CHILDREN'S LEARNING, KEY STAGE 2: RECENT FINDINGS

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The purpose of this research was to investigate the ways in which young children may be encouraged to think in a genuinely historical way. Bruner has suggested that any discipline can be structured so that the thinking processes and concepts which are central to it can be tackled from the very beginning, but that in the humanities this has been postponed on the mistaken grounds that it is too difficult.

> Much remains to be done... carrying out the kind of research that can give support and guidance... in improving teaching. (Bruner, 1963, p.32).

Yet much research has discouraged the expectation that young children are capable of embryonic historical thinking. Often, research has been undertaken with older children; it has involved complex questions and written sources (da Silva, 1969; Booth, 1969; Rees, 1976; Dickinson and Lee, 1978). Research with younger children has classified responses within a rigid Piagetian framework (Coltham, 1960; Peel, 1960; Hallam, 1975), or emphasised the importance of concepts of time (Smith and Tomlinson, 1977; Crowther, 1982). Some have thought that children's immaturity and limited knowledge prevent useful speculation about the ways in which people in the past may have felt, thought, and behaved because the

relationship between interpreting sources and the ill-defined concepts of historical imagination and historical empathy was unclear.

Nevertheless, there has been an expectation that children's active involvement in the processes of historical thinking should be encouraged (Schools Council, 1975-80; DES, 1978; 1986; Cowie, 1985; Marbeau, 1988). Psychologists' research into inferential thinking (Piaget, 1926; 1928; Donaldson, 1978; Flavell, 1985), creative thinking (Borke, 1978; Cox, 1986), discursive teaching (Biott, 1984; Prisk, 1987), and concept development (Klausmeier, 1979; Furth, 1980; Vygotsky, 1986) suggests that young children can think at a higher level in history than had previously been supposed. Yet, except for small-scale studies (Wright, 1984; Davis, 1986; Hodgkinson, 1986), there has been no research into children's levels of understanding of sources (Shawyer, Booth, and Brown, 1988).

My research hoped to show that young children can become actively involved in making historical inferences about sources, that there is a pattern in the early stages of their thinking, that their thinking can be evaluated, and that teachi strategies are significant in enabling them to make historical inferences. It was undertaken as a class teacher of Year 4 children (8 to 9 year-olds) over two consecutive years.

THE HYPOTHESES

The research investigated the hypotheses that,

- children can make deductions and valid inferences about a range of sources: artefacts, pictures, maps, diagrams, written sources;
- that they can make a distinction between what is known, what can be inferred, and what cannot be known;
- that teaching strategies are significant in their ability to do this; and

- that their thinking can be evaluated.

THE DESIGN

EXPERIMENTAL GROUPS

Two 'experimental groups' were taught in consecutive years by the researcher. The teaching strategies used involved:

- an integrated curriculum;
- visits to a site in the locality where there was evidence of settlement during the periods studied, and 'further afield' visits to Grimes Graves, the British Museum and Lullingstone Roman Villa;
- class discussion of key sources; and
- the introduction and use of selected concepts of different levels of abstraction (Ausubel, 1968; Klausmeier, 1979; Vygotsky, 1986; Blyth, 1990).

CONTROL GROUP

The experimental groups were matched for ability, by analyses of variance and of covariance, with a control group in another school, using the NFER non-verbal reasoning test BD as covariate. Children in the control group were taught the same four periods of history as those in the experimental groups, by an experienced teacher using his own methods. It is important to explain that the research was a case study rather than a rigorous experimental design, because it proved impossible to collect detailed information about the teaching methods experienced by the control group.

The control group was taught history as a discrete subject for one session each week by the head teacher, a history graduate, using a traditional textbook

(Unstead, 1964). He was not privy to the research design, partly because ethical issues are involved in explicitly requiring a person to teach in a way the researcher may not consider best practice, and also because informed involvement may influence results. Prior to the National Curriculum, few teachers kept detailed plans and it was decided, for these and other reasons, that demands beyond teaching specified content to a particular age-group over a specific period would jeopardise his willingness to participate. Therefore it was not possible to analyse the variables which affected the control group results: less time spent on history, the relationship between the class and the teacher, the teacher's motivation, and didactic teaching with unspecified aims.

However, the control group was necessary in order to compare the responses of the groups taught by the researcher with those of children of a similar age who had not experienced her teaching strategies.

UNITS OF STUDY

The experimental groups and the control group were taught the same four periods of history: the Stone Ages, the Iron Age, the Romans and the Saxons. Each unit lasted for five weeks and consisted of five 'lessons'; three lessons were concerned with evidence of settlement, one with beliefs, and one was based on a visit to a local site.

THE TESTS

WRITTEN 'EVIDENCE' TESTS

At the end of each unit, the children in each of the groups took a written test on five consecutive days. They were asked to pretend they were archaeologists and to fill in a 'report sheet' saying what they knew for certain, what 'reasonable

guesses' they could make, and what they would like to know about five previously unseen sources related to the period: an artefact, a picture, an archaeologist's plan, a map, and a written source. The layout of the sheet was designed to reflect the assessment scale, and to encourage children to use a logical connective to form an argument based on a premise, to form two such arguments, and to use an abstract concept to synthesize the two statements.

GROUP DISCUSSIONS

Tape recordings were made of group discussions of each of the sources used in the written tests. Each group consisted of about five children. During the first year of the study, the teacher was present to cue and question. During the second year, no adult was present (Doise, 1978; Meadows, 1983; Cox, 1986).

STORY-WRITING TESTS

A story-writing test was also given to the second experimental group at the end of each unit. Children were given a source related to the period which was concerned with beliefs and ritual. They were asked to write a story which tried to explain the source through the eyes of someone living at the time. This investigated their ability to piece together their knowledge of the period in order to try to explain ideas and attitudes different from their own.

ASSESSMENT SCALES

For written 'evidence' tests a ten-point assessment scale was devised based on the work of Piaget (1926, 1928) and subsequent psychologists (e.g. Donaldson, 1978; Butterworth and Light, 1982; Meadows, 1983), and on research into children's thinking in history (Peel, 1960; Thompson, 1962; Hallam, 1975; Booth,

1979; Cooper, 1983). Previous scales had to be adapted as they had been concerned with older children and with written sources. The reliability of the researcher and an independent observer was calculated using Cohen's Kappa coefficient, and showed a high degree of reliability. The tape-recorded discussions were mapped, using the same assessment scale as the written evidence tests. The story-writing was assessed using a scale adapted from the levels described by Ashby and Lee (1987).

FINDINGS

The written evidence scores were analysed using analyses of variance and covariance. The main findings of the study were:

- By unit 4, children responded at a similar level to each type of evidence. This is probably because language, and understanding the kinds of deductions and inferences about historical sources which are appropriate, is more important in influencing children's thinking than whether the source is 'concrete' or abstract.
- The children were able to differentiate between 'knowing' and 'guessing' and found both equally easy, but they consistently found it more difficult to say what they 'would like to know'. This is probably too open and unstructured a question.
- Children in the 'unled' discussion groups developed as many valid arguments as children in the 'led' groups, probably because they had learned how to discuss sources in class lessons. In the led groups, they explored points more fully, in a more structured way, and used more abstract vocabulary; unled discussions encouraged children to

correct each other and to explore and express their ideas in their own ways.

- The experimental groups both improved considerably over the four units in the number of valid points they made and in the number of sequential arguments they produced, both in the written evidence tests and in the led and unled discussions. The control group also improved, though to a lesser extent. This was probably because they became used to the thinking required by the consistent layout of the test.
- Tallies of selected concepts used in written tests and in led and unled discussions showed that children in the experimental groups used many of the selected, taught concepts. (It is not surprising that the control groups rarely used these concepts since they had not been introduced to them). Learning selected vocabulary probably helped the experimental children to make a greater variety of inferences than the control group; even if they did not name the concept they had learned, they introduced ideas associated with the concept.
  For example, R.L. had learned to use such concepts as kingship, authority, and law in class discussion and so, in spite of great difficulty in writing, was able to respond to a slide of the Sutton Hoo Sceptre with the idea that,

  > "It must of been a simdle (symbol) ∴ it was prechurs (precious). It was hard to make ∴ it took a long time, and so it was uneck (unique)"; and J.K. could ask, "Why have it? Wat was its purpose? Was it to show his power to rule weth, or to make

people thing he was power? Wid the king of thort it ruled the peoples minds?"

- There was a qualitative difference in the inferences of the experimental and the control groups. The experimental groups, probably because of discursive teaching strategies, considered how sources were made and used, and what they may have meant to the people who made and used them. (Collingwood, 1939, defined these as key questions about historical sources). This led them to begin to try to explain attitudes and values different from their own.
- The story-writing test was less successful in helping children to consider attitudes, values, and beliefs different from their own, probably because to reconstruct a whole society in another period was too complex and often led to anachronisms.
- It therefore seems that children can best be helped to begin to develop historical imagination, in a restricted way, through learning to make a range of valid suppositions about sources. Their inferences will be limited by their immaturity and their restricted knowledge. However, it is essential that they embark on this process of making a variety of suppositions about evidence in order to try to understand how people in the past may have felt and thought, because this is the bridge which can eventually lead them to true historical empathy.

IMPLICATIONS FOR TEACHERS

First, children can learn about the past through active involvement in the processes of historical enquiry. They are encouraged to do so in a relaxed atmosphere, conducive to open and animated thought, in which they can develop

intellectual autonomy, take risks, exchange ideas, and organise their thoughts relative to those of others. Second, teachers need to select a small number of key sources of different types, which reflect significant aspects of a period, and to show children, through whole-class discussions the kinds of questions to ask, the kinds of probabilistic inferences to make about them, and how to support their ideas with reasons. In order to do this, children need to be introduced to and use selected, special vocabulary. Third, through making such inferences, children begin to consider what sources may have meant to the people who made and used them, and the feelings, ideas, and behaviour the sources reflect, which may be different from their own. In this way children develop embryonic historical imagination more easily than by projecting themselves into the past through story-writing, which involves complex reconstructions and is more likely to encourage unchecked anachronisms. Fourth, if children learn how to discuss sources through whole-class teaching, they are able to transfer this to small-group discussion when no adult is present. The role of the teacher is to select sources, to observe, support, share, and extend children's investigations. Not only does this encourage children's independence, it also frees the teacher to observe, reflect on, and even research the processes of children's thinking and so extend their own professional understanding and expertise.

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