Leicestershire countryside. The rich red soil is excellent for both grass and animal production. The hills have good grass for sheep, cattle and horse rearing and the soil is good for corn. The roads are a bit bumpy but what does it matter when you are breeding sturdy dray horses to pull your carts." (School E₁).

"Good farming plot, well fertilised ground for sale. 5 miles from Uppingham where there is a good Saturday market for leather, yarn and cattle. Come and live in Leicestershire; it has pleasant pastimes, lovely countryside and a nearby quarry for extensions to the house. Very good place to buy horses for transport." (School E₁).

"A fine stone farmhouse with river close at hand. Very red, rich soil and fertile soil growing great quantities of corn and grass pasture. Cattle raising and sheep raising are very popular as sheep are the largest in the land." (School F).

"For sale, a farm comprising 100 acres. Good, rich grazing suitable for cattle, sheep and horses. 30 acres are under corn. Local market for wool by the knitting manufacturers. Quick trade to London for cattle. Become a grazier in Leicestershire and grow rich." (School G).

Many of the advertisements written by the older age group were, however, rather uninteresting agglomerations of information given in the passages with little attempt at synthesis into a whole like the examples quoted above. Possibly many of this age group resented the form of the question, being unused to using acquired information in what was really a piece of creative writing. However, the trial version of the test had confirmed that asking for a precis of the state of agriculture in Leicestershire using the information given in both passages had encouraged repetition of comprehension rather than synthesis. It does seem essential to encourage synthesis by requiring the information in a form different from that in which it was written, but perhaps older children could be asked,

for example, to state the reasons for and against a particular hypothesis rather than to present a piece of creative writing.

Synthesis, then, would seem to be a difficult ability, the successful achievement of which is perhaps related more to mental than to chronological age. Tables 22 and 23 reveal a higher differentiation between scores for the ability groups than for the age groups (excluding School B, the 11-12 age group of low ability). The younger children, and the lower ability groups, seem able only to synthesise a few ideas into one theme, although many do so in a creative manner. The older groups, and the brighter children, can work with more ideas at once but many find it difficult to use them creatively. This is perhaps due to the style of historical writing to which they are accustomed and that essay titles which encourage creative synthesis of ideas rather than regurgitation of acquired facts might improve their achievement in this ability, since the older children are better mentally equipped to deal with a variety of ideas than the younger children to whom such essay titles are normally given.

Question 4 was the first of the items which encouraged children to go beyond the material given to make inferences from local knowledge or previous learning experience. It was, of course, also possible to answer the question from the information given in the passage and not go beyond it at all. Of those giving an answer to the question, 42.6% utilised internal evidence (Category a) and 57.3% external criteria (Category b).

Category (a)

Answers to the first category tended to cite the goodness of the grass, the profit to be made or, less frequently, the local market provided by the framework knitting industry as reasons for Leicestershire farmers specialising in animal rearing. Examples are as follows:-

"Leicestershire farmers went in for keeping and rearing animals because the grass was so good for grazing" (School C).

"Because they had good land in abundance which was suited to animal rearing and might as well use it to its best advantage rather than waste it." (School E₁).

"Leicestershire had good grazing land which enabled the farmer to keep and rear animals. The animals' droppings came in useful for manure and herbage." (School F).

"Because they knew that the cattle and horses bred would be good ones." (School E₂).

"Because there was rich grazing land so the cattle would get fatter and the farmers make more profit." (School C).

"Leicestershire farmers went in for keeping and rearing animals in such a big way because they would make a profit selling horses to travellers and there were so many framework knitting factories in that area they could sell their wool to. They could sell products from their animals in many ways, e.g. wool, meat, milk, leather, yarne, etc." (School D).

"Because there was a lot of money involved and everybody who was a farmer was very rich, almost a gentleman." (School E₂).

Category (b)

Answers in the second category depended on previous learning experience. Those who had not studied the subject before made inferences from general historical knowledge about the products and uses of animals.

For example:-

"Sheep gave wool and wool was used a lot then. Horses could pull carts which was done a lot then." (School C).

"Because the horses were in great demand for pulling stagecoaches and barges. Sheep for wool and cattle generally for meat as the population was slowly increasing." (School E₁).

"At that time most travelling was done on horseback and horses were used for pulling coaches so that there must have been a big demand for horses. Meat could not be stored for long so it had to be bought fresh." (School E₁).

"Farmers went in for keeping and rearing animals at that time because there were no frozen or canned foods so meat was very important. Also because no synthetic man-made fibres had been invented and only wool and cotton were used for clothing so sheep were very important." (School E₁).

"Because everyone wanted meat, bacon and woollen garments so they bred cattle and sheep. They wanted leather for boots, jackets, etc." (School E₂).

The classes studying for C.S.E. or 'O' Level History who had therefore begun to study the topic included much more specific historical detail in their answers, utilising factual recall as well as inference. For example:-

"Leicestershire farmers went in for keeping animals for rearing as they wanted to follow in the footsteps of Robert Bakewell, their fellow farmer." (School F).

"I think that Leicestershire farmers decided to keep and rear animals because the enclosure system had just come in which offered the farmer a better chance of keeping and rearing animals, also disease would not spread." (School F).

"Farmers went in for keeping and rearing animals because the population was increasing and more food was needed to keep them alive." (School F).

"Because the peasants were moving to the towns and there wasn't the labour to grow arable crops. Less labour was needed to rear animals. The growth of the wool trade and manufacture in England meant that a larger local supply of wool was needed." (School G).

Inference is really a process of utilising existing knowledge in a new situation and the variety of answers to this question showed that it is an ability which can be demonstrated on a number of different levels. It is possible to infer within the limits of the material given by making explicit the connection between two elements in a passage which had before only been implicit, as in the need of the framework knitters for wool from sheep reared in the county. On another level, inference can be made from facts given in the passage to generalised information already possessed, such as the need of horses for transport before the coming of steam or motor cars or the need for fresh meat before the advent of canned foods. On a third level, true inference merges with factual recall since, if the topic is already being studied in some depth, the connection between facts learnt in one context and ideas put forward in another is bound to be made. In each case, the child is being asked to utilise knowledge

already possessed in one of the forms outlined above to explain a phenomenon not perhaps encountered before. In this sense, inference moves from the known to the unknown and is therefore important in encouraging progress in learning.

As in Question 10 of the Sources Test, the chi-square test was used to see whether age or intelligence levels helped to determine which level of inference was used, i.e. whether internal evidence (Category a) or external criteria (Category b) was used in the reasoning. In the following table the category 'no answer' is omitted since two-thirds of this was represented by School B which would have biased the result.

Table 27

Contingency Table: age and the ability to use different criteria in making an inference, Question 4

Age Group	(a)	(b)	
11-12	6	1	7
12-13	14	10	24
13-14	23	26	49
14-15	6	15	21
over 15	0	14	14
	49	66	115

On the null hypothesis that age plays no part in the ability to utilise either internal evidence or external criteria in making an inference,

$$\chi^2 = 20.21.$$

For 4 d.f. a value of 13.28 is needed for significance at the 1% level and so the null hypothesis is rejected. The older the child, the more likely he is to utilise external criteria in making an inference.

Table 28

Contingency Table: intelligence and the ability to use different criteria in making an inference, Question 4

AH4 Grade	(a)	(b)	
A	10	16	26
B	12	8	20
C	24	22	46
D	10	8	18
E	0	5	5
	56	59	115

Note

1. As the no answer category has again been omitted in considering ability it must be remembered that since two-thirds of School B fell into that category, the remaining D and E intelligence groups are mainly represented by older candidates, particularly from school G. Since it has already been proved that age is an important factor in utilising external criteria, this inevitably biases the sample. More work needs doing here using larger samples from the less able groups among younger children.

On the null hypothesis that intelligence plays no part in the ability to utilise either internal evidence or external criteria in making an inference,

$$\chi^2 = 8.044.$$

For 4 d.f. a value of 9.49 is needed for 5% significance and the null hypothesis is therefore sustained. When the no answer category, and therefore the whole sample, was included, significance at the 1% level was obtained. Bearing in mind Note 1 to Table 28 and the fact that a value only just below that required for 5% significance was obtained for the biased sample, it would appear that intelligence plays some part in

determining whether internal or external criteria are used as a basis for inference, although perhaps not to the same extent as age. This would concur with the results obtained from Question Db of the Sources Test.¹ Perhaps more important, however, is the fact that (excluding School B) only 8% of the sample were unable to make any inference at all. The vast majority displayed some powers of inference, even though the reasoning was carried out on several different levels.

Question 5 was not a well designed question and therefore the results obtained will not be discussed at any length. It was intended to discover whether children could recognise the incompleteness of evidence for a particular purpose. This involved inference from the known to the unknown, since children were asked to state what classes of people were not described in the two passages. The possible answers to the question were therefore somewhat limited. Many children could not answer the question at all. Of those who did, most recognised that the poor, the farm labourers and so on, were not mentioned:-

"We do not learn about the ordinary people who live in the streets from the two accounts." (School C).

"Poor, starving villagers, that is what they do not say anything about." (School C).

"We cannot learn about the poorer people in society who I suppose did all the hard work." (School E₁).

"We cannot learn about the framewokers and ordinary people, just about the farmers themselves." (School E₁).

Others noted the omission of townspeople, the professional classes, other kinds of farmers than graziers and also the very rich:-

"The people we cannot learn about in these accounts are the peasants, the poor people. We also cannot learn about the very rich people who lived in manor houses and mansions." (School D).

1. See page 195.

"We cannot learn about the framework knitters who were written about by Daniel Defoe." (School E₁).

"The kinds of people we do not learn about from the accounts are those in the professions, such as doctors, teachers, etc. There is also no mention of tradesmen such as shoemakers, blacksmiths, shop keepers etc." (School E₁).

"We don't get much information from the two accounts about the arable farmers." (School F).

Some answered the question from detailed historical knowledge although the inference here was not so obvious as in Question 4:-

"The people who are not talked about in these extracts are the poor people who would have had to sell their land when the enclosure act came in." (School F).

"The people that we do not hear about in the documents are the poor peasants who have been forced to sell their land to richer people with the Government behind them, as they haven't enough money to enclose." (School F).

It was noticeable that the two groups (F and G) which had relied most heavily on detailed historical knowledge in answer to Question 4 had comparatively less success in answering Question 5, the means for Question 5 being lower in both cases (See Table 21).

In general, age played little part in the ability to answer this question but intelligence was more important. (See Table 22 and 23). This is probably because the inference depended more on imaginative thinking than on historical experience.

Question 6 demanded the ability to pass judgement on the comparative merits of two near contemporary sources. This was found considerably more difficult than the ability to judge between an eye-witness account and a modern account of the same event.¹ Over a quarter of the total sample could not answer the question at all. Of those who did make a judgement, three-quarters did so on the style and content on the passage (Category a) and only a quarter made any use of the information given about the authors themselves (Category b).

1. cf Question 10c of the Sources Test, page 198.

Category (a)

Most of the children relying on internal evidence preferred Celia Fiennes account to that of Daniel Defoe. Some did so because Celia's description was fuller:-

"I would trust Celia Fiennes because it is more descriptive and tells you about the land and the surrounding area." (School C).

"I would trust Celia Fiennes most because she talks about more things. Daniel Defoe hardly tells about anything else than sheep farming, horses and the men who breed them. Celia talks about the corn, the land, horses and sheep. She even talks about the roads and how bad they are." (School F).

"Celia Fiennes gives a much fuller account which mentions arable as well as pastoral farming." (School G).

Others preferred Celia Fiennes because they felt that Daniel Defoe was exaggerating the richness of Leicestershire farming:-

"Celia Fiennes because she tells about the land and the bad roads whereas Daniel Defoe just glamorises." (School C).

"Celia Fiennes because she tells her story with less fantasy and imagination and more or less keeps to the facts." (School E₁).

"I would go more on the judgement of Celia as Daniel exaggerates too much about Leicestershire having the best meat farmers in England. Celia gives a bit more about crop farming and the quality of the soil which Daniel Defoe does not give a lot about." (School E₁).

"I would most trust Celia Fiennes' judgement because she does not boast as much as the other and generally seems more realistic." (School E₂).

Those who preferred the judgement of Defoe did so because he was more factual:-

"I would trust Daniel Defoe's account about the state of farming in Leicestershire because his account is about the agriculture but Celia Fiennes is more about the landscape." (School C).

"I would trust Daniel Defoe's account of the state of farming in Leicestershire at that period because it is a more factual pieces of writing. Also he sticks to the main and more basic facts about farming, while Celia starts to talk about a landlord having one hundred horses at his inn, straying from the main facts." (School D).

"I think Defoe's description is best because if anybody wanted to buy a farm that gives most information." (School E₂).

"I would trust Daniel Defoe's judgement because he talks about horses and farmers and Celia goes on mainly about the countryside." (School E₂).

"Defoe, because he seems better informed about farming. Celia Fiennes' account is mainly concerned with her own impressions. Daniel Defoe seems to state facts which he has found out." (School G).

One answer stands out for its degree of perception:-

"Both accounts are equally to be trusted because they tell you about different aspects of farming." (School F).

Category (b)

The majority of those who utilised the information given about the two authors preferred Defoe to Fiennes. Of the few choosing the latter, the main reason given was that Defoe, being a journalist, was not to be trusted:-

"Defoe's job was to do this type of work and he has to impress the public and may, therefore, exaggerate, but Celia Fiennes just wrote and I think wrote the truth." (School F).

"I would trust Celia Fiennes judgement because writing was not her profession: Defoe's was. Defoe might have to exaggerate to impress his readers and maintain their interest in his work." (School F).

"It is hard to say which you could trust the most. Celia Fiennes would look at farming from a feminine viewpoint whereas Defoe would look at it from the point of view of an author or poet, and might therefore stress things out of context. I think I would most trust Fiennes for this reason." (School D).

Others would trust Defoe just because he was a journalist:-

"I would most trust the judgement of Daniel Defoe about the state of farming in Leicestershire because he was a government agent and was expected to give a true and accurate account of farming." (School F).

"I would most trust the judgement of Daniel Defoe as being an author he was used to writing such articles and Celia Fiennes was not." (School E₁).

Some of the boys felt that as Celia Fiennes was a woman, she was an untrustworthy source:-

"Defoe is more reliable because women of that period were no great authorities on things such as agriculture." (School D).

"Celia Fiennes was only the daughter of a colonel and would not know as much as a man." (School E₁).

Finally, a few based their judgements on the comparability of information given in the passages with the present day landscape of Leicestershire:-

"The passage I would trust the most about farming in Leicestershire is that of Daniel Defoe because he talks about framework knitting. There is a large knitting industry today and Leicestershire is still famous for its sheep." (School F).

"I would most trust the account written by Defoe because there are still a lot of animals in Leicestershire and a lot of the ground is clay or granite and so it is difficult to grow crops." (School F).

The chi-square test was again used to determine the influence of age and intelligence in making a judgement. It was obvious that age influenced the ability to tackle the question at all, since 21 out of 27 in School B and 9 out of 19 in School C failed to answer the question. The first test was therefore done omitting the 'no answer' category as this would have biased the sample heavily towards a rejection of the null hypothesis.

Table 29

Contingency Table: age and the use of different criteria in passing a judgement, Question 6.

Age Group	(a)	(b)	
11-12	6	0	6
12-13	15	2	17
13-14	40	10	50
14-15	9	12	21
over 15	10	4	14
	80	28	112

On the null hypothesis that age plays no part in the use of either internal evidence or external criteria in judging the comparative merits of two contemporary sources,

$$\chi^2 = 15.462.$$

For 4 d.f. 13.28 is required for significance at the 1% level and therefore the null hypothesis can be rejected. The older the child, the more likely he is to use external criteria in making a judgement. It is noticeable, however, that some of the younger children could use external criteria and equally many of the adult sample failed to do so.¹

Table 30

Contingency Table: Intelligence and the use of different criteria in passing a judgement, Question 6

AH4 Grade	(a)	(b)	no answer	
A	18	7	2	27
B	14	5	1	20
C	33	12	12	57
D	13	2	16	31
E	2	2	6	10
	80	28	37	145

On the null hypothesis that intelligence plays a part in the ability to pass a judgement of the comparative merit of two contemporary sources,

$$\chi^2 = 27.182.$$

1. See Question 10b of the Sources Test, page 194.

For 8 d.f. 20.09 is required for significance at the 1% level and so the null hypothesis can be rejected.

If, however, the test is carried out excluding the 'no answer' category, a value for χ^2 of 2.553 is obtained which is not significant at all. It would, therefore appear that whereas intelligence plays a part in determining whether a judgement is made at all, it does not influence the choice of criteria on which that judgement is based.

Chronological rather than mental age would seem to play a more important part in the ability to utilise external criteria in making a judgement between two near contemporary sources. This agrees with the analysis of the results of Question 10c₁ of the Sources Test concerning the judgement between an eye-witness account and a modern account of the same event, although in that case the 'no answer' category was smaller.

Comparison of Results of Sources Test and Documents Test

It is now possible to make some general points about the levels of achievement of the sample on the objectives tested in Question 10 of the Sources Test and in the Documents Test, with reference to the intended use of the Farming Unit.

Firstly, most groups took a comparatively long period to finish the seven questions. The digestion and then use of information in the form of original documents, albeit typed and not manuscript, is a lengthy process. If it is thought that the source method is a worthwhile way of achieving certain objectives, then adequate time needs to be given to the process.

Secondly, the order of objectives to be achieved on any one document or pairs of documents is important. Table 24 shows that the objectives

1. See page 200-201.

in the Documents Test were progressively more difficult to achieve. Comprehension must come first if the document is to be read and understood intelligently: analysis and synthesis can only follow once the child has grasped the contents of the document. Having familiarised themselves with the material by the use of these three abilities, then a child can be asked to progress beyond it to make inferences and judgements. This means that the order of questions on any worksheet on documentary material is vital.

Thirdly, the previous learning experiences of the children will affect their achievement of objectives by the source method. Children who are used to factual, descriptive essays find it difficult at first to put their thoughts into a less formal structure and also tend to be unselective. Questions demanding inference may well be answered by factual recall. Many have never been taught to look at a piece of historical writing as evidence and therefore to consider not only the content but also the origin of the material.¹ They will therefore need carefully structured workschemes to help develop abilities not previously called for.

Fourthly, age and intelligence obviously play some part in the achievement of certain objectives but in most instances the former is more important than the latter. In the achievement of the power of analysis the ability to see similarities is acquired at an earlier age than the ability to see differences, and those with a higher mental age than their contemporaries are likely to acquire the latter more quickly. With synthesis, age affects the number of ideas able to be manipulated at once, the older child having the advantage although the younger child makes greater use of his imaginative faculty. Inference is, inevitably, affected by age since older children are more likely to have a greater fund of experience on which to base their reasoning. In questions which cannot be answered

1. This was particularly true of School G, vide Sources Test Q.10b and the Documents Test Q.6 .

directly from historical knowledge, intelligence also plays an important part. In making judgements, again the older child is more likely to make a judgement in terms of external criteria rather than relying on the style and content of the material.

Fifthly, however, is the important point that some younger children can make inferences and judgements using external criteria at an earlier age than their contemporaries. The early development of this ability, which might be described in Piagetian terms as formal reasoning, shows little relationship with intelligence and is probably associated with uninvestigated factors such as levels of maturity and degree of social competence.¹ The inconsistency of levels of answering among children of similar age and ability groups suggests that questions on worksheets or any other work scheme need to be flexible to enable children to make full use of acquired skills rather than grow bored by being forced to work at a level below their capabilities.²

Lastly, given suitable material and carefully worded questions aimed at giving practice in specific objectives, children will work at the level of which they are capable. It is important to realise that, given that children are reasonably interested in the material being studied, they will not give up a question that might be thought too difficult for them because they do not in fact see the further implications of the question. This implies that, providing once again that the materials are capable of being understood and appreciated by them, one need not be afraid of setting questions demanding inference and judgement to 12 and 13 year olds, even 10 year olds in some cases.³ They may answer the questions purely from

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1. See J. Coltham, The Development of Thinking and Learning in History, TH34, Historical Association, 1971, 26.
 2. See the comments by a teacher of 13 year olds in the Second Trials, page 34.
 3. The 11 year olds in these trials were not a representative sample; probably many 11 year olds could perform much better on the objectives chosen.

internal evidence and not go beyond the material, but they will become used to thinking in a questioning manner which should be the main behavioural outcome of any history course.

Analysis of the Total Scores of the Documents Test

The means, variances and standard deviations were calculated separately for each part of the test, where the possible score on each part was 15.

Table 31

Means, variances and S.D.s for first three questions of Documents Test

School	Age	n	Mean	Variance	S.D.
B	11-12	27	5.259	6.785	2.593
C	12-13	19	6.679	6.377	2.525
D	12-13	7	10.571	1.102	1.050
E ₁	13-14	32	9.219	5.585	2.363
E ₂	13-14	25	6.880	4.670	2.160
E _{pt}	13-14	17	7.941	5.114	2.261
F	14-15	21	9.476	6.916	2.630
G	15+	14	10.643	3.087	1.757
G _{pt}	15+	8	11.5	1.670	1.291

Table 32

Means, variances and S.D.s for second three questions of

Documents Test

School	Age	n	Mean	Variance	S.D.
B	11-12	27	1.074	5.479	2.431
C	12-13	19	3.631	2.053	1.433
D	12-13	7	8.857	4.122	2.030
E ₁	13-14	32	6.844	9.335	3.055
E ₂	13-14	25	4.880	5.082	2.254
E _{pt}	13-14	17	6.823	10.616	3.258
F	14-15	21	7.667	9.102	3.017
G	15+	14	8.876	4.275	2.067
G _{pt}	15+	8	8.375	5.000	2.236

Notes

1. In Schools E and G, the post-test sample have been quoted separately as E_{pt} etc.
2. The means in both parts of the test in general become higher the older the children.
3. In all cases, the means of the first part of the test are higher than those of the second part, although the differences between the two means is not so marked in the older age groups.
4. School D is outstanding both for its comparatively high mean for the age group and for the homogeneity of the sample.
5. School E_{pt} has a very high variance in the second part of the test, probably^{pt} due to its being a mixture of E₁ (generally above average) and E₂ (average).

It would appear that the achievement of objectives involving utilisation of the material in the documents themselves was attained to a higher degree by the whole age range tested than the objectives involving utilisation of external criteria. The latter group of objectives were more readily attained by older children (14+) although never to the same degree as the first group of objectives. This is in part due to mental development with age, as was seen in Chapter 2, but would also appear to be due to the trial schools being unfamiliar with the exercise of the second group of objectives, particularly the consideration of the nature of historical evidence.

The possible total score on the Documents Test was 30.

Table 33

Means, variances and S.D.s for total scores
on Documents Test

School	Age	n	Mean	Variance	S.D.
B	11-12	27	6.333	10.63	3.2604
C	12-13	19	10.684	15.268	4.032
D	12-13	7	19.428	7.673	2.770
E ₁	13-14	32	16.062	18.031	4.246
E ₂	13-14	25	11.76	19.76	4.445
E _{pt}	13-14	17	14.765	26.013	5.100
F	14-15	21	17.190	22.820	4.777
G	15+	14	19.428	7.673	2.770
G _{pt}	15+	8	20.25	4.094	2.022

Notes

1. The post-test samples of Schools E and G are included separately; in Schools C,D and F the pre- and post-test samples are identical. School B did not take the post-test.
2. The means become progressively higher the older the children, with the notable exception of School D which, it will be remembered, was well above the average of the population. There is also a clear difference between the means of E_1 and E_2 .
3. The variances and S.D. show that the most homogeneous groups were School D (all of above average intelligence) and School G (the adult sample). The least homogeneous group was E_{pt} , an amalgamation of E_1 and E_2 .

There is obviously a considerable difference between the means of the various groups. A one-way analysis of variance was carried out to test the significance of the differences in means. Only the post-test samples were used so that the variance ratios (F) could be compared on the Documents Test and the Post-Test.

Table 34

One way analysis of variance, Document Test scores

Source of Variation	Sum of Squares	Degrees of Freedom	Variance Estimate
Total	1885	71	
Between groups	789	4	197.25 ($\hat{\sigma}^2_b$)
Within groups	1096	67	16.35 ($\hat{\sigma}^2_w$)

On the null hypothesis that the differences among the group means were due to chance, the value obtained for F was 12.06. For \mathbb{Z} significance a value of 3.65 is required for F and therefore the null hypothesis can be confidently rejected. There are real differences among the means of the five groups.

The possible sources of variation are

- (1) Age
- (2) Intelligence level
- (3) Previous learning experience in the different schools.

Since not only the numbers of the different school samples vary but also the number of children in the five intelligence groups, a full two-way analysis to parcel out and test for age and intelligence level was impossible. The one-way analysis was continued by testing the significance of the difference between the means of each of the groups in turn using the formula $\hat{\sigma}^D = \sqrt{\frac{\hat{\sigma}^2}{n_1} + \frac{\hat{\sigma}^2}{n_2}}$

The estimate of the population S.D. $\hat{\sigma}$ is estimated from all the groups involved in obtaining the F ratio and therefore $\hat{\sigma}$ is replaced by the within-groups estimate, $\hat{\sigma}^2_w$. As the number of each sample varied, each had to be tested separately against each of the others using the 't' ratio.

The table below shows the levels of significance obtained:-

Table 35

Levels of significance obtained using analysis of variance between the means of each school on the Documents Test

	C	D	E	F	G
C		3.0249*	4.9673*	5.0796*	5.6138*
D	3.0249*		2.5679 ⁺	1.8390	0.375
E	4.9673*	2.5679 ⁺		1.2685	3.1457*
F	5.0796*	1.8390	1.2685		1.8215
G	5.6138*	0.375	3.147*	1.8215	

* = 1% significance
 + = 5% significance

It is obvious from the foregoing analysis that neither age nor intelligence level is the sole source of variation. Age is clearly important, as the fact that the youngest group, School C, differs significantly from every other group. But it is not the sole factor, since if it were the mean of School C should not differ significantly from that of the group of similar age, School D, and yet it does so at the 1% level. That Group D does not differ significantly from the older groups, Schools F and G, suggests that high mental age is also an important factor.

It is, of course, difficult to disassociate age as a source of variation from another possible source, the teaching in different schools, since the age groups are synonymous with school classes. Reference to Table 33 does suggest, however, that the older the child the higher the mean likely and therefore that increasing chronological age affects the achievement of objectives.

In Table 23, the question means for intelligence groups, age has been eliminated because the AH4 intelligence groups can be similarly calculated across the age range by means of the norms. It is clear that the higher the intelligence group, the higher the question mean, particularly in the second part of the test.

The effect of intelligence can also be shown by correlating AH4 scores with scores achieved on the Documents Test. When this is done for the post-test sample of 72, the obtained $r = 0.721$. This is well above the level required for 1% significance on a sample of this size and clearly therefore intelligence does affect performance on an objective test of this kind.

When correlation coefficients between AH4 scores and performance on

the Documents Test were calculated separately for each school, the following results were obtained:-

Table 36

Pearson correlation coefficients obtained between scores on AH4 Test and Documents Test for each school

School	Age	r
C	12-13	0.62*
D	12-13	0.82*
E	13-14	0.84*
F	14-15	0.40
G	15+	0.37

* = 1% significance

Interestingly, significant correlations were obtained only for schools in the 12-14 age group. This result would seem to suggest that in the younger age groups a higher mental than chronological age will allow better performance on an objective test but among older age groups the effect of intelligence is less important than that of maturation. The greater importance of intelligence in the younger age group is borne out by the performance of School D, a high intelligence group, while the decreasing importance of intelligence would help to account for the similarity in means between School F and G, although the former was somewhat above average and the latter below average in intelligence.

The effects of age and intelligence on the achievement of objectives should not, however, be overestimated. Different styles of teaching and learning also play a part. The tables of means for questions and total

score are important to this evaluation in making it possible to ascertain, by comparing them with post-test scores, whether using the Farming Unit helped children to develop certain of the objectives desired. More important generally, however, is the discovery through the Documents Test, that given suitable material and carefully worded questions, most children will make some attempt to achieve even difficult objectives such as inference and judgement while working at a level of which they are capable. The importance of the source method is in the motivation it can give to children to achieve such objectives both because the subject matter is interesting and because it lends itself to the formulation of work-schemes around a framework of objectives.

3. THE POST-TEST OF EDUCATIONAL OBJECTIVES

The post-test of educational objectives was primarily designed to discover whether the educational objectives specified for the Farming Unit had been achieved. It was also hoped to compare the performance of children on the Documents Test with that on the questions testing the same objectives in the Post-Test to see if there was any improvement; for this reason, the desired objectives were weighted in the Post-Test. There were, however, two main difficulties. Firstly, the class teachers felt they had already given a lot of time to the project and were unwilling to allow their classes to participate in a lengthy post-test battery. Secondly, and arising out of this, several teachers wished the Post-Test to form part of the normal school examinations and therefore measure outcomes in which they were particularly interested, especially knowledge.

For this reason, two maps, one pre- and one post-enclosure of a village not studied by the children, were chosen to form the basis of the

test as in this way the children's knowledge of the whole subject of enclosure could be explored. The maps were reduced, electronic master stencils made and copies run off. Unfortunately, the reduction resulted in loss of clarity, particularly on the pre-enclosure map. It was also decided to make the test largely multiple-choice to simplify marking.

It was only when this process was well under way that the difficulties of using maps as the basis of this test from the evaluation point of view became obvious. It was difficult to set questions which exactly matched those set on the contemporary extracts in the Documents Test since somewhat different techniques were needed in dealing with maps. For example, the ability to detect similarities and differences between two pieces of evidence involved consideration of visual evidence on the one hand and written phrases on the other. It was also impossible to set a question asking for a judgement of the two sources as had been done in the Documents Test. Therefore in direct comparisons of the total scores of the two tests the result of Question 6 in the Documents Test, which measured the ability to judge between two sources, was omitted. It is very difficult to set two tests of exactly equal difficulty and as both had to be short a statistical test of equal difficulty was impossible to apply. Conclusions drawn from comparisons of the two tests are necessarily, therefore, tentative.

As suggested earlier, historians find it easier to set questions on the documents themselves rather than directly on the objectives and the list of objectives was used as a checklist to ensure that all objectives were covered. With the exception of the ability to make a judgement between two sources, it was in fact easier to set questions on a wider

range of objectives in the post-test as knowledge of terminology and the recall of facts in a different context could be tested now that the content had been covered. The number of questions set was strictly limited by the time schools were prepared to give to the test.

Table 37

Analysis of objectives and weighting of questions in
the Post-Test

Category of Objectives	Q.No.	Weighting	Total
1. Knows specific facts	1	1	
	2	1	2
2. Knows terminology	5	1	
	6	1	
	7	1	
	8	1	4
3. Knows of and can handle some of the material of the historian	14	4	
	15	4	8
4. Understands the material on the basis of internal evidence	3	2	
	9	2	
	12	2	
	13	3	9
5. Applies external criteria to the material	4	2	
	10	2	
	11	2	
	17	3	9
6. Appreciates the dangers of generalisations in history	16	3	3
	17	35	35

The tests were generally administered in the absence of the evaluator but marked by her since the only question demanding subjective judgement was Question 17. The results were analysed in three main ways. Firstly, the total scores of each question, regardless of school group, were analysed by means of item analysis to see how effectively the Unit as a whole had met its objectives. Secondly, the results of each school on the post-test were compared with the results of the Documents Test to see whether any improvement in the desired objectives had taken place. (Method of Difference). Thirdly, the total scores and the objective scores of each school were studied to see if the effectiveness of the Unit varied from school to school. This also involved analysis of the observation data and the teachers' questionnaires to discover the different ways in which the Unit had been used in the various schools.

Item Analysis

The technique of item analysis is most commonly used for assessing the efficacy of test items in measuring the required skills or abilities, attempting to discover the level of difficulty of a particular item and how well it discriminated between candidates taking the test. In this case item analysis was not used to discriminate between candidates but to see how well overall the total number of candidates performed on each of the objectives which the Farming Unit was intended to develop. The technique was used to test the course being followed rather than the differing abilities of the candidates concerned. Therefore a high facility value (which is the percentage of all candidates who have given the correct response to the item) for each question is set out below, together with that for each of the categories of objectives.

Table 38

Facility Indices (expressed as %) for questions and
categories of objectives in the Post-Test

Category of Objectives	Q.No.	F value	F value (%)	Rank Order
		%	of Categories	
1. Knows specific facts	1	89	81	2
		74		
2. Knows terminology	5	76	73	3
	6	85		
	7	64		
	8	67		
3. Knows of and can handle some of the sources of the historian	14	62	67	5
	15	72		
4. Understands the material on the basis of internal evidence	3	90	69	4
	9	64		
	12	46		
	13	75		
5. Applies external criteria to the material	4	76	66	6
	10	53		
	11	78		
	17	59		
6. Appreciates the dangers of generalisation in history	16	87	87	1

Inevitably, the level of difficulty of the test items affects performance within each objectives category. The easiest question appeared to be Question 3, with an F value of 90%, and the most difficult Question 12,

with an F value of 46%. The former required the identification of the two main fields in the village, the latter required children to detect a difference between the two maps which the Documents Test had already shown to be a difficult skill. However, the grouping together of the test items into categories and considering the F values of the latter to some extent compensates for the varying levels of difficulty of individual questions.

That all the categories have an F value of over 50% does suggest that overall the Farming Unit was achieving its objectives. However, variations in F values between categories need to be considered in more detail. The fact that Category 6 has the highest F value is somewhat spurious since there was only one item in the category, but the high F value does at least suggest that children had learnt that open field farming was not equally distributed throughout England. The two knowledge categories come next in rank order; the questions set showed that children had grasped the outlines for the procedure of enclosure and had used technical terms such as tithe and glebe correctly. The rank order of the three remaining categories is as one would expect, with the utilisation of internal evidence ranking fourth and the application of external criteria proving the most difficult. Category 3 was clearly found difficult and will be discussed later.

The facility values of the post-test categories need also to be considered in relation to the amount of practice each objective was given during the use of the Farming Unit. Obviously this varied from school to school, and this was the point of the second set of trials, but for the purpose of revising the actual materials or the objectives they were meant to achieve some attention must be paid to the Unit itself. It has been suggested before that historians find it easier to set questions

on the source material rather than on the objectives and that the unevenness of performance between the categories of objectives may be in part due to the neglect of certain objectives when the worksheets were set. Analysis of these showed that this was in fact true - the questions were unevenly distributed between the various objectives. This was to some extent inevitable since a large number of comprehension questions were set to encourage children to read the material. These generally demanded short answers, whereas questions designed to develop judgement or synthesis take much longer to answer, as the Documents Test had shown, and so fewer of these could be set. Each category of objectives was considered in turn to see whether the materials, the worksheets or the objectives themselves needed revision.

Categories 1 and 2 - Knowledge of Facts and Terminology

The post-test showed that these objectives had on the whole been achieved and in the Unit there was a reasonable spread of questions to develop these objectives. Classroom observation and the teachers' questionnaires indicated that the glossary of technical terms was extensively used and appreciated. It was, however, obvious that with such a large amount of material children would only learn the facts and terminology of the patches they had covered which would affect their post-test performance.

Category 3 - Knows of and can handle some of the material of the historian

The two questions concerned with this category had very different 'F' values. More children knew which documents would help them to find out about the enclosure of their village than where these were to be found. They had presumably understood what it was they were handling while using the Unit, e.g. Acts of Parliament, written claims to land by villagers, etc. but had not really understood where these came from. Analysis of the Unit

worksheets showed that no questions led them directly to this discovery and although the provenance of the documents was clearly stated in the Background Book, this had on the whole been used for reference and not studied. If children are to realise the difference between documents and project materials, and this is important, then much more attention needs to be paid to this point both in the Unit and by the teachers handling it.

The analysis of the questions in the Unit worksheets showed that many of the sub-categories of 3 had not been developed. 3e and 3f, recognising the incompleteness of material and undertaking further search were clearly impossible as the documents in the Unit were pre-selected and further search, except among secondary materials, impracticable in the school environment. 3c and 3d, concerned with the reliability of the materials, were not adequately developed by the Unit. Category 3 clearly needed a drastic overhaul if the objectives were to be both achievable and achieved.

Category 4 - Understands the Material on the basis of internal evidence

Category 4a, the comprehension ability, had previously been interpreted as the ability to summarise the content of a piece of evidence. The questions in the Unit worksheets concerned with comprehension did not ask for summaries so much as the ability to select a piece of evidence to solve a particular problem, and this was therefore introduced as a new objective. 4b, the translation of material from one form to another, was adequately covered in the Unit and this is reflected in the relatively high F value of Category 4 where the children were dealing with maps. 4c, the ability to differentiate between pieces of source material, had been found difficult in the Documents Test. In the post-test, Question 12 asked children to detect what had happened to the common in the village of Wilson between

one map and another, and this was the worst done question in the test. On the other hand, Question 13, which asked children to find out what had happened to certain roads between one map and another, was relatively well done. Children probably found it easier to detect visual differences than verbal differences, although the poor quality of reproduction of the maps by no means helped them to do this. 4e, the selection of material from a variety of sources relevant to a given theme and their presentation in communicable form, e.g. creative writing, was a complex objective which clearly contained elements of Category 5, the application of external criteria. It was decided to break this down into two objectives, the selection of material from a variety of sources relevant to a given theme in Category 4 and the synthesis of evidential material with items from one's own fund of knowledge and experience in imaginative form, e.g. creative writing in Category 5. The low F value of the question devised to test the latter in the post-test suggests that inadequate practice had been given, and analysis of the Unit worksheets proved this to be so, with only three questions for the Category 4 objective and five for the Category 5 objective in the whole Unit. The use of the historical imagination, together with practice in selection, had been neglected in the Farming Unit.

Category 5 - the application of external criteria

This had been found the most difficult category of objectives in the Documents Test and, apart from Category 3, proved to be so the post-test. However, as already stated, the post-test was in some need of revision as it proved difficult to test the same abilities as had been measured in the Documents Test, particularly inference and judgement of sources. However, at the end of a unit of work, factual recall will undoubtedly

colour inference as it had done in the Documents Test with the older groups who had already begun to study the history of farming. Inference had been reasonably well covered in the Unit, but judgement had not. The recall of facts in a new context proved to be a difficult ability, although some of the children perhaps found the multiple choice test hindered them as the alternatives seemed equally plausible. Question 17, which tested judgement as well as historical imagination, was as already stated, one of the worst questions in the post-test with a comparatively low F value of 59%. The bias of the Unit worksheets towards Category 4 rather than Category 5 work clearly needs correction,¹ although as has been seen the former must precede the latter and the type of questions demanding inference and judgement take longer to do.

Category 6 - appreciates the dangers of generalisations in history

The high F value of Question 16, which tested this ability in the post-test, probably reflects the information given to children by class teachers rather than a gain from the Unit since this objective was not specifically covered in the Unit worksheets except in so far as all documents deal with the Midlands. Even if the worksheets were revised, it is clear that what the children would be doing was relating the material to their own local knowledge and the objective was therefore reworded. It would, however, be useful to include materials from another village which did not go through the same enclosure process as Congerstone so that children could see that a national event like enclosure could vary in its application from village to village.

The item analysis analysis then, showed up certain weaknesses in the post-test itself, particularly for Category 5, but far more obvious was

1. This point was also made by outside evaluators of the Farming Unit.

the patchy coverage of certain objectives in the Unit worksheets and in some cases in the choice of materials. This would need to be remedied before entirely satisfactory achievement of the objectives could be reached. The objectives themselves also needed some revision.

Comparison of Documents Test and Post-Test Scores

It must be re-iterated that any conclusions drawn from comparison between the scores of these two tests must necessarily be tentative as it is not easy to set two tests of exactly equal difficulty. Every effort was made to ensure the validity of the comparisons made below. The results of Question 6 of the Documents Test were omitted since the objective of judgement of sources this question sought to measure was not measured in the post-test and therefore, as it was found difficult of achievement, its inclusion as part of the Documents Test would bias the results. In the post-test, only Categories 4 and 5 were used since 1,2 and 3 were not measured in the pre-test for reasons already explained.

Firstly, the Pearson coefficient of correlation was calculated for the relevant sections of each of the two tests in the five schools. The results are shown below:-

School	
C	$r = 0.2214$
D	0.6614
E	0.3718
F	0.3778
G	-0.1452

No significant correlations were obtained at all yet, the total scores for each test correlated with the AH4 intelligence test.¹ This result

1. See Table 50.

is difficult to interpret. It might be due to the fact that different types of material were used in the two tests, or that the source method allows children to develop different objectives at their own pace. To support the latter point, since each patch in the Farming Unit did not necessarily develop the same objectives, and as no child had used all the patches, each must have had practice in different objectives.

It was then necessary to test the significance of the differences in the means obtained on the two tests in each school. Since the two samples were related, and the numbers are small, the method of difference pairs was used.¹ The results for the different schools are set out below:-

Table 39

Levels of significance obtained using method of difference pairs between the means of each school on the Documents Test and Post-Test

School	<i>d.</i> Freedom n-1	Value of 't'
C	18	4.284*
D	6	10.738*
E	16	3.378*
F	20	2.189 ⁺
G	7	3.249 ⁺

* = 1% significance

+ = 5% significance

On the null hypothesis that the increase in mean score between the two tests is due to chance, significance at either the 1% or the 5% levels was achieved in all cases and the null hypothesis can be rejected.

1. See D.G. Lewis (1972), op.cit., 120.

This may mean that the second test was easier than the first, and it must not be forgotten that the first test was concerned with verbal extracts and the second with maps. The alternative hypothesis is that the increase in mean score is due to practice on the desired objectives the children received while using the Farming Unit and that its use therefore helped children to develop these objectives. In this respect it is interesting to note that the two older groups, who did comparatively better on the Documents Test, made less progress between the two tests, as might be expected. This might suggest that the younger age groups, when given the chance to practise abilities not previously demanded of them, responded to the opportunities given to them during the use of the Farming Unit. Evidence from observation, analysis of the preference charts filled in by the children after using the Unit and study of the work they produced suggests that this second hypothesis is to some extent a true one.

Comparison of the Performance of School Groups on the Post-Test

Table 40
Means, variances and S.D.s for Total Scores on
the Post-Test

School	Age	n	Mean	Variance	S.D.	S.D. Docs Test
C	12-13	19	20.680	29.269	5.41	4.032
D	12-13	7	32.428	3.959	1.99	2.770
E	13-14	17	22.710	30.443	5.517	5.100
F	14-15	21	25.286	16.732	4.046	4.777
G	15+	8	30.625	5.234	2.288	2.022

Notes

1. Only the schools, and the groups within them, which completed the post-test are included, i.e. Schools A, B, E₁ and E₂ do not appear.

2. As with the Documents Test, the means become progressively higher the older the children with, once again, the notable exception of School D.
3. The variances and S.D.s show that the most homogeneous groups were again Schools D and G, and the least homogeneous E.
4. The S.D.s are on the whole similar in rank order to those on the Documents Test, but they are more extreme: School D shows greater homogeneity, Schools C, E and G greater diversity. School F, like School D, shows a greater degree of homogeneity in the post-test but is still relatively diverse. This might suggest that, with the exception of School F, the post-test accentuated tendencies to homogeneity or diversity already obvious in the Documents Test.

As in the Documents Test, there is obviously a considerable difference between the means of the schools. A one way analysis of variance was carried out to test the significance of the differences in means.

Table 41

One-way analysis of variance, Post-Test scores

Source of Variation	Sum of Squares	Degrees of Freedom	Variance Estimate
Total	2602	71	
Between Groups	1078	4	$\hat{\sigma}^2_b$ 269.5
Within Groups	1524	67	$\hat{\sigma}^2_w$ 22.74

The null hypothesis states that the differences among the group means are due to chance. The value obtained for F was 11.85; for 1% significance a value of 3.65 is required and therefore the null hypothesis can be confidently rejected. There are real differences among the means of the five groups.

The possible sources of variation are again:-

1. Age,
2. Intelligence Level,
3. Different Learning Experience in the Classroom Situation.

As again the numbers in both age and intelligence groups differ sharply, a full two-way analysis to parcel out age and intelligence was impossible. The one way analysis was continued by testing the significance of the difference between each of the groups in turn, using the formula

$$\hat{\sigma}^D = \sqrt{\frac{\hat{\sigma}^2}{n_1} + \frac{\hat{\sigma}^2}{n_2}}$$

The estimate of the population S.D. $\hat{\sigma}$ is estimated from all the groups involved in obtaining the F ratio and therefore $\hat{\sigma}^2$ is replaced by the within-groups estimate, $\hat{\sigma}^2W$. As the number of each sample varied, each mean had to be tested separately against each of the others, using the 't' ratio. The table below shows the levels of significance obtained:-

Table 42

Levels of significance obtained using analysis of variance between the means of each school on the Post-Test

Schools	C	D	E	F	G
C		5.58*	1.27	3.05*	4.95*
D	5.58*		4.54*	3.43*	0.73
E	1.27	4.54*		1.66	3.47
F	3.05*	3.43*	1.66		2.69*
G	4.95*	0.73	3.47*	2.69*	

* = 1% significance

Despite the fact that the overall F value for the analysis of the post-test was slightly lower than that of the Documents Test, comparison of the table above with Table 35 shows that there is in fact significant variance between more of the school groups in the post-test than in the Documents Test. In the post-test, intelligence would appear to be more

important as a source of variation than age, since School C (12-13) does not differ significantly from School E (13-14) nor School E (13-14) from School F (14-15). On the other hand, Group D, of above average ability differs from all groups except School G, to whom it was perhaps closer in mental age although not in chronological age.

As with the pre-test, the AH4 scores were correlated with the post-test scores for the whole of the sample, the obtained τ being 0.6282. This is well above the level required for 1% significance, although lower than that obtained for the Documents Test. Intelligence is still an important factor in determining the test scores.

When correlation coefficients between the AH4 scores and performance on the post-test were calculated separately for each school, the following results were obtained.

Table 43

Pearson correlation coefficients obtained between scores on AH4 Test and Documents Test for each school

School	Age	τ	
C	12-13	0.5248*	
D	12-13	0.9360*	* = 1% significance
E	13-14	0.7412*	+ = 5% significance
F	14-15	0.2039	
G	15+	0.6668 ⁺	

Comparison with Table 36 will show that this is a very similar result to that obtained using the same test for significance with the Documents Test, and similar conclusions can be drawn about the greater importance of intelligence levels in achieving the desired objectives in the younger

age groups.

It is clear that the correlation in younger age groups between intelligence levels and both the Documents Test and the post-test are similar, which suggests that the children did not perform markedly different in relation to each other in the two tests. This indicates that the use of the Farming Unit did not to any degree enable individuals to below the age of 14 to advance in the achievement of objectives at a faster rate than their colleagues, although the group as a whole advanced. This perhaps supports Haget's assertion, for individuals at any rate, that there is not much to be gained by seeking to advance the stages of development to any great degree.¹

All the children used portions of the Farming Unit in between the two tests, i.e. they would seem to have been taught similarly, and one might therefore expect the variations between the means of the post-tests to be less. In fact, as has been seen, the variations between the groups, if not the overall F value, was greater. This suggests either that age and intelligence levels are the sole factors in the variation, which from Table 40 would not seem to be entirely true, or that different methods of teaching or the school environment still played their part despite the common factor of the Farming Unit. An analysis of the facility index for each question and category of objectives in the post-test in each of the five schools also indicated that the classroom environment of the Farming Unit may have been a potent factor.

1. See Chapter 2, page 89.

Table 44

Facility Indices for questions and categories of objectives obtained by each school in the Post-Test, (expressed as a percentage)

Schools	I	II	III	IV	V	VI	Categories
	1 2	5 6 7 8	14 15	8 9 12 13	4 10 11 17	16	Questions
	94 31	73 84 36 36	61 61	84 47 05 65	87 47 63 42	79	Facility value of questions
C	63 1	57 4	61 2	52 5	59 3	79	Facility value of categories
	100 57	100 57 86 86	79 100	100 100 86 100	92 86 100 100	100	Facility value of questions
D	78 5	82 4	89 3	96 1	94 2	100	Facility value of categories
	76 82	47 76 52 52	64 63	91 59 65 54	82 41 76 43	82	Facility value of questions
E	79 1	57 4	64 3	67 2	50 5	82	Facility value of categories
	90 100	90 95 76 86	52 76	90 66 41 84	71 38 79 66	89	Facility value of questions
F	95 1	87 2	64 4	70 3	64 5	89	Facility value of categories
	87 100	87 100 100 100	69 78	87 75 100 96	93 100 100 71	96	Facility value of questions
G	93 2	97 1	73 5	90 3	89 4	96	Facility value of categories

1,4,2 etc = rank order of category
(excluding Category 6)

It is clear that there is a general progression in achievement from the youngest to the oldest age group, but considerable differences in which of the objectives was achieved most successfully. For example, Category 3 was comparatively well achieved by the three younger age groups but not by the older ones. Similarly, Category 1 was reasonably well achieved by all the schools except D, where it was the least successful category.

The teachers were all asked in a questionnaire whether they thought the objectives of the Unit were suitable for the age-range being taught. Only in School A did the teacher say 'no', feeling that the objectives were too academic for a first year. All the other teachers with the exception of School D said that the objectives were generally suitable although the less able pupils were liable to lose interest in the worksheets and needed considerable help. The teacher in School D, with a small, highly intelligent group, stated that documentary work was suitable for younger age groups where there was a tendency to expect too little from pupils. All the teachers participating in the trials were surprised by what their pupils could achieve, so perhaps the teacher in School D made a generally valid point.

The teachers were also asked which of the objectives they thought were most important for their age group. All the teachers with one exception selected Category 3, knows of and can handle some of the sources of the historian. The teachers in Schools C, E and F selected Category 4 also, understanding the material on the basis of internal evidence. The exception was School G, where knowledge of facts was chosen as the most important objective. The teachers generally felt that their classes had gained experience in all other categories except 6.

Table 44 suggests that teachers did to some extent influence the use of the Unit towards the fulfilment of their desired objectives. (NB Category 6, for reasons already stated, is ignored). In Schools C, D and E a comparatively high facility value was obtained for Category 3, and in School G the knowledge categories scored most highly. The exception is School F, where the teacher said she wished to achieve Category 3 and 4 objectives but in fact set worksheets which directed pupils to look for knowledge rather than experience of handling source materials; this is reflected in their high levels of achievement in the knowledge categories.

Considering the high value placed on the Category 3 objectives, it is surprising that the teachers involved did not take more trouble to see that their pupils understood what it was they were using. Analysis of the frequency charts used in the pre-tests showed that only School D had any previous experience in handling documents. Yet only in Schools C and D did the teachers tell the pupils anything about the nature of the materials and only in School D did the children read the section of the Background Book on the documents themselves. Only the teacher in School D read all the Teacher's Book where the reasons for the choice of both documents and objectives were set out. The topic of farming was introduced only briefly in all schools except G and so the pupils were working blind with the document. Clearly the teachers needed some guidance on how best to fulfil the objectives they desired to develop by using the Farming Unit, but as so few read the Teacher's Book it was difficult to see how this was going to be achieved.

It is also possible that previous learning experience of the children affected the comparative success or failure of the Farming Unit. The chart below shows how often they had experienced various types of learning activity in history lessons in the previous year. This was derived

from information obtained in the Frequency Charts given as part of the pre-tests.

Table 45

Types of learning activity experienced in history lessons over the past year in each school

Type of Activity	Schools					
	B	C	D	E	F	G
Listening to the teacher	3	3	3	3	3	3
Taking dictated notes or notes from blackboard	3	2	1	2	3	3
Using worksheets as a guide to reading/writing	1	3	3	3	2	2
Undertaking free projects	1	1	2	2	2	1
Reading textbooks, printed notes etc	3	3	3	3	3	3
Looking at visual aids e.g. filmstrips, slides	2	2	1	2	2	2
Using original documents, e.g. Jackdaws	1	1	2	1	1	1
Answering and asking questions in class	3	3	3	3	3	3
Working in groups	1	3	2	1	2	1
Working by themselves	3	3	3	3	3	3
Studying local material	1	1	3	1	1	1

1 = never or once a term

2 = once a term

3 = every week or every lesson

With the exception of School D, it would seem that all the schools were taught by exposition and question and answer, followed up by individual work using textbooks and printed sheets. Working in groups

was not common except in School C. Schools C, D and E used worksheets guiding them to materials and were therefore perhaps more familiar than Schools B, F and G with the techniques used in the Unit; this might help to explain why Schools C, D and E appeared to have gained more from the use of the Unit than did Schools F and G, (See Table 39). Unstructured projects were less common than guided worksheets. Only School D had previously used documents or studied local material, which perhaps is an additional factor to high intelligence level in explaining their success on both the pre- and post-tests. School B had been taught entirely by exposition, question and answer and blackboard or dictated notes and it is therefore hardly surprising that they found the worksheet approach difficult and that their teacher gave up using the Unit. School G had been taught similarly, but as they were an adult class studying for 'O' Level they used the worksheets and documents at home and not in class, and were more highly motivated than School B.

The conditions under which the Unit was used may also have affected levels of achievement in the different objectives. Schools C, D and E used the Unit more than once a week for half a term or more; Schools B, F and G used it for less than this, and this may again be reflected in the greater gains made by the former three schools (see Table 39). In School G, as already stated, the Unit was used at home. In all the other schools except B, it was used in double lessons or blocks of lessons which gave ample time for distributing and collecting the materials as well as for individual and group work. In School B it was used in 40 minute periods, always last lesson in the afternoon - possibly another factor in its failure in that school.

In all schools except D the Unit was used as a basis for individual or group work in the part of the syllabus devoted to the Agrarian Revolution. In School D, where pupils were already working on their own local enclosure, it was used as additional resource material. In Schools B and F its use was compulsory for individuals; in Schools C and D it was compulsory to begin with and then free choice by individuals or groups, other children choosing different types of work on the same topic. In Schools E and G work on the Unit was entirely free choice. This variety of use meant that not all children covered the same number of patches and therefore had differing amounts of practice in the various objectives.

Nor did all the children have the same access to learning space or resources. Although free movement was permitted in all schools except B, only in School C was there adequate space for consulting the large maps which were part of the Unit. In School E, the children worked in alcoves in a corridor and therefore received less individual help from their teacher than the children in School C, and found it difficult to consult the maps. No additional resources of any kind were available in School B, nor in School G since the materials were used at home; in all the other schools additional books, slides and home-produced resources were available. Only in School C was any of the less structured follow-up work such as visits or model-making undertaken. This perhaps helps to account for the fact that School C had greater success in achieving the objectives of the Unit than any school except D.

The teachers were also asked about their attitudes and that of their classes to using the Unit. None of the teachers, with one exception, felt that the use of the Unit would increase interest in history; the

teacher in School F felt that it had although she had not expected it. All the teachers said that some of the children had enjoyed using it, while in School F almost all were reported to have done so. That the Unit had not caught the attention of all the children equally was shown by the Like/Dislike Charts¹ which were filled in again when the Unit had been used. Clearly more attention needed to be given to children's attitudes towards the source method.

The teachers were equally cautious about their own attitudes to the Unit, all except one answering 'partly' to the question 'did you enjoy using the Unit?'. Their explanations of their attitudes are worth quoting in full to illustrate how a Unit of this kind needs to be sufficiently flexible to meet a wide variety of requirements:-

School B "I enjoy the 'questing' approach to history but found this method overwhelming. We gained some insight into the way in which a historian goes to work."

School C "I felt it was excellent material to use as PART of a wider project on farming in general. It gave the class valuable experience in handling reproductions of documents which they had not had before. I thought at first examination that the class would find it rather difficult but was pleased to find that many children - the more able ones - produced some very good work and became adept at ferretting through the documents and coming up with the correct answers and interesting analyses.

Unfortunately the really weak ones soon became lost and rather bogged down. In spite of help they did not see a great deal of light and I suggested they moved on to easier work although still connected with aspects of early farming.

The practical aspect was particularly pleasing. Some made a plough, sickle and hoes which were used to prepare ground which was planted with wheat and barley - we are hoping to harvest in the autumn and perhaps even make a loaf of bread with the produce.

Altogether I was pleased with the outcome of the work we did on farming."

School D "I felt that some of the material was too localised for us - I would have preferred material from a wider selection of places. None of our boys knew Congerstone. They became aware of the nature of much source material and, visually, what it looks like. They enjoyed transcribing the material themselves. It introduced a much wider knowledge of enclosure and emphasised the importance locally - and not just as a textbook topic."

1. See page 277.

School E "Two things (1) One needs to be very conversant with this material before using it with real success. (2) The material needs structuring to suit a wide ability range. An understanding of primary/secondary source material is very clearly done in this work and is valuable. It also gave me an insight into how to plan a more detailed course of study on farming than the simple worksheets I had been using."

School F "I wished I had tried to answer all the questions first. It helped to teach them to select relevant material, interpret documents, maps and figures (they had a lot of difficulty with this). It made them see there was more to history than book reading."

School G "Lack of time to use it adequately in an 'O' level evening class. It gave them local knowledge and they saw what original material looked like."

It is difficult to derive any general conclusions from such a wide variety of comments. Clearly the pressure of time on teachers had prevented some of them from studying the material adequately first, a fact which is reflected elsewhere in the questionnaires. The local nature of the material was not specifically valued and was even criticised in one instance; it would seem that to be of any use material must be really local to the neighbourhood of the school if the children are to derive any benefit from acquaintance with the subject matter. What is more important perhaps, is the detail given which promotes "a wider knowledge" of the subject and the value of seeing original historical material. The help given by the worksheets in training children to handle this material was appreciated and all the teachers said they would use the worksheets if they made use of the Unit again.

The teachers' comments on the structure and content of the Unit will be considered together with those from teachers participating in the second set of trials since it was impossible to alter the Units before the latter took place, and a more valid conclusion can be derived from a wider sample.

Conclusion from the Post-Test

The following conclusions can be drawn from the post-test results:-

1. That the Farming Unit did on the whole meet its desired objectives, and that all of these objectives (with the exception of Category 6) were thought to be worth achieving by the teachers using it.
2. That the children did on the whole improve their performance on the desired objectives during the use of the Unit but that their improvement was conditioned by their age and intelligence levels.
3. That the difference in the level of achievement of objectives are partly due to different age and ability levels but are also influenced by the contents of the Unit and its worksheets and the classroom environment in which it was used, including factors like previous learning experience, resources available and the attitude of class teachers towards the objectives.

These conclusions pointed on the one hand to a revision of the worksheets in the Unit to give further practice in certain of the objectives and on the other to a closer examination of the actual use of the Unit under classroom conditions, since it was clear that the learning environment did affect the outcomes of the Unit despite its structured nature.

CONCLUSIONS FROM THE FIRST TRIALS

The first trials were intended to discover something about all four goals of evaluation, but were biased towards the first goal, that of evaluating the objectives of the Farming Unit and the extent to which they were achieved. These will be discussed using the headings originally used in the section, the Goals of the Evaluation.¹

1. See pages 170 and 171

1. Were they worthwhile objectives?

The evaluation here involved a value judgement on the part of the teachers using the Unit. Five of the six categories were thought worthwhile; the sixth, 'the ability to appreciate the dangers of generalisation in history', was neither thought worthwhile nor was adequately developed by the materials of the Unit. It was noticeable, however, that the objectives teachers said they believed were important and those they sought to achieve through their use of the Unit in the classroom were not always the same. Nor did teachers wishing to achieve Category 3 objectives, 'knows of and can handle some of the material of the historian', take much trouble to ensure that the children knew what it was they were working on. The difference between primary and secondary sources and the provenance of the materials were stated in the Background Book, but clearly work along these lines needs to be built into the Unit if the objective is to be achieved. Some of the sub-categories of objectives were shown to be incapable of achievement by means of this Unit and a revised list of objectives is appended.¹

2. Were they the only objectives possible?

Participant observation and the teachers' questionnaires suggested two other objectives which would be valuable and these were incorporated into the revised list of objectives. Firstly, the use of the historical imagination, using the detail given in the documents to build up an imaginary historical episode. Secondly, the relationship of the documentary evidence to remaining visual evidence such as field shapes, farm buildings and so on needed to be included. This was particularly

1. See Appendices

desired by teachers teaching the history of farming as part of a social studies or humanities course. Both these objectives are particularly applicable to the younger age-group (11-14) who, because of pressures of examination syllabuses on older children, were the main users of the Unit. The incorporation of materials and worksheets to fulfil these two objectives might have helped to prevent School B from having to give up the use of the Unit.

3. Were the objectives suitable for the age-range using them?

The pre-test battery was largely directed to evaluating the suitability of the objectives. Two main conclusions were reached about the two basic categories of objectives, the ability to understand the material on the basis of internal evidence and the ability to apply external criteria to the material. Firstly, chronological rather than mental age is more important in determining levels of achievement in both categories although particularly in the second one. However, in the younger age groups a higher mental than chronological age enables children to achieve the more difficult objectives of the second category. This conclusion, based on analysis of the pre-tests, is similar to the teachers' comment on the Unit that the less able, particularly in the younger age groups, tend to lose sight of what they are doing or to need a lot of help. It would suggest that some simpler work schemes need to be included in the Unit for the use of this group.

The second conclusion is, however, rather contradictory. The pre-tests showed that children were very inconsistent in the levels of reasoning used to answer the various items, and that children who were incapable of applying external criteria to answer questions would

nevertheless make inferences or judgements in terms of the internal evidence before them. This suggests that worksheets should be designed to cover a wide range of objectives to enable children at different levels of mental development to use the full extent of their powers and that the questions should enable them to utilise either internal evidence or external criteria according to their capabilities. With unstreamed classes and greater use of the worksheet system, careful setting of questions to stretch some children in any age group, while not confusing others, although difficult, would seem to be essential if the higher levels of reasoning are to be successfully achieved in history at a reasonably early age.

It was clear from the Documents Test that the objectives being tested were sequential in difficulty, i.e. most children could answer questions demanding comprehension but a smaller proportion could answer satisfactorily questions demanding judgement. The ability to see similarities between two pieces of evidence was found simpler than that of seeing differences. It would seem logical, therefore, to introduce these abilities sequentially in a worksheet, setting comprehension questions at the outset and progressing through analysis, synthesis, factual recall and inference to judgement. This will ensure firstly that most of the class can do at least the first part of the worksheet and the brighter or more socially advanced children will be able to progress to the higher levels of reasoning, and secondly and perhaps more important that children are encouraged to read and understand the material first before having to undertake any of the more advanced cognitive processes on the information it contains.

4. To what extent were the objectives achieved?

The post-test indicated that the Unit did on the whole fulfil its objectives, and comparison of the Documents Test with the Post-Test scores indicated that most of the children had made some progress in the different objectives. It was found that the younger age groups had made most progress, perhaps suggesting that they were being encouraged to use abilities of which they were capable but which had not been previously demanded of them.¹ However, comparison of the Documents Test and the Post-Test with the AH4 Intelligence Test scores showed that individuals did not progress at a faster rate than their colleagues and perhaps therefore that the achievement of particular objectives cannot be accelerated to any significant degree.

The degree to which the different objectives were achieved varied from school to school, and it was clear that not only age and intelligence but also the attitude of teachers and the learning environment played a part. Analysis of the frequency charts, teachers' questionnaires and the observation schedules suggested that the previous learning experience of the class, the time given to work on the Unit, the layout of the learning area and the additional resources available affected the outcomes of the Unit, as did the emphasis placed on the different objectives and the attitude of the children themselves.

The first trials had, then, established the extent to which it was possible to achieve the desired objectives using the Farming Unit and that, in the eyes of the teachers using the Unit, most of the objectives were worth achieving. The main emphasis in the first trials had been on

1. The teachers in Schools C, E and F suggested that they were surprised at the progress many of their pupils made and indicated that they had not been demanding sufficient of them, see page 265 and 266.

objective testing and it was decided not to repeat the pre-test battery in the second trials, partly because the analysis of results of the first trials had presented a reasonably coherent picture but also because of the inconvenience such a test battery caused in schools. More information was, however, needed about the use of the Unit in the classroom, the difficulties it presented to both children and teachers and the best way of using it to maximise achievement of its objectives.

The first trials had shown that coverage of certain objectives in the Unit materials was sparse and that some of the worksheets needed revision. It was hoped that the second trials would indicate problems in the Unit at classroom level and would enable the evaluator to suggest how best it could be used in a variety of situations.

APPENDIX: THE COMPUTER ANALYSIS

As has already been indicated, parts of the Statistical Package for the Social Sciences were used at a late stage of the research and in many cases served only to confirm results already obtained by other means. The inclusion of the choices made by the children on the Like/Dislike sections of the Activity Charts did, however, add a new dimension to the analysis, and it is mainly the relationship of these choices to the other data which is considered below.

Numerical categories were assigned to the literal grades or actual scores obtained on the various tests. These ranged from 1 (highest) to 5 (lowest) on the AH4 Intelligence Test, Sources Test, Documents Test and Post-Test. On the Like/Dislike Charts, 1 represented 'like', 2 'indifferent' and 3 'dislike'. Other variations are shown on the list of 28 variables analysed in Table 46. That the numerical categories had different meanings for some of the variables meant that care had to

be exercised in interpreting the results and particular note taken of whether correlations were positive or negative.

Separate cards listing the numerical category obtained for each of the variables were made out for each of the 72 children who took all the tests. The only missing data was in variables 22 and 23, part of the post-test version of the Like/Dislike Charts, which was not completed by two of the schools. Two parts of the statistical package proved most useful. The first was the crosstabulation of the categories of the test items, including variables 22 and 23, against the independent variables of IQ, Verbal Ability, Age and Sex. The second was the calculation of the Pearson Correlation Coefficient for each variables with each of the other variables (excluding 22 and 23). A third part of the analysis, a count of the number of children in each of the 1-5 or 1-3 categories for the 28 variables also proved useful in interpreting the results of the Like/Dislike Charts, and this will be considered first.¹

Table 46

The 28 Variables used in the Computer Analysis

No.	Code	Variable
1	IQ	AH4 Intelligence Test, Grades, 1-5
2	VG	AH4 Intelligence Test, Verbal Grades, 1-5
3	S1	Sources Test, first 8 questions, 1-5
4	S2	Sources Test, grades obtained Q.10, 1-5
5	ST	Sources Test, Q.10. 1 = use of external criteria 2 = use of internal evidence 3 = no answer

1. Examples of the print-out for each of the four programs are included in the Appendices.

Table 46 continued

No.	Code	Variable
6	D1	Documents Test, first 3 questions, 1-5
7	D2	Documents Test, last 3 questions, 1-5
8	D3	Documents Test, total scores, 1-5
9	DT	Documents Test, Q.6. 1 = use of external criteria 2 = use of internal evidence 3 = no answer
10	PT1	Post-Test, total scores, 1-5
11	PT2	Post-Test, objective categories 4 and 5, 1-5
12	L/D1	Like/Dislike Chart, Q.1., 1-3
13	L/D2	Like/Dislike Chart, Q.2.& 3., 1-3
14	L/D4	Like/Dislike Chart, Q.4., 1-3
15	L/D5	Like/Dislike Chart, Q.5., 1-3
16	L/D6	Like/Dislike Chart, Q.6.-8, 1-3
17	L/D9	Like/Dislike Chart, Q.9.-12, 1-3
18	L/D13	Like/Dislike Chart, Q.13.&14., 1-3
19	L/D15	Like/Dislike Chart, Q.15-17, 1-3
20	L/D18	Like/Dislike Chart, Q.18., 1-3
21	L/D19	Like/Dislike Chart, Q.19., 1-3
22	L/D20	Like/Dislike Chart, Q.20.&21., 1-3
23	L/D22	Like/Dislike Chart, Q.22., 1-3
24	L/D 13 PT	Like/Dislike Chart, Post-Test version, Q.13.
25	L/D 14 PT	Like/Dislike Chart, Post-Test version, Q.14

Table 46 continued

No.	Códe	Variables
26	AGE	Age, 12=1, 13=2, 14=3, 15=4, 15+=5.
27	SEX	Boy = 1, Girl = 2
28	SCH	School C = 1, School D = 2, School E = 3, School F = 4, and School G = 5.

The Like/Dislike Charts

The Activity Charts administered as part of the Pre-Test battery were, as has been seen, divided into two sections. The first was a Frequency Chart, designed to discover how often children had experienced different teaching methods in history lessons in the previous year. The responses to this were analysed by school groups rather than by individuals and has already been considered in relation to the post-test scores in the different schools.¹ The second section of the Activity Charts was a Like/Dislike Chart intended to discover children's attitudes to the types of teaching methods they had experienced in history lessons. The choices made in this related to individuals rather than to school groups. Table 47 indicates the percentage of the 72 children in the post-test sample in each of the three categories of like, indifference or dislike for the various items. This should be compared with the Chart itself, which is included in the Appendices, and with Table 46.

1. See Table 45.

Table 47

Percentages of Responses on Like/Dislike Charts

Category of Response	Like	Indifferent	Dislike
Test Item			
L/D1	63.9	26.4	9.7
L/D2	26.4	36.1	37.5
L/D4	54.2	30.6	15.3
L/D5	73.6	22.2	4.2
L/D6	33.3	50.0	16.7
L/D9	81.9	18.1	0
L/D13	61.1	36.1	2.8
L/D15	48.6	37.5	13.9
L/D18	61.1	27.8	11.1
L/D19	63.9	22.2	13.9
L/D20	81.9	16.7	1.4
L/D22	72.2	15.3	12.5

The response to L/D22 shows that the large majority of children in this sample liked history, a finding which contrasts with those of the surveys referred to in Chapter 1. The most popular teaching method was the use of visual aids (L/D9), with none disliking it, and the least popular the use of dictated or blackboard notes (L/D2), although as many were indifferent to this as positively disliked it. Reading in various forms (L/D6) was not popular, half of the children falling into the indifferent category. As already suggested, this may reflect the low

verbal ability of the sample as a whole or a more widespread attitude relating to reading habits which would merit further investigation. The only other method not liked by more than 50% of the sample was asking and answering questions in class (L/D15); slightly more than half were either indifferent to this or actively disliked it, indicating perhaps a rather passive attitude to their work. Project work (L/D5), on the other hand, was popular.

The answers to the questions concerned with using documents (L/D13) indicated whether the children thought they would like the technique rather than whether they actually liked it, since the Frequency Charts had indicated that few had experience of the source method. Answers to these two questions were abstracted from the Like/Dislike Charts filled in a second time after the Farming Unit had been used and analysed separately. Since, as has been seen, two schools did not complete this chart a second time, the results below are based on a sample of 57 rather than 72.

Table 48

Percentages of Responses to Q.13 & 14 of the Like/Dislike Chart in the Post-Tests

Category of Response	Like	Indifferent	Dislike
Test Item			
L/D 13 PT	61.13	15.78	21.08
L/D 14 PT	57.82	24.89	17.39

The table suggests that the majority of children had enjoyed using the Farming Unit but, compared with their answers to the same questions before using the Unit, more actively disliked the method than had

expected to do so. A greater number were indifferent to working with the documents than to looking at them, probably disliking the greater mental effort required in the former.

Crosstabulation of Data

The next stage of the analysis was to determine what influenced children in their attitudes towards the various teaching methods as expressed in the Like/Dislike Charts. The computer analysis provided crosstabulations of the test items with the independent variables of age, sex, IQ and verbal ability. The chi-square test was performed on each of the crosstabulations for items in the Like/Dislike Charts to determine the significance of the relationship between the two variables tabulated. The results are given below:-

Table 49

Values of χ^2 obtained from the Crosstabulations of the items from the Like/Dislike Charts with the Independent Variables

Variable	Age	VG	IQ	Sex
Test Item				
L/D1	13.100	9.847	6.152	2.655
L/D2	15.976 ⁺	4.917	7.453	3.267
L/D4	10.381	8.368	5.994	1.555
L/D5	10.663	7.090	7.222	4.221
L/D6	16.038 ⁺	12.804	8.357	0.736
L/D9	2.899	4.951	11.048 ⁺	0.753
L/D13	6.745	5.369	7.279	3.079
L/D15	14.884	5.567	8.323	0.817
L/D18	4.635	15.775 ⁺	26.789*	0.577
L/D19	20.444*	14.113	8.261	0.366
L/D20	8.267	5.184	3.597	1.003

Table 49 continued

Variable	Age	VG	IQ	Sex
Test Item				
L/D22	22.371*	18.524 ⁺	6.328	4.146
L/D13PT	13.105	16.836 ⁺	12.529	4.865
L/D14PT	14.179	19.008 ⁺	15.989 ⁺	5.822

+ = significance at the 5% level

* = significance at the 1% level

Since there were five categories in the Age, VG and IQ variables, the results in these three columns are based on 8 d.f. The value required for 5% significance is 15.51 and for 1% significance 20.09. With only two categories of sex, the results in this column is based on 2 d.f. 5.99 is required for 5% significance and 9.21 for 1%. The only exception is L/D9 where since no children disliked the use of visual aids the degrees of freedom were reduced to 4 for Age, IQ and VG and to 1 for Sex.

Sex would appear to be the least important variable, since no significant results were obtained. Of the test items which approach nearest to significance at the 5% level, project work (L/D5) was favoured by boys, history itself (L/D22) by girls and the use of documents in the post-test version of the Chart (LD13 & 14 PT) again by girls.

The variable of intelligence was found to be most important in regard to the question of working in groups where, somewhat surprisingly, group work was favoured by the higher intelligence groups and disliked by the lower. The sample from the lower end of the intelligence range was not large enough for much reliance to be placed on this result, but it

might suggest that less able children perhaps prefer to be left to work at their own pace rather than be forced into association with others. 5% significance was achieved for the use of visual aids (L/D9), where although none of the children disliked them, the middle intelligence ranges expressed indifference more frequently than the extreme ends of the scale. High χ^2 values, and significance at the 5% level in one case, were also obtained for the questions concerned with the use of documents in the post-test (L/D13&14PT), where as might be expected dislike was more frequently expressed by those in the lower intelligence range.

The significant relationships obtained from the chi-square test on crosstabulations of verbal grades with attitudes to teaching methods must be treated with some caution as there were few children in the lowest or highest categories of verbal grades, resulting in bunching in the middle of the scale. No significant values of χ^2 at the 1% level were obtained. Of the four at the 5% level, the crosstabulation of L/D18 indicated that more children at the lower end of the scale disliked working in groups, suggesting that as in the case of general intelligence they prefer to be left on their own rather than to work with others. With L/D22, none of those with high verbal grades disliked history, but more at the lower end of the scale recorded indifference or actual dislike. Since history is a literary subject, this is perhaps to be expected. Analysis of the two questions concerned with attitude to the source method after the use of the Farming Unit (L/D13&14PT) also showed that there was greater indifference and dislike at the lower end of the scale of verbal ability. The only other question where the value of χ^2 approached significance at the 5% level was L/D6, where as might be expected, indifference to and dislike of reading also increased at the lower end of the scale.

The largest number of high, and of significant, values for χ^2 were obtained in the crosstabulation of Age with attitudes as shown in the Like/Dislike Chart. 1% significance was obtained for L/D19, working by themselves, and for L/D22, liking history lessons, where in both cases dislike was more frequently expressed in the younger age groups. This is perhaps surprising in the case of L/D22, considering that in the surveys discussed in Chapter 1 the older adolescents had tended to dislike history rather than the younger, but it should be remembered that most of the 15 and 15+ groups in this sample had opted for history as an examination course. This may also help to explain the significant result obtained for L/D2, where the majority of those expressing a liking for dictated or blackboard notes were in the older age groups. In L/D6, indifference to reading was predominant in all age groups, but actual dislike was more common in the 12 year old group and was absent from the 15 and 15+ groups.

Comparatively high χ^2 values, although not always at the 1% or 5% levels of significance, were obtained for L/D13&14PT, attitudes to the use of documents in the Post-Test, with all the four variables considered. Conclusions are necessarily tentative due to the fact that the two schools who did not complete the Like/Dislike Chart in the post-test were the two older groups, but it would generally appear that the source method as practised by use of the Farming Unit was slightly more popular with girls than with boys, and also with the higher intelligence ranges and those with greater verbal ability. Crosstabulation with age indicated general popularity with the 12-14 age range, but a greater degree of indifference and dislike by 14 year olds than by the two younger groups.

Age, intelligence, verbal ability and, to a lesser extent, sex, do to some extent appear to influence children's attitudes towards teaching

methods in history lessons, but the comparatively small number of significant results obtained from the chi-square test on the cross-tabulations suggest that these are by no means the only variables influencing attitudes. The home environment, peer group attitudes, the individual degree of social competence and other influences may be equally important.

Pearson Correlation Coefficients for the List of Variables

The computer analysis provided a Pearson correlation coefficient for each of the test items with every other test item except L/D 13&14 PT where there was missing data, and with the main variables considered. It must be remembered that the correlations are between numbered categories rather than between actual scores. However, the correlations obtained for test items agreed with those already obtained from actual scores by manual methods, and many of the correlations were very high, suggesting that reasonable reliance could be placed on them. Table 50 shows the significant correlations obtained.

Three main conclusions may be drawn from this table. Firstly, the grouped test item results correlate highly with each other and with intelligence, verbal ability and age.¹ This confirms the conclusions already reached, that age and intelligence are important factors in the achievement of objectives and that the use of the Farming Unit, while it may have enabled the whole group to improve, did not enable individuals to advance faster than their colleagues.² If the latter had been the case, a high degree of correlation would not have existed between a pre-test and post-test scores. It will be remembered, however, that the scores

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1. Note that the correlations between age and school and the test items is always negative, since the youngest school was numbered 1 and the oldest 5 and the 12 year olds 1 and the 15+ group 5. The oldest children, as has been seen, performed better on all the tests.
 2. See page 258

for each school group on the Documents Test and the relevant section of the Post-Test did not correlate significantly: the computer analysis deals with the sample as a whole rather than with the different school groups.

Secondly, the computer analysis enabled comparisons to be made between the use of external criteria or internal evidence to answer Question 10 of the Sources Test (ST) and Question 6 of the Documents Test (DT). As will be seen from the table, a high degree of correlation was obtained; the result was in fact significant at the 0.1% level. This indicates that similar criteria were used by individuals in their answers to these questions, although it will be remembered that external criteria was more rarely used on Question 6 of the Documents Test. Since significant correlations were obtained between these two items and most of the other tests, one can perhaps conclude that children capable of using external criteria in these two instances also scored more highly on the objective tests as a whole. The table also indicates that older children more frequently made use of external criteria, as has already been seen. It is interesting that these two items also correlate highly with L/D22, suggesting perhaps that the children who liked history were those capable of using external criteria, or those disliking history were those who failed to answer the question at all.

Thirdly, the computer analysis enabled the association between preferences for teaching methods to be detected. In the case of a positive correlation, it is of course impossible to tell how far it is the liking for or the dislike of two particular techniques which are associated, and all one can conclude is that the attitudes expressed towards these two

Diagram showing statistically significant relationships between choices of teaching methods listed on the Like/Dislike Charts

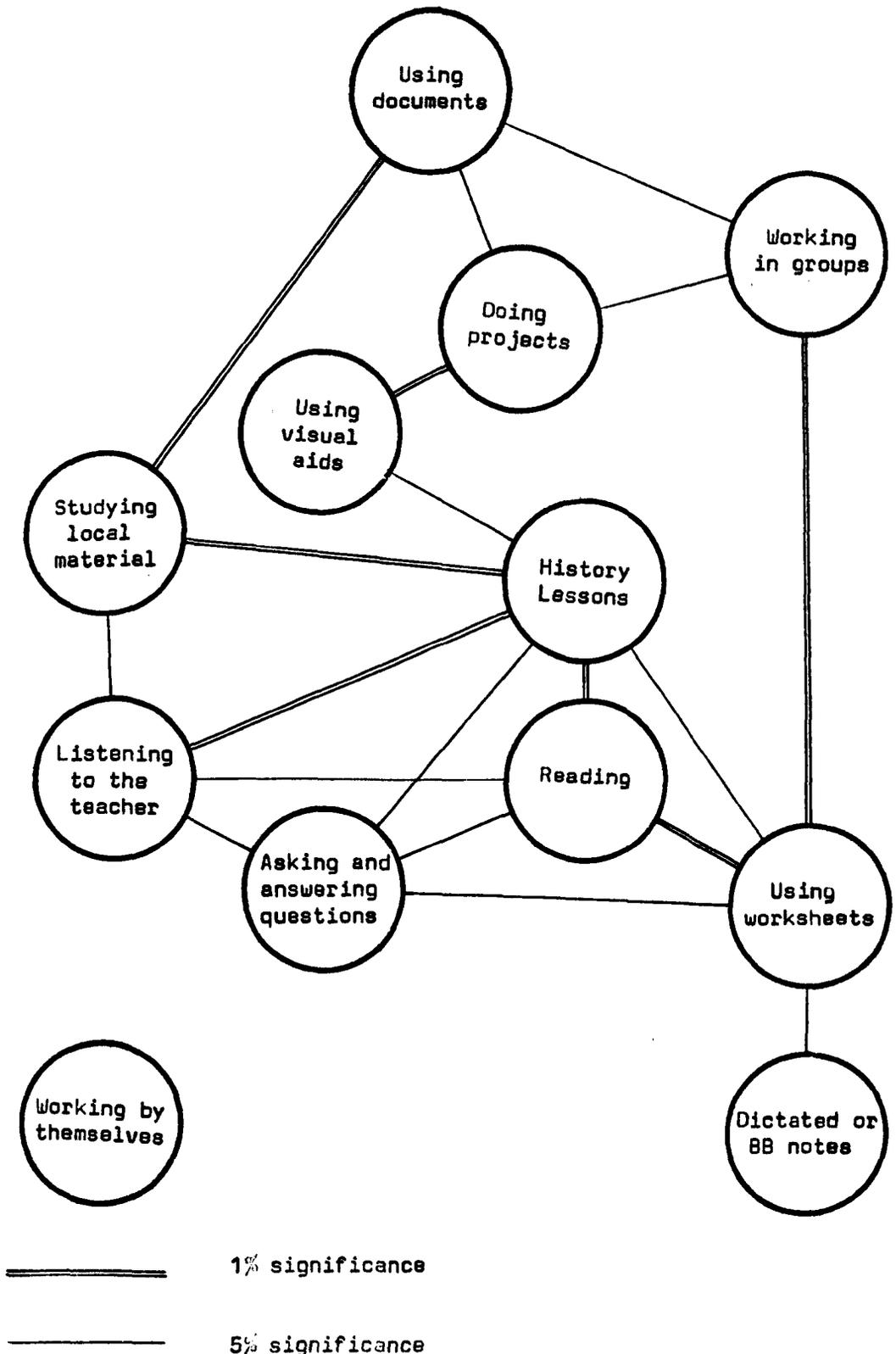


Diagram 2

techniques were similar.

Diagram 2 indicates the significant relationships between preferences expressed for the techniques listed on the Like/Dislike Chart. The only item for which a significant relationship was not found was L/D19, working by themselves. There are no clear groupings of preferences, but there does seem to be one group which prefers a structured method of working and one which prefers a more flexible approach. Liking history is more strongly associated with the first group than the second. The former includes those with similar attitudes towards reading, asking and answering questions, listening to the teacher, using worksheets and perhaps seeing a value in dictated notes. All of these except the use of worksheets were favoured by the older age groups. The second group had similar attitudes towards project work, using various kinds of visual aids, working with local materials and with documents and working in groups. The two divisions proposed are not absolute: attitudes to worksheets and to group work are related, as are listening to the teacher and enjoying local studies. From the point of view of the present research, it would perhaps appear that the first group are less well disposed towards the source method than the second. The crosstabulation of the two relevant items from the post-test version of the Like/Dislike Chart had, it will be remembered, indicated that greater indifference to and dislike of documents was expressed by the 14+ age group, who seem to be most strongly associated with this first group preferring structured methods.

One or two observations may be made about the relationship of certain items from the Like/Dislike Charts with objective test scores, bearing in mind that the scores for the former indicate a preference

and for the latter degree of ability. It is interesting that L/D2, the use of blackboard and dictated notes, correlated negatively with the first part of the Sources Test (S1) and with both parts of the Post-Test (PT1&2), suggesting that those who relied on these methods of learning did not benefit from the use of source materials. Oddly, the use of worksheets, (L/D4) also correlated negatively with the first part of the Post-Test (PT1), despite the fact that worksheets were an integral part of the Farming Unit. It is less surprising that attitudes to reading (L/D6) correlated positively with Verbal Grades (VG) and with both parts of the Documents Test (D1-3), based on written sources. The significant relationship between both using documents (L/D13) and studying local materials (L/D20) with both parts of the Sources Test (S1&2) perhaps suggests that some pupils do have a genuine appreciation of the value of historical evidence. A similar relationship exists between studying local materials (L/D20) and the Post Test (PT1&2), indicating perhaps that a favourable attitude, or the reverse, does affect performance on source materials. The large number of significant correlations obtained between liking history lessons (L/D22) and the various test scores perhaps suggests that the ability to do well in a subject increases the liking for it, or that failure to succeed results in dislike.

The conclusions suggested above are necessarily tentative because of the narrow range on which the correlations are based. There does, however, appear to be a relationship between preferences for certain teaching methods and between these and the variable of age. Moreover, attitudes towards teaching methods also appear to affect performance on some of the cognitive objectives sought after by teaching with the source

method. The importance of attitude on the part of the pupils to the successful use of the source method was clearly another topic requiring investigation in the second trials of the Farming Unit.

CHAPTER 6

THE SECOND TRIALS

The second set of trials was undertaken during the Spring and Autumn of 1975 to clarify some of the problems encountered in using the Farming Unit in the classroom. Some of the teachers in the first set of trials had indicated that their classes needed a considerable amount of help while using the Unit, and it was hoped to discover under what circumstances the Unit was used most effectively so that some form of learning sequence could be built into the Unit itself.

It might have been possible to undertake this research as part of a process-product study during the first set of trials, but this did not prove to be so for two reasons. Firstly, the unfamiliarity of many teachers with both the method and materials of the Unit meant that the evaluator was heavily involved in classroom work during visits to schools and was unable to quantify aspects of the classroom situation. Secondly however, it was during these visits that the possible importance of certain factors in the learning environment became obvious and it was only at a later stage that they could be incorporated into a detailed observation schedule.¹ When the first trials began, the techniques of interaction analysis were not widely used and they only became familiar to the evaluator once the first trials were well under way. However, without a period of involvement in the classroom during the first trials, an observation schedule would have been based on beliefs rather than on

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1. The evaluator's experience here is similar to that of Parlett and Hamilton on the Nuffield Research for Learning scheme, where it was found that only in the second stage of evaluation, after a considerable number of school visits, could questioning and observation be more systematic and direct. See Parlett and Hamilton, (1972), "Evaluation and Illumination: a new approach to the study of Innovatory Programs", op.cit., 17.

practice and it was probably better that a second set of trials should have been organised to study classroom procedure separately. The only disadvantage was that not so much information (e.g. as to intelligence levels) was available about the individual children in the second set of trials, but this was not so important as the comparison was between classes rather than individuals.

THE DATA-GATHERING INSTRUMENTS

1. Observation Schedules

Two observation schedules were used.¹ The first was similar to that used in the first trials to record information about the learning environment, e.g. arrangement of room, space available, other resources, length of lessons, etc. This was used to enable a comparison to be made from school to school and to act as a check on the teachers' questionnaires.

The second schedule was an attempt to quantify certain behaviours in the classroom. Much literature is now available on the subject of classroom interaction analysis: it has been admirably classified by a Schools Council research team,² and it is unnecessary to repeat their work here. Two points, however, need to be stressed. Firstly, the value of interaction analysis is not yet proven.³ For example, while it is possible to detect differences in style of teaching, it is not always possible to relate these to similar differences in pupil achievement. Gallagher, using his Topic Classification System of analysis, found significant differences between levels of conceptualisation used by teachers working

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1. Included in the Appendices.
 2. See J.F. Eggleston, M.J. Galton and M.E. Jones, Processes and Products of Science Teaching, Macmillan Education for the Schools Council, 1976. (The evaluator was privileged to see a draft copy before publication by Professor Kerr).
 3. See G. Nuthall, 'Is Classroom Interaction Analysis Research worth the Effort Involved?', New Zealand Journal of Educational Studies, ix, 1, (May 1972), 1-17.

with the BSCS curriculum package but no significant differences were found between the achievement levels of the various classes taught.¹ Even when a relationship between teaching style and pupil achievement can be measured, as in Wright and Nuthall's study in primary schools, it has not proved very easy to say in what way the two are related.² Furst found that the relationships between measures of teacher behaviours and pupil achievement were not simple ones - in fact, they were represented by curvilinear rather than linear graphs. Nuthall commented that "if a different sample of teachers had been drawn, quite different results might have been achieved."³ Nevertheless, since the results of the first trials had suggested that classroom conditions might affect pupil achievement, it was necessary to attempt to quantify some aspects of classroom interaction but not to place exclusive emphasis on the result.

The second point concerns the nature of the actual analysis. Most systems have been designed to measure aspects of teacher behaviour, the most well known perhaps being the Flanders Interaction Analysis System which seeks to quantify direct and indirect teacher influence.⁴ The Science Teaching Observation Schedule⁵ allows for talk and activity

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1. J.J. Gallagher, 'Teacher Variation in Concept Presentation', in BSCS Curriculum Program in BSCS Newsletter, No.30, University of Illinois Institute for Research on Exceptional Children, 1967. (Ref. originally derived from Eggleston, Galton and Jones (1976), op.cit.).
 2. G.A. Nuthall and C.J. Wright, 'The Relationship between teacher behaviour and pupil achievement in three experimental elementary science lessons', American Research Journal, 7, (1970), 477-481.
 3. N.F. Furst, The Multiple Languages of the Classroom, unpublished doctoral dissertation, Temple University, Philadelphia, 1967. (Quoted in G.A. Nuthall, 'A Review of Some Selected Recent Studies in Classroom Interaction and Teacher Behaviour' in J.J. Gallagher, G.A. Nuthall and B. Rosenshine, Classroom Observation, AERA Monograph, 6, (1970), Chicago, 19.
 4. N. Flanders, Analysing Teacher Behaviour, Addison-Wesley, 1970.
 5. Science Teaching Observation Schedule; a copy was lent to me by Professor Eggleston while the Science Trials were under way. It has since been published by the Schools Council, Research Studies Series, 1975.

initiated by pupils but assumes that the teacher will initiate learning for a considerable proportion of the lesson. Observation during the first trials of the Farming Unit had shown that teachers rarely addressed the class as a whole: they tended to give out the documents and worksheets and then concentrate on answering actual questions asked by individuals or groups. It was therefore decided to take note of the questions asked by the children as a guide to where the difficulties of the Farming Unit lay. Teacher responses were also classified but for a different reason; these would enable the evaluator to see how far teachers acted in accordance with the aims of the Unit and perhaps to see if different teaching styles were possible using the Unit and, if so, whether these affected pupil achievement. The first trials had shown that the number of actual questions asked was comparatively small since the worksheets were to some extent self-explanatory. A sign system, recording each occurrence of a pre-selected and limited number of possible questions and responses was therefore chosen in preference to a category system recording a larger number of behaviours at specified intervals.

The schedule used is included in the Appendices. The pupil questions were classified into three groups. In the first group, note was taken of questions or statements which revealed attitudes towards working with the Unit. The second group comprised questions which pupils asked to obtain assistance on using the materials in the Unit and the third group included questions pupils asked about the administration of the Unit. The fourth category was of selected teacher responses to questions in all the above groups.

The first observation schedule was completed during the first visit to a classroom and the second one during a subsequent visit once the

other conditions were clear to the evaluator and the children were used to her presence in the classroom. Questions were noted for a lesson of 40 minutes, which was the total time allotted in some schools and part of a longer lesson in others.

2. Interview of Children

The Like/Dislike Charts used in the first trials had indicated that the majority of children enjoyed using the Unit but these were not sufficiently flexible to discover the reason for, or the nature of, that enjoyment.

To this end it was decided to interview various groups of children in each class to ascertain their attitudes towards the work. They were asked whether they enjoyed the work, why they enjoyed it (if they did), whether they liked it better than normal history lessons and whether they would want to do it again. The interview was also used to discover the administration of the Unit in the classroom, often difficult to ascertain from two or three visits. The children were asked how they came to be doing a particular patch, how they progressed from one patch to the next and how they obtained assistance if they could not work out an answer on the worksheets. This would enable the evaluator to see how far the reference material within the Unit was being used or whether the children depended on their teacher for assistance. Finally, the children were asked if they had found the documents or the worksheets difficult to understand.

The children's answers were to some extent conditioned by the patch on which they were working and therefore several groups, all working on different patches, were interviewed in each class to get a representative sample of opinion.

3. Teacher's Questionnaire¹

All teachers using the Unit were asked to complete a questionnaire recording their impressions of the work of the Unit with their class. This was similar to the one used in the first trials but advantage was taken of comments made during those trials to elicit further information, e.g. as to the use of the Teachers' Book and the action taken if children's interest began to flag.

4. Post-Test

The same post-test as that used in the first trials was used in these i.e. the multiple choice test on the two maps of the enclosure of the village of Wilson. While the first trials had shown that this test was not entirely satisfactory, it was felt more useful to use the same test so that comparisons could be made with the post-test groups of the first set of schools.

5. Participant Observation

As in the first trials, since the evaluator was also the author of the materials, she was on occasions involved in classroom work; she was, in fact, a participant observer rather than a detached observer.² It was possible, by arrangement, to be detached for the period necessary to complete the observation schedules, but it was also felt important to collect whatever other information was available. Points were frequently raised by teachers about the reactions of their classes to the Unit which had not been included in the schedules or questionnaires. However careful the design of these is, unexpected side effects of the work are likely to appear. While accepting the subjective nature of information gathered by participant observation, it did prove useful in interpreting parts of the more formally collected data.

1. Included in the Appendices

2. See G.J. McCall and J.I. Simmons, Issues in Participant Observation, Addison-Wesley, London, 1969.

THE SAMPLETable 51Analysis of the Sample in the Second Trials

Unit used 1975	School	Type	Sex	Age	Number taking Post-Test	
					Used Unit	Did not use Unit
Feb-April	H ₁	Junior High	Mixed	12-13	23	
Feb-April	H ₂	Junior High	Mixed	12-13		19
Oct-Dec	I	Junior High	Mixed	13-14	39	
October	J	Grammar	Girls	13-14	29	
Feb-April	K	Grammar	Boys	13-14	28	
February	L ₁	Junior High	Boys	13-14	31	
February	L ₂	Junior High	Boys	13-14		29
Oct-Dec	M	Secondary	Mixed	14-15	23	
					173	48

Notes

1. The age range of the group was much less than that of the first trials. The dates when the Unit was used are important in this respect as the group was in fact more homogeneous than at first appears. The youngest school, H₁, used the Unit in the Spring Term of their second year and therefore most of the group were nearer 13 than 12 and so not far removed from the third year groups of Schools I and J, who used the Unit in the Autumn of the same year. In School M, the Unit was used with fourth years, but right at the beginning of the academic year when they were mainly 14 and so close in age to Schools K and L who had used the Unit in the Spring Term of the same year.
2. In Schools H and L a group of the same age and taught by the same teacher as the group using the Unit were taught the Enclosure Movement by traditional methods and took the post-test so that their results could be used for comparison.

3. In another School, N, three third year mixed ability groups of girls used the original Unit, Law and Order in Leicestershire in the Nineteenth Century. The same test battery, suitably modified and excluding the post-test, was used with them and the results are included as an appendix to the following analysis as they were of considerable interest, particularly in the design of worksheets for use with Documents.

The Schools

School H was identical with School C in the first trials but a different letter has been used as the groups using the Unit - a year after the first trials - were obviously different from that of the first trials. This was a Junior High School within the Leicestershire comprehensive system, situated in a rural part of the county close to the village of Congerstone on which part of the Unit was based. Two classes made use of the Unit as part of a course on farming, lasting a term, within their Social Studies syllabus. All children had the same introduction to the subject by audio-visual methods, but then groups within each class chose whether to use the Unit or the normal home-produced resource booklet on the Enclosure Movement. Group H₁ is amalgam of both classes using the Unit and H₂ of those not using the Unit but taking the post-test. They were boys and girls of mixed ability aged mainly 13 and the groups in which they worked were their normal working groups. Lessons were blocked and the Unit could be used for periods of 1½ hours at a time; the groups used the Unit patches for 4-6 weeks, each child using 2-3 patches.

The Humanities Centre of the school was purpose-built and housed an excellent resources area and library to which the children had access during lessons. Their classroom was spacious with wall areas for maps and free movement was permitted during lessons. The children worked at small tables arranged in regular groups. Their teacher was one of two in the second trials who had worked with the Unit before. He was young

and sympathetic in his dealings with pupils: he suggested rather than directed the methods by which they should work.

School I was a Junior High School in a village fairly close to Leicester. Two classes used the Unit as additional resource material within their Humanities syllabus. They were boys and girls of mixed ability aged 13 and over. All were introduced to the subject briefly in the same way and began to work with the Unit, although the teacher then transferred some members of the classes on to other work. School I is therefore an amalgam of those children in the two classes who worked mainly with the Unit. It was used more than once a week for about four weeks, each child using 2-3 patches.

As with School H, humanities was taught in a purpose-built centre containing the library; one class worked in a classroom with access to the library and the other in the library itself. The children worked in their usual groups and free movement and communication were permitted.

Their teacher was young and enthusiastic and had previously attended a course run by the evaluator on the use of archives, although she had not directly used them before. The humanities syllabus was designed around a series of objectives, and group work and worksheets were familiar to the class.

School J was a Girls' Grammar School on the outskirts of Leicester. The Unit was used by two third year classes mainly aged 13 and over; each class was taught by a different teacher, and only one class took the post-test although both were observed. The Unit was used twice a week for two weeks only as part of an outline chronological syllabus on the development of Britain and consequently each child had only time to use

one patch at the most. Lessons were forty minutes long. The children had been introduced briefly to the topic and then worked on the Unit in groups. They were not familiar with this method of working, nor with the use of worksheets or of documents. They worked in classrooms where the desks were arranged in rows; wall space was limited and although free movement to look at maps was permitted it was not very easy. The children worked in the classroom all the time; they had access to a few textbooks but not to the library.

The two teachers involved were a Head of Department and a first year teacher. Neither was familiar with the structure of the Unit nor its contents, and the children were handed a patch each as an example of resources on farming. Consequently the children cannot have realised the context of the particular patch on which they were working.

School K was a Boys' Grammar School in the city of Leicester. The Unit was used by one class of boys aged 13 or over, of mixed ability but of grammar school standard and destined for the 'O' Level examination. The class worked on the Unit twice a week for half a term, but lessons were of forty minutes only. It was used by individuals and was compulsory for the class as a whole, forming a project in its own right. Each boy used three or more patches. The post-test was taken as part of normal school examinations, but some time after work had been completed on the Unit.

The classroom in which the Unit was used was small and overcrowded, desks usually in rows being pushed into irregular groups. This made it difficult both for the teacher to get round the groups and for the pupils to use reference material such as maps. Working space was available only

in the classroom, but a few pupils were permitted to use the library for reference. There were no other resources apart from text-books.

The teacher was again young and enthusiastic but unfamiliar both with the source method and with the Unit itself. The children had never used documents and rarely used worksheets before and took some time to become accustomed to the method.

School L was a Junior High School entirely of boys in a Leicestershire town. The Unit was used by one of the top classes in the third year, aged mainly 14 and over, and a similar class were taught by the teacher's usual method and took the Unit post-test. Both were in the 'O' Level streams. Work on it formed part of a course on the Agrarian Revolution and the documents were used as illustrative material. It was compulsory for the whole class, who worked in pairs. Lessons lasted 45 minutes, and the Unit was used more than once a week for about two weeks, most pairs completing one or two patches.

The classroom was spacious with desks pushed together in pairs and adequate wall space. The class worked entirely in the classroom, not utilising the library nor the resources centre in the school. Textbooks were available but no other resources apart from an Q.S. map. The teacher was very experienced but relatively unfamiliar both with the source method and the Unit; he regarded the latter only as an illustration to what he had previously taught by exposition. Documents and worksheets were rarely used but the pupils were already very familiar with the subject matter and experienced little difficulty in using the Unit.

School M was a secondary school in a Leicestershire town, taking children from the age-range 11-18. The Unit was used by two fourth year

mixed classes aged 14+ who were destined for C.S.E. The subject formed part of their social and economic history course, during which they were required to study certain topics in depth. They used the Unit more than once a week for about five weeks, each child covering at least a general patch and one of the patches on enclosure. They had been introduced extensively to the topic before using the documents, which formed additional resource material for individual work on the enclosure movement.

One group worked in a spacious classroom, the other in a terrapin hut, but in both cases the children remained in the room and did not go to the library for reference. Textbooks were available, but no other resources. The teacher said that the class were used to working both with documents and with worksheets, but the children gave no indication of this, suggesting that if they had previously worked with documents they had not recognised them as such. The teacher was rather reserved in his dealings with the class but was familiar both with the source method and with the Farming Unit which he had used previously.

School N was a girls' secondary modern school on the outskirts of Leicester. Three third year mixed ability forms aged 13+ used the Law and Order Unit as a basis for group projects. They used the Unit twice a week for a period of about half a term. The girls were unfamiliar with documents and to a lesser extent with worksheets.

The classroom was spacious, with tables arranged in groups and plenty of wall space. A large number of project books were available, together with home-produced material such as a list of the most common crimes committed in Britain in 1974, and worksheets for use with the documents. The teacher was young and enthusiastic, but unfamiliar with the source method.

Nature of the Sample

As with the first trials, it was impossible to randomise the sample as it was necessary to accept any offers of co-operation.¹ In age, the sample was more homogeneous than that of the first trials.² Intelligence was difficult to ascertain, since no intelligence test was used. The groups in Schools J, K and L were streamed and above average in intelligence; Schools H and I contained mixed ability groups, and in School M the group was nominally a C.S.E. group but as far as could be seen had a low literacy level. School N was a secondary modern school group with no examination prospects.

Of the teachers, only two had previous experience of using the Units and another one practical knowledge of the source method. The teachers in Schools H, J, L, M and N were Heads of Department, while those in Schools I and K, together with the second teacher in School J, were relative newcomers to the teaching profession.

ANALYSIS OF RESULTS

1. THE POST-TEST

Reliability

The objective post-test was scored and analysed so that the results could be used as a basis for the comparison of other data. The facility values per question and per category of objectives were first obtained so that these could be compared with the results of the post-test in the first trials to give some idea of the reliability of the test. The results are set out below, with the values for the first trials in brackets.

-
1. The schools used were the only ones who offered to co-operate out of a request sent to most of the secondary schools in Leicestershire.
 2. Compare Table 1 with Table 51.

Table 52

Facility Indices (expressed as %) for questions and categories of objectives in the First and Second Trials

Category of Objective	Q.No	F value of question %	F value of category %	Rank order of category
1. Knows specific facts	1	88 (89)	80 (81)	2 (2)
2. Knows terminology	5	65 (76)		
	6	70 (85)		
	7	71 (64)	69 (73)	3 (3)
	8	70 (67)		
3. Knows of and can handle some of the material of the historian	14	54 (62)		
	15	76 (72)	65 (67)	5 (5)
4. Understands the material on the basis of internal evidence	3	84 (90)		
	9	50 (64)		
	12	47 (46)	65 (69)	5 (4)
	13	79 (75)		
5. Applies external criteria to the material	4	83 (76)		
	10	65 (53)		
	11	75 (78)	69 (66)	3 (6)
	17	53 (59)		
6. Appreciates the dangers of generalisations in history	16	85 (87)	85 (87)	1 (1)

A Pearson coefficient of correlation was obtained between the facility values of questions in the first and second trials.

$$r = 0.8192$$

which for a sample size of 17 was found to exceed the value necessary for significance at the 1% level. The questions where there was greatest disagreement between the two sets of scores were Question 5 and Question 6, both asking for recall of terminology, and Question 11, asking for recall of fact; the knowledge demanded depended partly on which patches the candidate had done. There was also considerable disagreement in the scores for Question 9, asking for inference about the meaning of the wavy line forming the boundary of the meadow - a question where a variety of interpretation is likely. The results of the post-test would seem, then, to be reasonably reliable in consistency of scoring over two quite large samples of 72 and 173 of similar age range.

Comparison of the Performance of School Groups

The performance of each of the school groups on the post-test is shown below:-

Table 53
Means, variances and S.D.s for Total Scores in the
Post-Test in the Second Trials

Group	Age	No.	Mean	Variance	S.D.
H ₁	12-13	23	25.00	44.2609	6.6529
H ₂	12-13	19	21.3684	19.4958	4.4154
I	13-14	39	25.3846	22.5957	4.7535
J	13-14	29	23.8966	15.6790	3.9597
K	13-14	31	25.7097	21.3469	4.6205
L ₁	13-14	31	25.7097	15.2383	3.9036
L ₂	13-14	29	24.1379	25.1534	5.0153
M	14-15	23	22.0435	36.1285	6.0107

Notes

1. Groups H₂ and L₂ had not used the Farming Unit before taking the post-test.
2. The sample, as explained, is more homogeneous in age than appears. The means, too, are more homogeneous with a range of 3.6662 (excluding H₂ and L₂) as opposed to 11.748 in the first trials.
3. Unlike the results of the post-test in the first trials, there is no clear progression towards higher means the older the group. In fact, excluding H₂ and L₂, the lowest mean was obtained by the oldest group and School J (13-14) have a lower mean than H₁ (12-13).

As in the first trials a one way analysis of variance was carried out to test the significance of the differences between the means, although there was clearly not the same degree of difference as in the first trials.¹

Table 54

One-way analysis of variance of Post-Test Scores,
Second Trials

Source of variation	Sums of Squares	Degrees of Freedom	Variance Estimate
Total	5784.19	220	
Between Groups	429.5988	7	$\hat{\sigma}^2_b$ 61.3713
Within Groups	5354.5912	213	$\hat{\sigma}^2_w$ 25.1389

The null hypothesis states that the differences among the group means are due to chance. The value obtained for F was 2.4413; for 1% significance 2.73 is required and for 5% 2.05, and the null hypothesis can therefore be rejected at the 5% level. There are differences among the group means, although not to the same extent as in the first trials.

1. See Table 40.

The one way analysis was continued by testing the significance of the difference between each of the groups in turn, using the formula

$$\hat{\sigma}^D = \frac{\hat{\sigma}^2}{n_1} + \frac{\hat{\sigma}^2}{n_2}$$

The estimate of the population S.D., $\hat{\sigma}$, is estimated from all the groups involved in obtaining the F ratio and therefore $\hat{\sigma}^2$ is replaced by the within-groups estimate, $\hat{\sigma}^2 w$. As the number of each sample varied, each had to be tested separately against each other using the 't' ratio. The table below shows the levels of significance obtained.

Table 55

Levels of significance obtained using analysis of variance
between the means of each school in the Second Trials
on the Post-Test

	H ₁	H ₂	I	J	K	L ₁	L ₂	M
H ₁		2.3368 ⁺	0.2918	0.7782	0.2025	0.5143	0.6158	1.9997 ⁺
H ₂	2.3368 ⁺		2.8632 [*]	1.7084	2.6285*	2.9178*	1.8714	0.4343
I	0.2918	2.8632*		1.2103	0.0796	0.2695	1.0141	2.5396 ⁺
J	0.7782	1.7084	1.2103		1.0457	1.3998	0.1833	1.3237
K	0.2025	2.6285*	0.0796	1.0457		0.3244	0.8640	2.2978 ⁺
L ₁	0.5143	2.9718	0.2695	1.3998	0.3244		1.2135	2.6571
M	1.9997 ⁺	0.4343	2.5396 ⁺	1.3237	2.2978 ⁺	2.6571*	1.4961	

Notes

1. Group H₂ differs significantly from H₁; the former had not used the Farming Unit, the latter had. H₂ also has a high number of significant differences from other groups, but does not differ from the other group who had not used the Unit, L₂, nor from the groups with the two lowest means who did use the Unit, J and M.
2. Group L₂ does not differ from L₁, although the former had not used the Unit and the latter had.

3. Group M has a large number of significant differences, being similar only to the two groups not using the Unit (H_2 and L_2) and the group using the Unit who had the lowest mean, J.

The table shows that Group H2 and School M are entirely responsible for all the significant differences between group means and therefore for the significant value of F. Group H_2 had not used the Farming Unit and therefore might be expected to differ in performance, but School L_2 had not used the Unit either yet present no significant differences from any other group. This perhaps suggests what the comparison between pre- and post-test scores in the first trials suggested, that the use of the Unit has a greater effect on the younger age groups than the older. However, other factors clearly need to be taken into account such as previous learning experience or the time spent on the Unit and other work by H_1 and H_2 and L_1 and L_2 respectively. School H only had a brief introduction to eighteenth century farming followed by half a term's work either on the Unit or on the teacher's own resources. School L had a lengthy introduction to farming but spent only two weeks using the Unit. It is likely that the post-test performance of School L reflects previous teaching, whereas that of School H is more indicative of the effects of the Unit.

School M was the oldest group although, as suggested, they were not in fact very much older than L_1 and L_2 because of the time in the academic year when the Unit was used. Clearly the reasons for their comparatively poor post-test performance need investigation.

Apart from the two groups mentioned above, the more homogeneous sample in the second trials produced more consistent results on the post-test and suggests possibly that chronological age is a more potent factor in the success of the Unit than the way in which it was used from school to school. However, bearing in mind Gallagher's discovery that different teaching styles are not necessarily reflected in significantly

different outcomes on the part of pupils, such a conclusion cannot be accepted without further investigation of the classroom situation.

Although the outcomes of the Unit have been fully considered in Chapter 5, it was thought worthwhile to look at these in the different schools in the second trials. Table 56 gives the facility values for both individual questions and categories in the second trial schools, and should be compared with Table 44. It is unnecessary to discuss again the outcomes in terms of the structure of the Unit, but one or two general points may be made about the scores achieved by different schools in the second trials.

Firstly, the scores on individual questions vary more from school to school than the overall facility values of the categories of objectives. The variation is very obvious, for example, in Question 5, asking for a technical term. It is due partly to the different patches covered by each child and partly to the various emphases laid on different teaching points from school to school.

Secondly, from the pre-tests in the first trials, it might have been expected that Category 4 objectives should rank higher than Category 5. This had been generally true in the post-test of the first trials but not in the second. Category 4 contained Question 12, the worst done question in both trials, asking for the detection of a difference between two maps; this had been shown in the pre-test to be a difficult skill. Equally, the relatively high scores achieved in Category 5 are largely due to questions demanding recall of fact in a different context rather than the more difficult skills of inference and judgement. Question 17, demanding the exercise of historical imagination and the passing of a judgement, did not on the whole score very highly ($F = 0.53$) and is lowest,

Table 56

Facility Indices (expressed as %) for questions and categories of objectives obtained by each school in the Second Trials on the Post-Test

Schools	I	II	III	IV	V	VI	Categories
	1 2	5 6 7 8	14 15	3 9 12 13	4 10 11 17	16	Questions
	100 78	26 91 43 39	61 80	87 70 61 75	87 70 78 64	80	Facility value of questions
H ₁	89 1	50 5	71 4	73 3	75 2	80	Facility value of categories
	100 68	16 42 42 26	45 72	92 58 42 58	95 58 89 35	75	Facility value of questions
H ₂	84 1	27 5	59 4	63 3	69 2	75	Facility value of categories
	90 38	85 69 64 49	58 83	100 36 54 89	86 62 90 64	89	Facility value of questions
I	64 4	67 3	71 2	63 5	76 1	89	Facility value of categories
	72 79	41 69 72 86	53 78	84 34 14 89	81 48 93 64	91	Facility value of questions
J	76 1	67 3	66 4	55 5	72 2	91	Facility value of categories
	100 93	86 68 79 89	55 76	79 54 43 69	93 50 68 73	98	Facility value of questions
K	96 1	80 2	66 4	62 5	71 2	98	Facility value of categories

.../continued

Table 56 continued

Schools	I	II	III	IV	V	VI	Categories
	1 2	5 6 7 8	14 15	3 9 12 13	4 10 11 17	16	Questions
	94 52	55 55 90 77	60 74	84 52 74 88	79 97 68 62	86	Facility value of questions
L ₁	73 3	69 4	67 5	75 2	77 1	86	Facility value of categories
	97 41	69 86 28 55	62 76 100 59 62 74	74 66 76 37	93	Facility value of questions	
L ₂	69 2	60 5	69 2	74 1	63 4	93	Facility value of categories
	74 74 100 70 83 83	84 1	40 66	72 54 39 64	76 65 57 55	71	Facility value of questions
M	74 2	84 1	53 5	57 4	63 3	71	Facility value of categories

1,5,4 etc = rank order of categories
(excluding Category VI)

significantly, in the two groups who had not used the Unit, H_2 and L_2 . This suggests that they lacked the knowledge of detail or the practice in passing judgements to answer the question well. Category 2, knowledge of terminology, was also achieved least successfully by the two groups who had not used the Unit. On the other hand, it is not entirely clear that the Unit helped in the achievement of Category 3 objectives, the knowledge of the sources of the historian. Although H_2 did less well in this category than H_1 , the reverse is true in the case of L_2 and L_1 and in general the category does not rank high. This would suggest that some children are taught about Enclosure Awards and Acts when learning the subject by traditional methods and that the Unit did not help them to learn any more about the provenance of the documents.

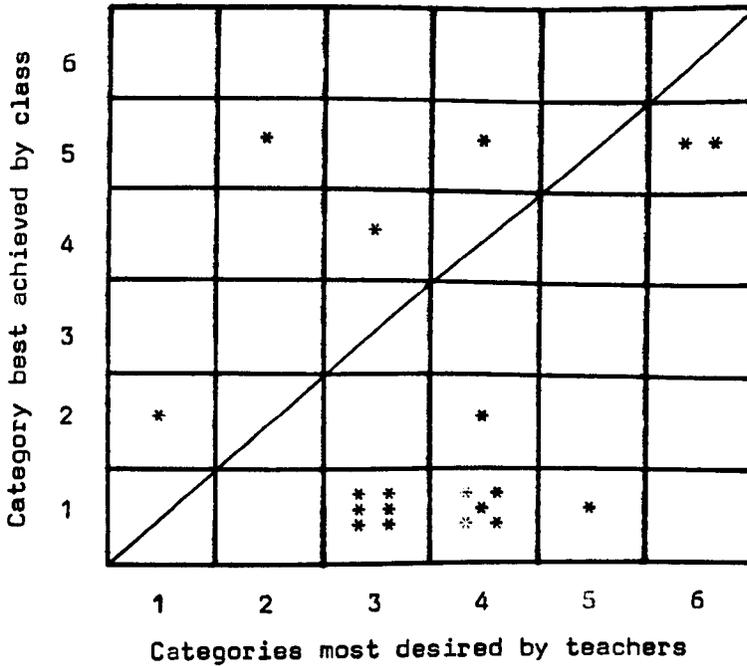
In the first trials an attempt was made to compare the objectives in which the schools scored most highly with those the teachers thought most important. Diagram 3 sets out the two dimensions for all eleven teachers taking part in both trials.

Notes to Diagram 3

1. One category, the appreciation of the dangers of generalisation in history, was excluded as none of the teachers thought it important and its high rating on the post-test was spurious.
2. Increased interest in history was not directly measured in the post-test, but was thought important by several teachers and so is included.
3. Several teachers chose more than one category as important for their class.
4. The graph is remarkable for complete absence of correlation, i.e. none of the squares correspond.

Diagram 3

Diagram to show the relationship between the objectives most desired by the teachers and those best achieved by their classes



Key

- Categories
1. Knowledge of facts
 2. Knowledge of terminology
 3. Experience in handling source materials
 4. Experience in handling internal evidence
 5. Experience in utilising external criteria
 6. Increased interest in history
- * indicates those objectives most desired by each teacher and the objective best achieved by his class

The diagram shows clearly that, whereas most teachers chose Category 3 and 4 objectives as being most important for their classes, in fact those classes scored most highly on knowledge of facts. This may not be so contradictory as first appears. Experience in handling source materials and using skills such as analysis and synthesis on the evidence before them would lead to accumulation of facts, and the post-test may be responsible for overemphasis of this objective. The Category 3 objectives were tested by questions demanding knowledge of the location and type of source materials used, which the teachers presumably did not think was important since few of them considered it necessary to tell the children anything about the documents themselves. The poor quality of reproduction of the maps in the post-test may help to account for the comparatively poor achievement of Category 4 objectives. Nevertheless, it would appear from both sets of trials that since teachers on the whole regard these two categories as most important, greater emphasis needs to be placed on them in the construction of the Unit, the way it is used in the classroom and also the way in which their achievement is tested.

Relation of Classroom Variables to Post-Test Performance

An attempt was made to relate various classroom variables thought important after participant observation to scores achieved on the post-test, but with little conclusive result.

1. How far the class were used to working on their own

Schools H, I and M were used to working with worksheets in pairs and groups; Schools J, K and L were on the whole unfamiliar with the techniques required. To a participant observer, this resulted in considerable difficulty for both teachers and classes when the Unit was first used, and it took the children quite a time to settle down to the work required. The

differences are not reflected in the post-test scores, although the scores of School H₁ are relatively high considering it was the youngest group and those of School I, a mixed comprehensive class, compare favourably with those of the streamed classes in the same age group. School M is an exception.

2. How far the class had previously used documentary material

The teacher in School M claimed that his pupils were used to working with documents and the teacher in School J said she used them occasionally. However, none of the children thought they had ever used this kind of material before and therefore had clearly not realised what it was they were working on. Their previous use of this kind of material is obviously not reflected in their post-test scores.

3. The amount of prior knowledge the class had of eighteenth century farming

It is clear that the post-test will to some extent reflect the children's prior knowledge of the subject as well as experience gained working from the Unit. Schools H, L and M had an extensive introduction to farming, the first as part of a Humanities syllabus and the other two as part of a C.S.E. or 'O' Level course. Schools H and M scored comparatively highly in the knowledge categories, but School L not noticeably so. Schools I, J and K had a brief introduction only, but K (perhaps because of the length of time they spent on the Unit and the post-test was taken as part of a school examination) scored very highly in the knowledge categories.

It will be noticed from the analysis of the observation schedule that Schools J and K asked most questions to acquire factual information, and so perhaps giving the class a reasonable introduction to the history of farming enables the teacher to concentrate on the other problems his

pupils encounter. The danger is that they will be given too much prior information and regard archive work as an unnecessary addition, which appeared to be the case in Schools L and M.

4. The teacher's knowledge of the Unit, preparation for its use and the amount of direction given to the class

The teacher in School H had used the Unit before and was familiar with both the material and the questions he might be asked: he was able to direct the children on to patches he thought suitable for their interests and ability. The teacher in School M had also used the material before and, with the C.S.E. examination in mind, directed his classes to use one of the general patches and then one of the enclosure ones. The teacher in School I had studied the Unit fairly extensively but had not used it before; she adopted the same method of use as School M. In School K the patches were given out indiscriminately to begin with but the children could choose freely which one they moved on to next. The teacher here was totally unfamiliar with the Unit but as it was used for a reasonable length of time in the school, she soon acquired the necessary knowledge. In Schools J and L the Unit patches were given out singly as illustrations of work already covered and the teachers concerned were not well prepared in the use of the materials.

The variety of levels of preparation is not, however, reflected in post-test scores except again that School H and I scored higher than the streamed classes in their age group. The exception is once again School M, where the careful preparation of the teacher was not to any degree reflected in his class' achievement. Attention needs to be paid to levels in interest in this class to resolve the difficulty.

5. The length of time spent using the Unit

This needs to be balanced against the amount of prior introduction to the subject. For example, School L spent only two weeks using the Unit but had a lengthy introduction. The other school using the Unit for a very short period of time was School J, also also received only a brief introduction to the subject and this does seem to be reflected in their post-test scores. All the other schools used the Unit for about half a term and Schools H, I and K achieved broadly similar post-test scores. School M is again an exception.

6. The working space and other resources available

Schools H and I had direct access to the school library; School H also had home produced booklets on farming. Both these schools, as has been seen, scored relatively highly considering their age and mixed ability. School K could use the library occasionally during lessons, but Schools J, L and M had access to textbooks only and worked in their classroom all the time rather than going elsewhere for reference. Schools J and L did not use the Unit long enough for this to matter, but School M, as their attitudes show, clearly became bored with the endless repetition of the Unit worksheets with no variety provided by additional resources.

The relation of classroom variables to learning outcomes is clearly a complex one: the above analysis shows certain relationships but no clear pattern. A more sensitive post-test might clarify the picture, as might a larger sample, but as it stands one can only accept Gallagher's findings that teaching patterns are not necessarily reflected in different learning outcomes.

2. THE OBSERVATION SCHEDULE

Diagram 4 shows the number of questions asked by the children in each school during two forty minute sessions using the Farming Unit. It had been intended to take the average of each category for the two recording sessions, but as a comparatively small number of questions were asked, these all had to be included to pinpoint any trends. The general points arising from the schedule relating to the structure of the Unit are made below, but analysis of the differences between schools has been included with the results of interviews of children in the next section.

The relatively small number of questions indicates that the directions given on each of the worksheets were largely satisfactory and enabled children to work by themselves.

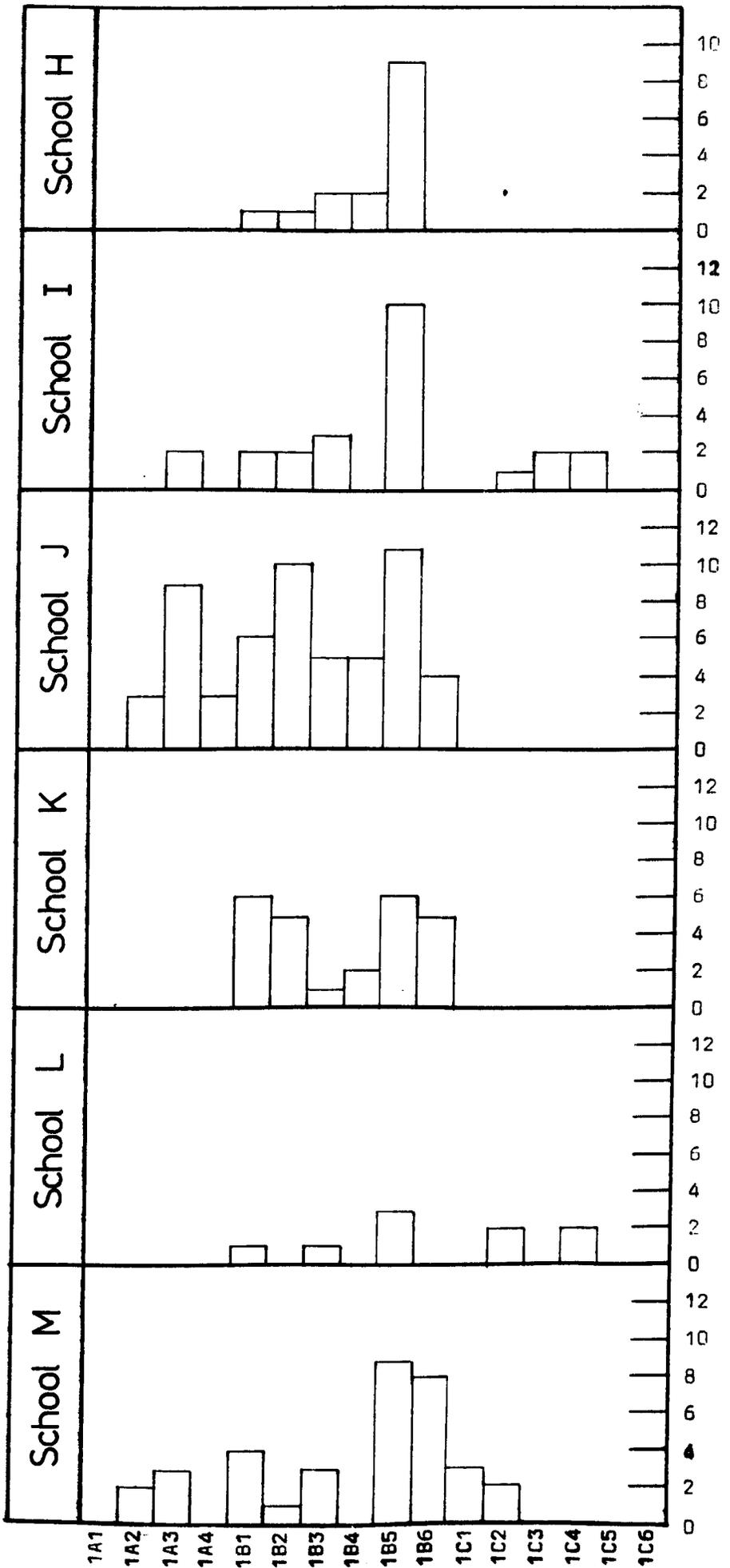
There were few questions in Category 1A, pupils asking questions or making statements revealing their attitudes to the work. The interviews discussed later suggest this may have been because most of them enjoyed the work, but it perhaps also suggests that they accepted it from their teacher as another task to be done with little comment. In Schools J and M there was some evidence of lack of interest in the task set, but most of the questions in this category showed an unwillingness to read the documents, again most obvious in Schools J and M, and from one girl only in School I. Some girls in School J also revealed an unwillingness to work with the material at all, disliking the 'discovery' method and preferring to be told information.

The majority of the questions fell into Category 1B, pupils asking questions to obtain assistance. 1B1, acquiring factual information, was most prevalent in classes having only had a brief introduction to the subject but also where the use of the Background Books had not been

Diagram 4

Diagram to show the number of questions asked by children in each school

during two forty-minute sessions using the Farming Unit



explained to the class. B2, the inability to read a particular word, was most common in School J where there was considerable resistance to the use of the documents and the use of transcripts had not been adequately explained. In school L, where extra transcripts had been requested, no questions in this category appeared. B3, the inability to understand the meaning of a word, was a more generalised question across all the schools; it was obvious that such words as 'depopulate' and 'garret' needed to be included in the glossary. B4, understanding the document₁ as a whole, was common in the younger groups who found it difficult to assimilate a large amount of information. B5, understanding the task set, provoked most response. In a few cases this was due to ambiguity in the wording of the question, but was more often due to the fact that the questioner did not know how to find the answer, e.g. how to work out how many storeys the farmhouse had in Patch 4 or whether certain claims to land had been passed in Patch 8. This may imply that the inference demanded were too advanced or that the children were unused to making inferences at all; questioning by the evaluator suggested that the latter was the true explanation. B6 had been left as an open category. During observation it became clear that the question 'where in the document do we find the answer?' was frequently asked and so this was included in the schedule as B6. It occurred in Schools J, K and M and indicated the unwillingness to read the documents (1A3) which was openly expressed in two of the schools. The long passages of print in some of the patches were clearly daunting to the slower reader, as in School M, and exasperating to the type of child in Schools J and K who were used to finding answers quickly.

-
1. The term 'document' rather than 'archive' was used in the interviews and observation schedules. Although not technically the correct term for the type of records included, it was more familiar to both children and teachers.

The few 1C questions, pupils asking questions to find out various procedures, was partly due to the fact that each patch took a long time to complete and the evaluator saw few transfers from one patch to another. There were no C5 questions because the children were already in their normal working groups or had been put into groups by the teacher. The system of working in School H meant that the children were used to using a variety of materials without consulting the teacher and proceeded normally. One group in School I actually worked in the library, and consulted their teacher about which books to use, but Schools J, K, L and M had no access to the library. The few Category C questions do suggest that the administration of the Unit presented few problems to the teacher or class.

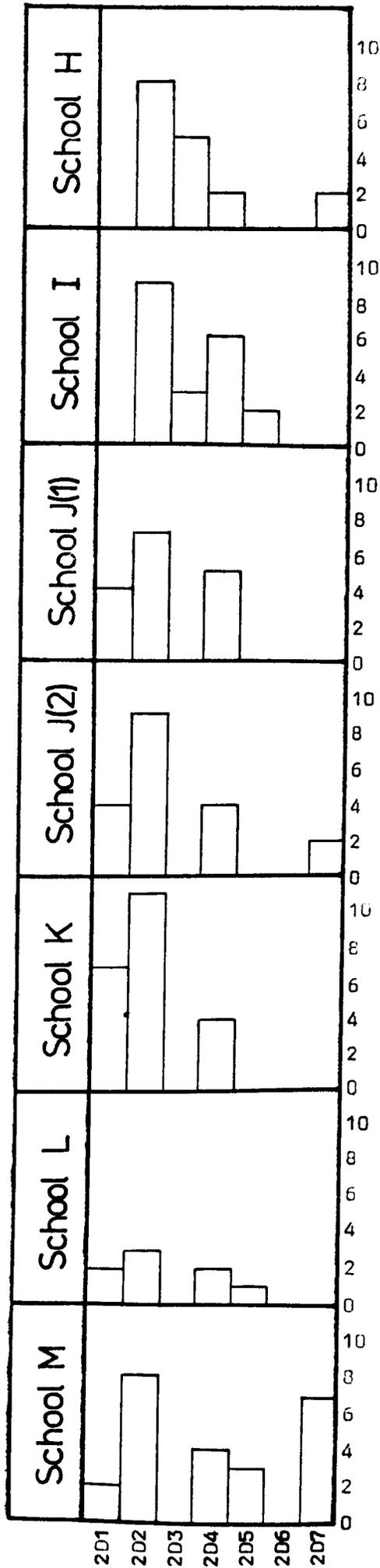
Diagram 5 shows the type of responses by the teachers to the children's questions; the number of responses were obviously related directly to the number of questions asked by the children and are not indicative of teaching style.

2D1, statement of fact, could be given in reply to questions in the 1B1, 1B3 and 1B4 categories. It is noticeable in Schools H and I that, although some requests for factual information and the meaning of words were registered, no direct statements of fact were made by the teacher: the children were, rather, directed to other sources of information. In Schools J, K and L the number of statements of fact is closely related to requests for factual information; in these schools exposition was the normal method of teaching.

2D2, encouraging pupils on tasks set, was the most common response, particularly to 1B5 questions, understanding the task set on the document. Teachers either reworded the question or suggested how it could be done. It is noticeable that only the teachers in Schools H and I

Diagram 5

Diagram to show the categories of responses by teachers to the questions asked by children in their classes



suggested a fresh approach to the work when pupils became confused; they were more familiar with the material than any of the others except the teacher in School M, and generally displayed more flexibility in their teaching than he did. 2D4, directing pupils to other sources of information, was common to all schools but the type of material suggested depended on the accessibility of other resources. The teachers in Schools J and L had not adequately explained to their classes the use of the Background Book with its glossary and frequently had to direct individual children to it.

None of the teachers made responses in 2D6, insisting on specific method of work, and since the children asked few Category C questions there were few responses in 2D5; these were mainly concerned with the provision of crayons, paper, maps and so on. The children were never prevented from working with whom they wished. 2D7 was an open category, but in the course of observation it became clear that the response of teachers to several questions in Category 1B was to read through a document with the pupil and so this response was classified as 2B7. It occurred in Schools H and J, but most frequently in School M, where the teacher commented that his class had difficulty in reading some of the lengthy passages in the documents. A low literacy level might help to explain why School M obtained such a comparatively low score on the post-test.

The observation schedule indicated that certain improvements could be made in the Unit to ease its working in the classroom. Firstly, some of the documents were over long and not broken up in any way, which made them tedious to read and the answer to a question difficult to find. Secondly, the use of transcripts and of the glossary and information in the Background Book needed to be made clearer to the children, and possibly to the teachers as well. Thirdly, the wording on some of the

worksheet questions was ambiguous and needed revising, and possibly the inferences made simpler. On the whole, though, the children's questions suggested that the teacher's role was to clarify and assist in making these inferences. Since only he is familiar with the level of thinking in his own class, this role could not be eliminated by any improvement in the Unit, nor would it be desirable to do so. It was clear, however, that to fulfil this role adequately, many of the teachers needed to be much more familiar with the Unit than in fact they were. This is the danger of including worksheets in the Unit, as the teacher does not become familiar with the material through setting his own. This subject will be further considered later.

Although the kind of help children needed was common in all schools, the amount of help needed varied considerably among the groups. The observation schedule was not sufficient in itself to indicate the reason for the discrepancy and other information was clearly needed.

3. THE ATTITUDES TO THE USE OF THE UNIT SHOWN BY CHILDREN AND TEACHERS

The information was derived from the question schedules, from interviews with the children and from comments made by their teachers.

School H

The small number of questions asked in this school was due to several factors; the familiarity of the children with both the method of working and to a lesser extent with the subject; the availability of other resources; the fact that the teacher did not leave any group on its own for very long but circulated among them and asked direct questions himself about the work they were doing.

The children chose whether they wished to work on the Unit at all and which patches they wanted after their teacher had described their content.

Those who did choose to work on the Unit tended to stay on it for as long as possible by choosing further patches rather than alternative work. If their interest did flag, the teacher transferred them on to home-produced resources but on the whole he felt that their interest in the materials was better than expected.

The children said they liked the local nature of the material (Congerstone was a nearby village) and the detail in the documents; they enjoyed reading the old print but became rather bored with the passages in manuscript. All the children interviewed said they liked this method of working better than their normal system of booklets with questions incorporated. The reason given was that in their pamphlets the answer was often obvious and therefore tedious to write out, whereas with the Unit worksheets they had to work out the answer and they found this more interesting. The Unit obviously had novelty value, but many gave the above reason even when working through their third patch. An examination of their normal worksheets showed that they were rarely asked to make inferences, which perhaps helps to explain why, although they enjoyed doing so, they asked most questions about how to derive the answers from the documents. They also liked the illustration that was incorporated into some of the patches.

School I

The children all worked on the Unit to begin with but their teacher transferred some to other work when their interest flagged. All the children interviewed, with one exception, liked using the Unit but were not so definite as School H that it was better than normal history lessons. Like School H, they found discovery exciting, both working out the answers to the questions using the detailed information in the documents and looking up information in other sources. (They had direct access to the library).

Once again, they needed most help in making inferences. One child thought the questions were too easy and resented having to work them out from the information given. The teacher's comment was penetrating:-

"there appears to be an initial enthusiasm, then they become bored with detailed searching for information. Suddenly they get the measure of it and then it becomes too easy."

She regarded their interest levels as satisfactory and believed the materials had a novelty value, but should not be used too often.

School J

The girls in School J were used to formal exposition and the use of textbooks: they had little experience either with worksheets or with working in groups. The large number of questions is perhaps indicative of their lack of self reliance. If they came across a problem, they tended to ask for help rather than to try and solve it for themselves. Their initial reaction was unfavourable, as the large number of Category 1A questions and statements suggests. They disliked the scattered materials and difficult handwriting and the need to work out the answers to questions. They were clearly unused to thinking in terms of 'why' rather than 'how', which is reflected in the questions they asked in Category 1B5. Many soon came to enjoy working with the Unit, preferring it to blackboard notes and enjoying working out ideas in their groups. They only had the opportunity to work on one patch per group, and two valid criticisms were made. Firstly, as a project it lacked variety, with few pictures or other kinds of material. The class only had access to books; they were unable to follow up references in the Library and had not been informed about the Background Books. Secondly, they found it difficult to see the relevance of an individual patch and were unable to see how the whole pattern of enclosure was worked out. Consequently, few of them wanted to do this kind of work again.

Their teachers commented that the children wanted to derive information

quickly and often had not the patience to read through a document to find the answer; they became bored quickly and were not very persistent. They felt the initial interest in the class was due partly to novelty value and partly to the detail in the documents, and rated their interest levels as better than expected. The teachers themselves were as unfamiliar with the material as the children, which resulted in difficulty in satisfying questions in the 1B5 Category, and the tendency to make statements of fact where possible.

School K

As in School J, the boys here were used to teaching by formal exposition and the use of textbooks. They also had little introduction to the subject of farming, which is reflected in the comparatively high number of questions asking for factual information and the meanings of words. They were slow to settle down to a new type of work and disliked having to read through a document to find an answer, expecting to derive information quickly. They disliked reading both old printing and old handwriting and were vociferous in demands for transcripts. However, they were not so openly hostile to the work as School J, as the lack of Category 1A statements indicates. At first, they regarded the worksheets as a means of racing each other to complete a patch and produced superficial work. Their teacher felt that once they settled down they worked well and they also needed less help in interpreting the worksheets than the other schools in the age group, often consulting each other rather than the teacher. She commented that in particular the slower ones who did not respond so well to questioning worked well with the Unit and found that reports came back from parents that the children were interested in the work. She rated their interest levels as better than expected and

indicated that it was the subject, the detail in the documents and the worksheets which promoted interest.

School L

School L only used the Unit for two weeks, each pair of boys using one patch. They were used to exposition and taking notes from the blackboard, and some of them enjoyed using the worksheets as a different method of learning. Like School J, they did not have enough experience working with the Unit to discover what it was all about, and regarded the single patch they completed as just another exercise, which was also the teacher's intention. They did not see the relevance of the work and were not certain they wanted to do it again. The novelty value had worn off by the end of four lessons and as they were used to a chronological syllabus, they began to be keen to move on to another topic. Their teacher rated their interest levels as satisfactory and thought it was due to the subject, the documents themselves and the worksheets.

The lack of questions asked in this school seemed to be due partly to a reasonable factual knowledge of the subject but also to a general unwillingness to consult the teacher himself. They preferred to consult with each other rather than the teacher, and had more than the usual number of Background Books and transcripts which reduced the number of Category B questions.

School M

School M were the oldest group using the Unit. They worked in periods lasting 1 hour 20 minutes and their teacher made no attempt to break up the lesson by introducing a different type of work. Consequently, their interest tended to flag and some of them objected to using the Unit, as is shown in the Category 1A statements. Their teacher said they had

difficulty in reading the lengthy passages in some of the patches. However, he tended to persist with the work rather than suggest a new approach or use other materials. The pupils disliked having to look for the answer to a question on a worksheet; they expected to know it rather than to have to find out and frequently needed to have the task explained to them. They also disliked having to write something in their own words or in imaginative form. Some liked the detail in the documents and using the worksheets, but on the whole this class seemed to the evaluator to lack interest. This fact may well largely account for their low post-test scores. However, their teacher rated their interest as better than expected, which suggests that they were generally unenthusiastic about history. They fall, of course, into the age-group discussed in Chapter 1 whose interest in history is generally low, which may help to account for their attitude.

The six classes and their teachers, then, exhibited different types of response. These can be grouped into various categories and the classification of each class or teacher borne in mind when considering their comments on the structure and improvement of the Farming Unit.

The responses of the children fell into three groups. The first group are the younger children in Schools H and I, who were still enthusiastic about history and who were used to the discovery method although not to documents. They settled down to work on the Unit with relative ease and enjoyed it. The second group, Schools J and K and perhaps some of School L, are bright children used to formal methods of teaching and to receiving and imparting information quickly.¹ They found it difficult

1. cf the two groups derived from attitudes to *teaching methods* as shown on the Like/Dislike Chart in the First Trials. See Diagram 2 and page 286.

to settle down to finding out for themselves and some resented having to do so, although others came to enjoy it once they became used to the method. They were also unused to spending a long time on one topic and were soon ready to move off farming on to something else, unlike the children in Schools H and I. The third group, some of School L and School M, are older children who had become less enthusiastic about history and probably about school in general. They preferred easier ways of learning history, such as exposition, and regarded the challenge of finding out themselves as a waste of time.

This classification suggests that there are three main factors conditioning children's response to the source method. The first is age, younger children being generally more enthusiastic about discovery methods while mid-adolescents (14-16) tend to be apathetic towards or dislike a method of learning dependent on themselves rather than the teacher.¹ The second factor is intelligence, which to some extent counteracts the effect of age by making the older child keener to learn and in some ways more able intellectually to do so, but not necessarily enthusiastic about the discovery method. Many bright children like to receive information quickly and therefore resent the time spent deciphering handwriting or reading lengthy passages of material. Intelligence levels are, too, affected in turn by a third factor, the type of teaching to which a child is used. This, perhaps, is not so basic as the other two, resulting rather in confusion when the source method is first introduced if it is unfamiliar rather than prolonged hostility to the method itself. The same three factors, then, would appear to govern attitude as well as the ability to master various objectives, as was seen in the last chapter.

1. cf the computer analysis of the Like/Dislike Charts in the First Trials, Diagram 2 and page 286.

The responses of the teachers can also be classified into three groups, not entirely overlapping with the responses of their particular classes. The first two groups both valued the experience children gained in finding out for themselves, accepting that it took longer than exposition and that less ground would be covered. The difference between the first two groups is rather one of degree. The teachers in Schools H and I gave few factual responses to questions encouraging their pupils' initiative on the task set, but were also sufficiently flexible to vary the approach if it became obvious that the children's interest was flagging. The teachers in Schools K and M gave more factual responses, mainly because their classes asked more of this type of question than in Schools H and I and were working towards examinations, but they differed mainly in persisting with the set work and not introducing variety when interest was lessening. The third group, the teachers in Schools J and L, preferred teaching by exposition and valued the source method as a means of illustration of material already learnt by other means than as a method of learning in itself.

In Schools H and I, therefore, the attitude of the teachers corresponded with that of their classes, resulting in a fairly high level of interest and a comparatively high post-test score. In the schools representative of the second group of pupil interest, Schools J and K, the situation was more complex. In School J, the teachers used the material as illustration, which is perhaps the method best suited to that group, but did not take into account the children's unfamiliarity with the method, with resultant confusion in the initial stages. In School K, the teacher wished to use the material on a more extended basis; the boys wished to get through it as quickly as possible, and their post-test scores suggest that they did not derive the same benefit as Schools H and I. In the

third group, Schools L and M, the teacher in School L would seem to have used the Unit in accordance with his wishes and those of his class; this seems to account for their high post-test scores. In School M, on the other hand, the attitudes of the children and the teacher were in direct contradiction which is undoubtedly represented in their low post-test scores.

The differences in learning outcomes as represented by post-test scores possibly, then, reflect harmony or disharmony between teachers and their respective classes in attitudes to the source method.

4. THE ATTITUDES SHOWN BY CHILDREN AND TEACHERS TOWARDS THE CONTENTS AND STRUCTURE OF THE FARMING UNIT

Since the children were the main consumers of the Unit, it was felt important to ascertain their attitudes towards its contents and these are considered first. Information derived from questionnaires filled in by teachers in both sets of trials are then used to analyse the teachers' attitudes, and various suggestions for improvement in the contents and structure of the Farming Unit can then be made.

The Patches

The interviews with children were deliberately conducted with groups using different patches so that their attitudes to these could be ascertained. Attitudes to each patch across the various schools were remarkably consistent.

Patch 1. Leicestershire before Parliamentary Enclosure contained several long passages of print which were visually unattractive and were thought difficult to understand. It also contained several long words which were not explained in the Glossary. They liked the extracts from William Pitt's

description of Leicestershire in 1809 but found it tedious to look through to find their local area as the worksheet suggested. Clearly the author had overestimated children's ability to skim through long passages to find the relevant section; this was noticeable in other patches as well.

Patch 2. Robert Bakewell was generally popular especially with boys.

Once again there were complaints about the long, unbroken sections of print from Nichols' History of Leicestershire and few children attempted to read Bakewell's letter in the original, most using the transcript. The patch was difficult for those who knew nothing about eighteenth century farming and the use of the Background Books needed emphasis.

Patch 3. Wages and Prices was generally popular and was considered easy.

The children particularly liked finding out today's prices to compare with those of 1790 and 1808. The relevance of the rise in prices and wages between 1790 and 1808 was not clear unless children had some background knowledge of the period.

Patch 4. Farmhouses was probably the most popular patch of all, especially with girls, and this despite the fact that there were no transcripts of the inventories. It contained a variety of material including drawings. The girls clearly liked finding out in detail about the contents of houses but also liked working out the questions, particularly discovering the trade of the subject of one of the inventories from the contents of his shop. Some found it difficult to understand how questions such as 'How many storeys do you think the house had? Give reasons for your answer' could be worked out, especially in the second group of pupils, and needed considerable help from their teachers.

Patch 5. The Village of Congerstone before Enclosure was one of the patches whose relevance the children found it hard to see if the patch was done in isolation, as most of them had never heard of Congerstone. Its location and the reasons why it was chosen for study needs to be explained to them. Another problem was the poor quality of reproduction of the pre-enclosure map, although the children did like using it. Variety of material is clearly important.

Patch 6. The Act of Parliament for the Enclosure of Congerstone was popular as the print was well broken up and had side-headings to help locate the information.

Patch 7. The Commissioner and his Work was enjoyed by the brighter children as it involved a considerable amount of inference-making. Less able children, however, tended to become confused. It was quite detailed and marginal to what children generally learnt about eighteenth century enclosure, and was a patch to be used with caution by the teacher.

Patch 8. Carrying out the Act was used entirely in transcript form as the children found attempting to read the clerk's handwriting tedious. It was central to the process of enclosure and was generally popular, although the older children disliked the questions demanding use of the historical imagination at the end of the worksheet.

Patch 9. The Roads was a long and complicated patch, which, like Patch 7, was popular with the brighter children, particularly boys. The material in it was new to most children as they had not learnt very much about roads at the time of Parliamentary Enclosure, and the second and third groups of children at first thought it irrelevant to their learning. Many, though, liked the detail in it which they did not usually learn by other teaching methods. Once again, it was used almost entirely in transcript form.

Patch 10. The End of Enclosure in Congerstone was difficult but enjoyed by brighter children because of the inferences that had to be made to answer the questions. Some of the answers required mathematical calculations which took a considerable time. The relevance of the patch was not appreciated unless a previous enclosure patch had been done first.

It is obvious from the above that a teacher using the Unit needs to consider carefully which patches to give his particular class, depending on their age, ability and purpose in working through the Unit. Indiscriminate handing out of patches as had been done in some of the trial classes could easily lead to boredom and poor work. For example, examination forms would not need to work through patches 3, 4, 7 and 9; a younger class or group in a class of average intelligence using the Unit as a project could usefully use Patches 1, 2, 3, 4, 5, 6 and 9 but might become confused by Patches 7, 8 and 10, whereas a bright group would enjoy using the latter three patches provided they knew something about eighteenth century farming. These points need to be added to the description of the contents of each patch in the Teacher's Handbook.

The children in the second trials had only been asked questions about individual patches. Teachers in both trials were asked to comment on all the components of the Unit and their replies are considered below.

Documents and Transcripts

The general quality of the documents was felt to be adequate except for the maps, where reproduction was clearly poor; cost had been a factor here, but as so little visual material was provided some attempt would have to be made to improve this as they were integral to the topic being studied. The colour coding was felt by all teachers to be useful and certainly speeded up collection of material at the end of lessons. Opinion

was divided as to whether the documents should be stapled in patches together with the relevant worksheet or whether the materials of each patch should be loose in a plastic envelope. This was not important as, if the Unit were for sale, and the documents supplied loose, they could be stapled if required as some teachers in fact did on their loan Units.

It was hoped to discover whether children liked using facsimiles or would have preferred to work entirely from transcripts. All the teachers stated that their classes used the transcripts in conjunction with the facsimiles, but observation showed this to be otherwise. When the children discovered a transcript to a particular document they did not refer to the latter again. Yet teachers felt that the children's interest would not have been aroused if they had not seen the facsimile in the first place. One of the teachers in School J said that the facsimiles seemed more genuine as source material, but neither she nor most of the others, as has been seen, told the children what source material was or where the documents came from. Teachers perhaps do not realise that what to them is source material is to children just another form of project material, and underestimate the need for an explanation. This is unfortunate as the Sources Test had shown that many even young children can recognise that value of original material if encouraged to do so.

The teacher in School K valued the untranscribed material as it made her class use their intelligence to work out the meaning of the document and to think about it, but it was the brighter children in classes such as hers who most resented having to do this. The children liked seeing what the facsimiles looked like and in some cases transcribing them, but it was more the detail in them *than* their appearance that interested the children once work had begun. The comment made by the teacher in School I was

most helpful:-

"I think that both documents and transcripts are necessary because it is important that children get the experience of looking at originals but once they become interested in the information rather than the documents and writing then they need transcripts."

The Unit might be improved, then, by including transcripts of the more difficult material in each of the patches rather than in a separate book as was done. Since, as has been seen, the children found it difficult to skim through a long passage to select the relevant paragraph, it would perhaps be better only to transcribe the necessary sections of the facsimiles in the patches and to break these up under headings so that slower readers would not find so much difficulty. This would also prevent the child accustomed to finding information quickly from becoming bored by tedious searching for information so long as there was sufficient material and demanding questions to hold his attention. Teachers might also be encouraged to use certain documents orally to stimulate interest, reading through them with the class, and then to let the children work on transcripts rather than the facsimiles themselves.

The Worksheets

With two exceptions, all the teachers used the worksheets as they stood with their classes and said that they would do so again if they re-used the Unit. They appeared to value the detailed knowledge of the material that the author possessed rather than to desire to set questions for their own particular class. Only School A, the youngest group, felt that the questions were difficult and all the others rated them as average. In School D the teacher used the archives as source material with his own question sheets, and in School F the teacher set her own worksheets directing the children to specific questions of the Unit worksheets.

It did not appear, then, that any of the teachers resented the provision of worksheets as had been previously suggested by the staff of the Teachers' Centre.¹ The problem was rather that because they did not devise the work on the archives they did not become sufficiently familiar with the material to help their classes adequately. In School F, the teacher said that she wished she had tried to answer all the questions set first. The content of each patch had been described in the Teachers' Handbook but as will be seen, many of the teachers did not read enough of this to derive the necessary knowledge. One solution might be to eliminate some of the patches in the Unit while increasing the number provided of others so that familiarising oneself with the material would not be so formidable a task.²

A general worksheet was included to give pupils who had completed Unit worksheets the opportunity to pursue more open-ended topics on materials other than the archives in the Unit. School C was the only one to make use of this, and then only of one section. Had it been more generally used, it might have provided the variety of work that some of the children and teachers desired. That it was not was partly due to an inadequate explanation of its purpose in the Teachers' Book, but also to lack of time to pursue the topic of farming in many of the schools concerned.

The Background Book

This was intended for use by the children rather than the teacher. It contained an introduction to the documents and archives; background notes on the history of farming under separate headings, e.g. The Open

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1. See the Appendix to this Chapter for the problems that can arise when worksheets were not provided.
 2. This could also be achieved by limiting the kind of patches used with a certain class, as suggested above, page 333.

Field System of Farming, Robert Bakewell, etc.; a glossary of technical terms; and a list of books for further reading and suggestions for following up local sources. Observation and interview with the children suggested that in most cases its use had not been explained to them, and many of the teachers were unfamiliar with its contents.

Three or four Background Books were included in each box, and teachers in the more knowledge-orientated classes (F,G,L,M) did not find this provision adequate. In most cases the books were used for reference; Schools D and G also used them for private directed reading, the classes being sufficiently small to make this possible.

The glossary of technical terms was found useful by every school and could well be expanded. The background notes on farming were used by only five of the schools. Only School D made any direct use of the introductory section on the documents, and none of the classes used the section on further reading. The limited use of the books may have been partly due to the difficult level of language used and the long, unbroken sections of print.

A solution might be to provide a simpler background book similar to the home-produced resources of School C/H, and to direct the children's attention to it on each worksheet. The glossary of technical terms would need to be included, but the more detailed information given in the present book could well be incorporated into the Teacher's Book; one teacher stated on her questionnaire that she would value more background information, particularly on the work of the Commissioner, obviously not realising that this was in the Background Book. Another teacher wanted a list of source books and material in local archives in the Teachers' Book, and so

the section on further reading and follow-up work in the Background Book, which was not used by the children, could be transferred to the Teachers' Book and expanded. As has been seen, a structured Unit such as this by no means dispenses with the teacher and it would clearly be better to provide for the teacher's use material that is not directly of value to children working through the Unit.

The Teacher's Book, Origins and Purpose of the Unit

The information derived from questionnaires in this section had to be treated with caution. Only one teacher actually admitted that he had not read the Teacher's Book (School G), but observation and interview of teachers showed that not many of them knew what it contained, apart from answers to the worksheets.

Only two teachers, in School G and one in School J, said they could use the Unit just as easily without the Teacher's Book. School G, as has been seen, used the Unit in a very limited form. The teacher in School J had, in any case, only read parts of it and the initial confusion and lack of interest of her class suggested that they might have benefited had she read more of it. Schools D, I and K were enthusiastic about the value of the Teacher's Book; the rest thought the use of the Unit would only be made a little more difficult without it.

All the teachers approved the inclusion of answers to the worksheets, and in some cases would have liked them more detailed. Only Schools A and K wanted more information in the Teacher's Book and what they required was in fact included in the Background Book. This would be met by transferring the factual sections of the Background Book and the notes on further reading to the Teacher's Book as already suggested. Interview of the children

using different patches indicated, as has been seen, that the outline of potential use of each patch should be amplified so that teachers could decide whether a patch was suitable or not for the needs of their particular class.

It was hoped to discover how interested the teachers were in the statement of objectives of the Unit given in the Teacher's Book, or whether Parlett and Hamilton were right in their statement that "few in practice take cat log descriptions or lists of objectives very seriously save - it would seem - for the traditional evaluator."¹ No teacher recorded that a statement of objectives was unnecessary. Schools G, J and L felt it was interesting but not useful, whereas others felt it was useful. Yet, as has been seen, the objectives of the Unit most successfully achieved by the classes were rarely those thought most desirable by their teachers. This is undoubtedly partly due to deficiencies in the setting of worksheet questions, as already explained in Chapter 5, in that insufficient practice was given in some objectives. It does also suggest that as long as teachers are in general agreement with the objectives of the curriculum developer, they perhaps expect these objectives to be fulfilled through the resources provided without any interference from themselves. Yet, as has been seen, the children needed help from their teachers in learning how to use the various skills demanded by the Unit worksheets, particularly in the making of inferences. A prepared resource pack cannot in isolation effect its various objectives; in use, it becomes part of a complex teaching and learning process in which the teacher himself is a vital element. Some method needs to be found of encouraging the teachers to define and seek to fulfil their own objectives rather than passively to accept those of the curriculum developer. This might be achieved through in-service training

1. Parlett and Hamilton, (1972), op.cit., 11.

or by not including set worksheets in a resource pack, thus encouraging teachers to become familiar with the potential of each document for their class. This is, however, time consuming and deprives the teacher of the detailed knowledge of the documents possessed by the pack compiler.¹ A compromise might be to explain in the Teacher's Book how the teacher could work with the curriculum developer in trying to achieve the objectives of the Unit, by, for example, explaining the nature of the documents to the children. A list of objectives is clearly insufficient.

CONCLUSION TO THE SECOND TRIALS

"When an innovation ceases to be an abstract concept or plan, and becomes part of the teaching and learning in a school or college, it assumes a different form altogether ... It is not an instructional system as such, but its translation and enactment by teachers and students that is of concern to the evaluator and other interested parties."²

The second trials were undertaken to discover more about the second and third goals of the evaluation,³ the interpretation of the Archive Teaching Unit, Leicestershire Farming, in the classroom situation. It was hoped to use the results of the trials both to improve the structure of the Unit itself and to find out the most effective methods of using archives in a variety of situation.

Information was collected on a broad spectrum by means of an objective test, observation schedules, questionnaires and interviews. A variety of data-gathering instruments proved essential since the results of one could not be adequately interpreted without reference to another. The most difficult problem was deciding on the criteria to be used in defining 'effective use' of the Unit in any one school. High test scores were not necessarily related to high interest levels or satisfaction expressed

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1. cf. the Appendix to this Chapter.
 2. Parlett and Hamilton, (1972), op.cit., 30 and 31.
 3. See page 170.

by the teacher using the Unit, and it became clear that 'effective use' was a complex measurement of several dimensions.

The key factor appeared to be the attitude of the children in the class towards the use of the Unit. This was conditioned by other factors, particularly age and intelligence, but also involving previous learning experience, availability of other resources, the length of time spent using the Unit etc. The attitude of the teacher towards the use of the Unit was also crucial. It was noticed that when the attitude of both class and teacher were similar, post-test scores were relatively high. When, however, the teacher hoped to fulfil by using the Unit objectives with which his class were not in sympathy, like discovery of information or use of the imagination, post-test scores were low. The attitude of the class might change to become more in sympathy with that of the teacher, as in School K, but in this case the Unit must be used for a long enough period for this change to take place.

The objective test scores were not, then, sufficient in themselves to stand as a measure of 'effective use'. Their significance could only be understood in relationship to the coincidence, or otherwise, of the attitudes of both teacher and class. 'Effective use', in fact, depended essentially on the co-operation of teacher and class in the achievement of common aims using methods acceptable to both. Before using the Unit, then, the teacher would need either to know that his class were in sympathy with his aims in using it or to be prepared to take steps to ensure that his aims were understood and therefore, perhaps, more acceptable to his class. The latter step was not taken by any of the teachers in the trial classes, largely, it would seem, through lack of realisation that children did not understand what it

was they were being asked to work with.

The methods of ensuring such common attitudes would obviously vary from school to school, but the second trials did suggest certain steps which could be taken to help children appreciate what they were being asked to do. Firstly, children needed to have some idea of the subject before beginning work on the archives; this is equivalent to the background knowledge possessed by any historian working on original material. Secondly, because children feel that once a subject has been explained to them they have finished with it, they need to be told the relevance of working with archives rather than be handed them with no explanation. The teacher may feel they ought to be used as an illustration or for personal discovery, depending partly on the nature of the material itself,¹ and on the aims of the class, but the children should be made to feel there is some point to the work they are asked to do on original source materials. Thirdly, the teacher needed to make careful choice of the patches given to groups, or the children would be unable to see how what they were working on fitted into the general pattern of changes in eighteenth century farming about which they already possessed some knowledge. The idea of each group working on a general patch followed by one or more of the patches on enclosure seemed a good one, depending on the syllabus of the class, and perhaps more copies of each patch needed to be included in the boxes so that teachers had more control over what they wanted their classes to learn from the work. Fourthly, the children (especially those not used to the discovery method) needed clear instructions on how they were to proceed. These had been written out for them in the Background Book, but this was generally used for reference and such instructions would anyway come better from the

1. The distinction between documents and archives, made in Chapter 3, is relevant here.

teacher. They particularly needed to be told to read the information given on each of the worksheets before answering the patches so that they understood the context of their patch. Lastly, in most cases interest began to flag if the work was pursued for too long with no variety. If the class had direct access to other resources, for example the library, interest was higher as different types of material could be consulted. If the class worked only in the classroom, especially for long periods at a time, then work on the Unit needed to be interspersed with other forms of teaching, such as visual materials or the oral use of selected documents. More visual materials in the Unit itself would be an improvement, since much of the material was too similar for interest to be sustained for long periods at a time.

Since many teachers asked how best they should use it when they first received the Unit, the suggestions made above could well be incorporated into the Teacher's Handbook.

APPENDIX: SECOND TRIALS OF THE ARCHIVE PACK, LAW AND ORDER IN LEICESTERSHIRE IN THE NINETEENTH CENTURY

In the replies to requests for schools to participate in the second trials, one school volunteered to use the original Unit, Law and Order in Leicestershire in the 19th Century. This was an unstructured Unit, containing documents and a Teacher's Background Book, but no worksheets or additional information for the children. Consequently the data-gathering instruments used in the second trials of the Farming Unit had to be modified but the results are discussed here as they served to illuminate several aspects of working with source material.

School N was a girls' Secondary Modern School on the outskirts of Leicester where the Unit was used by two third year mixed ability classes.

Its use was compulsory as part of a social history course; the girls were given a brief introduction to the subject and set to work on the documents. Their classroom was spacious, with tables arranged in groups, and a selection of project books was available.

The girls used only the documents concerned with the policeforce in the Unit, not those concerned with prisons. Since the Unit contained no worksheets, the teacher made her own. She duplicated some background information sheets from the Teacher's Book, particularly a list of crimes committed in Leicestershire in 1834, and made worksheets on groups of documents, attaching these to different coloured cards.

On the first visit it was clear to the evaluator that the girls disliked using the documents and workcards. Not many direct statements were made to this effect, but there was a general lack of enthusiasm for the work. Interview of both teacher and class suggested several reasons for this. Firstly, the girls had not used either documents or worksheets before and they resented being asked to think out the answers for themselves. Their teacher reported that several had requested an 'ordinary lesson' as it was so much easier. She herself was anxious that they should become accustomed to thinking for themselves and wished to pursue the method. Secondly, only one transcript was provided for a particularly difficult document and the girls had problems in deciphering some of the others - there were several Category 1B2 questions. However, the teacher herself felt that the girls would regard transcripts as just another printed sheet and that the documents had more effect. She had not told the class anything about the nature of the documents and the girls did not seem to realise what it was they were working on. There was also no glossary and they had to ask their teacher the meaning of words such

as 'embezzlement' and 'larceny'. Thirdly, and perhaps most important, the girls disliked the tasks set for them on the workcards. Three of these are set out below:-

Law and Order

Worksheet 1

Read information sheet 1 and 2. Now find out what the main crimes were. Find out the meanings of any terms you do not understand.

Start to collect cuttings from daily local and national newspapers. Compile a list of crimes committed in modern society.

- a) When you have collected all the necessary information, copy out the list of crimes and compare crime in 1800 and the 1970s.
- b) Write a short paragraph to say what the differences are. Which crimes are missing today? Look carefully at the lists and see if there are any new crimes. Why have crimes changes?

Law and Order

Worksheet 2

Before 1829 there was no Police Force as we know it today. The system of catching criminals was organised by each parish. Constables were appointed by each parish.

Study document 1 "The Account of William Chandler".

By 1829 Robert Peel had begun to organise the Metropolitan Police Force. Using the document, and "Police and Prisons"

- a) Write an account of how Law and Order was maintained before Robert Peel's Police Force was set up.
- b) Study documents 3, 5 and 6.

Write a summary stating if you agree with the qualifications that were asked for. If so, say why. Also write your comments on the conditions of service. Which conditions do you think should be omitted? Are there any conditions you would add for a constable today?

Documents 7, 8, 9 and D have to be studied very carefully. Between them they give a picture of what life was like for the average P.C. in those days.

In your own words, using the documents and any other knowledge you might have: write an essay describing the life of a Police Constable as it would have been about 1870.

The problem with the workcards seemed to be two-fold. From the girls' point of view, the questions asked were similar to those for which they would normally have used lesson notes or textbooks and they did not understand why they had to decipher difficult handwriting and search through scattered documents to find the answers. It has been seen that it is the detail in documents that children enjoy, yet the girls were being asked to absorb this and to present a generalised essay. This was the second problem, that most of the workcards demanded the more advanced skills and either assumed or ignored the simpler ones. The pre-tests of the Farming Unit had shown that the practice of skills was sequential; that most children needed to use comprehension and analysis on the material before them before applying external criteria to use synthesis, inference and judgement. The first workcard does, in fact, ask for the skills in order - find out the meanings of terms, collection of additional material, analysis and comparison of material and finally inference. The problem here was that the children did not have sufficient time to build up the necessary references and also that their background knowledge of the nineteenth century was insufficient for the inference required. Worksheets 2 and 3 ask for synthesis of material studied and the incorporation of previously learnt data, assuming that comprehension and analysis of the materials will be carried out beforehand. The girls found this very

difficult as it involved balancing a great many factors at once to make a coherent narrative.

The teacher herself felt that the work was not proving very successful, and that interest levels were low because the girls found the workcards difficult. After the above points had been discussed with her, she revised the workcards to include comprehension and analysis questions designed to help the girls read the documents before demanding the more advanced skills of the other workcards. She found that after this the work went better; the girls asked fewer questions about where to find the answer in the document, and worked with greater interest. She stated on her questionnaire that guidance on making workcards to accompany the documents would have been an invaluable addition to the Teachers' Book.

Observation in School N, therefore, proved an interesting addition to observation of the Farming Unit since it enabled the evaluator to see what could happen when a list of hierarchical objectives was not used to structure workcards. The teacher herself had not sufficiently detailed knowledge of the documents to set the kind of worksheets included in the Farming Unit and had tended to fall back on the type of essay questions she normally set. The girls found it difficult to organise the material derived from the documents immediately in the form required and achieved better results when the simpler skills were specifically asked for before more difficult ones were involved. The trial also indicated that teachers, far from resenting advice, might indeed welcome it.

CONCLUSION

The purpose of this research was to study the effect of the use of archive materials on teaching and learning patterns in school history lessons. The means chosen were two packs of local documents and archives, one concerned with law and order in Leicestershire in the nineteenth century and the other with farming and the process of enclosure in the eighteenth and nineteenth century Leicestershire. These have been evaluated in detail in the previous three chapters and the necessary changes in the structure and use of the packs indicated. It remains now to relate this detailed study to the wider question of the use of archives as a whole in school history lessons, the fourth goal of the evaluation.¹ Although the use of archives is perhaps a method of teaching rather than a new curriculum the four basic elements of the curriculum model proposed by Professor Kerr² are still applicable to its evaluation. These will be considered in slightly different order from that outlined in Chapter 1, looking first at the techniques of evaluation, secondly at the materials to be used, thirdly at the learning experiences and lastly at the value and purpose of the use of archives in the school history curriculum.

The comparative value of the techniques used in the evaluation

It was pointed out at the beginning of Chapter 5 that an independent evaluator in the educational field experiences considerable difficulty in obtaining an adequate sample on which to conduct investigations. Without the backing of a national body like the Schools Council, one's status and purpose are suspect and offers of assistance are not readily forthcoming.³

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1. See Chapter 5, pages 170 and 171.
 2. J.F. Kerr, *Changing the Curriculum*, (1968), op.cit., 15 and see page 28.
 3. The six schools used in the Second Trials were the only ones to offer assistance after a request had been sent to most secondary schools in Leicestershire.

This had two main results in this research. In the first place, the need to work with any school classes whose teachers offered to co-operate in order to obtain a sample of adequate size meant that variables such as age, intelligence, previous learning experiences etc, could not be controlled and differences had to be accepted as part of the accidental sample,¹ so obtained. Secondly, although all classes used the same materials, it was impossible to insist on common teaching patterns, equal provision of additional resources, similar periods of time devoted to each section of the materials or the use of control groups. Drop-out during the use of the materials due to natural causes such as illness or a teacher's practice of allowing unrestricted choice of work patterns also reduced the size of the sample, resulting in different sample sizes for pre- and post-tests in the first trials. This was not so great a problem in the second trials where testing was done on a less formal basis.

In these conditions a controlled experimental study such as those described by Scriven,² is clearly impossible. The author is in complete agreement with Parlett and Hamilton that experimental conditions devised for agricultural and botanical studies are not easily transferred to what they described as the 'social-anthropological' setting of the classroom.³ The evaluator in the latter has to study a variety of situations which are never exactly the same and to explain what he sees rather than manipulate conditions according to a predetermined plan of action. This does not mean that he cannot introduce new elements into the situation and test his subjects for specific purposes, but he will always be obliged to qualify his results because the experimental conditions under which they were obtained were

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1. D.G. Lewis, Statistical Methods in Education, (1972), op.cit., 99, and see Chapter 5, page 180.
 2. M. Scriven, The Methodology of Evaluation, (1967), op.cit., 67-71, and see page 49,
 3. M. Parlett and D. Hamilton, Evaluation as Illumination: a New Approach to the Study of Innovatory Programs, (1972), op.cit., 5, and see page 54.

never exactly similar. Evaluation of this kind, therefore, need not be entirely a descriptive process. Statistical tests on data obtained can indicate how far the trends observed are due to the accidental nature of the sample and so enable the evaluator to predict from his results the effect of his materials in similar or in radically different situations. This is what it is hoped the research described here has achieved. The process could now be taken one stage further by a classroom teacher who by teaching with the same materials himself in a variety of controlled conditions would eliminate the important variable of different teaching patterns. It would, of course, be impossible to generalise from one class or even from several classes in the same school, but a large scale experiment in which a number of teachers were actively involved and prepared to teach according to pre-determined patterns derived from the conclusions reached in this research would be necessary to verify the predictions made.

The evaluation had both a formative role, in that it was hoped to discover in what ways the materials themselves needed revision, and a summative role, in that an attempt was made to measure behavioural changes brought about by the use of the Farming Unit and to study the effect of its use on the learning environment and on teachers' and children's attitudes. The first trials attempted to fulfil both these roles by the definition and measurement of cognitive objectives before and after the use of the Unit. Because of the problems posed by the use of an accidental sample as outlined above, careful attention was paid to the collection of data on intelligence levels, age and previous learning experience so that the sample could be described as accurately as possible. Nevertheless, the conclusions drawn from the measurement of changes in cognitive abilities as a result of using the Unit can only be described as tentative for two main

reasons. The first was the problem of setting two tests of exactly equal difficulty using source materials. These had to be short both because children take a long time to work through source materials and because teachers were unwilling to interrupt the normal work of their classes for too long a period. The latter consideration prevented the proper use of the Roads Post-Test. This was unfortunate for, since it was concerned with subject matter not directly studied as part of the Farming Unit, it might have provided a more accurate assessment of changes in cognitive ability, although even then it was difficult to guarantee that none of the sample would have been familiar with the topic. The second problem was the inability of the evaluator to control teaching with the Unit: children used different parts of it for unequal periods of time and had access to a variety of additional resources, both of which would affect their performance on the post-tests. Changes in the levels of cognitive ability in each class could be measured and explained by reference to how that particular class had used the Unit, but generalisations made from measurements of sub-sections of the sample can at best be hypotheses when applied to the complete sample or to the population as a whole. As suggested above, further work could be done here by practising teachers in verifying the conclusions reached in this research in their own particular situations.

In view of such limitations on the acceptance of results, one may question whether objective testing was a worthwhile part of the experimental study. In fact, the pre-tests and post-test had a purpose additional to the measurement of cognitive outcomes for which they were patently designed. This would not have been necessary had definite conclusions already been reached concerning the acceptable level of cognitive skills using historical material a child can be expected to show at a certain mental or chrono-

logical age. The research discussed in Chapter 2 had shown that considerable doubt still existed in this respect and that therefore further experimental data would be valuable. Three in particular of the conclusions reached after analysis of the pre-tests might prove to be valuable to teachers devising workschemes for children studying source materials in history lessons. The first is the fact that even if children are not capable of using external criteria, which is an element of formal reasoning, they will tackle work requiring quite advanced objectives, such as inference and judgement, using criteria that are within their capabilities and so become familiar with the use of a particular mental skill. The second is that although age and intelligence do condition their performance on certain cognitive objectives, children do not conform consistently to the norms for their age or intelligence groups and can be encouraged to use the most advanced skill of which they are capable at any one time by the provision of work which is sufficiently flexible to be tackled at a number of different levels of reasoning. Source materials are an ideal basis for this work. The third is the fact that most of the cognitive objectives sought after in work on historical materials are sequential in difficulty and that a workscheme should first encourage children to comprehend and analyse the materials before asking them for synthesis, inferences or judgement. This may seem an obvious conclusion, but the author has seen many workschemes devised on source materials where synthesis of information was expected at the outset, the children presumably being expected to comprehend and analyse the material independently. This research has shown that, particularly where the use of source materials is unfamiliar, children need to be led through the sequence of skills if the full potential of the material is to be exploited.

The post-test had two purposes additional to that of measuring changes in the levels of cognitive ability brought about by using the Unit. Firstly,

item analysis of the data as a whole enabled the evaluator to discover where the structure of the Unit was deficient in giving practice in certain objectives, or where the list of objectives itself needed revision. This involved complete re-analysis of the Unit worksheets, together with consideration of data from observation and the teachers' questionnaire, but it was the post-test scores themselves that prompted re-examination of certain areas. Secondly, the post-test scores in both trials provided the basis from which comparison could be made between classes using other less formally collected data. This applied both to the total scores for each class (or age or intelligence group in the first trials) and to scores for each category of objectives, which could be examined in relation to teacher attitudes to the objectives or to the attitudes of children to certain teaching methods. The post-test scores, in fact, indicated what needed to be investigated in the classroom situation. Quantified data concerning performance of the subjects experiencing the new curriculum, and therefore some form of objective testing, would seem to have a value even in the fluid classroom situation if only to act as a focus for the collection and interpretation of other kinds of data.

The emphasis of the first trials was, then, on the interaction between a specified group of children and a pre-structured set of materials. They provided information on the capabilities of children working on source materials and on how the materials needed to be structured to suit these capabilities. Although some data from classroom observation and teacher attitudes was also utilised, the Unit was largely considered in isolation from the classroom situation. The purpose of the second trials was to study the interaction between the materials and the learning environment, and therefore the pre-tests of the first trials were not repeated although the post-test was used again for the reasons outlined above. It might have

been possible to combine a study of classroom interaction with the study of behavioural outcomes in one set of trials, but it was found that working with the Unit in the classroom situation during the first trials was an essential prerequisite to the design of evaluation instruments for use in the second trials. It became clear, for example, that with structured materials designed for use by the children and not by the teacher, standard interaction schedules based on teacher-initiated questions and pupil responses were not applicable. In order to design a schedule of pupil-initiated questions and teacher responses, however, classroom experience of the problems encountered in using the Unit was essential. It would be possible for an evaluator to seek to quantify only the areas he felt were important, but by planning his campaign in isolation from the classroom, he might well miss many valuable side effects of his materials which he had not anticipated.

Participant observation would seem, then, to be an essential stage in the construction of evaluation instruments for the quantification of the classroom situation, but it does need to lead on to the latter. As with objective testing, it is the quantification of data which enables trends to be identified even though these trends can perhaps only be explained in terms of non-quantifiable data. For example, the number of questions asked by children in each of the predetermined categories in the second trials not only enabled deficiencies in the structure of the Unit to be identified but also revealed attitudes to its use and the relationship of the children with their class teacher. It had been suspected during the first trials that attitudes of both teacher and class might affect the outcomes of the Unit, but it was analysis of the question schedules related to performance on the post-test that confirmed their importance. The hypothesis that the

the key factor in the effective use of source materials is the common or opposed interests of teacher and class in using them was only arrived at after the study of all the data obtained, but it was discrepancies in the quantified data that prompted the seeking of an explanation. The second trials confirmed the importance of using the results obtained with one evaluation instrument to interpret the results of another, but also suggested that these instruments should not only result in descriptive data: quantification of even so fluid and varied an environment as a classroom is essential if an explanation of general validity is to result.

The methods of evaluation chosen in this research, given the limitations of the sample referred to above, did then enable a formative evaluation of the materials to be carried out: these will now be revised accordingly before reissue to local schools. As a summative evaluation, it failed to pinpoint major behavioural changes as a result of using the materials, but served rather to explain what happened when the materials were used with a large sample of different age and ability ranges. The evaluator was therefore able to suggest measures which could be taken to maximise the effectiveness of source materials in comparable classroom situations. Future research might well apply these measures to a variety of groups and, by means of control groups, arrive at a better idea of the effectiveness of source materials in promoting behavioural changes than the evaluator was able to do as a result of these trials.

The Materials of An Archive Teaching Unit

A distinction was made in Chapter 3 between two types of historical records, documents and archives. The former category included many important records whose basic feature was their existence in isolation from other records, whereas archives were essentially groups of related records characterised by continuity of custody. It was suggested that archives are valuable in enabling a sequence of events to be reconstructed, but are

frequently more technical and less intrinsically exciting than documents. The Documents Test in the first trials had shown that many of the younger or less able children found difficulty in relating one piece of information to another, and might not therefore make the best use of archives. The Law and Order Unit and the first four patches of the Farming Unit consisted of documents rather than archives, and these were more frequently used by the younger age groups than the later patches of the Farming Unit which were mainly archives. The latter, however, were tackled enthusiastically by older children, who enjoyed piecing together a sequence of events or relating written evidence to the large wall maps forming part of the Unit. Many of this group were also interested in the process of enclosure as part of an examination syllabus and therefore saw little relevance in the earlier patches of the Farming Unit. This suggests that documents, which often lend themselves to imaginative work but do not involve an appreciation of the interrelationship of pieces of evidence, are perhaps better suited to the younger or less able groups, whereas work on true archives may be better confined to those who have reached the stage of formal reasoning.

The technical nature of many of the archives did not seem to present much of a problem, as intensive use was made of the glossary of terms in the Background Book. It was the length of many of them that was found most daunting. The sample in the first trials had a low verbal ability compared with their intelligence level and many of them expressed indifference to or dislike of reading. In the second trials, the brighter and older groups showed a similar reluctance to read lengthy passages, not so much because it was beyond their capabilities, but because they were used to deriving information quickly from textbooks and disliked having to hunt for a piece

of information. The observation schedule indicated that 'where do we find the answer' was a very common question. The reasons for this would merit investigation. One may well be children's increasing familiarity with the visual presentation of information which is easier to assimilate than the written word; the use of visual aids, although not of broadcasts and tape recordings, was very popular with all age groups in the first trials. Listening to the teacher was popular with older children and with the adult group, and it is again an easy way of deriving the necessary information. From the point of view of the present research, however, the reluctance to read on the part of many students suggests that the compiler of a source pack needs to select short passages of material where possible or records where the information is broken up in some way: the Act of Parliament for the Enclosure of Congerstone, for example, although long, had marginal headings which enabled information to be located fairly readily.

The manuscript form of many of the records helped to account for the reluctance to read lengthy passages. In this respect it was shown that the points of view of teachers and pupils were diametrically opposed. Nearly all the teachers felt that the use of facsimiles rather than transcripts was a vital element of the source method. Children, on the other hand, enjoyed looking and in some instances transcribing facsimiles, but preferred actually to work from transcripts. This dichotomy of view indicated that teachers perhaps do not really appreciate why children like working with source materials, and this is a point fundamental to the use of the source method. To the teacher, a facsimile has a value because it is a copy of a genuine historical record. Nearly all the teachers thought that the most important

objective of the source method was to give children experience in handling original source material. Yet, as has been seen, few thought it necessary to explain the nature of a historical source to their pupils. A facsimile, then, unless the significance of its value to the historian is pointed out to them, lacks the mystique for the children that it has for the teacher of history. What they appreciate is the details it contains and, once the novelty of a facsimile has been exhausted, seem to prefer to derive this detailed information from transcripts. A source pack could well, then, contain single copies of facsimiles to be used as stimulus material and multiple copies of transcripts, possibly only of extracts from the facsimiles, on which the pupils' work could be based. It does not seem to be the actual appearance of a document or archive which stimulates children's interest so much as the details it contains. This perhaps explains why the lack of pictorial material in the Farming Unit was not commented upon, and why a description of the clothing issued to a police constable in the Law and Order Unit was preferred to an early photograph of a member of the Leicester force. Perhaps the interest of a picture is quickly exhausted while that of a short written extract, taking longer to absorb, is more sustained.

An effect of the children's interest in the details of a document or archive is that the geographical location to which it refers becomes of secondary importance. Few of the children using the Farming Unit had heard of the village of Congerstone, which might as well to them have been in another county, but it did not detract from their enjoyment of the details of enclosure process supplied by the archives. For one group, however, whose school was near Congerstone, local references in the archives undoubtedly enhanced their appreciation of the materials. This has two implications for the teacher using source materials. If he is dealing with a general

topic such as canals or enclosure and no information is available on the immediate locality of the school, he can use published materials from another area of the country without detracting greatly from his pupils' enjoyment. For example, The Northumberland Election of 1826₁ could be used with Leicestershire pupils studying nineteenth century elections and Weston Turberville Enclosure 1797-1800₂ by those studying the Agrarian Revolution. An important exception here would be source materials on an event or area in their county which had national importance and so was familiar, such as the Tyne₃ to children in the north-east or the imprisonment of Mary Queen of Scots₄ to Sheffield children. In general, however, if a teacher wishes to utilise children's undoubted interest in their immediate locality, he will usually have to collect materials himself as it is unlikely that any published packs will be sufficiently local to be of value. The increasing numbers of school resource centres and of teachers' centres make the production and storage of really local materials a feasible proposition if the teachers themselves are willing to devote time and expertise to the collection of materials. This is a point which will be further considered later.

Children's love of details in documents and archives and their need for transcripts suggests that the provision of archive materials for use in schools does perhaps lie within the professional sphere of the archivist rather than the teacher, or at least that the help and advice of the archivist is a vital necessity. The archivist has easier access to the

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1. University of Newcastle Department of Education, ed.C.D. Kilkenny and L. Turnbull.
 2. Buckinghamshire County Record Office, History Teaching Unit, No.1.
 3. University of Newcastle Department of Education, The Tyne 1800-1850.
 4. Sheffield University Institute of Education, Teaching Units for History IX, Mary Queen of Scots in Captivity

wide range of records it will be necessary to consult if suitable materials are to be found, and has the knowledge of palaeography necessary to make transcripts. He may also be able to provide the background historical information for work on the archives. The archivist does need to be aware of the need to provide a sequence of material and to avoid lengthy documents whose visual impact is daunting to the child. If the teacher does not search out the material for himself, however, it is absolutely essential that he is familiar with the material he is to use with his class. This research was based on a highly structured archive teaching unit, provided with worksheets and instructions to the children. Yet all the observations made indicated that children relied on their teacher to a great extent, particularly for assistance in understanding the relationship between pieces of evidence and in the making of inferences. All the teachers taking part in both trials regretted that they did not know the material better. This suggests that the compiler of a source packs, needs, as far as he can, to share with the user his own detailed knowledge of the sources. Firstly, if the pack is concerned, as so many of them are, with the local aspect of a national event such as the establishment of the police force or the administration of the poor law, then background historical information on the local application of that event needs to be provided.¹ Teachers of history familiar with the national picture are unlikely to have the necessary detailed knowledge of the local scene to enable them to use the materials effectively. The Farming Unit included a detailed Background Book for children, but the research suggested that it was rarely used at this level and would have been better written for the teacher. Secondly,

1. This has been covered very thoroughly in all the Teaching Units for History compiled by the University of Sheffield Institute of Education. An attempt was made to provide this information for teachers in the Law and Order Unit used early on in the research.

the compiler of a source pack needs to give the fullest possible information about each of the records used in the pack- its location, its relationship to other records used, further complementary materials which could be consulted and so on.¹ Thirdly, the research described here suggested that if the compiler feels able, the teacher does not resent the actual provision of workschemes or at least of suggestions for work with a class. All the teachers taking part in these trials suggested that the compiler's detailed knowledge of the significance of his materials was at least as important, if not more so, than their professional knowledge of their classes. On the other hand, the author felt that the provision of actual worksheets led teachers to regard it as unnecessary to familiarise themselves with the materials before using the Unit as thoroughly as they would have done if they had devised their own workschemes. The best compromise might be for the compiler to state why each record was chosen so that its significance can be appreciated by the user² and to include suggested workschemes which indicate how a group of records might be used with a class³. This does to some extent sacrifice the compiler's detailed knowledge of his sources, but it does ensure the teacher's familiarity with the materials which is vital to their successful use with his class. All published packs should state clearly the type

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1. Some of the archive packs already produced by County Record Offices do this, e.g. Northamptonshire County Record Office, A Woman's Work - Housekeeping in Northamptonshire 1600-1900 and Nottingham University Department of Manuscripts, Laxton: Life and Work in an Open Field Village. Extracts from these appear in the Appendices. Such information is less frequently given in packs produced by teachers' groups and similar educational bodies.
 2. This was the approach adopted in the Archive Pack, Law and Order in Nineteenth Century Leicestershire.
 3. This approach has been adopted in both packs produced by the Manchester Branch of the Historical Association, Orphan Annie and The Princes of Loom Street. Examples of their workschemes are included in the Appendices.

of records and what additional information they contain so that the teacher can decide whether a pack is suitable for his class and understand the amount of structuring of the materials that he is required to do himself.

The size and structure of the pack also need consideration by the compiler if this familiarity on the part of the teacher is to be achieved. Most published packs contain single copies of 20 to 30 records, usually but not always in facsimile form. It has often proved too expensive for the teacher to purchase sufficient of these packs to make class use feasible, and they have tended to be used in work with small groups. One of the criteria adopted in the construction of the Farming Unit was the provision of sufficient material for use with a whole class, which resulted in a box of material rather than in the usual wallet. All the teachers appreciated having sufficient material to use with all their pupils at once, although several would have liked even more copies than they in fact had. A large amount of material on any particular topic would seem, then, to be of benefit to teachers using archives with their classes, but it has problems both for the teacher using the material and for the compiler or publisher producing it.

In the first place, there is a danger of overwhelming the teacher with an insuperable amount of material. This can be avoided in two ways. The compiler can either include a large number of different archives which are structured into sub-topics or patches₁ or he can include multiple

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1. This was the compromise adopted in the Farming Unit, where the colour coding of each patch and its inclusion in a separate plastic envelope was found generally useful in the classroom. It was also the method used to structure the second Unit produced by the Liverpool Teachers Archive Study Group, The Liverpool-Prescot-Warrington Turnpike Road and the Nottingham University Department of Manuscripts Public Health and Housing in Victorian Nottingham. Its adoption in the Newcastle Units and in the first Manchester Manuscript, Orphan Annie, would help teachers to find their way through an otherwise undifferentiated mass of material.

copies of a small but manageable number of archives or documents. The danger of the first method was experienced during the use of the Farming Unit, that because children work through archive material so slowly, they only get to know a small section of the material provided and fail to see how it fits into the general background pattern they have studied. It can be avoided by the teacher choosing the sub-topics he considers most suitable for his particular class and to work with those only, provided that he does not reduce the amount of material so much that the original purpose of supplying a large number of archives is lost. He and his pupils can therefore become familiar with all the material he has chosen. It can be a useful method in an examination class, where the relevance of the material is a prime consideration, or in a mixed ability situation if some of the material is capable of being used by the less able.¹ Use in a mixed ability situation is, on the other hand, the drawback to the second method, the provision of multiple copies of a small number of documents or archives. This method enables both teacher and class to work with all the material, but may well limit the use of the pack to a specified age and ability group. The first method is perhaps applicable to topics where clear sub-structures are possible and where it does not matter that each member of the class should cover all the materials. Farming, the poor law, law and order, railways and canals would be suitable topics for this kind of pack. The second method is more suitable for limited and clearly defined topics such as those covered by the Sheffield Units² or the study of a single enclosure process, railway or canal. It is also, perhaps a better method

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1. The first four patches of the Farming Unit containing documents were useful in this respect.
 2. Sheffield University Institute of Education Archive Units for Teaching e.g. No.1, The Yorkshire Election of 1807, No.IV, An Eighteenth Century Charity School.

for packs designed for use with examination forms where it is vital that each pupil should cover all the material. The first method, on the other hand, lends itself to open-ended workschemes with groups in younger or in mixed ability classes.

The second problem in providing teachers with sufficient material for class use is the size of the pack needed to contain it. It is noticeable that packs which have adopted this criterion have been those produced for loan rather than for sale, as in the case of the Sheffield Units, the first two Liverpool Units¹ and the Farming Unit used in this research. The commercial history project kits² contain a large amount of material, but these are expensive to purchase and the pack becomes damaged in class use. A solution would be the banking of individual documents or of archive sets in school resource centres or in local teachers' centres.³ As a master stencil of each facsimile or transcript could also be retained, it would allow easy replacement of lost or damaged items. A resource bank of this kind would allow teachers maximum freedom of choice in the materials they used, but it would only be a better method of making source materials available than the source packs already in existence if three conditions could be met. The first is the provision of some sort of exchange scheme between counties in different areas of the country since, as has already been suggested, not only material from his immediate geographical area is

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1. Liverpool Teachers' Archive Study Group, Liverpool and the Slave Trade and The Liverpool-Prescot-Warrington Turnpike Road.
 2. Longmans' History Project Kits, e.g. The Norman Realm and Macmillan Exploring History Series, e.g. The Industrial Revolution.
 3. As is already done in the Resources Centre in Dudley. See J. West, 'The Development of a Local Resources Centre', Teaching History, ii, No.7, (May 1972), 228-236.
In Devon, teachers' centres can arrange for the photocopying of documents from the Record Office.

interesting to the child. The second is that the resource bank should store not just facsimiles and transcripts but also the necessary background information required by the teacher not only about the material itself but also about the local background of the topic concerned. The third is that professional assistance should be available in collecting and collating the material. It is the last condition that would be the most difficult to meet. Enquiry among teachers in Leicestershire¹, where resources centres are well established, has suggested that sophisticated equipment on which archive materials could be reproduced and in some cases skilled assistance in operating it is available to many teachers. On the other hand, increasing demands on their professional services from relatively new fields such as counselling has left teachers even less time for the preparation of resources than was previously the case.² Nor, as has been suggested, is the teacher necessarily the best person to search the archives for suitable materials. Many school and county resource centres could make use of services already provided by County Record Offices such as Gloucestershire, who will provide extra copies of material contained in their source packs (SIGNALS), or Staffordshire, where exhibitions of pilot copies of archives have been mounted so that teachers can ask for suitable ones to be reproduced in quantity.³ Another method of utilising the expertise of the often overworked archives staff would be for a history teacher to be seconded to a Record Office for a period of not less than three years. During this time he would gain some expertise himself in

1. As referred to previously, a questionnaire on Resources for History Teaching (included in the Appendices) was sent to 48 secondary schools in the county, but only 20 were returned and so a full analysis was not possible.
2. The two teachers who helped in the preparation of the two archive packs used in this research had one free afternoon a week, but this is now very rare.
3. E.P. Lloyd, 'The Use of Historical Documents in Schools', (1966), op.cit.

the handling of archives and be responsible for supplying, preferably in consultation with a panel of local teachers, school and county resource centres with suitable archive materials. Similar schemes have operated in some counties, e.g. Essex, but have usually resulted in the production of packs of materials rather than the direct supply of archive sets and information to resource centres. A third way of making such provision is by in-service training schemes run through University Departments of Education or Colleges of Education.¹ The resulting material could be made available to teachers through their libraries.² If teachers are to be responsible for the production of their own resources, as is the increasing tendency in Leicestershire for example, they need training not only in the historical but in the educational use of archives. This should not necessarily form part of a pre-service training when so much has to be absorbed in a short time, but would better form part of the in-service training schemes so often proposed by educational bodies³ and usually rejected because of cost. The current reorganisation of teacher training could well provide an opportunity to implement such schemes: the manpower and expertise to run them exists but the financial backing is not forthcoming.

This research has indicated, then, that it is the detail in documents and archives rather than their visual appearance that stimulates

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1. Many of whom already participate in the production of archive packs (see the second section of the Bibliography).
 2. The initial packs produced by the author for the Research Unit for Assessment and Curricular Studies have been made available to teachers through Leicester University School of Education Library.
 3. e.g. Great Britain, Department of Education and Science, Teacher Training and Education (James Report), (1972), op.cit., Ch.2, 'The Third Cycle', and the Report of the Advisory Committee on the Supply and Training of Teachers, August 1976, reported in Times Higher Education Supplement, 20.8.1976.

children's interest, and that transcripts, preferably of short extracts, would in many cases be preferable to packs of facsimiles. Even when working through materials themselves, children rely heavily on the assistance of their teacher, who needs to be thoroughly familiar with all aspects of the source pack being used. This indicates that compilers of source packs should provide more information on the provenance and significance of each record included than is frequently the case, together with information on the local background of the topic covered. Where possible teachers prefer to have sufficient material for class use rather than small packs for group work, in which case the compiler needs either to structure a large number of archives into sub-topics to make the pack manageable or to provide multiple copies of a smaller number of records. Such large amounts of material are not really suitable for inclusion in the standard published wallets, and would be better stored in a school or county resource centre if adequate provision could be made for the collection and preparation of suitable materials.

Using Archive Materials in the Classroom

It was suggested in Chapter 6 that an essential prerequisite to the successful use of archive materials in the classroom was a harmony of attitude and purpose between the teacher and his class. The first step a teacher can take towards ensuring this exists is to understand and appreciate the attitude of his pupils. The computer analysis of the Like/Dislike Charts in the first trials had shown that younger children were more favourably disposed towards the techniques of the source method than the older groups. The latter, who were more intellectually able to cope with the use of archives, were usually information-orientated,

probably because of examination pressure, and preferred a quick and easy method of obtaining information such as listening to the teacher or taking blackboard notes. The second trials suggested that brighter children of all ages became impatient if they could not arrive at the necessary information quickly. It is therefore teachers of the two latter groups who have to explain to their pupils why they wish them to work from original sources: it is incorrect to assume, as many teachers do, that these are automatically attractive to their pupils. They need, perhaps, to respect their pupils' attitudes by using a small number of documents or archives that are relevant to a particular topic in the syllabus and not pursue the method for too long at a time. They may also influence their pupils' attitudes by making the use of archive material essential to the solution of a particular problem. The research suggested that pupils appreciate archive work more when they had some background knowledge of the topic covered, similar to that possessed by any historian researching in archives. Care needs to be taken, however, not to teach the subject so thoroughly that its interest becomes exhausted, but to introduce a problem such as the effect of enclosure on individual tenants or the drawbacks of travelling along a turnpike road and to suggest the pupils solve this problem by using the original materials themselves. Such an approach may serve to stimulate their interest and sense of inquiry. It may seem elementary to suggest that teachers need to prepare their pupils for archive work in this way, but few of the teachers in either trials of the Farming Unit found it necessary to suggest to their pupils that archive work was anything different from their normal run of tasks. Yet all the teachers taking part had specifically requested the use of the Unit and most had stated that their main objective in doing so was to give their pupils experience in working with original sources.

Considerable thought also needs to be given to the selection of material for a particular class, whether directly from the Record Office, from a resource bank or a commercial source pack. Obviously the content is important, particularly with an examination class, but the type of record chosen is equally so. It has been suggested previously that single documents can serve as sources of historical facts, as stimuli to the imagination and as exercises in certain cognitive abilities. Archives have an additional function as a sequence of material which enables the user to reconstruct a particular event and so to understand something of the nature of historical evidence. The inability of younger or less able children to synthesise several pieces of information into a coherent whole makes documents rather than archives more suitable for this group, particularly as they are frequently more stimulating to the historical imagination which younger children are less reluctant to exercise than their older compatriots. If a teacher decides to use archives with an older group, however, he should recognise the function of archives and not use them as documents, as repositories of historical fact or illustrations of a topic previously studied. Several teachers in the second trials used the Farming Unit in this way, resulting in their pupils failing to see the point of being forced to obtain information from a number of scattered sheets when it was, they thought, more readily available in their textbooks.

A second consideration, closely allied to the first, in the selection of archive materials is the kind of objectives a teacher wishes them to fulfil. A historical record cannot, on the whole, be rewritten to give practice in a particular cognitive ability. The available materials to some extent condition the choice of objectives for a particular scheme of

work. It may be possible to add other materials, but the teacher may find that he needs to revise his objectives and perhaps include those he is forced to discard in a later scheme of work not involving the use of archives.

The preparation of workschemes can proceed once the materials have been chosen and the main objectives are clear. A teacher needs then to decide how far he can leave his pupils to pursue their own lines of enquiry and how far they need to be guided through the materials. This research has suggested that, particularly where even older pupils are unfamiliar with the use of archives, they do need to be carefully guided through the work at first until they understand the necessary techniques for handling archive materials. Two main considerations indicate the value of detailed worksheets. The first is the general reluctance of children to read, which can be overcome by simple factual questions on the material. The second is the sequential difficulty of cognitive skills, suggesting that these simple comprehension questions need to precede those requiring analysis, synthesis, inference-making and judgement. The pupil, in fact, needs to be encouraged to collect and analyse the information before he is asked to exercise his mind upon it. Most teachers prefer to set questions on the materials themselves rather than directly on a list of objectives or desired cognitive skills, but it is easy when doing this to over-emphasise one category at the expense of another. Study of the Farming Unit worksheets after item analysis of the Post-Test indicated a very patchy coverage of certain objectives. It may be impossible because of the materials or the difficulty of the objectives to give an equal amount of practice in each, but a reasonably even spread can be achieved by use of a grid such as the one below. This was used in analysis and revision of the Farming Unit worksheets.

Table 57

Chart of Objectives for use when designing worksheets on the
Farming Unit

	Category of			Objectives		
	Knows specific facts	Knows terminology	Knows of and can handle some of the sources of the historical.	Understands material on the basis of internal evidence	Applies external criteria to the material	Appreciates the dangers of generalisations in history
Unit Patch						
1. Leicestershire before Parliamentary Enclosure						
2. Robert Bakewell						
3. Wages and Prices						
4. Farmhouses						
5. The Village of Congerstone before Enclosure						
6. The Act of Parliament for the Enclosure of Congerstone						
7. The Commissioner and his Work						
8. Carrying out the Act						
9. The Roads						
10. The End of Enclosure in Congerstone						

The main categories of objectives are along the top axis and the materials in sequence down the side axis. The appropriate squares can then be marked off as the workscheme proceeds and it is easy to see which objectives are being neglected. This method does help to ensure that the materials are used in a variety of ways and avoids the usual overemphasis of the comprehension category, which was a basic fault of the Farming Unit worksheets.

Unless the teacher is certain of the general level of reasoning attained by his class, he also needs to ensure that his questions are sufficiently flexible to be answered at a variety of levels. The child who can make use of external criteria needs to be encouraged to do so, but the same question must be capable of being answered from the internal evidence of the archive or document. Question 6 of the Documents Test concerning the relative merits of the judgement of Daniel Defoe and Celia Fiennes on the state of Leicestershire farming indicated how the same question can be answered in a number of different ways. It also showed that a teacher even of young children need not be afraid of setting questions demanding inference and judgement on source materials. Their pupils may not be capable of using critical judgement, but they will learn to look for an answer in the materials provided and become used to thinking of the material as evidence to be sifted through rather than as unquestionable fact. Most of the teachers taking part in the trials were surprised at the kinds of objectives their pupils could achieve using source materials and realised that previous worksheets they had set had perhaps not been sufficiently wide-ranging in scope. Other teachers with whom the use of worksheets on source materials has been discussed, found after experiment with their

1. During a course run by the author on 'Archives in History Teaching' in the University of Nottingham, 1974-5.

own classes that an objectives chart like the one suggested earlier was a valuable way of ensuring that a worksheet did demand different kinds of thinking.

Once material has been selected and workschemes prepared, the use of archives in the classroom can begin. In the research described here the preliminary stages were carried out by the author rather than by the teachers concerned, with the result that the latter were generally unprepared for classroom work on archives. Interviews and the post-test completion of the Like/Dislike Charts in the first trials suggested that many children did not understand the nature of the material they were using. The Sources Test had shown that they were capable of appreciating, for example, the value of an eye-witness account compared with that of a modern textbook of the same event. The difference between primary and secondary sources and the provenance of the records used in the Farming Unit had been pointed out to children in the Background Books, yet analysis of Category 3 objectives (Knows of and can handle some of the sources of the historian) in the Post-Test indicated that this explanation had either not been used or not understood. Observation showed that the Background Book was used only for the acquisition of factual information to answer questions on the worksheets. It would seem better for the teacher himself to discuss with his class before beginning archive work the nature of the material they are to use. This could be done using a single selected document of which all the children had a copy, or by making a transparency of the document for use with an overhead projector. The teacher could then discuss with his class the peculiarities of handwriting or the format of the document, and prompt questions about it such as 'How do we know it was written by?', or 'What else would you want to know before you accepted this as genuine evidence of what happened?'. This would encourage

older children working with archives to pursue their own lines of enquiry. Two related documents could be used to discuss the question of bias; answers to questions about the French man-at-arms' account of the Battle of Agincourt in the Sources Test showed that even 10 year olds could be aware of nationalistic bias, while many older children taking the Documents Test had shown themselves able to utilise the information given about the authors of the two extracts in judging their respective merits as evidence of the state of Leicestershire farming at the turn of the seventeenth century. A more exciting way of introducing children to the use of historical evidence might be through an organised visit to a County Record Office. Many of these are willing to put on exhibitions for children. Leicester County Record Office, for example, will demonstrate the techniques of document repair during which children can handle parchment and vellum and so gain a greater interest in the archives themselves. Others, as was seen in Chapter 3, send round mounted exhibitions of documents to schools accompanied by an archivist who can answer children's questions. Some kind of introduction to the nature of historical evidence is vital in influencing children's attitudes towards the source method which, as suggested earlier, are not necessarily favourable to begin with, particularly among the older and brighter children who are more likely to question the value of such a time-consuming method of working.

The method of classroom work with archives depends on the age and purpose of the class. Older children, particularly those working towards examinations, prefer individual work on the whole and, after suitable preparation, could be given suggested lines of work rather than specific worksheets. For example, they might be asked to make out a case for or against the value of enclosure based on the evidence before them. It

cannot be overstressed, however, that firstly they will resent doing this if the purpose has not been explained to them and secondly that they will become confused unless they have previously been shown the way in which to work. The second trials of the Law and Order Unit, discussed in the Appendix to Chapter 6, illustrated both these points. Younger children seem to prefer working in groups and by sharing ideas serve to stimulate each other's interest. Since many below the age of 14 will not have reached the stage of formal reasoning, they are better using a detailed worksheet asking for specific answers rather than pursuing more generalised lines of enquiry. Although in many cases they can only utilise internal evidence rather than apply external criteria, they find the process of relating pieces of concrete information an exciting one, although to begin with they need considerable assistance from the teacher in knowing how to make the connection. For example, many younger children found it fascinating to work out the number of storeys in a house from an inventory of its contents room by room. The process of discovery interested them, whereas older children are not so much interested in the process as the result - the accumulation of information. A reconsideration of the objectives tested in public examinations will be necessary before the use of archives becomes really popular with older children who are, after all, better equipped mentally to use the techniques required.

The trials showed that able children tended to help each other solve problems, whereas the less able were reluctant to ask for help from each other and one the whole tended to dislike group work. The use of self explanatory worksheets did mean that the more able children could work in groups in this manner, leaving the teacher free to assist others. Group work, however, could lead either to superficial coverage of the material

by intelligent children racing each other to complete a section or to confusion on the part of the slower children who were afraid to ask for help, even from their teacher. The most satisfactory rate of progress was achieved in classrooms where the teacher visited each group in turn, regardless of whether they had asked for help, to check methods of working. Teachers who knew the material well were able to reinforce the objectives of the work by answering children's questions indirectly, for example by showing them a different way of approaching the same problem. Teachers who were unfamiliar with the material tended to make factual responses, thus encouraging the children to rely on them rather than on their own powers of thinking. It is only the former method which will encourage the development of formal reasoning in historical thinking at a reasonably early age in adolescence. The trials showed, in fact, that the role of the teacher in promoting more advanced thinking was a vital one which was supplemented rather than replaced by structured worksheets such as those provided in the Farming Unit.

The length of time that any group should spend on a particular set of archives is again dependent on the age and purpose of the group and to some extent on their normal method of working. During the trials, older children seemed reluctant to spend more than four to six forty-minute lessons using the Farming Unit. Some were obviously influenced by their teacher's concern to cover a syllabus, but the older groups seemed less interested in detailed evidence than did the younger children. They were also reluctant to carry out the more advanced mental processes on material collected from the archives, regarding the accumulation of information as the prime object of the exercise - this was borne out by their performance on the Post-Test. This was partly because their normal set work was

designed to encourage the latter process, but also because they were ready to move on from the detailed evidence to generalisations and hypotheses which were not allowed for in the patch worksheets, but only in the General Worksheet which none of them were given. Younger children, on the other hand, found the process of discovery through the worksheets and the detail thus accumulated, sufficiently satisfying to occupy many of them for more than six lessons. This was partly due to the fact that open-ended workschemes on topics lasting for half a term were familiar in their schools, but also, perhaps, to their willingness to accept the material as it stood without the desire to understand its significance in relation to the topic as a whole which the older groups experienced. Interest could be sustained for a longer period with both groups if resources additional to the Farming Unit were available. Seeking information in the Library, in textbooks or in the Background Books relieved the tedium of continuous searching through the manuscript materials of the Farming Unit. As with any other teaching method, the use of archives can become boring to children if pursued for too long at a time, but as suggested above, the duration of interest depends on the age, purpose and normal working methods of the group involved.

Assessment of projects involving archives, whether by individuals or groups, can be a problem since achievement of techniques as well as factual information needs to be considered. Teachers working continuously with a class can judge general progress on desired affective objectives better than an evaluator visiting a classroom two or three times. Cognitive objectives can be tested by reserving one or two of the more general archives from a source pack and a range of questions covering all the objectives from the original grid. The answers to the questions will show

how pupils perform relative to one another and so could form part of an examination. Item analysis of the total scores, i.e. the scrutiny of total performance on each item rather than for each pupil will also indicate which objectives have been fulfilled least satisfactorily. The teacher can then draw upon his experience with the materials to discover why. Possibly pupils were not given sufficient practice to achieve a particular objective, or there were no materials suitable for the purpose. He can then revise his choice of materials, his workschemes or perhaps his objectives before the pack is used again. Undoubtedly this method is time-consuming, but once prepared and revised after classroom trials the pack of materials and the workschemes can be used time and again.

The research indicated, then, that the method of use of archives in the classroom is at least as important as the choice of the materials to be used. Particular emphasis has been laid on the need for a class, especially of older or of intelligent children, to understand both the purpose of using archives and the nature of the archives themselves. It has been suggested that younger children need to be guided through the materials by means of specific worksheets, and, being interested in detail and in the process of discovery, are prepared to spend a considerable time on them. Older children, on the other hand, can with adequate preparation be encouraged to ask their own questions of the material but need to be led fairly quickly from a consideration of the archive evidence to thinking about its significance within the topic as a whole. In assessing the work done on archives, attention needs to be given to success in the acquisition of techniques or cognitive skills as well as in the memorisation of fact.

The Value and Purpose of Using Archive Materials in the Classroom

Archive materials are already, as was shown in Chapter 3, a recognised element in the resources of many history rooms in schools. This research was therefore designed to discover the most effective methods of using an established technique rather than to promote a new one. The results have, however, led the author to hold certain views on the value and purpose of the use of archives in schools which may serve to conclude this study.

The most important function of archives in the classroom is to provide detailed evidence of the way in which things happened in the past in a form that is attractive to children. The teacher can utilise children's interest in this concrete information to help him overcome some of the challenges to the position of history in the school timetable which were considered in Chapter 1. Firstly, archives can be chosen which deal with individuals rather than with the faceless groups referred to in textbooks; 'Orphan Annie'¹ has more significance to children than a group called 'the poor'. The child can see for himself that a remote historical event such as the reorganisation of poor law administration affected a real person in a defined locality which need not necessarily be his own. If local archives are used, the fact that names survive in the area or can be found on tombstones helps to bring the geographical coverage as well as the time span of history within the experience of the child. The archives may also provide evidence of the motives of the people involved. In the materials used in this research, children were led to consider the motives of the chief landowner in promoting the enclosure and those of the Commissioner in carrying it out. The opportunities given through

1. Manchester Branch of the Historical Association, Manchester Manuscript, No.1

archives for children to gain insight into human motivation and also to discover that history affected people at the lower end of the social scale increases the social relevance of the subject as defined in Chapter 1.

Secondly, the fact that archives form a sequence enables a child to experience the unfolding of an historical event for himself. When he is able to ask his own questions of the evidence this experience is undoubtedly enhanced, but even when the process is carefully guided by the teacher the use of archives helps to minimise the essentially second-hand nature of the subject matter of history.

Thirdly, since archives - despite their many inherent difficulties - do provide concrete information about the past, they do enable teachers to encourage children to use a wide range of cognitive processes and refute the suggestion that history is essentially a study for the mature mind. It is concepts and abstractions which children find difficult to utilise since they do not understand their implications. When using archives, the detailed information catches the children's interest. This encourages them to search further, to compare the details they discover and, with assistance at first, to infer relationships between them. Many cannot judge between or criticise materials from an external standpoint, but they learn to consider them as evidence to be worked on and understood rather than as fact to be accepted. This results in history becoming a discipline with a set of techniques to be acquired rather than a subject whose contents need to be learnt. That many of these techniques are valuable for purposes other than the study of historical archives contributes to the practical relevance of history lessons. If children can come to regard the latter as periods in which they learn how we know and how we find out as well as what we know, then history might regain the popularity it had as a school subject earlier this century.

Archives, then, by reason of their nature as a sequence of detailed information, can help to increase the relevance and the reality of history and to develop cognitive processes which have a value beyond history lessons. But this is only to say that they are valuable teaching aids available to a teacher who is willing to learn how to use them. Many of the more far-reaching functions claimed for the use of archives in the classroom cannot be achieved through the limited, usually pre-selected, materials on which children need to work. Firstly, archives cannot be used to teach children, below sixth form level at any rate, the structure of a subject in the Brunerian sense. Only when they have reached the stage of formal reasoning are children capable of criticising material from an external standpoint. Earlier, they value the work done on archives for its own sake and do not appreciate the implications of that work for the structure of the subject as a whole. They use a set of techniques on specific evidence because they want to discover what happened rather than because that is how historians work. Undoubtedly the acquisition of these techniques at an earlier age than has usually been the case may enable children to understand the nature of history as a discipline rather earlier as well, but for educational purposes the techniques rather than their implications are probably more important.

Secondly, the use of archives does not encourage historical research in the classroom unless in a very limited sense. Children may certainly discover for themselves a sequence of events but only because the materials and workschemes have been structured to enable them to do so. Much of a historian's time is taken up with discarding what is irrelevant among the archives he studies, but although children may be encouraged to sift through material there are few teachers who would be prepared to take

class time for children to discover what is not useful to their purpose. It might be a good training in selectivity but it might equally lead to frustration and boredom. Moreover, few children would know on what criteria to discard material; they tend to assume that what is provided is necessary for the purpose. Children may eventually be encouraged to pursue their own lines of enquiry using a set of archives, or even to collect additional information for the purpose, but as with teaching the structure of the subject the ultimate aim of a history teacher is to educate his pupils rather than promote his discipline.

Thirdly, it is doubtful whether the use of archives really does enable children to test the conclusions of experts before accepting them, as has been suggested.¹ Certainly, children can prove through archives that an historical event really happened and affected real people, but their use of archives is illustrative rather than critical. Since they seem more able to discover similarities rather than dissimilarities in two statements, it is doubtful how far they would understand the significance of differences in an event as described in textbooks and in archives, unless this were pointed out to them. Archives can be used to encourage a questioning attitude in children but it is through the work they are given to do on them rather than because of the archives themselves that this is achieved.

Archives in the classroom, then, have little value in themselves except as a resource. It is their exploitation by a skilled teacher that gives them a valuable educational purpose. Nor are they a resource that can be used very frequently because suitable archives are not available for all periods of history. The majority of the archive sets at present in use in schools deal with English social, economic and to a lesser

1. See W. Lamont, 'The Past and the Future', Times Educational Supplement, 25th April 1968, 1387.

extent, political, history of the seventeenth to the nineteenth centuries. This is partly because suitable and easily read sequences of material have survived and are accessible in local rather than national repositories, but also because the topics with which they deal are to some extent already within the child's experience of his environment. Since authenticity of appearance does not appear to be of first importance, there is no technical reason why transcripts of earlier manuscripts, for example manor court rolls, or translations of foreign material, should not be used more extensively. On the whole, though, within current school syllabuses, it is the 13+ age group which study the periods for which suitable archive material is available and it is this group, as we have seen, who are better mentally equipped to deal with archives. The earlier periods of history tend to fall to the lot of younger children and the archives which survive for these tend to be concerned with the workings of central government and therefore with the kind of people who have not come within a child's range of experience. Documents, however, are less limited in scope and are, as has been suggested, more suitable for work with the younger age groups. They can be used to illustrate nearly every period of history since man became literate. It must not be forgotten that archive work is only one aspect of the source method. While true archives may have a limited use both because of their survival in suitable form for only certain historical topics and because of the time-consuming nature of work on them, sources as a whole can be used by a teacher to enrich all aspects of the school history syllabus.

APPENDIX I

EXAMPLES FROM THE SOURCE PACKS CONSIDERED IN CHAPTER 3

I EXTRACT FROM M.W. KEATINGE AND N.L. FRAZER, DOCUMENTS OF BRITISH HISTORY 78-1216 A.D. WITH PROBLEMS AND EXERCISES, A & C BLACK, LONDON, 1912

34. DOMESDAY BOOK

1086

Saxon Chronicle. Translated by J.A. Giles

At mid-winter, the king was at Gloucester with his Witan, and he held his court there five days; and afterwards the archbishop and clergy held a synod during three days, and Maurice was there chosen to the bishopric of London, William to that of Norfolk, and Robert to that of Cheshire; they were all clerks of the king. After this the king had a great consultation, and spoke very deeply with his Witan concerning this land, how it was held and what were its tenantry. He then sent his men over all England, into every shire, and caused them to ascertain how many hundred hides of land it contained, and what lands the king possessed therein, what cattle there were in the several counties, and how much revenue he ought to receive yearly from each. He also caused them to write down how much land belonged to his archbishops, to his bishops, his abbots, and his earls, and that I may be brief, what property every inhabitant of all England possessed in land or in cattle, and how much money this was worth. So very narrowly did he cause the survey to be made, that there was not a single hide nor a rood of land, nor - it is shameful to relate that which he thought no shame to do - was there an ox, or a cow, or a pig passed by, and that was not set down on the accounts, and then all those writings were brought to him.

35. EXTRACTS FROM DOMESDAY BOOK

From the Victoria County Histories

(1) (Berkshire) King William holds Windsor in demesne. King Edward hold it. There are 20 hides. On the demesne is one plough, and there are 22 villeins and 2 bordars with 10 ploughs. There is one serf and a fishery worth 6 shillings and 8 pence; and 40 acres of meadow and woodland yielding 50 swine for pannage dues. Other woodland is placed in enclosure. There are beside 100 closes in the vill. Of these 26 are exempt from rent payment. From the others come 30 shillings. Of the land of this manor Albert the clerk holds $1\frac{1}{2}$ hides and the third part of a coppice and as much woodland as renders 5 swine as dues for pannage. Gilbert Maminot holds three virgates, William 8 hides, Aluric 1 hide, another Aluric half a hide and the priest of the vill $1\frac{1}{2}$ hides and two sergeants of the King's court half a hide, Eudo Dapifer 2 hides. T.R.E. it was worth 15 pounds; afterwards 7 pounds; now 15 pounds.

(2) (In Carlton Hundred) The king holds Wargrave in demesne. Queen Eddid held it. It was then assessed at 33 hides; now it is assessed at nothing. There is land for 29 ploughs. On the demesne are 2 ploughs; and there are 41 villeins and 14 bordars with 25 ploughs. There are 6 serfs and a mill worth 9 shillings and 2 pence and 3 fisheries to render 3000 eels and 16 acres of meadow, and woodland to render 100 swine. T.R.E. it was worth 31 pounds; and afterwards, as now, 27 pounds and 6 shillings and 8 pence.

35. (3) (In Wantage Hundred) The Abbot of St. Alban holds West Hendord. Nigel do Albengi gave it to that church. Three thegns held it T.R.E. and could go to what lord they pleased. It was then assessed at 10 hides, it is now assessed at 4. There is land for 4 ploughs. On the demesne

are 2 ploughs; and there are 3 villeins and 3 cottars with 1 plough and there are 45 acres of meadow. Of his land Ernuzon holds 2 hides of the abbot and there he has 1 plough and 4 cottars. A church is there and 5 acres of meadow. The whole T.R.E. and afterwards was worth 10 pounds. Now likewise the whole is worth 10 pounds.

(4) (In Thatcham Hundred) Bernard the falconer holds Waring of the king. Alwin held it of King Edward in alod. It was then assessed at 1 hide; it is now assessed at half a hide. There is land for 4 ploughs. On the demesne are 2 ploughs and there are 5 villeins and 1 bordar with 2 ploughs; also 1 serf and mill worth 16 shillings. It is and was worth 3 pounds.

(5) (In Moonstoke Hundred) William de Perci holds Hambleden. He received it with his wife. Alwin held it of King Edward. It was then as now assessed at 8 hides. There is land for 3 ploughs. In the demesne is 1 plough and there are 6 villeins and 6 bordars with 2 ploughs. There are 2 serfs and a mill worth 12 pence. There is woodland worth 4 swine. T.R.E. it was, as now, worth 4 pounds; when received it was worth 3 pounds.

(6) (In Basingstoke Hundred) Geoffrey, chamberlain to the king's daughter, holds Hatch Warren of the king. Alsi held it T.R.E. It was then assessed at 1 hide; now at 3 virgates. There is land for 3 ploughs. In the demesne are 2 ploughs and there are 2 villeins with 1 plough. There are a church and 11 serfs. T.R.E. it was worth 100 shillings, was afterwards, as now, worth 4 pounds. Odo de Wincestre claims his hide and says that he had it in mortgage for 10 pounds from Alsi, with the permission of King William, and that he is therefore deprived of it unjustly. But Geoffrey holds it of the king for the service he performed to his daughter Matilda.

35. (7) (In Bishop's Sutton Hundred) Edwin holds Oakhanger and says that he bought it of King William; but the jury of the shire knows nothing of this. Alwi held it of King Edward and Richard now holds it of Edwin. T.R.E. it was assessed at 1 hide and 8 virgates. There is land for 4 ploughs. In the demesne are 2 ploughs and there are 8 villeins and 6 bordars with 3 ploughs and 2 serfs and 2 acres of meadow. T.R.E. and afterwards it was worth 40 shillings; it is now worth 60 shillings. Of this manor the king's reeve claims half a hide for pasture for the king's oxen; but (the jury of) the shire testifies that he cannot have pasture or pannage in the king's wood as he claims except by authority of the sheriff.

(8) (In Bermondspitt Hundred) Edwin the priest holds 8 virgates in Candover of the king. The same Edwin held it of King Edward as an alod. There is land for half a plough and yet there is 1 plough in the demesne. It is worth 5 shillings.

(9) (In Boore Hundred) Cheping held 3 virgates of the king in Oakley and was assessed at that amount. It is now in the forest. It was worth 40 shillings. Wislac held 8 hide of the king in Boldreford. It is now in the forest, except 2 acres of meadow which Hugh of St. Quentin holds. It is worth 10 pounds (sic).

(10) Aluric had half a hide in Pilley in Boldre; and it was assessed at that amount. It is now in the forest except 3 acres of meadow which the same Alurice holds. There was land for two ploughs; it was worth 5 shillings.

(11) (Hundred of Barnstaple in Essex) Ramsden is held of the Bishop of Bayeux by 2 knights and was held as 3 hides by 2 free men, and according to the English jurors Ravengar took away the land from one of them and Robert Fitz Wimarc the land from the other and now they know not how

it came to the bishop. These men had then 2 ploughs; now there is no plough there. Then 5 bordars; now 7. There is half a hide of woodland and pasture for 100 sheep. It was then worth 3 pounds; now 4.

35. (12) D.B.I. 34 (A manor in Sussex) In demesne there are 5 teams and there are 25 villeins and 6 bordars with 14 teams. There is one mill of 2 shillings and one fishery and one church and 4 acres of meadow and wood for 150 pannage pigs, and 2 stone quarries of 2 shillings and 2 nests or hawks in the wood and 10 serfs.

(13) D.B.I. 132b (A manor in Hertfordshire) There are 6 teams in demesne and 41 villeins and 17 bordars have 20 teams. There are 22 cottars and 4 serfs.

(14) D.B.I. 132b. The priest 13 villeins and 4 bordars have 6 teams ... there are 2 cottars and 4 serfs.

(15) D.B.I. 136. The priests and 24 villeins have 13 teams ... there are 12 bordars, 86 cottars and 11 serfs.

(16) D.B.II.1. In this manor there was at that time a freeman with half a hide who has now been made one of the villeins.

(17) D.B.I 180b. Five thegns hold this land of Earl Edwin and could go with their land whither they could, and below them they had four soldiers who are as free as themselves.

(18) D.B.I. 172 (Worcestershire). When the king goes on a military expedition if any one who is summoned stays at home then, if he is so free a man that he has his ~~ake~~ ^{seake} and soke and can go whither he pleases, he with all his land shall be in the king's mercy.

(19) D.B.I. 30. Richard of Tonbridge holds in this manor one virgate with wood from which he has taken away the countryman who dwelt there.

(20) D.B.I. 32. The men of Southwark testify that in King Edward's time no one took toll on the strand or in the water-street save the king, and if any one in the act of committing an offence was there challenged he paid the amends to the king, but if without being challenged he escaped under a man who had sake and soke, that man had the amends.

1. Find an example of inter-marriage between Norman and Saxon in the extracts.
2. From the extracts given arrange the dwellers in the different manors in the order of their social positions.
3. Ref. No.17 - what do you think this extract means?
4. From the extracts make a list of all the rights the king had in various parts of the country.
5. After reading the extracts, draw up a paper of instructions from William to his surveyors telling them exactly what information they are to ask for.

II K. DAWSON AND P. WALL, SOCIETY AND INDUSTRY IN THE 19th CENTURY,
NO.5., THE PROBLEM OF POVERTY, O.U.P., 1969. EXTRACT CONCERNING THE
NEW POOR LAW, 23-24.

The New Poor Law

The Whig Government lost no time in acting and in April 1834 introduced a Bill based on the Royal Commission's recommendations. The Bill passed through both houses of Parliament with remarkably little opposition and on August 14 received the royal assent.

An Act for the Amendment and Better Administration of the Laws relating
to the Poor in England and Wales, 14 August 1834

- Whereas it is expedient to alter and amend the Laws relating to the relief of poor Persons in England and Wales. Be it therefore enacted ... that it shall be lawful for His Majesty. His Heirs and Successors, by Warrant under the Royal Sign Manual, to appoint three fit Persons to be Commissioners to carry this Act into execution ...
- II And it be further enacted that the said Commissioners shall be styled 'The Poor Law Commissioners for England and Wales'; and the said Commissioners, or any Two of them, may sit ... as a Board of Commissioners to carry the Act into execution; and the said Commissioners ... are hereby empowered ... to require the Attendance of all such Persons as they may think fit to call before them upon any Question of Matter connected with ... the Administration of the Laws for the Relief of the Poor
- V ... the said Commissioners shall, once in every year, submit to one of the Principal Secretaries of State, a general Report of their Proceedings; and every such general Report shall be laid before both houses of Parliament ...
- VII ... the said Commissioners shall ... from Time to Time appoint ... Assistant Commissioners for carrying this Act into execution ...
- VIII ... no Commissioner or Assistant Commissioner shall ... be capable of being elected or sitting as a member of the House of Commons
- XV ... for executing the Powers given to them by this Act the said Commissioners shall ... make and issue all such Rules, Orders and Regulations for the Management of the Poor, for the government of the Workhouses and the Education of the Children therein ... and for

apprenticing the Children of poor Persons, and for the Guidance and control of all Guardians, Vestries and Parish Officers, as far as relates to the Management or Relief of the Poor.

XXV ... it shall be lawful for the said Commissioners ... to declare so many Parishes as they think fit to be united for the Administration of the Laws for the Relief of the Poor, and such Parishes shall be deemed to form a Union ... and ... the Workhouse or Workhouses of such Parishes shall be for their common use.

XXVI ... the said Parishes shall be separately chargeable ... to defray the Expence of its own Poor ...

XXVI ... in any Union it shall be lawful ... to direct ... that relief shall be given to any adult Person who shall from Old Age or infirmity of Body be unable to work, without requiring that such Person shall reside in a Workhouse

XXXVII ... where any Parishes shall be united ... for the Relief of the Poor. A Board of Guardians of the Poor for such Union shall be constituted and chosen, and the Workhouse or Workhouses of such Union shall be administered, by such Board of Guardians; and the Guardians shall be elected by the Ratepayers

XLV ... nothing in this Act contained shall authorize the detention in any Workhouse of any dangerous Lunatic, insane Person or Idiot, for any longer period than Fourteen Days ...

1. What central authority was set up to administer the Poor Law?
2. What were to be its powers and duties?
3. How were the parishes to be reorganised?
4. Who were to be responsible for administering the Poor Law in the new areas?
5. To whom would it be lawful to give out-door relief?

III WORKSHEET ON A JACKDAW DESIGNED FOR THIRD YEAR GRAMMAR SCHOOL BOYS

The Armada 1588. Jackdaw

- Notes: 1) Keep this sheet carefully; it will be collected.
- 2) Write the questions in your notebook and the answers directly underneath.
- 3) You may start with any question; then do them in order. After doing number 20, do number 1.

I

Use Broad-sheet 1 (The Quarrel and the Men), look at the pictures of Drake and Howard of Effingham.

- 1) Why do you think that Phillip II of Spain was particularly opposed to Elizabeth? (Give three reasons).
- 2) Who was in charge of the English Navy?
- 3) Who commanded the Armada?

II

Use Broad-sheet 2 (Singeing the King of Spain's Beard).

- 4) When did the Armada enter the English Channel?
- 5) Describe how Drake delayed the Armada (10 lines).

III

Use Broad-sheet 3 (The Ships) and look at the pictures of Armada ships.

- 6) What was the difference between English and Spanish tactics?
(3-4 lines total).
- 7) List the types and numbers of each type of ship that sailed with the Armada.
- 8) Give the total number of ships in the English fleet.
- 9) How many of these were warships?

- 10) Give 3 differences between English and Spanish warships.

IV

Use the map "The Fleets in Action".

- 11) Taking the whole of a clean double page copy the main map, including the title and the four rectangles A, B, C, D. Do not copy the inset map.

V

Use Broadsheet 4 (Did we Drum them up the Channel?) and maps 4A, 4B, 4C - look briefly at the Council of War document.

- 12) What were Philip's orders for the Armada?
- 13) Using the next double page after the one used for question 11 divide it into 4 equal sections labelling them A, B, C, D. Describe, writing you answer in the appropriate section, what happened in stages A, B, C, of the Armada's progress.

VI

Use Broad-sheet 5 (The Fire Ships) and map 4D - look at the Armada picture.

- 14) In the appropriate section on the double page describe Stage D of the Armada's progress.
- 15) How did Philip's plan go wrong? (2 lines).

VII

Use Broad-sheet 5 - The End of the Armada.

- 16) What route home did the Armada take?
- 17) How many Spanish ships got hom?
- 18) What did the English commemorative medal say?
- 19) How true was this claim? (5-6 lines).

VIII

Use Broad-sheet 7 (Elizabeth at Tilbury) and the picture of Elizabeth.

- 20) Read Garrett Matigley's description of Elizabeth, look at the

p picture of her and read her speech at Tilbury. How do you think such a woman held allegiance of her subjects? (10 lines).

IV A WOMAN'S WORK, HOUSEKEEPING IN NORTHAMPTONSHIRE 1600-1900. ASPECTS OF HOUSEKEEPING IN NORTHAMPTONSHIRE ILLUSTRATED BY A SELECTION OF DOCUMENTS AT THE NORTHAMPTONSHIRE RECORD OFFICE.

The Contents of this Folder:

24 Documents -

1. 2 Pages of Apethorpe Hall household accounts, 1594.
2. 2 Pages of household inventory, Northampton, 1666.
3. Letter giving instructions to housekeeper at Milton, 1700.
4. 6 Cookery recipes, 17th & 18th Centuries.
5. 4 Pages of a household-utensil valuation book, 1758.
6. Menu of a dinner at Althorp, 1793.
7. House tax receipt, 1811.
8. A page from a Pytchley farmhouse account book, 1816.
9. 4 Medicinal recipes, 17th & 18th Centuries.
10. Newspaper cuttings from the Northampton Mercury, 1793-1899.
11. Certificate of discharge for mis-used servant, 1822.
12. Agreement for apprenticeship of girl servant, 1759.
13. Testimonial to a satisfactory housekeeper, 1815.
14. Letter about an unsatisfactory cook, 1838.
15. List of servants and wages at Aynho House, 1830.
16. A Page from Ecton Hall cellar book, 1833.
17. Handbill relating to theft of laundry from Canons Ashby, 1846.
18. Drawing of kitchen interior at Aynho House, 1847.
19. Drawing of laundry room at Aynho House, 1847.

20. 5 Household recipes, 17th - 19th centuries.
21. Plan of new domestic offices at Ecton Hall, 1888.
22. 3 tradesmen's bills, 1821, 1830, 1911.
23. 4 pages from a schoolgirl's cookery notebook, circa 1888.
24. Timetable of lessons at Dallington Domestic Economy School, circa 1897.

INTRODUCTION

NOTES ON THE DOCUMENTS

FURTHER READING

TRANSCRIPTS OF DOCUMENTS 1,2,3,4,6,7,8,9,12,13,14 & 20.

The label on the cover shows a central panel copied from the binding of the "Book of Advice" of Lady Westmorland, circa 1626. The original binding is embroidered in silver and coloured thread. The borders of the label show samples of Northamptonshire lace made in the late 19th century.

Northamptonshire Record Office, Delapré Abbey, Northampton.

INTRODUCTION

The obvious place to study the history of housekeeping must always be a museum or stately home, where one can see at close quarters the worn, humble articles of house, cottage and farm, or the more elaborate furnishings of a mansion. In conjunction with these one can turn to the many reference books on the same subject. But somewhere between the two, and complementary to them, lie the original letters, account books and scraps of documentary evidence which have survived to be placed in the care of County Record Offices for study by the general public. These latter sources have been used to compile this folder, whose first document takes us back to a lordly well-provisioned household in the reign of

Elizabeth I and whose last document shows us that by the present century domesticity had become a science to be practised in the poorest home.

It immediately emerges that there is an inevitable scarcity of evidence about the homes of all but the most fortunate members of society. The well-to-do, with education and thrift, had the time to keep accounts, write letters, hoard recipes. They might leave wills and inventories to describe their worldly possessions. But everyone else had some kind of battle to maintain a supportable standard of life. Mostly illiterate, they figure as names in the records of others; they farm, or work in shops, or build other people's houses, or make lace; they may enjoy the bounty of their more fortunate neighbours, live tolerably well and have a few goods and chattels; yet they leave behind hardly any tangible records of their life at home.

However, with such records as we have, we can yet learn useful facts about the lives of servants, the furniture they had to scrub and dust, the food they were expected to prepare and the utensils they had to scour, as well as about the more leisurely existence of their masters, mistresses and neighbours. Throughout our chosen period there seems to have been an inexhaustible well of cheap local labour to provide houseservants - it was only after the First World War with its subsequent emancipation of women, redistribution of wealth and greater mobility of labour that this well began to dry up. If a common theme is to be discerned in this folder it is that of the harassed, overworked but not necessarily unhappy servant (we must remember that in the days before the Welfare State employers of domestics for the most part willingly accepted the obligations which law and custom imposed on them to provide for the well-being of their hired help).

In common with the other Archive Teaching Units produced by the Northamptonshire Record Office, this present selection contains a wide variety of documents and examples of handwriting. Transcripts have been provided to help students to read difficult script, which is often not merely indecipherable but full of contractions and idiosyncrasies now fallen into disuse. It is hoped that students will enjoy the challenge of making comparison between the original document and its transcript and, with practice, feel encouraged to make use of the many manuscript sources at their local Record Office, whatever the chosen subject of study.

V EXTRACTS FROM THE HANDBOOK OF 'SIXTEENTH AND SEVENTEENTH CENTURY WILLS, INVENTORIES AND OTHER PROBATE DOCUMENTS' PRODUCED BY THE BORTHWICK INSTITUTE OF HISTORICAL RESEARCH OF THE UNIVERSITY OF YORK. NOTES ON READING THE FACSIMILES.

**TEXT
BOUND INTO THE
SPINE**

1 Learning to read.

The document facsimiles have been numbered in chronological order. It would be more use, for those who are learning to read, to work through them in order of difficulty: so it is suggested that they are read in the following order, starting with the most straightforward -

- 8, 2, 6, 11, 3, 5, 1, 4, 10, 9, 12, 7.

2 Language.

The main language of the majority of these examples is English: some, however, contain words, phrases or sentences of Latin, and a few are entirely, or almost entirely, in Latin. The Latin is always translated in the footnotes of the individual examples. Anyone who reads probate documents must expect to find, and should be able to understand at least the general sense of such words, sentences and passages.

3 Alphabet.

The alphabet in use in these examples has the following main differences from the modern alphabet:-

- a letter *ȝ* for th, as in *ȝ* 'the'
- ī* (i or j) is not usually dotted

i and j, u and v (and I and J, U and V) are used interchangeably:

4 Spelling.

This was not standardised, as it is today. Try not to get into the careless habit of modernising spellings as you transcribe them. (If you do this, you will certainly miss the meanings of some words altogether, by thinking that you know their modern equivalents after reading only one or two letters of them, instead of taking trouble to read the whole word first)

(Notes 5-9 below are in many ways revision notes for those who have attended a course at the Borthwick Institute, but it is hoped that others will find them useful)

5 Forms of letters.

All letters may appear in forms approximating to those used today; however, other forms may seem difficult.

Difficult letters

<i>r</i>	<i>τ</i>	(c)	<i>ϕ</i>	(B)
<i>o</i>	<i>o</i>	(e)	<i>ϕ</i>	(C)
<i>e</i>	<i>g</i>	(h)	<i>ϕ</i>	(E)
<i>r</i>	<i>z</i>	(r)	<i>ϕ</i>	(S)
<i>l</i>	<i>δ</i>	(s)		
<i>w</i>	<i>ω</i>	(w)		
<i>w</i>	<i>δ</i>	(a)		
<i>g</i>	<i>g</i>	(k)		
<i>y</i>	<i>ϕ</i>	(p)		
<i>v</i>	<i>ϕ</i>	(v)		
<i>e</i>	<i>ϕ</i>	(x)		

Tricky letters

<i>l</i>	(A)
<i>f</i>	(F)
<i>h</i>	(H)
<i>k</i>	(K)
<i>n</i>	(N)
<i>r</i>	(R)
<i>l</i>	(d)
<i>l</i>	(b)
<i>l</i>	(11)

Some letters have large loops, eg. *l* (b) *l* (d) which often cross when the letter is doubled, eg.

The letters i, m, n and u will often be very difficult to read when written together, in a word such as

community - *community* and ct is, sometimes *ct*

6 Roman numerals.

Note that -

the last i of a group is nearly always long, eg. *iiij*

x (10) is almost always in the form *x*

a raised xx means a score, eg. *xx* (80)

General sign, but often means m or n has been omitted. can be joined to a letter during or at end of word.

NB. to l e t t r e or l e t t r e, and the word-ending -lettre acion 9 Transcription

The document reproductions enclosed have been transcribed according to the following rules:

per or par } but these can be written carelessly, }
pro }
pre or pri } pre }
ser or sar }
Christ }
and }

i The original spelling, capitalisation and punctuation have been retained. Where there is any doubt as to whether a letter is a capital, however, it has been transcribed as a small letter.

ii The letters u and v, i and j, have been transcribed as they are written in the text and not modernised; but y (= th) has been transcribed th.

iii Roman numerals have been transcribed as such.

iv All abbreviations whose meaning appears beyond doubt to the transcriber have been extended and the extensions have been underlined. A few whose meaning seems to be obscure have been represented by an apostrophe

v Omissions from the text (usually because of later damage) which can be supplied, and comments on the text, are placed in square brackets. Omissions which cannot be supplied are represented by dots, if possible one dot for each letter omitted, placed in square brackets

vi The line arrangement of the text has been followed in the transcription wherever possible; where it is not possible line-endings in the text are represented in the transcription by an oblique line.

vii Interlineated words have been placed between apostrophe
The aim of a transcription made according to these rules is to represent the text in as complete a way as possible; a transcription like this would probably need editing before it was used, for instance, in a book.

7 2. RE and

These are the signs of abbreviations most frequently met.

Remember also -

raised letters, eg. the (the, that) which (which, with) M^{re} (Master, Majestic)

abbreviations, usually raised, for l. s. d. 1^o 2^o (in Latin primo, secundo) use of 1^o, 2^o for first, second (these are also used occasionally to mean 1, 2.)

apparently meaningless abbreviation signs, or flourishes at the ends of words, eg. London etc.

8 Punctuation.

One sign which has completely vanished today was in general use, or, having the value of a comma (occasionally, a full stop) eg. see = a full stop. Note also small strokes, used to fill in at line ends.

VI FROM ROGER WILLSON, NEVILL HOLT SCHOOL

THE NEVILLS OF HOLT - some suggestions for an archive teaching unit.

The general purpose of the unit would be to provide a range of documentary materials for studying the history of an important country and landowning family, leading to work on genealogy, heraldry, domestic architecture, furnishings, monuments and domestic and estate business. This could lead to work on documents on other families in the country.

1. The Family

Family trees - Nicholls 'Leics' 1798 ; LRO have various documents of 17th century. Also two 18th century tables showing descent of Cosmas and Lady Mary Neville from the kings of England! Worksheets. Material in county library.

Church monuments - series in Nevill Holt church 1593; 1636; 18th and 19th centuries with useful inscriptions. Photographs. Worksheets. General work on development of church monuments, brasses, etc.

Worksheets on members of the family - eg a high sheriff; a Nevill involved in the Civil War. Marriage settlement in LRO.

2. The House

Architectural development. NH Hall is basically a medieval manor house with Tudor, Stuart, Restoration, Queen Anne, Georgian and 19th century additions. A series of photographs, drawings, worksheets could lead to a study of the history of domestic architecture.

Growth of the house. The medieval manor house-will, 1302 and conjectured plan.

The private house - rooms listed in 1848 sales catalogue; 1876 plan; 1900 Servants' Bell system. The uses of rooms.

3. Heraldry

Detailed study of the Nevill Holt heraldry - Palmer and Nevill families. Stone carvings, monuments, funeral hatchments. Handbook on heraldry, particularly impaling, wives/husbands etc and an interpretation of this. Possibly worksheets for colouring. Stained glass.

4. Furnishings

LRO 1765 list of linen and china at Holt ; I am investigating Nevill wills. Excellent sales catalogue of 1848 lists complete contents of house. Possible to reconstruct rooms and furnishings, leading to study of house and life in it - e.g. the kitchen; the stable; drawing room; bed rooms; laundry; roman catholic chapel.

5. The Estate

LRO maps of Nevill property in Nevill Holt and Medbourne

Medieval emparking

18th century estate business - several documents in LRO (eg 1758 bills for wages, walling etc; 1743 letters; 1756 sale of land; damage done by a gale; supply of trees; horses' feed, etc.

The Nevills and the enclosure of Medbourne (1844) - LRO enclosure award map.

1850 NH tithe map, with field names (could lead to another study book)

LRO Nevill property-lists for recusancy in 18th century.

6. Family Correspondence and Household Management

LRO have a good collection of Nevill family papers from the 18th century from which a good selection could be made (eg 1729 wine bill; 1729 chariot cover; 1743 bill for household requisites; 1744 letter by Earl of Lichfield proposing a visit to NH; 1759 letter on supply of tea and groceries; accounts from 1729 to 1760; 17th century medical prescriptions; letters from children to parents).

This could lead to study of family relationships, household management and prices.

7. Education

LRO have superb series of letters on education of the Nevill children abroad in the 18th century, the costs, travelling involved, subjects taught, for the sons and daughters. From the series it is possible to follow the history of Gosmas Nevill and his son, Charles, from birth to his 'Grand Tour' in Europe.

8. The Nevills as Lords of the Manor

Manorial Court minute book in LRO - shows workings of the court and its functions.

9. Recusancy

The Nevills were Roman Catholics. Several lines could be followed here - photos, diagrams, worksheets on the priests' hiding places in the house; general work on Elizabethan recusancy; Jesuit records - the house had a resident priest from 1628 to 1846; the Roman Catholic chapel in the house (furnishings listed, 1848); Recusants' registration of property in LRO + recusancy of some tenants.

10. Nevill Holt Spa

18th century - 1742 pamphlet (L.Libr) - the season-leading to work on other Leics spas.

Suggested work with children

1. Lines of enquiry from the history of Laxton, eg further investigations into the lives of some of the Lords of the Manor - Sir William Courten for example; how Earl Manvers reunited the Lordship; the site of the castle and manorhouse (see part of the 1635 map).
2. Further work could be done on the duties of the steward or estate agent. There are many more documents illustrating the agent's work in the Manvers collection at Nottingham University. (Thompson, English Landed Society in the 19th Century and Orwin & Whetham, History of British Agriculture have good chapters on the work of the Estate Agent).
3. Work on the illustrative material
 - i Look at the Mark Pierce map of 1635 and the present day Ordnance Survey map (2½" or 6") if obtainable and note any difference
 - ii Compare the earliest and latest maps of Laxton Westfield and see how much enclosure or consolidation has taken place.
 - iii Try to relate the 'lands' in Westfield for sale in 1825 (facsimile b) to the 1789 map of the Westfield.
 - iv What information can be gained from the Window tax schedule, e.g. size of houses, rate of taxation, wealthy villages?
 - v What information can be gained by looking at the valuation of 1805 and the inventory of 1879?
4. Further work on documentary material
 - i Look at the complete census for 1821 and see what information can be gained from it (Nottinghamshire Record Office).

ii Look at the enumerator's schedule (1851 census) for Laxton.

This can be found on microfilm in the Nottingham City Reference Library.

iii Many more enquiries could be made into the operation of the Poor Law in Laxton. There is a wealth of documentary material on this subject in the Nottinghamshire Record Office.

VIII EAST SUSSEX COUNTY RECORD OFFICE, LOCAL HISTORY RESEARCH UNIT NO.8,
DISCOVERING COUNTY RECORDS

What is a County Record Office? It is a place where the records of a County are kept. These records are not the round black objects you associate with a discotheque nor have they anything to do with outstanding sporting achievements. They are in fact documents of all shapes, materials and sizes containing information. When such documents are preserved for future reference by the person or organisation creating them they are called archives. This word is Greek in origin and means a receptacle for documents of great importance. You may have wondered in reading the Bible about the 'Ark of the Covenant'. This is really the same word and means the receptacle in which the Israelites kept their most treasured documents. Not very far away from where you live or go to school there is probably a Record Office which is working to preserve the most important documents of your locality. If you live in a city or large town this may be run by the City Authorities, but the majority of Record Offices are run by County Councils.

What do they do? First of all they ensure that the archives made or inherited by the County Council are properly preserved. Second, they provide means for the preservation of other documents of importance which

have been created by private individuals, businesses, large landed estates, parishes and local clubs and societies. Thirdly, the Record Office must take steps to see that all this material can be used by people who want to find out about the things to which the documents relate. All this involves many different skilled processes from being able to decipher old handwriting and understanding legal terms to the repair and restoration of badly damaged documents. Moreover in order to make sure that archives do not deteriorate they must be stored in specially designed rooms which are made as secure as possible against fire and other hazards and in which a check is kept on the temperature and humidity. People who work on cataloguing and arranging documents are called archivists. Those who repair and restore them are known as document repairers, or conservationists.

Why do we spend all the time and effort on preserving old pieces of paper or parchment which may not have seen the light of day for many years? There are really two main reasons. First, we in England live under a system of law and government which requires that when we make claims against anyone or when they make claims on us there must be documentary proof of what is being said. Thus when old people say that they are entitled to a pension proof must be brought and this can only be found in records of births. Equally when anybody performing an official function decides that something has to be done (a new school built perhaps) the decision and the reasons for it must be put 'on record' for others to see.

Apart from this very practical reason there is also a great value in preserving documents on account of their historical significance. In order to know more about what has happened in the past (and this can be very important for what is happening to us to-day) it is essential that we have

the archives relating to these events so that historians and others can see for themselves the true facts. The archives of a community are its memory. Just think what life would be like for you if you had no memory. You would not know your parents, or the house you lived in, each day you would have to start everything from the beginning again and because you would have no idea what happened more than 24 hours ago you would not be able to plan ahead - no holidays in fact! Now a government or an institution or a County Council which had no archives would be in just the same kind of situation and its work would quickly become impossible.

What are the documents which are kept in a County Record Office? Some indication has already been given. They are the archives of the County Council, the Quarter Sessions (the local court), and of the Clerk of the Peace who was the 'Secretary' for Quarter Sessions, and of the parishes, individuals, societies, schools and sometimes of large public organisations, such as hospitals, nationalised industries and Government Departments when these records refer only to the particular County in question. Extracts from some of these records are reproduced here with notes explaining them. Almost all are in reasonably simple writing which you should have little difficulty reading. See how much you can understand of each document, read the notes about it and then try and find out more about each of these types of archive and their historical background. What kind of information do you think can be got from each one by someone interested in local or national history? Try and find out if there are similar documents relating to your own locality.

Teachers' Notes

1. The Unit is designed for pupils between the ages of 9 and 16, especially those with no previous contact with original material as part of their historical studies.
2. The notes accompanying each document are arranged in an identical manner. There is an introductory section which recounts briefly the historical background and seeks to relate it to the present day. Then follows a statement of what the document is and an indication of the other documents which result from the same activity and which are likely to exist in most County Record Offices.
3. The section "Some Things To Do" is designed to provide suggestions for graded exercises which can be undertaken by the pupils themselves. The first project is a very simple one and in many cases could be done without leaving the school. The last project always involves use of original sources and a degree of creative work and is marked for "senior pupils". This means senior in ability rather than age. Teachers may wish to draw up their own list of projects.
4. The Unit can be used for any of the following purposes:-
 - (a) as a preliminary to a group visit to County Record Office. It is suggested that the pupils study the Unit first and are then shown either the originals of the materials reproduced herein, or documents of the same kind and date, perhaps where possible relating to their own area. To facilitate this a list of document references has been appended
 - (b) as a preliminary to individual visits by pupils either in connection with the projects under "Some Things To Do" or private research work

(c) as a classroom tool for the study of the means of producing written history

(d) as providing basic examples for certain topics of study in class.

5. The Unit is designed so that it can either be used in normal pagination, or be broken down by removing the binder and using the identifying letters to relate the examples with their accompanying notes.

Use of the East Sussex Record Office by Schools

The attention of teachers is drawn to the requirements of the Record Office in regard to pupil visits. In the case of group visits (i.e. three or more pupils) a teacher should accompany the party. The Record Office provides a special room for this purpose, whether the object is to study particular groups of records or to hear a talk and view a general exhibition, slides, etc., on the work of the Record Office. The maximum which can be accommodated is 12 including the teacher and this figure must be adhered to.

Archivists and other Record Staff have normally no experience of education and are in any case heavily engaged on their principal professional tasks. While advice on archive matters will always be available, staff cannot provide constant supervision of school groups. The teacher must therefore ensure that the pupils are well prepared for their visit, work purposefully and (if the use of original material is involved) are made aware of the need for handling documents with care.

All requests for group visits must be made through the agency of the Education Authority, and not directly to the Record Office. Requests will be referred to the officer appointed for the purpose by the Authority who will liaise with the Archivist charged with responsibility for edu-

cational work. This is to ensure that the best service can be given to the schools with the least interruption to the work of the Office. Suitable programmes will be drawn up for each age group and project and for each type of visit. The assistance of teachers in this will be welcomed as will any suggestions for the improvement of the programme and its administration or the production of the Local History Research Units. The compilation of Units on historical subjects by teachers and others is an object which it is hoped will be encouraged.

For visits by individual pupils or those working in pairs on a specific project, the normal routine, applicable to any user of the Record Office will operate. It would be deemed a courtesy if the teacher gave 24 hours prior notice to the Search Room Supervisor at the office. Pupils who use records in the Search Room must, of course, observe the regulations (copy available on request). In these cases they will be expected to have some background knowledge of the subject they are studying and be able to read and understand the document provided without assistance beyond that normally given to the users of the office by the staff.

It is most important that pupils are not sent on speculative visits. They, or their teacher, should ascertain beforehand that there is material available of the right kind and in sufficient quantity for the particular topic chosen. Any subject involving research in original documents before about 1660 will be difficult for pupils unless they have had practice in reading early hands. The extensive use of deeds prior to 1830 is also not to be recommended. Teachers are asked to ensure that the pupils visit the office only when they need to consult original material or printed books which are unobtainable elsewhere. Search room space is severely limited and should not be taken up by pupils merely consulting printed books which can be seen in, or borrowed from, Public Libraries.

Publications

The following publications issued by the East Sussex Record Office may be of interest to teachers.

Your County Record Office (illustrated). Explains the basic work of the office and the facilities provided. Includes a list of publications.

FREE

Readers Guide. Sets out the principal rules of the office, how to use the services, indexes, etc., and how to approach research in original sources. Appendix is a brief list of the major collections in the office. 15p.

Three Handbooks discuss the material available for research into particular topics:-

The History of a Parish Locality 10p

How to Trace the History of your House 20p

How to Trace the History of your Family 20p

A list of the Local History Research Units is available on request.

Enquiries concerning records, Local History Research Units and visits by individual pupils should be addressed to:-

County Archivist,
East Sussex Record Office,
Pelham House,
Lewes.

and marked for the attention of the Assistant Archivist (Education).

Enquiries concerning group visits, the education programme, and projects should be addressed to:-

The Chief Education Officer,
County Hall,
St. Anne's Crescent,
Lewes.

IX NORTHAMPTONSHIRE COUNTY RECORD OFFICE, A WOMAN'S WORK - HOUSEKEEPING
IN NORTHAMPTONSHIRE 1600-1900, NOTES ON DOCUMENT 3.

Letter giving instructions to housekeeper at Milton, 1700.

William, 3rd Baron Fitzwilliam, had his large country estate at Milton, near Peterborough. He seems to have had a preference for London life, and only visited Milton from time to time, preceded by a flurry of orders and warnings to his Northamptonshire servants. This letter is a typical example and is addressed to the steward, Francis Guybon, the patient recipient of instructions and demands for money for many years in the absence of his master. Poor Guybon was expected to see all and do all, supervising the courts, placating the electors of Peterborough with venison and sweet words, and organising a food-carrying service to feed hungry Fitzwilliams in London. By his side at Milton were the housekeeper, Mrs Bull, and the parson of Marholm, Jeremiah Pendleton. Between them they watched over the material, bodily and spiritual wellbeing of their lord, though the Reverend Pendleton was expected to take his turn as building foreman and herbalist.

Recently Lord Fitzwilliam had lost his eldest son and heir, who had a weak constitution. This extract from a previous letter to Guybon will give some idea of current medical notions, which were used to no avail. "You must likewise tell Mr and Mrs Pendleton about gathering the Herb for my son William. First it must be gott very dry and then before the Flower comes out, and as neare the Full of the Moone as possibly: but rather then have it gathered neare the Full of the Moone, if the Budd or Flower should be blowne, my wife had rather it nearer the New Moone with the Budd unblowne. And if the Herb is now come out, & is neare Blowing: Lett it be gathered the beginning of next weeke if the weather be faire

and dry". Lady Fitzwilliam, a Norfolk heiress, was often ill too and perhaps this explains Lord Fitzwilliam's attention to household details. In other letters "aired bedds" are in great demand.

In this particular letter the following points may need slight explanation. Sir Charles Barrington was Lord Fitzwilliam's son-in-law and lived at Barrington Hall in Hatfield Broadoak, Essex - "a courteous affable gentleman" according to Wotton's Baronetage. Anna Maria Fitzwilliam bore him no children and his estates, though not his baronetcy, passed out of his family. Mr Wright was a carpenter engaged in the rebuilding at Milton. The Paradise Lease refers to land leased from the Dean and Chapter of Peterborough. "Bucks" was a term for a quantity of clothes. Petermass Fair was the most ancient one held in the city, having been granted by Charter by Richard Coeur de Lion before he set out for the Holy Land. Brigg Fair was otherwise known as the Bridge Fair and its Charter of 1439 specifically ordained that it should be held at the bridge and on both sides of the River Nene at St. Matthew's Day. A "firkin" was a small cask for liquids, holding a quarter of a barrel; a "Hogg" was a hogshead or large cask. "Cloathes" meant woven cloths. "Venison" was deer meat. The "Ferry Boate" plied across the River Nene at Gunwade Ferry, linking Milton Park with Alwalton in Hunts. Its upkeep was the responsibility of Lord Fitzwilliam.

Document Reference: N.R.O. F(M)C 1130.

X MANCHESTER BRANCH OF THE HISTORICAL ASSOCIATION, MANCHESTER MANU-
SCRIPT I, ORPHAN ANNIE, RESEARCH BOOKLET 4 & 5

Parish organisation had become firmly established by the beginning of the eighteenth century. Parishes varied both in size and in the problems they faced. Some small ones had few paupers, some such as Manchester were very large and included several townships within their boundaries. These had an increasing population, many of whom needed help. Some rural parishes faced greatly increased costs of poor relief, especially during the French Wars (1793-1815) when food was expensive and agricultural wages low.

The overseer of the poor was unpaid, untrained and sometimes unwilling. He usually wanted to do his job in the easiest and cheapest way.

3a Documents 1 and 2 show three ways in which the overseers of two northern parishes administered poor relief in the eighteenth century. Suggest reasons why the method chosen in document 2 would not be so suitable for overseers in document 1.

3b Compare the provision of clothing for "Pimlott's Boy" in document 1 with that in documents 6, 13, 17, 18.

3c Work out the length of journey which the two Cash boys had to make. Compare the time they were allowed with that taken by Joseph Sefton in document 13 for a similar journey.

Although the parish poor rate was the official method of helping the poor, there was during the eighteenth century a growing amount of private charity. An increasing concern for the individual was evident in many spheres of life. Document 4 shows one way in which this concern was given a practical application.

4a What did Coram have to wait 17 years to establish this charity?

- 4b Find out more details of Coram's life, and any other charitable projects in which he was interested.
- 4c Jonas Hanway was one of the Governors of the Foundling Hospital. Find out details of the work he did for children.
- 4d Ann Saunderson (document 6) had to make a long journey. Find out how she was likely to travel and how long the journey was likely to take.
- 4e Compare documents 6 and 18; in what ways were the lives of these two girls likely to be similar or different?
- 4f What impression is given of the attitude of the hospital authorities towards the children? What may have helped to form that attitude.

Although the parishes were expected, by the Poor Law of 1601, to provide work for the poor of the parish, Manchester's first Poor House built specially for the purpose was not established until 1792.

- 5a Find the site of the workhouse and New Bayley prison on the map (document 8).
- 5b Samuel Bamford provides us with a link between the two buildings. There is an interesting account of his life in Brief Lives by T.A. Lockett, published by the University of London Press in the series It Happened Round Manchester (1968).
- 5c Why should Samuel Bamford and Thomas Battye, who were both familiar with the workhouse at the same time, give such widely differing accounts of its administration (documents 11 and 12)?
- 5d What buildings cover the sites of the workhouse and the prison today?
- 5e Where were the town hall and market, shown on the engraving (document 10), situated?

Many pauper children were absorbed into the industrial life of the eighteenth and nineteenth centuries in many different activities. Some were

employed in the cotton spinning mills which, driven by water-power, required less adult skilled labour, and could make use of children.

Samuel Greg owned several factories in Lancashire and Cheshire in addition to the mill at Quarry Bank.

6a Why did Greg build his mill at Styal?

6b How did Joseph Sefton (document 13) come to be an apprentice at Styal?

6c Make a note of all the details he mentioned about his life as one of Greg's apprentices.

XI UNIVERSITY OF NEWCASTLE-UPON-TYNE, DEPARTMENT OF EDUCATION, ARCHIVE
TEACHING UNIT NO.1., COALS FROM NEWCASTLE, HANDBOOK pp 16-17

Suggestions for Topic Work

The subject covered by this unit is a very comprehensive one. Suggestions are given for six smaller topics which might be pursued with the aid of the documents in the unit.

A. THE GEOGRAPHY OF TYNESIDE IN THE EARLY NINETEENTH CENTURY

Casson's map (document 1) provides an admirable basis for the study of this topic.

B. THE RIVERS

Documents 1 and 14 provide a useful starting point for a study of the rivers Tyne and Wear. The geography of these rivers and their significance as the outlets through which it was both possible and profitable to export the coal from the region can be discovered. The predominance which the northern coalfield enjoyed in the London market as a result of having easy access to the capital is shown in document 17. Some mention of the method of handling coal is made in documents 14 and 17. The illustration

of drops and spouts (document 16) is clearly useful, while the keelman, a nationally renowned Tyneside figure, who was responsible for the ferrying of coal on the river, is the subject of document 15.

C. THE COLLIERY

The science of mining can be studied by reading the description of Felling Colliery (document 2) and using the plan (document 3) and the illustrations (documents 4, 5 and 6) to help in the understanding of the text. Documents 7 and 8 provide information about the organisation of the labour force at the pit, including both the jobs done underground and at the surface.

D. LABOUR RELATIONS IN THE COALFIELD

A preliminary study of labour relations in the coalfield can be made from documents 12, 13 and 15. Although dealing primarily with other matters, documents 18 and 19 give some very useful information. Other topics supplement the knowledge gained from this preliminary study. The working conditions at the colliery considered in topic C, profits and wages, the main subject of topic E, and the attitude of employers towards accidents as discerned from a study of topic F, are all relevant to a study of labour relations in the coalfield.

E. THE ECONOMICS OF COAL MINING

It is not possible fully to understand the economics of coal mining in the early nineteenth century from the documents in this unit. The subject is a complicated one, and far beyond the scope of a limited collection. Nevertheless some interesting information on this topic is contained in the documents. Some general remarks about production in the coalfield appear in document 1, while the production at particular pits can be discovered in documents 2, 10 and 11. Information about the

marketing of the coal is contained in documents 1, 11 and 17. Documents 8, 9 and 10 give details of the wages paid at Felling and Wylam Collieries. The running costs for Wylam Colliery are given in documents 9 and 10. Transport costs in particular are given in document 14, but documents 9, 10 and 11 also contain useful information. The rents paid by the coal owners to the land owners appear in document 11. From examples in document 14 it is possible to discern that the selling price of coal varied according to its grade.

F. THE FELLING DISASTER

Document 19 provides useful background material and document 20 deals specifically with the disaster. The latter should be read in conjunction with documents 3 and 7, both of which are taken from Hodgson's original account of the accident. The significance of the disaster in the history of mining appears from documents 18, 21, 22 and 23.

XII UNIVERSITY OF NEWCASTLE-UPON-TYNE, DEPARTMENT OF EDUCATION, ARCHIVE TEACHING UNIT NO.6, THE NORTHUMBERLAND ELECTION 1826, HANDBOOK pp 35-6

Suggestions for Topic Work

As this unit deals with a specific election extending over a relatively short period of time, the documents are closely inter-related and the collection as a whole is very self-contained. Suggestions are given for several topics on aspects of the election which might be pursued using the documents in the unit; in each case only the principal documentary references are indicated.

A. THE COURSE OF THE ELECTION

By a study of selected documents it is possible to trace the chronological sequence of events in the election. The qualifications for

members of Parliament are given in document 1. Documents 7 and 8 deal with the events of the county meeting. The day to day running of the poll can be traced in documents 25, 27, 28, 31 and 32. A study of document 33 in conjunction with the map (document 5) gives a great deal of information about voting in the election. Documents 34, 35 and 36 deal with the aftermath of the election - congratulations and celebrations - while document 37 relates to the opening of the new Parliament.

B THE ORGANISATION OF THE ELECTION CAMPAIGN

Documents 2 and 4 supply information about the committees established to supervise the campaign of one of the candidates. The problems faced in mounting a campaign in a county the size of Northumberland, and the ways in which these problems were approached, are indicated in documents 5, 21, 22, 23 and 24. Other duties of the committees can be seen in documents 6 and 35. An example of the expenses incurred by one of the candidates is given in the notes to document 38.

C THE PARTIES AND POLITICAL INDEPENDENCE

The lack of any rigid party organisation is shown by the numerous references to the documents to inter-party squabbles and coalitions between rival parties, for example documents 13, 14, 15, 16, 17, 28, 31 and 32. Independence of party is, in fact, shown in a number of documents, especially documents 14 and 31. It is clear from documents 9, 10 and 12 and the accompanying notes that the really important factor was the local influence of the candidates.

D NATIONAL ISSUES

A number of issues of national interest were raised during the election, and these are touched upon in documents 18, 19, 20 and 37. The issue which is, of course, present throughout the unit by implication is that

of Parliamentary reform. The need for reform can be assessed by the study of the documents as a whole, but the most glaring examples of abuses are provided by documents 7 and 38 and the illustration on the cover of the unit.

E A MOCK ELECTION

A reconstruction of the Northumberland election can be attempted using the material in the documents. The background of the four candidates and their principal supporters can be ascertained from documents 9, 10, 11 and 12 and the accompanying notes. Their views on various subjects pertaining to the election appear in documents 13, 14, 16, 17, 18, 19, 20 and 37. Study of these documents would provide a basis for reconstruction of speeches from the hustings. Reference to the other suggested topics will show the material most relevant for a reconstruction of the course of the election and the organisation of the campaign. The fortunes of each candidate as the poll progressed are indicated in document 33. The carnival atmosphere of the election can be seen from documents 21-24, and especially from the cover illustration, documents 3, 26 and 38.

XIII LIVERPOOL TEACHERS' ARCHIVE STUDY GROUP, A TUDOR HOUSE: SPEKE HALL AND THE NORRIS FAMILY 1500-1700, SPECIMEN WORKSHEETS

Nos. 9, 10, 11, 12: The building of Speke Hall

1. Name as many materials as you can see were used in building the Hall.
2. Look at the outside of your house or school. Name at least four differences between the building of Speke Hall and the building of a modern house.
3. Name three members of the Norris family responsible for the building of Speke Hall.

- 4 (a) With two pieces of polystyrene, make a mortice and tenon joint.
Use a pencil as a wooden peg.
- (b) Now describe how the joints in the framework of Speke Hall were made.
- 5 (a) Draw three different shapes of window which can be seen at Speke Hall.
- (b) Describe the shapes of these windows.
- (c) Of which shape are there most; try to explain why the other two shapes are there.
- 6 What is a gable? Draw one of the gables at Speke Hall and describe the decoration of the one gable.
- 7 Imagine you are a Tudor craftsman in wood. Write a diary from the time you are engaged by Edward Norris to the time you finish your work. (Describe how the other craftsmen are getting on with their jobs, and add little drawings from time to time. Also describe the tools you have for your work.)
- 8 From the drawings and photographs, describe the various doors and entrances to Speke Hall. What kind of decoration have they got? Look up something about locks in Tudor times. How would these doors be fastened? Could the house be defended, and if so who would attack it?
- 9 Write out the inscription over the front porch of Speke Hall. What does it tell us?
- 10 (a) Do you know of any other examples of half-timbered houses still to be seen in England? If they are easy to draw, copy them into your note book.
- (b) Is the plan of Speke Hall typical of Tudor Houses?

Nos. 17, 18: The Inventories

The Great Parlour

- 1 Write a list of what the room contained in 1700, with the prices given.
- 2 How do you know the room was used by many people?
- 3 The oval table was probably of the gate-legged type, very popular since 1650. What were its advantages?
- 4 "Turned chairs" were in use since the Middle Ages. Find and draw pictures of both types of chair mentioned.
- 5 How many seats were there in the 1624 room?
- 6 Can you find at least two ways in which the seating in 1624 differed from that in 1700?
- 7 Compare the tables in the two inventories and find what kind of wood might have been used?
- 8 How were 'carpets' used in 1624? Suggest why this differs from modern use.
- 9 Compare the total value of the room contents on both lists. What does this suggest?
- 10 Visitors will find two other large items of interest in the great parlour which existed in 1624 but are not mentioned in the inventories. Other documents in the folder give clues.

No. 25: A mother's letter

1. What explanation does Catherine Norris give for her handwriting being difficult to read?
2. Give reasons from the letter for thinking that the Norris family had friends and interests outside Liverpool.
3. What types of illness does Catherine talk about? How are children in the twentieth century better protected medically?

- 4 Can you, using the Norris family tree, find out who "Kathy" is likely to be?
- 5 Guess who "Mr Squire" was.
- 6 What was Richard Norris's job?
- 7 Try to find out the meaning of "stel drops".
- 8 How do the beginning and end of this letter differ from the way your mother would write to you?
- 9 Write out the document, putting in correct spelling, punctuation and capital letters.

XIV SPECIMEN RESEARCH CARDS FROM 'THE PRINCES OF LOOM STREET', MANCHESTER
MANUSCRIPT NO.2.



Research Card No. 3

POPULATION AND OVERCROWDED TOWNS

Documents 10 15 16 17 18

No. 1

Using document 10 and a geography atlas map answer the following questions.

- How many areas in Lancashire and Cheshire on the population map of 1801 have a population of 5,000 and over per square mile?
- How many areas in Lancashire and Cheshire on the population map of 1851 have a population of 5,000 and over per square mile?
- Can you suggest any reasons for these increases in numbers?
- How do you account for the areas on both maps with less than 250 people per square mile?
- Trace an outline of the 1851 map showing the coastline, the county boundaries and the River Mersey. Using your geography atlas shade in the areas of the coalfields. Then mark and name the six most important towns.

No. 2

Using document 15, imagine you are either the young John Prince or Rachel Prince being taken for a Sunday morning stroll through the streets of Manchester by your father. Describe what you might see and what kind of games the children might be playing.

No. 3

Look at document 18, then answer the following questions.

- Who was the inventor of the scavenging-machine cart and when and where was it first tested?
- What advantages did this machine offer?

- Who was responsible for the paving and sewerage of the streets of Manchester?
- Who was responsible for the repair of the surface of the town's streets?
- Imagine you are the driver of the scavenging-machine cart. Describe a day's work around Loom Street, where the Princes lived.

No. 4

Design either a cartoon or a poster, using document 17, drawing attention to the many nuisances and offences for which people were liable to be fined.

No. 5

Either draw a picture of part of Market Street showing a shop, a house, a carriage, a lady and a gentleman, or write a description of this scene.

No. 6

Using your textbooks and any library books available, try to find out the answers to the following questions.

- Who owned the manor of Manchester in 1836?
- What were the names of the officials who governed the town in 1836?
- How is Manchester governed today? Name as many of the departments as you can.
- Who pays for the repair of Manchester streets today and how are they cleaned?

The Princes of Loom Street

*J. Spence
1 High Street
2 Mary Brown
3 John Smith
4 Mr. W. Widdell
5 Mrs. Widdell*

Research Card No. 5

WAGES AND FOOD

Documents 3 & 7

No. 1

Look at document 4, then answer the following questions.

- How much rent did John Prince pay per week in 1832?
- When was the rent increased, and to how much?
- There is an error in the calculations for one of the periods. Can you find it?
- John Prince was a shoemaker: what would he make for the mill workers?

No. 2

Using document 7, work out

- how much Joseph Street was paid for the two weeks ending June 16th and June 23rd 1832.
- how much James Gleave was paid for the same period.
- how much Charles Crouth was paid for the same period.
- Can you suggest what sort of things would incur fines?

No. 3

You are either Thomas Prince, cotton spinner, or Hannah Prince, his wife, in 1837. You have three children. The wage coming into the house is about 28s. a week. Using document 8, work out a weekly menu.

No. 4

Make an illustrated catalogue for each of the four rooms of Mrs. B's house. Taking one room in your own house, make an illustrated catalogue of the furnishings of this room.

No. 5

Look at document 3, then answer the following questions.

- What is the importance of the canal?
- Why were there chimneys and why were they tall?
- How many floors were there in the three mills?
- In 1833 the mills were worked by steam power. What power would the mills use today?
- In 1833 the mills were lit by gas. What would light the mills today?

No. 6

If Henry McConnel looked out from the doorway of his mill at six o'clock in the morning, what was he likely to see?

The Princes of Loom Street

DAME ALICE'S HOUSEHOLD BOOK

The illustration of the Saxon Hall in 3A dates from the ninth century. By the early thirteenth century, when this Household Boke of accounts was kept, it is clear that things hadn't changed very much with regard to the communal way in which people lived. All family, retainers, guests and friends were fed twice a day in the great hall, though fewer were present for breakfast. This particular household book was kept by the steward of Dame Alice de Bryene, a great lady of Suffolk, during the years 1412-1413. In the book he noted down exactly how much food was eaten at every meal by how many people, how much it cost, how the larder was replenished during the month, the bakings and the brewings. In fact, the steward left a very clear picture of exactly how the great lady's household was run, in this respect at least. The steward wrote in Latin, as all educated men did at that time. This book is now kept at the Public Record Office, and here is the translation of the first paragraph of the first page:

Thursday, 29 September, 1412.

Breakfast 8, dinner 20, supper 20, sum 48.

The lady took her meals with her household; in addition, Agnes Sampson, a certain groom of Robert Louell, for the whole day, two friars of Norwich, Colbrook and one of the household of John Cok at one repast.

PANTRY: 40 white loaves and 6 black loaves; wine from what remained; ale from stock.

KITCHEN: one quarter of bacon, one joint of mutton, one lamb and 32 pigeons.

PURCHASES: in companage, 2d.

PROVENDER: hay from stock for 7 horses of the Lady and of the company;
fodder from the same one bushel of oats.

On January 1, 1413, New Year's Day, there was a great party:

Meals: Breakfast 30, dinner 160, supper 30, Sum, 220.

Guests: William Sampson with his wife and one of his household, Edward Peyton with one of his household, William Langham with one of his household, the wife of Robert Dynham with her sons, John Taylor with his sons, Richard Scrivener the bailiff of the manor with the harvest-reeve, and 8 of the household of the manor, Margaret Brydbek, one harper, Agnes Whyte, the whole day, Agnes Rokwode with 2 sons, a daughter, and a maidservant, the vicar of Aketon with one of his household, Richard Appylton with his wife and one of his household, Thomas Malcher with 30 tenants and other strangers, one repast.

PANTRY: 314 white, and 40 black loaves, whereof newly-baked 104 white, and 14 black loaves. Wine from what remained; ale from stock.

KITCHEN: 2 pigs, 2 swans, 12 geese, 2 carcasses mutton, 24 capons, 17 conies.

PURCHASES: beef 8s 2d, veal 3s, 5 young pigs, 2s 4d, 12 gall; milk 11d.

Lady Alice, then, kept a fine traditional communal household and ate with her guests and servants; but the tradition was beginning to change. The aristocracy began to tire of living their lives so much in public, and more and more lords and ladies took their meals in private, in the parlour, leaving the great hall to the care of the steward. This practice was frowned on by some as being snobbish. In 1362, fifty years before Dame Alice's time, William Langland made these comments in his famous poem Piers Plowman:

Elynge is the halle eche day in the wyke,
There the lord ne the ladye lyketh nought to sitte,
Now hath eche riche a reule to eten by hym-selve,
In a pryve-parloure, for pore mennes sake
Or in a chambre with a chymneye and leve the chief halle
That was made for meles, men to eten inne ...

ASSIGNMENTS

1. Make a list, like that of Dame Alice's steward, of how many people were at meals in your family over the last few days, how many meals this added up to altogether each day, and what they ate.

With the help of your mother, work out the month's expenditure on food.

How does all this compare with Dame Alice's household?

2. Draw a picture of the New Year party going on in the great hall, showing the different guests and what they were all eating.
3. Can you think of any new customs or practices today which are breaking away from tradition and which are therefore disapproved of by older people, in the way Langland disapproved of rich people eating by themselves instead of which their household?
4. How would you feed thirty people who came to dinner? How do institutions which must do this every day cope today? (If your school has its meals cooked on the premises, perhaps the cook will give you some help with this.)

SPACE IN THE HOME TODAY

In almost all the houses discussed in the various sections, the builder or architect was designing a specific house for one particular person - what architects today refer to as 'one-off'. The situation is now very

different. Up to 500,000 houses are built in this country every year, the vast majority of them by local councils. The architects employed by the councils cannot possibly design each house individually for the family which is going to live in it. They must therefore design houses which are as adaptable as possible, and which will be suitable for a large number of different sizes and ages of family. Faced with this situation, the Government set up the Parker Morris Committee to recommend the standards to which new houses ought to be built. In 1961, the committee published its report, Homes for Today and Tomorrow (HMSO 1961). This is more generally known as the Parker Morris Report, and here is part of what the authors of the report had to say:-

"... this Report is ... about the activities that people want to pursue in their homes - which taken as a whole can be catered for in a wide variety of ways. This approach to the problem of design starts with a clear recognition of these various activities and their relative importance in social, family and individual lives, and goes on to assess the conditions necessary for their pursuit in terms of space, atmosphere, efficiency, comfort, furniture and equipment ... The approach is flexible, questioning such wide-spread assumptions as that equal floor areas should be devoted to sleeping, dressing and sanitary needs as to all other needs put together, or that houses should generally have two storeys rather than one, one and a half, two and a half or three ... The usefulness of a room depends as much as anything upon whether its shape and the position of doors and windows allow the appropriate arrangement of furniture. In order to ensure that a room is workable and enjoyable to live in, one must not only make sure that the furniture will fit into the space available in a sensible way, but also that there is sufficient space left to make

the room comfortable and efficient in use. In other words, the right approach to the design of a room is, first, to define what activities are likely to take place in it, then to assess the furniture and equipment necessary for these activities, and then to design round these needs, plus others no less important such as aspect, prospect and communication with other parts of the home."

The Report went on to define minimum standards for the building of new houses and flats, assessed along the lines set out here. These are the standards to which all new houses built since the Report was published have had to conform and although they were intended to be only minimum standards, these are the standards to which most councils now build.

The pictures in 3M are from a handbook, Space in the Home, metric edition (HMSO, 1968). The original edition of this handbook was to follow up the publication of Homes for Today and Tomorrow. One of the things it does, is to illustrate the kind of furniture lay-outs and room measurements mentioned in Homes for Today and Tomorrow; the pictures are of some of these illustrations. The measurements are given in metres and millimetres.

One must remember that these standards can only be applied to houses built since the publication of the Report in 1961. A great many people still live in old houses, which may of course be absolutely acceptable by present-day standards of space and hygiene, but very often are not. Whether they are acceptable or not depends among other things on the size of the rooms and the number of people occupying them; on whether there is a bathroom and an indoor lavatory; and on how many people have to share lavatory and bath. It is hard to establish definite rules about this kind of thing, so each individual situation has to be analysed by the local Public Health Inspector, or a member of his department. Roughly, the

standard is that not more than 1½ people should occupy each room - but of course that varies with the size of the rooms and the people - e.g. when does a child begin to count as a full person?

ASSIGNMENTS

1. Analyse your own home in the terms of the Parker Morris Report - How many are there in the family? How many rooms are there? What is each room used for during the day, during the evening, and during the night? Make a graph, showing the number of people and rooms, and how they are used at different hours.
2. Make detailed, measured plans, like those in the pictures of a room in your own home. Show furniture lay-outs, people, activities and space. Give measurements in metres.
3. How convenient is your home? Describe planning improvements you would like to see in it, giving descriptions 'before' and 'after' and reasons why you would make the changes.
4. Make a plan of your home, showing the different rooms; how you get from one to the other; where you park prams, bicycles and a car; the access to cupboards and other areas. Are there any 'black spots' in the house, where there are always too many people and too much inconvenience? How would you improve them?
5. Draw (or collect pictures of) houses of the past 200 years. Include terraced houses, back-to-back dwellings, council houses of the 1930s, modern flats and any others you can think of.

APPENDIX 2

TESTS USED IN THE FIRST AND SECOND TRIALS

I SOURCES TEST, PRE-TRIAL VERSION

How much do you know about the sources of History?

Answer the following questions by underlining the correct phrase or sentence from the alternatives given.

1. The Bayeaux Tapestry tells us about (a) the landing of Julius Caesar
(b) the Norman Conquest
(c) the story of Joan of Arc
2. Chronicles written by monks tell us about (a) Roman Britain
(b) the Middle Ages
(c) Victorian England
3. The Sutton Hoo ship burial contained the possessions of
(a) an Iron Age Chieftain
(b) an Anglo-Saxon king
(c) a Norman warrior
4. We know that prehistoric man hunted animals because
(a) they wrote descriptions of hunting parties
(b) there is no evidence that they grew crops
(c) they painted hunting scenes on the walls of caves
(d) they made sharp stone axes
5. Monks wrote their chronicles on (a) clay tablets
(b) paper
(c) papyrus
(d) parchment

6. Domesday Book was (a) produced on a typewriter
(b) written in picture writing
(c) written with pen and ink
(d) printed by a printing press
7. An archaeologist digging on a site finds a collection of small cubes of stone in different colours, fragments of painted wall plaster and a hollow floor supported on small pillars about two feet high made out of tiles. He has found the site of (a) a Stone Age settlement
(b) a Roman villa
(c) a medieval monastery
8. We know that Charles I was executed because
(a) modern history books say that he was
(b) Cromwell signed his death warrant
(c) We still have accounts written by witnesses of the event
(d) We have a photograph of the event
9. Documents about people of national importance are kept in
(a) the Tower of London
(b) the Public Record Office
(c) the Houses of Parliament
(d) the Mansion House
10. Documents about past events in Leicestershire are kept in
(a) Leicester Town Hall
(b) the County Library
(c) the County Record Office
(d) Leicester Castle
11. You want to find out how many people lived in your town in 1760.
Which of the following sources would be of most use to you?

- (a) the Census Returns
- (b) the parish registers
- (c) lists of voters in a Parliamentary election
- (d) lists of tax payers

State briefly the reason for your choice _____

12. Read the following two passages. Both are about the Battle of Agincourt in 1415. A is by a twentieth century historian, H.A.L. Fisher, and B by an eye witness of the event in 1415, Jehan de Wavrin.

- A. "The British yeomen who decided the day at Crecy and Agincourt were armed with the long-bow, and, as the famous heavy cavalry of the French advanced to the charge, aimed at the horses. A cloud of arrows brought the assault to a sudden standstill and before a blow had been exchanged, the dismounted riders were floundering on the ground in their heavy armour, easy prey to their assailants."
- B. "The said French were so loaded with armour that they could not support themselves or move forward. They had archers and cross-bowmen enough, but they would not let them shoot, for the plain was so narrow that there was no room except for the men at arms. Then the English archers who, as I have said, were in the wings, saw that they were near enough, and began to send their arrows on the French with great vigour."

Suppose that you had to destroy one of the accounts and could only keep one of them. Which would you keep to help future generations find out about the Battle of Agincourt?

- (a) You would keep A because the writer had read many of the sources about the battle while B had read nothing at all.

(b) You would keep A because the writer had a University degree while B was only a man at arms.

(c) You would keep B because the writer was there when the battle happened.

(d) You would keep B because it was written on parchment.

State briefly why you chose the answer you underlined _____

NAME _____ AGE _____ SCHOOL _____

II SOURCES TEST, FINAL VERSION

How much do you know about the sources of History?

Answer the following questions by underlining the correct phrase or sentence from the alternatives given.

1. The Bayeaux Tapestry tells us about (a) the landing of Julius Caesar
(b) the Norman Conquest
(c) the story of Joan of Arc
2. Chronicles written by monks tell us about (a) Roman Britain
(b) the Middle Ages
(c) Victorian England
3. The Sutton Hoo ship burial contained the possessions of
(a) an Iron Age chieftain
(b) an Anglo-Saxon King
(c) a Norman warrior
4. We know that prehistoric man hunted animals because
(a) they wrote descriptions of hunting parties
(b) there is no evidence that they grew crops
(c) they painted hunting scenes on the walls of caves
(d) they made sharp stone axes
5. Monks wrote their chronicles on (a) clay tablets
(b) paper
(c) papyrus
(d) parchment
6. Domesday Book was (a) produced on a typewriter
(b) written in picture writing
(c) written with pen and ink
(d) printed by a printing press

7. An archaeologist digging on a site finds a collection of small cubes of stone in different colours, fragments of painted wall plaster and a hollow floor supported on small pillars about two feet high made out of tiles. He has found the site of
- (a) a Stone Age settlement
 - (b) a Roman villa
 - (c) a medieval monastery
8. Historians know that London caught fire in 1666 because
- (a) Christopher Wren built many new churches in London
 - (b) History books say it happened
 - (c) Samuel Pepys wrote about it in his diary
 - (d) The B.B.C. have a film of it
9. You want to find out about the history of your town or village. On the lines drawn below, write down some of the places where you could go for information. _____
10. Read the two passages below. Both are about the Battle of Agincourt of 1415, but A was written in 1415 and B in 1936.

A was written by a man-at-arms, Jehan de Wavrin, who fought at Agincourt.

"The said French were so loaded with armour that they could not support themselves or move forward. They had archers and crossbowmen enough, but they would not let them shoot, for the plain was so narrow that there was no room except for the men at arms. Then the English archers who, as I have said, were in the wings, saw that they were near enough and began to send their arrows on the French with great vigour."

B was written by a twentieth-century historian, H.A.L. Fisher.

"The British yeoman who decided the day at Crecy and Agincourt were armed with the long-bow, and as the famous cavalry of the French advanced to the charge, aimed at the horses. A cloud of arrows brought the assault to a sudden standstill and before a blow had been exchanged the dismounted riders were floundering on the ground in their heavy armour, easy prey to their assailants."

- (a) The two accounts are very similar. Can you find two details about the battle which appear in both?
- (i) _____
- (ii) _____
- (b) Can you suggest a reason why the same details about the battle appear in both these accounts? _____
- (c) If you had to destroy one of the accounts and keep only one, which would you keep to help future generations find out about the Battle of Agincourt? I would keep A / B (cross out the one you would throw away). Give a reason for your choice _____

NAME _____ AGE _____

FORM _____ SCHOOL _____

III DOCUMENTS TEST, PRE-TRIAL VERSION

Using Original Documents

In this booklet you will find three pairs of documents and some questions about them. Try to answer them as best you can but do not worry if you cannot answer one of them; leave it and go on to the next one.

1. The first two documents are extracts from the writings of two mediaeval English chroniclers describing the same King. Read them carefully (some of the words you might not know are explained at the end) and try to answer the questions in the order they are set.

(a) Peter of Blois

"He does not lie idle in his palaces like other kings but makes rapid journeys throughout the provinces, finding out what everyone is doing. No one is more acute in deliberation; no one has a greater torrent of eloquence. Whenever he has a breathing space from his duties and anxieties he occupies himself in private reading, or elaborates some problem in the call of an ecclesiastic. Our king is a man of peace, but he is as successful in war as he is magnificent in peace. The one object of his desires in this world is the peace of his people and this he has given them. No one is kinder to the afflicted, or more affable to the poor, and no one has made himself more insufferable to the proud. As it were in imitation of the Divinity his object was always to humble the mighty, to raise up the oppressed and to set in operation continual persecution against those who swelled with pride."

deliberation; considering what is to be done
eloquence; fine speeches
elaborates; works out
ecclesiastic; priest
afflicted; people who suffer
affable; pleasant in manner
insufferable; unpleasant

(b) Ralph Niger

"When he came to the throne he appointed slaves, bastards and vagabonds to the chief offices of the kingdom. Illustrious men were accused of crimes of a moral nature but were otherwise irreproachable he deprived entirely of their estates or annihilated them by gradually stealing bits of their property. He made bishops and abbots of the servants of the household or of the jesters of the court. He made an unheard of law about the forests by which those who had committed no other breach of law suffered perpetual punishment. He prevented men of high position from marrying or giving in marriage without his leave, and those who transgressed he punished as traitors. He kept for his own use or sold other people's inheritances."

bastards; men who were not legitimate by birth
illustrious; famous
irreproachable; blameless
annihilate; destroyed
transgressed; broke the law

2. The second pair of documents are extracts from the diaries of travellers who visited Leicestershire and Rutland in the last years of the eighteenth century and the first years of the nineteenth. Celia Fiennes (1662-1738) was the daughter of a colonel in Cromwell's army who travelled all over England, staying with various friends and relations. Daniel Defoe (1660-1731), whom you probably know better as the author of "Robinson Crusoe", was a journalist and political writer as well as a novelist and poet. He travelled through the countryside as a government's agent.

(a) Celia Fiennes (from a journey made in 1697-8)

"Thence I went to Durant (Duddington) 5 miles and passed over a very good stone bridge; here we are near the quarries of stone and all the

houses and walls are built of stone as in Gloucestershire; this river and bridge enter'd me into Leicestershire which is a very rich country, red land, good corne of all sorts and grass both fields and enclosures; you see a great way upon their hills the bottoms full of enclosures, woods and different sorts of manuring and herbage, among which are placed many little towns, which gives great pleasure of the travellers to view; the miles are long but hitherto pretty hard good way to Coppingham (Uppingham) 5 mile more, which is a neate market town; Satturday is their market which is very good affording great quantetys of corn leather yarne cattle, such a concourse of people that my Landlord told me he used to have 100 horses set up at his inn, and there were many publick houses here; you see very large fine sheepe and very good land but very deep bad roads."

concourse; crowd

(b) Daniel Defoe (from a journey made in 1724-5)

"Warwickshire and Northamptonshire are not so full of antiquities, large towns, and gentlemen's seats, but this county of Leicester is as empty. The whole county seems to be taken up in country business such as the manufacture above (framework knitting) but particularly in breeding and fæding cattle; the largest sheep and horses in England are found here, and hence it comes to pass too, that they are in consequence a vast magasine of wool for the rest of the nation; even most of the gentlemen are grasiers, and in some places the grasiers are so rich that they grow gentlemen: 'tis not an uncommon thing for grasiers here to rent farms from £500 to two thousand pounds a year rent.

The sheep bred in this county and Lincolnshire, which joins to it,

are, without comparison, the largest and bear not only the greatest weight of flesh on their bones, but also the greatest fleeces of wool on their backs of any sheep in England ... these are the funds of sheep which furnish the city of London with their large mutton in so incredible a quantity ... The horses produced here, or rather fed here, are the largest in England, being generally the great black coach horses and dray horses, of which so great a number are continually brought up to London, that one would not think so little a spot as this of Leicestershire could be able to supply them."

magasine; store

grasier; farmer raising sheep or cattle

dray horses; horses who draw carts and waggons

3. The third pair of documents are about the town of Loughborough in the nineteenth century. The first is part of a description of the town given in White's Directory of 1846. The second shows the total population of Loughborough as given in the Census Returns between 1801 and 1851.
 - (a) "Few towns experienced a more rapid increase during the first thirty years of the present century, than Loughborough, and for this present increase it is indebted to the manufacture of worsted hosiery, introduced by the late Joseph Paget Esq., and Mr John Cook; - to the spinning of mohair, a patent for which was obtained by the late Mr Cartwright: to the great increase of cotton hosiery; - and chiefly to the introduction of the lace, or bobbin net machine, by Messrs Heathcoat and Lacey, in 1809. Mr Heathcoat was originally a frame-smith, at Hathern, and spent many years working as a setter-up of machinery at Nottingham. In 1809, he procured a 14 year patent for

his improved twist lace frame, which was commonly called the Loughborough Machine, because it was first brought into extensive use here, in a large factory built by him and his partner; but owing to the great damage done to their machinery by the Luddites in 1811-12, they removed their establishment to Tiverton in Devonshire. After that period, they continued to let the patent right to numerous speculators for high rents and premiums; and after the expiration of the patent in 1823, when the invention was thrown open to the public, so lucrative was the trade, that nearly everyone in Nottingham and Loughborough, who had capital to command, were anxious to invest it in Bobbin Net Machines, in the manufacture of which hundreds of mechanics from other parts of the kingdom found ample employment for several years at exorbitant wages; and houses, machines and factories increased with such amazing rapidity in the two towns; but this over-speculation in a few years, so overstocked the markets, that after the commercial panic of 1826, machines which had cost from £400 to £500 each, were sold for less than half the amount that was charged for them in the busy years of 1824 and 1825.

The bobbin-net, or twist-lace manufacture, has of late years greatly declined at Loughborough, but in addition to the hosiery, several new articles have recently been introduced here, among which are silk velvet, broad and narrow figured satin and elastic velvet cuffs and trimmings, for which Messrs Unsworth and While obtained a patent in 1835. To supply that lack of employment which has of late years driven many families to other places, it has been proposed that a company be formed for the introduction of other branches of manufacture. There are in the town and its vicinity, many stocking frames, and framesmiths, and machine makers; two worsted makers, an iron-

foundry, a celebrated bell foundry, several dyeing establishments, more than a dozen malt kilns, four banks, several corn mills and commodious wharves at which much business is done in corn, coal and timber."

framesmith; a man who makes hosiery machines
 patent right; sole right to make or sell a machine
 speculator; a man who invests money in the hope of profit
 premium; money paid to an inventor for the use of his machine
 lucrative; profitable
 capital; money invested in the hope of making more money
 exorbitant; higher than they should be
 over-speculation; so much money invested that too many goods are made.

(b) Totals of Loughborough population from the Census Returns

<u>1801</u>	<u>1811</u>	<u>1821</u>	<u>1831</u>	<u>1841</u>	<u>1851</u>
4663	5556	7494	10969	10170	11339

Questions for Documents 1(a) and 1(b)

1. In two columns, one headed "Peter of Blois" and the other "Ralph Niger", list the acts of the king as described by each writer.
2. What can you say about the attitude of each writer to the king?
3. From the information given in both documents, write a few lines describing the character of the king.
4. The king the chroniclers are describing is Henry II, the king who quarrelled with Thomas a Becket and who reigned from 1135 to 1154. Can you remember why he needed to "humble the mighty" and to bring about "the peace of his people"?
5. Can you suggest any reason why the chroniclers differed in their attitudes to the king?
6. From what the documents say, do you think that Henry II was a good king or a bad one? Give reasons for your answer.

Questions for Documents 2(a) and 2(b)

7. In two columns, one headed "Celia Fiennes" and the other "Daniel Defoe", list the main points that each author makes about farming in Leicestershire.
8. On what points do the two authors agree about the types of farming? Do they disagree on any points?
9. Whose judgement would you trust the most and why?
10. Using the information given in both accounts, describe briefly the state of agriculture in Leicestershire at the turn of the nineteenth century.
11. What Leicestershire farmer is famous for his experiments in breeding sheep?
12. Why do you think that keeping animals was so important to Leicestershire farmers?
13. Would you say that Leicestershire was a prosperous county when Fiennes and Defoe visited it? Give reasons for your answer.

Questions for documents 3(a) and 3(b)

14. Make a list of the points White makes about the numbers of people in Loughborough.
15. From the population figures (3b) say in what decades (ten year periods) Loughborough grew most quickly, and in which it declined.
16. Compare your answer to the last question with what White (3a) says about the growth of the town. Do the two accounts agree?
17. Using the information given in both documents, briefly describe the changes which took place in Loughborough in the first thirty years of the nineteenth century.
18. Who were the Luddites? Why should they have attacked Heathcoat's factory?

19. What form of transport do the "commodious wharves" suggest that Loughborough had?
20. The census returns are still taken every ten years. Do you think that they should now be taken more often? Give reasons for your answers.

IV DOCUMENTS TEST, FINAL VERSION

The two extracts on this sheet are from the diaries of travellers who visited Leicestershire and Rutland in the last years of the eighteenth century and the first years of the nineteenth. Celia Fiennes (1660-1738) was the daughter of a colonel in Cromwell's army who travelled all over England, staying with various friends and relations. Daniel Defoe (1660-1731), whom you probably know better as the author of "Robinson Crusoe", was a journalist and political writer as well as a novelist and poet. He toured the countryside as a government agent.

Some of the words which you may not know are underlined and explained below.

(a) Celia Fiennes (from a journey made in 1667-8)

"Thence I went to Durant (Duddington) 5 miles and passed over a very good stone bridge; here we are near the quarrys of stone and all the houses and walls are built of stone as in Gloucestershire: this river and bridge enter'd me into Leicestershire which is a very rich country, red land, good corne of all sorts and grass both fields and enclosures; you can see a great way upon their hills the bottoms full of enclosures, woods and different sorts of manuring and herbage, among which are placed many little towns, which gives great pleasure of the travellers to view; the miles are long but hitherto pretty hard; good way to Coppingham (Uppingham) 5 mile more, which is a neate market town; Satturday is their market which is very good affording great quantetys of corn, leather, yarne, cattle; such a concourse of people that my Landlord told me he used to have 100 horses set up at his inn, and there were many publick houses here; you see very large fine sheepe and very good land but very deep bad roads.

concourse; crowd.

(b) Daniel Defoe (from a journey made in 1724-5)

"Warwickshire and Northamptonshire are not so full of antiquities, large towns, and gentlemen's seats, but this county of Leicester is as empty. The whole county seems to be taken up in country business, such as the manufacture above (framework knitting) but particularly in breeding and feeding cattle; the largest sheep and horses in England are found here, and hence it comes to pass, too, that they are in consequence a vast magasine of wool for the rest of the nation; even most of the gentlemen are grasiers, and in some places the grasiers are so rich, that they grow gentlemen; 'tis not an uncommon thing for grasiers here to rent farms from £500 to two thousand pounds a year rent.

The sheep bred in this county and Lincolnshire, which joins to it, are, without comparison, the largest, and bear not only the greatest weight of flesh on their bones, but also the greatest fleeces of wool on their backs of any sheep in England ... these are the funds of sheep which furnish the city of London with their large mutton in so increasing a quantity ... The horses produced here, or rather, fed here, are the largest in England, being generally the great black coach horses and dray horses, of which so great a number are continually brought up to London, that one would not think so little a spot as this of Leicestershire could be able to supply them."

magasine; store
grasier; farmer raising cattle or sheep
dray horse; horse for pulling carts and waggons

When you have read through the documents, try to answer the questions below.

If you cannot do one of them, don't waste time on it but leave it out and go on to the next one.

1. In two columns, one headed 'Celia Fiennes' and the other 'Daniel Defoe', list the clues each author gives about the kinds of farming done in Leicestershire.
2. What kinds of farming are mentioned by both authors? Do they disagree at all over the kinds of farming?
3. Using the information given in both accounts, write a short newspaper advertisement to sell a Leicestershire farm in this period, telling possible buyers why it would be a good idea to come and farm in Leicestershire.
4. Why do you think that Leicestershire farmers went in for keeping and rearing animals in such a big way at this period?
5. The two authors do not give a complete picture of farming in Leicestershire at this time. What kinds of people can we not learn about from their accounts?
6. Whose judgement about the state of farming in Leicestershire would you most trust, that of Celia Fiennes or Daniel Defoe? Can you explain why?

V ACTIVITY CHARTS

(a) Frequency Chart

The following are all things you might do in a history lesson. Put a tick in the column which shows how often you have done a particular activity in the last year.

ACTIVITY	Never	Once a year	Once a term	Every week	Every lesson
Listening to the teacher					
Taking dictated notes					
Taking notes from the blackboard					
Using worksheets					
Doing projects					
Reading textbooks					
Reading letters etc, of real historical people, eg Pepys					
Reading printed handouts of notes					
Looking at historical filmstrips					
Looking at historical films					
Looking at historical slides					
Listening to historical broadcasts or tapes					
Looking at original documents eg Jackdaws					
Working from original documents					
Asking questions about history					
Discussing historical problems in class					
Working in groups					
Working by yourself					

ACTIVITY	Never	Once a year	Once a term	Every week	Every lesson
----------	-------	-------------	-------------	------------	--------------

Visiting places of local historical interest

Studying local material

SCHOOL NAME AGE

(b) Like/Dislike Chart

The following are all things you might do in history lessons. Put a tick in the column which best shows how you feel about each activity.

ACTIVITY	Strongly Like like	Indifferent	Dislike	Strongly Dislike
Listening to the teacher				
Taking dictated notes				
Taking notes from the black-board				
Using worksheets				
Doing projects				
Reading textbooks				
Reading letters etc of real people, eg Samuel Pepys				
Reading printed handouts of notes				
Looking at historical filmstrips				
Looking at historical slides				
Looking at historical films				
Listening to historical broadcasts or tapes				
Looking at original documents				
Asking questions about history				

ACTIVITY	Strongly Like	Like	Indifferent	Dislike	Strongly Dislike
Answering questions about history					
Discussing historical problems in class					
Working in groups					
Working by yourself					
Visiting places of local hist- orical interest					
Studying local material					
How much do you like (or dis- like history lessons?					

AGE NAME SCHOOL

VI POST-TEST

Leicestershire Farming

The two maps you have been given are of the parish of Wilson in North Leicestershire. The first map was made before the village was enclosed, the second to show the changes made by enclosure. Look at the maps and answer the following questions by underlining the phrase or sentence which best answers the question.

1. In order to enclose the land, the villagers had to obtain
 - (i) a Royal Proclamation
 - (ii) an Act of Parliament
 - (iii) a County Council order
 - (iv) permission from the Ministry of the Environment
2. What was the title given to the man who was responsible for seeing that the enclosure of the village of Wilson was properly carried out?
 - (i) Minister
 - (ii) Government Inspector
 - (iii) Commissioner
 - (iv) Clerk of the Works

LOOK AT MAP 1

3. There are three main fields in the village whose names are printed in capital letters. Write down the names of two of them.
 - (i) _____
 - (ii) _____
4. Which two of the following crops were unlikely to be grown in these fields?
 - (i) wheat
 - (ii) barley
 - (iii) turnips
 - (iv) clover
 - (v) peas and beans

5. The open fields were split into blocks of strips. The length of each strip was supposed to be the distance an ox team could plough before needing a rest. This distance was

- (i) chain
- (ii) furlong
- (iii) metre
- (iv) pole

6. The three figures in each strip are units of measurement. They are

- (i) yards, feet and inches
- (ii) acres, roods and perches
- (iii) hectares, ares and centiares
- (iv) metres, centimetres and millimetres

LOOK AT MAP 2

7. The Reverend Swindel has received a large allotment. Land belonging to the Church was called

- (i) common land
- (ii) right of soil
- (iii) gleve land
- (iv) park land

8. The Reverend Swindel's allotment also made up to him for the loss of sums of money he used to receive from all the villagers. This money was known as

- (i) rents
- (ii) tithes
- (iii) first fruits
- (iv) rates

9. What do you think that the wavy line forming the boundary of the meadow represents?

(i) footpath

(ii) stream

(iii) road

(iv) hedge

10. What was usually grown in the meadow?

(i) hay

(ii) corn

(iii) turnips

(iv) beans and peas

11. The hedges around the new allotments on Map 2 would probably have been planted with cuttings from

(i) beech

(ii) privet

(iii) hawthorn

(iv) elder

LOOK AT BOTH MAPS

12. Which of the following seems a true statement about the common of Wilson?

(i) The common was entirely absorbed into the fields on either side of it

(ii) the common was left untouched by enclosure

(iii) the common was made into a single enclosed field.

13. In the process of enclosure, the opportunity was often taken to extend or widen existing roads or to make entirely new ones. Roads on Map 2 are marked either by double lines or by single dotted lines.

(a) Find two instances where an entirely new road was made.

Write down either the names of the roads or the names of the fields on each side.

(i) _____

(ii) _____

(b) Find one instance where an existing road was extended, identifying it as for (a).

(i) _____

14. These two maps tell you something about the enclosure of the village of Wilson. In which two of the following places might you expect to find similar maps of your own village or town?

(i) Leicester Town Hall

(ii) Leicestershire County Record Office

(iii) The Parish Church

(iv) Leicester Castle

(v) County Hall

15. Which four of the following documents do you think would most help you in your search for information about the history of the enclosure of your own village?

(i) Nichol's "History of Leicestershire"

(ii) a Manor Court Roll

(iii) written claims to land by villagers

(iv) an Act of Parliament

(v) an Anglo-Saxon Charter

(vi) an Enclosure Award

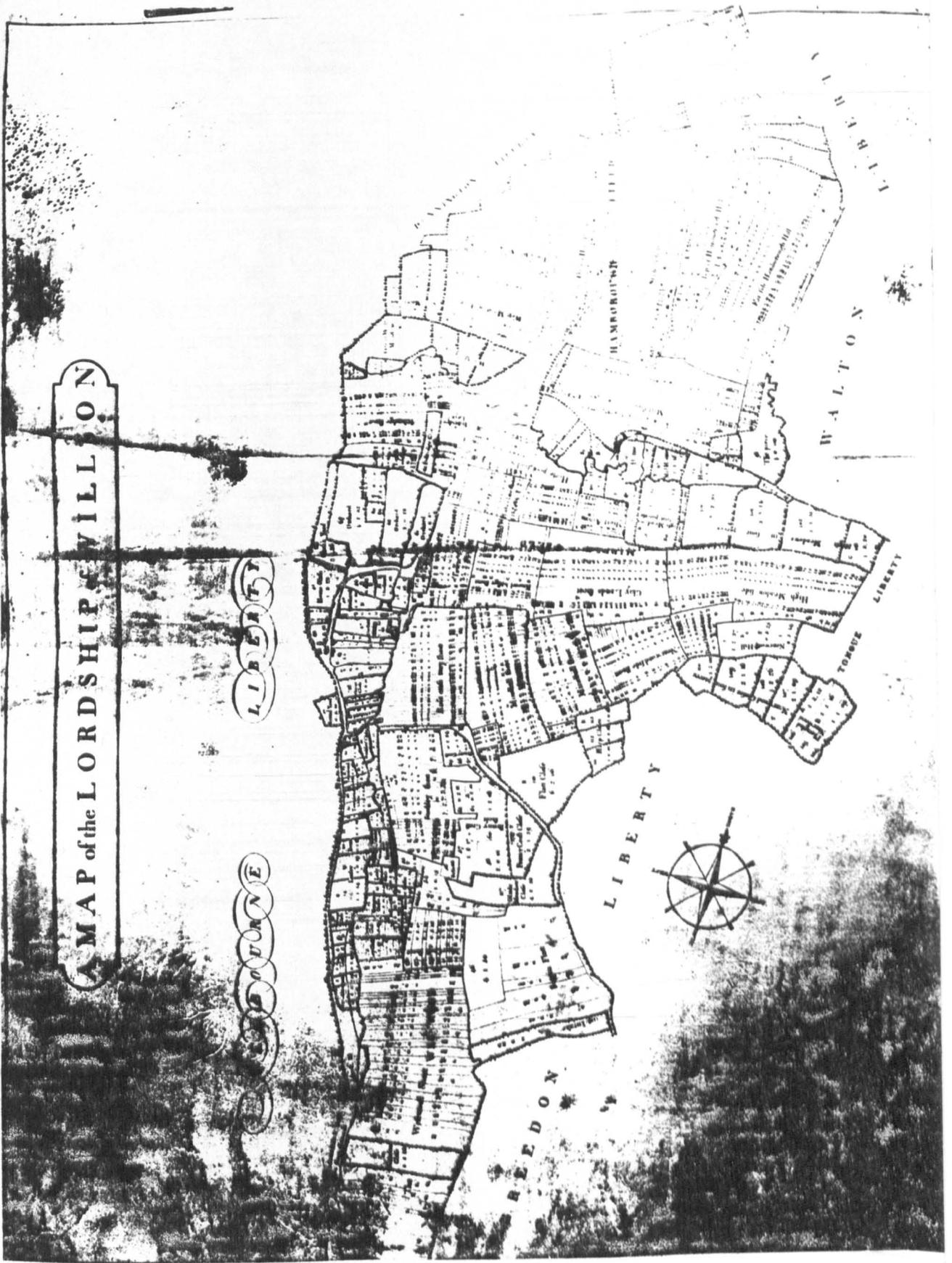
16. In which three of the following parts of the country would you not expect to see a village divided up into strips of land like Wilson in Map 1?

- (i) Scotland
- (ii) Midlands
- (iii) Lake District
- (iv) East Anglia
- (v) Pennines

17. Imagine that you had lived in Wilson before enclosure, and had kept yourself and your family by farming four strips and by grazing half-a-dozen animals on the common. After enclosure you were given a small farm on the outskirts of the parish which you had to fence and farm yourself.

On the back of this page, write a short letter to a friend living in a village which had not been enclosed, telling him how you feel about the change in your life. Do not write more than a paragraph.

The two maps accompanying the test are on the following two pages. This is a reduced version of the maps from which the children worked, which were larger and clearer.



A MAP of the Lordship of Willton

MITTON LIBERTY

MITTON LIBERTY

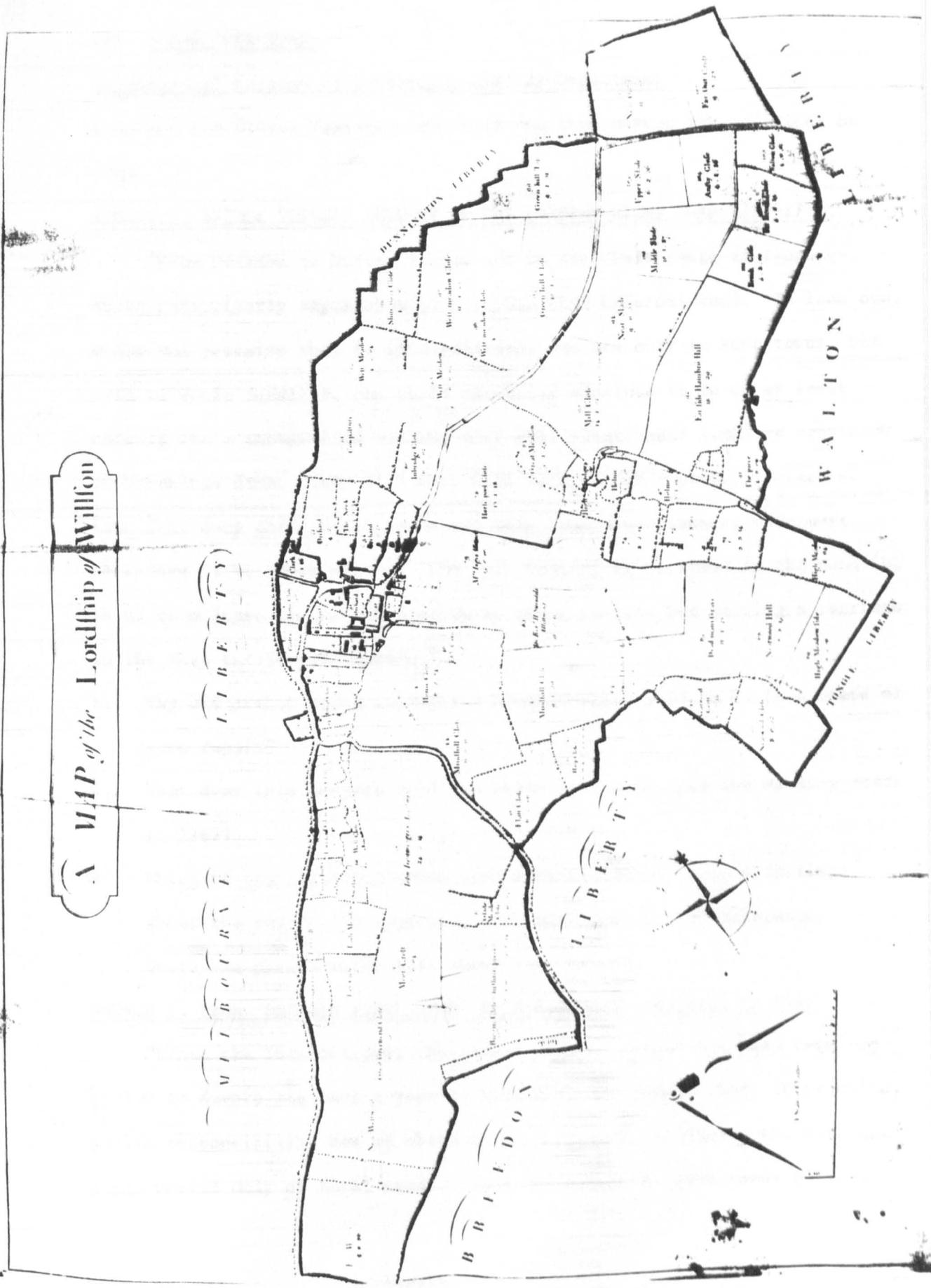
BRIDTON LIBERTY

LIBERTY

BENNINGTON LIBERTY

WALTON LIBERTY

TONGUE LIBERTY



VII ROADS POST-TEST

Loughborough College of Education: History Department

Read the two Source Passages carefully and then answer the questions on them.

SOURCE 1. ARTHUR YOUNG'S ACCOUNT OF THE PRESTON-WIGAN ROAD 1767-1770

"From Preston to Wigan, I know not in the whole range of language, terms sufficiently expressive to describe this infernal road. To look over a map and perceive that it is a principal one not only to some towns but even to whole counties, one would naturally conclude it to be at least decent; for a thousand to one but they will break their limbs by overthrow or breakings down. They will meet with ruts, which I actually measured four feet deep and floating with mud only from a wet summer, what must therefore it be after winter? The only mending it received is the tumbling in of some loose stones which serve no other purpose but jolting a carriage in the most intolerable manner."

1. Why did Arthur Young expect the Preston-Wigan road to be in a state of good repair?
2. What does this extract tell you about the techniques for mending roads in 1767?
3. Which of the following words best sums up Arthur Young's feelings about the road? (1) approval; (2) indifference; (3) annoyance.

Quote the phrase which best shows his feelings.

SOURCE 2. FROM 'BRITAIN SINCE 1700' by R.J. COOTES, written in 1968

"Since the 16th Century, the people of each parish had been required by law to devote six days a year to repairing the roads. But, in practice, parish responsibility was an obstacle to progress. Villagers, who were not paid, worked only on local roads. They neglected the main roads passing

through the parish because they were mostly used by strangers. Much needed improvements in Britain's trunk roads were unlikely to be carried out until the costs of building and maintenance were put upon the people who used them."

4. Why does R.J. Cootes think that villagers did not repair the main roads?

5. What sort of 'strangers' do you think used the main roads.

Arthur Young wrote his account of the roads during the eighteenth century, while R.J. Cootes is an historian of the twentieth century.

6. What evidence is there that Arthur Young actually travelled along the road he describes?

7. His report about the state of roads in the eighteenth century agrees with that of R.J. Cootes. If they did not agree, whom would you think was right? Can you say why?

8. Parliament passed many Acts in the late eighteenth century, setting up Turnpike Trusts to repair the roads. Using the information in both passages, write a short statement made by a Member of Parliament to the House of Commons saying why a new system of road repair was needed. Do not write more than a paragraph.

VIII TEACHER'S QUESTIONNAIRE, FIRST TRIALS

Leicestershire Farming

Questionnaire for Teachers who have used the Archive Teaching Unit

Could you underline the correct alternative when these are given, or otherwise write in your own comment on this sheet.

THE TOPIC

1. Was the topic of Leicestershire Farming adequately covered by the Unit?
Yes / No / Partly / other _____
2. Were there any particular omissions or faults? _____
3. How did the topic fit into your syllabus?
'O' Level or C.S.E. topic or paper
project in its own right
project in humanities / social studies grouping
other (please specify) _____

CONSTRUCTION OF THE UNIT

4. Do you think that the Unit fulfilled its objectives? Did your class gain
 - (i) Knowledge of facts
 - (ii) Knowledge of terminology
 - (iii) Experience in handling source materials
 - (iv) Experience in dealing with the material in the documents, using skills such as comprehension/translation/analysis etc.
 - (v) Experience in applying external criteria, i.e. making inferences and judgements
 - (vi) Appreciation of local application of a national event like enclosure
 - (vii) Increased interest in history?

5. Which of the above objectives did you consider was most important for your class?

(i) / (ii) / (iii) / (iv) / (v) / (vi) / (vii)

6. Were the objectives suitable for the age/ability range you were teaching? Yes / No / Partly

Could you comment on this? _____

7. Was there sufficient material for you to use?

Maps Yes/No

Background Books Yes/No

Patches Yes/No

Documents in the Patches Yes/No

Worksheets Yes/No

TEACHERS BOOK

8. Did you read the Teacher's Book? Yes/No/Parts of it

If you did, were the following useful or useless

explanations of objective useful/useless

suggestions for use Useful/useless

helps for palaeography useful/useless

answers to worksheets useful/useless

9. Would you have welcomed any more information in the Teachers Book?

BACKGROUND BOOK

10. Were there sufficient of these for the use of your class. Yes / No.

11. How were they used? Class reading

Reference

Private directed reading

Not used

Other (please specify) _____

12. If they were used, which sections did the children find useful?

Introduction about the documents

Background to the history of farming

Glossary of technical terms

Further reading

USE IN YOUR CLASS

13. With what class/classes did you use the Unit? _____

14. What age were they? _____

15. What ability level? _____

16. How many children used the material? _____

17. For how long were the documents used? Term/half term/ less/more.

18. How often per week were they used? Every day/more than once/once/
not every week.

19. How did you use the Unit? illustrative material
additional resource material
basis for group projects
basis for individual work
other (please specify) _____

20. Was it used by class as a whole
individuals
groups
other (please specify) _____

21. Was the use of the Unit compulsory for all children
free choice by groups
free choice by individuals
Other (please specify) _____

22. Will you please delete which patches were never used.

1/2/3/4/5/6/7/8/9/10

23. Which patch was used most? 1/2/3/4/5/6/7/8/9/10 Why? _____
least? 1/2/3/4/5/6/7/8/9/10 Why? _____
not at all? 1/2/3/4/5/6/7/8/9/10 Why? _____

DOCUMENTS AND TRANSCRIPTS

24. Could the children read the documents? All /most /few /none
25. Did they use the printed transcripts Yes /no /some
make their own transcripts Yes /no /some
26. Were the transcripts used with the documents Yes /no
On their own Yes /no
27. Did you think that the reproduction of the documents was good/
indifferent/bad?
Any suggestions for improvement _____
28. Was the colour coding of the patches useful/useless/detrimental to
reproduction?
29. Are the documents better loose in patch envelopes
stapled together
other (please specify) _____

WORKSHEETS

30. Did the children use the worksheets? yes/no/some
31. If you use the Unit again, will you still use the worksheets?
Yes/no/some.
32. Were the questions easy/average/difficult for your ability group?
33. If the children did not use the worksheets, how did you structure
the use of the Unit? _____

GENERAL

34. What additional work did the children do?
- | | | |
|---------|-------------------|------------------------|
| none | models | charts |
| writing | additional topics | other (please specify) |

35. Did you take them on any visits Yes/No
If so, where, _____
36. What additional resource material did you use?
tapes/slides/books/Jackdaws/pictures/home produced/other (please
specify) _____
37. What was the source of the additional resource material?
school library/County Library/resource centre/history room/teacher's
own/children's own/other (please specify) _____
38. Did the children need help? a lot/some/little/none
39. Did you give help to class as a whole/individuals/groups?
40. Did you introduce the topic before they started on the documents?
extensively/briefly/not at all.
41. Did you tell the children anything about the nature of the material
e.g. where the documents came from? Yes/no.
42. Do you think that the children enjoyed using the Unit? all did/ some
did/ none did.
43. Did you enjoy using the Unit? yes/no/partly
Could you comment on this? _____
44. Could you say in what ways it most benefited your class? If it did!

45. It will probably be available for purchase at a cost of £2 - £3.
Would you wish to purchase it? _____

NAME _____

SCHOOL _____

IX ORIGINAL OBJECTIVES OF FARMING UNIT

Educational Objectives and the Archive Teaching Unit

A group of Leicestershire teachers working on the recent Archive Teaching Unit, 'Leicestershire Farming', drew up the following list of criteria for the construction of the Unit:-

- 1) It should be a unit from which the children could work and not one just used for illustrative purposes, as many Jackdaws are. This indicated the use of workcards and dictated the second criterion.
- 2) That all the documents should be legible. This limited the choice of topic to one whose records were in English seventeenth century handwriting at the earliest.
- 3) Each document should make a point in itself but should also fit into a sequence so that the children could progress from one to another.
- 4) The Unit should contain sufficient material to make class use feasible.

The topic of Leicestershire Farming and the documents chosen satisfied these criteria. In addition, it could be used as a local illustration of a national theme since Leicestershire's contribution in this area was an important one.

More far reaching objectives were based on the lines of Bloom and Krathwohl's 'Taxonomy of Educational Objectives' (Longmans 1956) which has recently been interpreted for historians by Coltham and Fines in the Historical Association pamphlet 'Educational Objectives and the Teaching of History' (Teaching of History pamphlets No.35). The main categories are the general educational objectives, the sub-categories the more specific learning outcomes.

A. COGNITIVE

1. KNOWS SPECIFIC FACTS

- 1a Knows main characteristics of Leicestershire farming before Parliamentary enclosure.

- 1b Identifies the significance of Robert Bakewell's work..
- 1c Describes the process of enclosure.
- 1d Identifies the effect of enclosure upon the landscape and people.
- 2. KNOWS TERMINOLOGY
- 2a Gives meaning of terms, e.g. glebe
- 2b Identifies technical terms in their context.
- 3. KNOWS OF AND CAN HANDLE SOME OF THE MATERIAL OF THE HISTORIAN
- 3a Knows the major sources for the history of farming and where they can be found.
- 3b Transcribes the simpler forms of old handwriting.
- 3c Appreciates the value of contemporary witness.
- 3d Identifies bias, reliability etc in a piece of evidence.
- 3e Recognises the incompleteness for a particular purpose.
- 3f Knows how to deal with gaps in evidence by further search etc.
- 4. UNDERSTANDS MATERIAL ON THE BASIS OF INTERNAL EVIDENCE
- 4a Summarises the content of the material
- 4b Translates material from one form to another for the purpose of understanding, e.g. describes photographs, tabulates written information.
- 4c Differentiates between the various pieces of source material.
- 4d Selects material from a variety of sources relevant to a given theme and presents them in communicable form, e.g. creative writing, essay, etc.
- 5. APPLIES EXTERNAL CRITERIA TO THE MATERIAL
- 5a Recognises a fact in a context different to that in which it was learnt.
- 5b Draws inferences from the material in relation to a wider historical context.
- 5c Makes a judgement on the basis of the material, citing the evidence for that judgement.

- 6. APPRECIATES THE DANGERS OF GENERALISATIONS IN HISTORY
 - 6a Recognises that the local application of a national happening like enclosure may vary from one part of the country to another and even from village to village.
 - 6b Explains why these differences should occur.
- B. AFFECTIVE
 - 7. SHOWS INTEREST IN THE SUBJECT
 - 7a Expresses pleasure in using source material
 - 7b Initiates further personal research
 - 7c Visits places mentioned in the unit

X REVISED OBJECTIVES OF FARMING UNIT

Educational Objectives and the 'Leicestershire Farming' Archive Teaching Unit - A Revision

Historians tend to set schemes of work on the contents of the documents rather than strictly to the list of educational objectives. The latter must be used as a check list to ensure that some of the objectives are not being over-emphasised and others omitted. Equally, the task of question setting and further acquaintance with the documents may reveal that some objectives decided upon are unsuitable for this scheme of work and that others which are suitable have not been included. The following is a revised list of objectives drawn up after the first trials of the Unit.

A COGNITIVE

1. KNOWS SPECIFIC FACTS
 - 1a Knows main characteristics of Leicestershire Farming
 - 1b Identifies the significance of Robert Bakewell's work.
 - 1c Describes the process of enclosure
 - 1d Identifies the effect of enclosure on the Leicestershire landscape
 - 1e Identifies the effect of enclosure on the people involved.
2. KNOWS TERMINOLOGY
 - 2a Can give the meaning of technical terms, e.g. glebe.
 - 2b Identifies technical terms in their context.
3. KNOWS OF AND CAN HANDLE VARIOUS TYPES OF HISTORICAL MATERIAL
 - 3a Learns to refer to a variety of materials to clarify problems
 - 3b Knows the major sources for the history of Leicestershire farming and where they can be found.
 - 3c Transcribes the simpler forms of old printing and handwriting with reasonable ease.

- 3d Appreciates the value of contemporary witness.
- 3e Identifies bias, reliability, assumptions, etc in a piece of evidence.
- 4. UNDERSTANDS THE MATERIAL ON THE BASIS OF INTERNAL EVIDENCE
 - 4a Translates material from one form to another for the purpose of understanding communication, e.g. describes photographs, tabulates information, etc.
 - 4b Summarises the content of a piece of evidence.
 - 4c Selects the relevant piece of evidence to solve a particular problem.
 - 4d Compares and contrast two or more pieces of evidence.
 - 4e Selects material from a variety of sources relevant to a particular theme.
- 5. APPLIES EXTERNAL CRITERIA TO THE MATERIAL
 - 5a Recognises a fact in a context different from that in which it was learnt.
 - 5b Draws inferences from material in relation to a wider general or historical context.
 - 5c Synthesises evidential material with items from own fund of knowledge and experience in imaginative form, e.g. piece of creative writing.
 - 5d Makes a judgement on the basis of the evidence, citing the evidence for that judgement.
 - 5e Compares evidential material with the modern landscape and farming methods.
- 6. RECOGNISES THE LOCAL APPLICATION OF THE MATERIAL STUDIED
 - 6a Relates evidential material to local geographical and historical conditions
 - 6b Realises that national events like enclosure may vary even from vil-
lage to village in one county.

The AFFECTIVE objectives were not tested and remain as before.

XI UNTIMED OBSERVATION SCHEDULE, FIRST AND SECOND TRIALS

'Leicestershire Farming' - Untimed Classroom Observation

A ORGANISATION OF CLASS

- | | | | |
|----|-----------------------------------|---------------------|---|
| 1. | Number in class | | — |
| 2. | Are the class | unstreamed | — |
| | | partially streamed | — |
| | | streamed | — |
| 3. | Are the class | boys | — |
| | | girls | — |
| | | mixed | — |
| 4. | Are desks or tables arranged in | rows | — |
| | | irregular groups | — |
| | | regular groups | — |
| 5. | In the classroom, is there | plenty of room | — |
| | | adequate room | — |
| | | overcrowding | — |
| 6. | Is free movement in the classroom | permitted | — |
| | | partially permitted | — |
| | | forbidden | — |
| 7. | Is communication between pupils | permitted | — |
| | | partially permitted | — |
| | | forbidden | — |
| 8. | Is working space available | only in classroom | — |
| | | resources area | — |
| | | library | — |
| | | corridor | — |
| | | other | — |

9. Do children all stay in the classroom all time _____
 some work elsewhere _____
 some go outside for reference _____

B. INITIATIVE

1. Was the Farming Unit used by class as a whole _____
 some of the class _____
2. Was the use of the Unit compulsory _____
 suggested _____
 free choice _____
3. Of those using the Unit, did they work as class as a whole _____
 pairs _____
 individuals _____
 groups _____
4. If groups or pairs, were they usual working groups _____
 allocated by teacher _____
 suggested by teacher _____
 free choice _____
5. To what extent were the children's largely _____
 activities directed by the teacher to some extent _____
 not at all _____
6. Was the use of different patches my worksheets only _____
 governed by teacher's worksheets _____
 both types _____
 no worksheets _____

C. RESOURCES

1. What patches were in use? (cross out those used) 1/2/3/4/5/6/7/8/9/10
2. Were Background Books used for class reading _____
 private directed reading _____
 reference _____
 not at all _____

- | | | |
|---|----------------------|---|
| 3. Were my worksheets in use? | entirely | — |
| | partially | — |
| | not at all | — |
| 4. Were teacher's worksheets in use? | entirely | — |
| | partially | — |
| | not at all | — |
| 5. Where transcripts were in use, were they used? | with documents | — |
| | instead of documents | — |
| 6. What additional resource materials were there? | none | — |
| | books | — |
| | visual aids | — |
| | archive material | — |
| | home produced | — |
| | other | — |
| 7. Was the source of additional materials | school library | — |
| | County library | — |
| | resources centre | — |
| | history room | — |
| | teacher's own | — |
| | pupil's own | — |
| | other | — |
| 8. Was prior planning by teacher | thorough | — |
| | adequate | — |
| | barely adequate | — |
| | unsatisfactory | — |

D. VARIETY OF USE

1. Was 'Leicestershire farming' used by teacher as
- illustrative material _____
 - additional resource material _____
 - basis of project work _____
 - on its own _____
 - other _____
2. Techniques used by teacher in lesson observed
- exposition _____
 - use of visual aids _____
 - individual work _____
 - provision of own worksheets _____
 - class Q/A _____
 - other _____
 - marking pupils' work _____
3. Techniques used by pupils in lesson observed
- class discussion _____
 - patch worksheets _____
 - other worksheets _____
 - essays _____
 - drawing _____
 - models _____
 - consulting Background Books _____
 - consulting library/textbooks _____
 - consulting other resource material _____
 - marking own work from T.Book _____
4. How did the teacher react when interest flagged
- persist with work being done _____
 - suggest fresh approach _____
 - change to other work for while _____

XII OBSERVATION SCHEDULE OF PUPIL QUESTIONS AND TEACHER RESPONSES, SECOND TRIALS

1. PUPIL QUESTIONS

1A Pupils ask questions or make statements which reveal

- 1A1 Lack of interest in subject or topic A1
- 1A2 Lack of interest in task set A2
- 1A3 Unwillingness to read documents A3
- 1A4 Other attitudes (note questions) A4

1B Pupils ask questions to obtain ASSISTANCE in

- 1B1 Acquiring factual information about subject B1
- 1B2 Reading a word or words in documents B2
- 1B3 Understanding meaning of word in document B3
- 1B4 Understanding document as a whole B4
- 1B5 Understanding task set on documents B5
- 1B6 Other (note question) B6

1C Pupils ask questions to find out

- 1C1 What work to do next C1
- 1C2 Whether to use reference material in classroom C2

- 1C3 Whether to use reference material in library etc C3
- 1C4 Whether they can have crayons, paper etc C4
- 1C5 Whether they can work with friend/group C5
- 1C6 Other (note question) C6

2. TEACHER RESPONSES

- 2D Teacher replies by
- 2D1 Statement of fact, e.g. tells meaning of word D1
- 2D2 Encouraging pupil initiative on task set D2
- 2D3 Suggesting a fresh approach to work D3
- 2D4 Directing pupils to other sources of information D4
- 2D5 Permitting pupils to work as they wished D5
- 2D6 Insisting on specific methods of work D6
- 2D7 Other responses (note what) D7

XIII INTERVIEW OF THE TWO CHILDREN'S GROUPS, SECOND TRIALS

		A	B
1. Do you enjoy what you are doing?	very much	—	—
	quite a lot	—	—
	not very much	—	—
	not able to judge	—	—
2. Do you like this better than normal history lessons?	definitely	—	—
	about the same	—	—
	other ways better	—	—
3. Have you ever used documents before?	a lot	—	—
	sometimes	—	—
	never	—	—
4. Would you want to do this kind of work again?	definitely	—	—
	not sure	—	—
	no	—	—
5. How did you come to be doing that Patch?	Teacher gave it	—	—
	Teacher gave us some to choose	—	—
	Working through sequence	—	—
	Following written instructions	—	—
	Free choice	—	—
6. How do you go on from one Patch to next?	Allocated by teacher	—	—
	Asked teacher and chose	—	—
	Chose without asking teacher	—	—
	Following written instructions	—	—

7. What do you do if you can't work out answer?

- Ask teacher the answer
- Consult Background Book
- Consult ref. material in classroom
- Consult book in library
- Ask teacher if can consult book
- other (what?)

8. Are the documents hard to read?

- All are
- Some are
- None are

9. Are the documents hard to understand?

- Satisfactory
- Easy
- Difficult

10. Are the questions on the worksheets

- Satisfactory
- Too easy
- Too hard

11. How do you get work marked?

- We give it in
- Teacher does it in lesson
- We use Teachers Book
- Other

- c1e Experience in making inferences and judgements _____
- c1f Appreciation of local application of national events like enclosure _____
- c1g Increased interest in history? _____
- c2 Which of the above objectives do you consider most important for your class
- c1a _____
- c1b _____
- c1c _____
- c1d _____
- c1e _____
- c1f _____
- c1g _____
- c3 Were the objectives suitable for the age and ability range you were teaching?
- Yes _____
- No _____
- partly _____
- Could you comment on this _____
- c4 Was there sufficient material for your use?
- Yes _____
- No _____
- Could you specify what was short? _____

THE GENERAL APPROACH

- d1 Have the class used archive material before
- Frequently _____
- Occasionally _____
- Never _____
- d2 Have the children used worksheets before?
- Frequently _____
- occasionally _____
- Never _____

- d3 Did you read the Teacher's Book? Yes _____
 No _____
 Parts of it _____
- d4 The Book shows that the questions in the Unit were designed to fulfil certain objectives. Do you think that such a statement of objectives is very useful _____
 interesting but not useful _____
 unnecessary _____
- d5 Could you (or did you) make use of the Unit just as easily without reading the Teacher's Book? just as easily _____
 not quite as easily _____
 much less easily _____
- d6 Do you feel that the section on using the Units was satisfactory _____
 did not give enough guidance _____
 unnecessary _____
- d7 Were the answers to the worksheets useful _____
 not sufficiently detailed _____
 unnecessary _____
- d8 Would you have welcomed any more information in the Teacher's Book? Yes _____
 No _____
- Please specify what if 'yes' _____

BACKGROUND BOOK

- e1 Were there sufficient for use in your class? Yes _____
 No _____

- e2 How were they used?
- Class reading _____
 - Reference _____
 - Private directed reading _____
 - Not used _____
 - Other _____

- e3 If they were used, which sections did the children find most useful?
- Introduction to the documents _____
 - Background to the history of farming _____
 - Glossary of technical terms _____
 - Further reading _____

USE IN YOUR CLASS

- f1 With what classes did you use the Unit
- O Level/CSE _____
 - 3rd/4th year _____
 - 1st/2nd year _____
- f2 What ability levels?
- examination forms _____
 - average _____
 - below average _____
- f3 How many children used the material? _____
- f4 For how long was the Unit used?
- one term _____
 - half a term _____
 - less than half a term _____
- f5 How often per week was the Unit used?
- more than once _____
 - once _____
 - not every week _____
- f6 Was the Unit used as
- illustrative material _____
 - additional resource material _____
 - basis for individual projects _____
 - basis for group projects _____
 - other (please specify) _____

f7 Was it used by class as a whole ___
 groups ___
 individuals ___

f8 Was the use of the Unit by the class free choice ___
 compulsory ___

f9 Would you please delete which patches were never used?

1/2/3/4/5/6/7/8/9/10

Could you say why?

f10 Could you underline which patch(es) were used most?

1/2/3/4/5/6/7/8/9/10

Could you say why?

DOCUMENTS AND TRANSCRIPTS

g1 Could the children read the documents? All ___

Some ___

None ___

g2 Did they make use of the printed transcripts? Yes ___

No ___

g3 If they used the transcripts, were they used
 instead of the document ___

in conjunction with the document ___

Could you comment on the value of documents as opposed to transcripts.

Are both necessary in a pack like this? _____

g4 Do you think the reproduction of the documents was good ___

indifferent ___

bad ___

Any suggestions for improvement? _____

- g5 Was the colour coding of the Patches useful —
 unnecessary —
 useful but detrimental to reproduction —
- g5 Are the documents better loose in patch envelopes —
 stapled together —
 other (please specify) —

WORKSHEETS

- h1 Did the children use the worksheets? Yes —
 No —
 Some —
- h2 If you use the Unit again, would you still use the worksheets?
 Yes —
 No —
 Some —
- h3 Was the level of the questions for your age and ability group
 easy —
 average —
 difficult —
- h4 If the children did not use the worksheets did you
 provide your own worksheets —
 use the documents orally —
 allow the children free use —
 other (please specify) —

GENERAL

- i1 Did you introduce the topic before the children used the documents?
 Extensively —
 Briefly —
 Not at all —

- i2 Did you tell the children anything about the nature of the documents?
e.g. where they came from? Yes ___
No ___
- i3 Did the children need help? A lot ___
Some ___
A little ___
None ___
- i4 Did you give help to class as a whole ___
groups ___
individuals ___
- i5 What additional resource materials did you use
audio-visual aids ___
other archive materials ___
books ___
home produced ___
other (please specify) ___
- i6 What was the source of additional material?
school library ___
County Library ___
resource centre ___
teacher's own ___
pupil's own ___
history room ___
other (please specify) ___
- i7 What additional work did the children do? none ___
models ___
writing/notes ___
maps ___
other (please specify) ___

i8 Did you take them on any visits? Yes ___
No ___

If so, where? _____

INTEREST OF YOUR CLASS

j1 What was your feeling about the children's interest in the Unit?

Better than expected ___

Satisfactory ___

Unsatisfactory ___

j2 Where there was an interest, was it due to Subject ___

Local area interest ___

Using documents ___

Detail in documents ___

Worksheets ___

other ___

j3 Were there particular situations in which their interest flagged?

Yes ___

No ___

Could you give examples? _____

j4 If this happened, how did you cope? Persist with the work ___

Suggest a fresh approach ___

Use other material ___

Signature of teacher _____

Thank you for your help in filling this in for me, Marilyn Palmer.

XV RESOURCES IN THE TEACHING OF HISTORY QUESTIONNAIRE

TO the Head of the History Department, _____ School.

Dear _____,

I have been responsible for the production of two local archive teaching units, one on "Law and Order in Nineteenth Century Leicestershire" and one on "Leicestershire Farming", both produced by Thurmaston Teachers' Centre. I am interested to know whether this type of material is still needed in schools or whether schools are now producing their own materials. I should be most grateful if you could find the time to fill in the enclosed questionnaire and return it to me in the enclosed, stamped, addressed envelope by October if possible. The term "resources" is used as meaning written historical materials apart from printed books; it includes Jackdaws, photocopied documents, gobbets and question sheets etc. I am aware that many History Departments operate in a Humanities Framework and have tried to word the questions accordingly.

Mrs Marilyn Palmer, Senior Lecturer in History,
Loughborough College of Education.

VARIETY OF RESOURCES

1. Which of the following resources do you use in history/humanities lessons? (please indicate by ticks).
 - (a) Jackdaws
 - (b) Commercially produced history kits like Macmillan's "Exploring History" and Longman's Project Kits?
 - (c) Archive Teaching Units from other areas, like the Newcastle Units?
 - (d) Local Archive Teaching Units - Law and Order in C19 Leicestershire
 - Leicestershire Farming
 - Packs of C19 materials from Leicester School of Education Library

- Mines and Mining, Thurmaston
Teachers' Centre
- Leicestershire Railways, County
Library.

- (e) Books of printed documents, like Wall and Dawson, "Society and Industry in Q9".
- (f) Home-produced resources
- (g) Other (please specify) _____
2. Which of the above do you find most useful? _____
 Could you comment on the merits and defects of the resources you use?

3. Are resources produced by people outside the school of any use? _____
4. If so, are they better as (a) materials packs, unstructured? _____
 (b) structured teaching or learning units? _____
 (c) available for purchase? _____
 (d) available for loan? _____

PRODUCTION OF RESOURCES

5. Has the school a Resources Centre? _____
6. If 'no' to Q.5, has the History Department access to duplicating equipment? _____
7. In the situations posed by either Q.5 or Q.6 has the History Dept. use of: (please tick)
- | | |
|-------------------------------|-------------------------------|
| (a) Banda | (d) Gestetner-type duplicator |
| (b) Photocopier | (e) Offset Litho equipment |
| (c) Electronic Stencil Cutter | (f) Photographic equipment |
8. Has the Resources Centre/duplicating area
- (a) part-time technician _____
- (b) full-time technician _____
- (c) more than one technician _____

- (d) no technician _____
9. Have the following had a training course in the production of resources? (a) the Resources staff? _____
 (b) the History staff? _____
10. Is the material used in history/humanities compiled by (a) department concerned _____
 (b) resources staff _____
 duplicated by (a) department staff _____
 (b) resources staff _____
11. Is the preparation of resources allowed for in the timetable of teaching staff _____
 resources staff _____
12. If not, when are the resources prepared? _____
13. Do any of the teaching or resources staff concerned with history/humanities have time available during school hours for visits to collect material, e.g. to the County Record Office? _____

WORKING FROM RESOURCES

14. Are the resources ticked in Q.1 used as
 (a) illustrations by the teacher _____
 (b) as a basis for group work _____
 (c) as a basis for independent individual work _____
 (d) other (please specify) _____
15. How is work structured around the resources?
 (a) by giving questions on the material in the same sheet or booklet?
 (b) by setting general topics to be researched? _____
 (c) by setting specific questions on the resources on separate sheets? _____
 (d) other (please specify) _____

16. Are the questions/topics set on the resources intended to develop
(please tick)
- (a) knowledge of facts _____
 - (b) experience in handling source material _____
 - (c) experience in the skills of comprehension, analysis etc _____
 - (d) experience in making inferences and judgements _____
 - (e) the historical imagination _____
 - (f) other (please specify) _____
- Which of the above do you consider most important? _____
17. Have you come across (please tick):
- (a) Bloom and Krathwohl, "A Taxonomy of Educational Objectives".
 - (b) Coltham and Fines, "Educational Objectives in the Teaching of History: a suggested Framework", Historical Association, TH35.
 - (c) Jerome Bruner, "The Process of Education", (The spiral curriculum).
18. If so, have you used any of them in the preparation of work on history/humanities resources? _____
19. Do you take the Historical Association publication, "Teaching History"?

20. Are the children led on from the resources to look at (please tick)
- (a) books in the classroom/history room
 - (b) books in the school library
 - (c) books in other libraries
 - (d) slides or filmstrips
 - (e) tapes
 - (f) places outside the school, e.g. museums, places of historical interest?

21. With what age-groups are resources used? (please tick)

- (a) 11-14
- (b) 14-16 leavers
- (c) 14+ exam forms
- (d) sixth forms

22. Could you tick in the appropriate space to show how often resources are used with:-

	Every lesson	Every week	Each halfterm	Each term	Each year	Never
<u>11-14 age range</u>						
Textbooks						
Topic Books						
Jackdaw type resources						
Home-produced resources						
Audio-visual aids						
<u>14-16 Leavers</u>						
Textbooks						
Topic Books						
Jackdaw type resources						
Home-produced resources						
Audio-visual aids						
<u>14+ Exam Forms</u>						
Textbooks						
Topic Books						
Jackdaw type resources						
Home-produced resources						
Audio-visual aids						

APPENDIX 3

SPECIMEN SHEETS FROM COMPUTER PRINTOUT

The programs used were from the Statistical Package for the Social Sciences, which was run for the author by Paul Croll of Leicester University School of Education.

Programme I: A count and analysis of the number of children in each of the 1-5 or 1-3 categories for the 28 listed variables

TEST M2 14/07/76 PAGE 8

FILE RMCTEST (CREATION DATE = 14/07/76)

VARIABLE PT1

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	1.00	24	33.3	33.3	33.3
	2.00	26	36.1	36.1	69.4
	3.00	18	25.0	25.0	94.4
	4.00	4	5.6	5.6	100.0
	TOTAL	72	100.0	100.0	100.0

STATISTICS ..

MEAN	2.028	STD ERROR	0.106	MEDIAN	1.962
MODE	2.000	STD DEV	0.903	VARIANCE	0.186
KURTOSIS	-0.783	SKEWNESS	0.407	RANGE	3.000
MINIMUM	1.000	MAXIMUM	4.000		

VALID OBSERVATIONS - 72

MISSING OBSERVATIONS - 0

Programme 2: The calculation of the Pearson Correlation Coefficient for each variable with each of the other variables

TEST M2

15/07/76

PAGE 9

FILE RMCTEST (CREATION DATE = 15/07/76)

-----PEARSON CORRELATION COEFFICIENTS-----

VARIABLE PAIR	VARIABLE PAIR	VARIABLE PAIR	VARIABLE PAIR	VARIABLE PAIR	VARIABLE PAIR	VARIABLE PAIR					
Q20 WITH ST	0.2403 N(72) SIG .021	Q20 WITH DT	0.0173 N(72) SIG .443	Q20 WITH SCH	-0.1522 N(72) SIG .101	Q20 WITH LD2	-0.2338 N(72) SIG .024	Q20 WITH LD3	-0.2229 N(72) SIG .030	Q20 WITH VG	0.1421 N(72) SIG .117
Q22 WITH SEX	-0.1797 N(72) SIG .066	Q22 WITH AGE	-0.4599 N(72) SIG .001	Q22 WITH ST	0.2809 N(72) SIG .008	Q22 WITH DT	0.3763 N(72) SIG .001	Q22 WITH SCH	-0.5179 N(72) SIG .001	Q22 WITH LD2	-0.2406 N(72) SIG .021
Q22 WITH LD3	-0.2475 N(72) SIG .018	Q22 WITH VG	0.4380 N(72) SIG .001	SEX WITH AGE	0.2263 N(72) SIG .028	SEX WITH ST	0.1405 N(72) SIG .119	SEX WITH DT	0.0525 N(72) SIG .331	SEX WITH SCH	0.1320 N(72) SIG .135
SEX WITH LD2	-0.1521 N(72) SIG .101	SEX WITH LD3	-0.1601 N(72) SIG .090	SEX WITH VG	-0.1549 N(72) SIG .097	AGE WITH ST	-0.3346 N(72) SIG .002	AGE WITH DT	-0.4104 N(72) SIG .001	AGE WITH SCH	0.8988 N(72) SIG .001
AGE WITH LD2	0.3018 N(72) SIG .005	AGE WITH LD3	0.2959 N(72) SIG .006	AGE WITH VG	-0.3868 N(72) SIG .001	ST WITH DT	0.4271 N(72) SIG .001	ST WITH SCH	-0.4484 N(72) SIG .001	ST WITH LD2	0.0000 N(72) SIG .500

ST	-0.0388	0.2900	DT	-0.5419	0.0000	DT	0.0136	DT	0.4192
WITH	N(72)	N(72)	WITH	N(72)	N(72)	WITH	N(72)	WITH	N(72)
LD3	SIG .373	SIG .007	SCH	SIG .001	SIG .500	LD3	SIG .455	VG	SIG .001
SCH	0.2356	0.2389	SCH	-0.4033	0.9720	LD2	-0.3888	LD3	-0.4032
WITH	N(72)	N(72)	WITH	N(72)	N(72)	WITH	N(72)	WITH	N(72)
LD2	SIG .023	SIG .022	VG	SIG .001	SIG .001	VG	SIG .001	VG	SIG .001

A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED

Programme 3: The crosstabulation of the test items against the independent variables of IQ, verbal ability, age and sex.

TEST M2

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FILE RMCTEST (CREATION DATE = 15/07/76)

***** CROSSTABULATION OF *****
 SOURCES 1 BY IQ
 ***** PAGE 1 OF 1

SOURCES 1	IQ					ROW TOTAL
	COUNT					
	ROW PCT					
COL PCT						
TOT PCT	1.00	2.00	3.00	4.00	5.00	
1.00	10	2	7	3	1	23
	43.5	8.7	30.4	13.0	4.3	31.9
	45.5	16.7	30.4	25.0	33.3	
	13.9	2.8	9.7	4.2	1.4	
2.00	9	2	6	4	1	22
	40.9	9.1	27.3	18.2	4.5	30.6
	40.9	16.7	26.1	33.3	33.3	
	12.5	2.8	8.3	5.6	1.4	
3.00	2	6	7	2	0	17
	11.8	35.3	41.2	11.8	0.0	23.6
	9.1	50.0	30.4	16.7	0.0	
	2.8	8.3	9.7	2.8	0.0	
4.00	1	1	2	1	0	5
	20.0	20.0	40.0	20.0	0.0	6.9
	4.5	8.3	8.7	8.3	0.0	
	1.4	1.4	2.8	1.4	0.0	
5.00	0	1	1	2	1	5
	0.0	20.0	20.0	40.0	20.0	6.9
	0.0	8.3	4.3	16.7	33.3	
	0.0	1.4	1.4	2.8	1.4	
COLUMN TOTAL	22	12	23	12	3	72
	30.6	16.7	31.9	16.7	4.2	100.00

Programme 4: A breakdown of each item of the categories of the four independent variables of IQ, verbal ability, age and sex

TEST M2

15/07/76

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FILE RMCTEST (CREATION DATE = 15/07/76)

----- DESCRIPTION OF SUBPOPULATION -----
 CRITERION VARIABLE SOURCES 1
 BROKEN DOWN BY IQ

FOR ENTIRE POPULATION

MEAN 2.264
 STD DEV 1.187
 VARIANCE 1.408
 N (72)

VARIABLE IQ

CODE 1.00

MEAN 1.727
 STD DEV 0.827
 VARIANCE 0.684
 N (22)

CODE 2.00

MEAN 2.750
 STD DEV 1.138
 VARIANCE 1.295
 N (12)

CODE 3.00

MEAN 2.304
 STD DEV 1.146
 VARIANCE 1.312
 N (23)

CODE 4.00

MEAN 2.583
 STD DEV 1.443
 VARIANCE 2.083
 N (12)

CODE 5.00

MEAN 2.667
 STD DEV 2.082
 VARIANCE 4.333
 N (3)

TOTAL CASES = 72

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