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AN ANALYSIS OF SOME SCHOOL HISTORY TEXTBOOKS
WITH SPECIAL REFERENCE TO
STYLES OF CONCEPT PRESENTATION

D I S S E R T A T I O N

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ABSTRACT

The aim of this study was to find out whether the school history textbooks used in Transkei Junior and Senior secondary schools were adequate in helping pupils meet the demands of their course. The results of the study would be used as argument for or against the assumption that the type of textbooks used in Transkei schools, through their inadequacy in equipping the pupils with the necessary skills for "doing" history, do contribute to the high failure rate in history, especially that they, are in most schools, the only recourse for both the teacher and the pupil.

In particular the study intended to see what strategies the history textbooks used to aid concept understanding^d which is crucial to the understanding of history.

Twenty three criteria, fourteen objective and nine subjective were used to assess the books for readability and for strategies which might aid concept understanding. Eight books were assessed : four Std 5 and four Std 8 books.

The results showed that only three of the eight books catered for the development of skills of learning history and were suited to the level of the pupils for whom they were intended. History textbooks therefore need to be improved so as to foster the skills of learning history. Their inadequacy could be a contributory factor to the high rate of failure. In-service and pre-service training in methods of textbook analysis can assist in text-book selection and for changes in methods of teaching to supplement shortcomings in books which are commonly used.

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PREFACE

Much research has been done on school history textbooks, but the major focus of that research has been mainly on identifying instances of bias and prejudice. Those research studies have yielded much valuable information on history textbooks. However, textbooks can still be analysed from other angles, for example, from the point of readability or language complexity.

This study examines school history textbooks from an angle different from that of bias and prejudice. It analyses the textbooks from the point of view of their methods and styles of concept presentation.

Interest in analysing the history textbooks used in Transkei schools was first aroused by noticing a considerable decline in the performance of history candidates in the Std 7, the Std 8 and the Std 10 public examinations. Although the reasons for the poor performance of candidates might be numerous (for example, lack of motivation, pupils' abilities, teachers' professional skills, and the teaching facilities available at the schools), it was felt that a research study on textbooks, as part of the facilities available at the schools, could contribute towards improvement of history teaching and learning.

The researcher was also influenced by the 1979 Report of the Commission of Inquiry into Education in the Republic of Transkei (the Taylor Commission's Report) which indicated that the textbooks used then were inadequate for equipping the pupils with the necessary skills of learning history. The need to examine school history textbooks was further strengthened by the fact that textbooks still remain the most commonly used aid in Transkei and other underdeveloped states.

Eight history textbooks have been analysed in this study : four for Std 5, the initial year of the junior secondary phase, and another four for Std 8 the, initial year of the matric course.

Various methods were applied in assessing the textbooks : objective tests of readability and concept presentation, subjective criteria like the quality of illustrations and assignments, and interviews with teachers. The emphasis was on the various methods used by the books to present concepts, because language comprehension is important for the understanding of history. The way in which textbooks handle concepts can aid or hinder pupils' understanding, especially for pupils who are the second language speakers of the language of instruction, English.

A range of styles of concept presentation was used to show how the selected concepts were presented in each book.

The books analysed were those currently used in Transkei Schools.

The researcher hopes that the history teachers will find the criteria useful as tools of textbook analysis. The criteria can be used to assess the strengths and weaknesses of the books so that methods can be devised which supplement the textbooks' shortcomings.

CHAPTER 1

INTRODUCTION

1.1 Motivation for the Study

The performance of history candidates in the Std 7, Std 8 and Std 10 examinations in Transkei has been unsatisfactory over the last five years. Table 1.1 shows the history examination results of candidates in these classes from 1982 to 1986, 1987 being the year in which the data was collected.

Table 1.1

Pass Rate: Std 7,8,9 History Pupils in Transkei: 1982-1986

Year	<u>STD 7</u>			<u>STD 8</u>			<u>STD 10</u>					
	Total Candidates	Candidates		Total Candidates	Candidates		HIGHER GRADE			STANDARD GRADE		
		Passed	Percentage		Passed	Percentage	Total Cands	No Passed	Percentage	Total Cands	No Passed	Percentage
4	6	6	4	6	6	5	4	4	5	3	2	5
1982	28 883	17 953	62,0	16 412	11 203	68,22	4041	1108	27,41	175	36	20,57
1983	33 812	14 053	55,00	17 511	11 749	67,1	5713	1022	17,88	282	108	38,02
1984	38 753	27 113	70,00	12 265	7 355	60,0	3970	1234	31,07	1759	636	36,17
1985	31 283	18 355	58,67	11 244	6 022	72,52	5350	1777	33,2	2142	1442	67,3
1986	37 518	21 409	56,97	16 631	11 066	66,18	5644	2241	39,7	1411	559	39,6

These classes have been chosen for investigation because of ease of access to examination results. All the pupils in them sit an externally-controlled examination. However, Std 8 was departmentally examined only up to the end of 1987. From 1988 the Std 8 examinations were no longer departmentally controlled like the Std 7 and the Std 10 examinations. Moreover in Stds 7 & 10, only Std 10 has its examinations moderated by the Joint Matriculation Board.

The discontinuation of external examinations in Std 8 is the result of a long-standing recommendation by the Commission of Inquiry into Education in the Republic of Transkei (1979), sometimes referred to as the Taylor Commission of Inquiry. From the time that the twelve-year structure was introduced in 1975, Std 6 ceased to be a departmentally-examined class. Std 7, as the terminal year of the junior secondary phase, took the place of the externally-controlled Std 6 examinations. It was perceived as logical that Std 8, as the initial year of the Matric course, should not be externally examined. Subjecting pupils to external examinations in both Std 7 and Std 8 would not only be strenuous for the pupils, but would also be administratively taxing and expensive for the Department of Education itself. The Taylor Commission recommended that "a Junior Secondary School Leaving Examination be retained at the Std 7 level and ultimately to replace the present Std 8 examinations which should be phased out." (p.41) The Commission felt that the Std 8 external examination "caused the senior secondary school to have a large drop-out rate at the end of Year One, thus inhibiting its function in terms of preparing pupils for the Senior Certificate "(p.86).

The Std 8 examinations were not dropped immediately after the acceptance of the report of the Commission, because the Std 8 examination was, to a limited extent, accepted as a significant grade by some employers. However, attendant problems and motivating factors for the discontinuation do not form an objective for this study; they are mentioned mainly to indicate why the departmental control of examinations in this class was discontinued. The Department still controls the Std 8 examinations for private candidates.

Besides the unsatisfactory performance by candidates in Transkei in the five years referred to in the first table, it is also important to note that the performance of the Std 8 pupils is significantly different from that of the Std 10's. In fact there have been some complaints, also echoed when the Department of Education and Training results have been examined, that Std 8 results do not predict sufficiently accurately the performance of candidates in Std 10 where examinations are JMB-moderated and where candidates use the Cape Education Department syllabi but sit for examinations set by the Transkei Department of Education. This difference in performance becomes clearer when one compares the Std 8 and Std 10 results shown in Table 1.1.

As these results show, there has been a gradual decline of the percentage of pupils passing Std 10 during the five years reflected in the table. The decline in the Std 7 results has been from 62% to 55%, although there was one exceptional year, 1984, when the results touched 70%. No attempt will be made in this study to investigate the reasons for this exceptional result.

In Std 8 the pass rate is above 60%, but it has been fluctuating. There was a slight decline initially, but in 1984 the percentage passing dropped drastically from 67,1% in 1983 to 60% in 1984. It shot up to 70% in 1985 and then dropped to 66% in 1986. Again no attempt in this thesis has been made to investigate the causes of this rise in 1985 and decline in 1986. In all cases, except in 1984, the percentage passing Std 8, a public examination, was greater than that of pupils passing Std 7, also a public examination.

The performance of the Std 10 candidates, in both standard and higher grade, has been distinctly unsatisfactory. For higher grade the pass results have ranged from 17% to 39%. Although the results show some improvement from 17% to 39%, the performance must still cause concern. For standard grade the results are also poor, fluctuating between 20% and 39%. The exceptional year is 1985 when the results shot up to 67,3%. Again the researcher will not speculate as to the reasons. Apart from the low level of performance, the erratic performance of candidates also raises doubts. It is most unlikely that the quality of candidates would vary as much from year to year as the figures suggest.

The Std 8 results are high in comparison with the Std 10 results. With the Std 8 results averaging 68,8%, one would have expected the average for Std 10 to be nearer 60% instead of it being 36,6% for Higher Grade and 40,2% for Standard Grade.

The reasons for the poor performance of the pupils at Std 10 level may lie with the pupils' abilities, motivation and background, the teachers' professional skills, and the teaching facilities available at the schools.

Not all pupils have the ability to do all subjects at higher grade level. However, the tendency is for teachers to advise pupils to register for all subjects higher grade, banking on the fact that should a candidate get 33%, then that mark will be converted to a pass at standard grade level. However, many pupils fail to reach even that level.

Teachers in Transkei schools are faced with mixed ability classes. The strategies they use may not be suitable for handling such widespread attainment. Their styles of concept presentation and explanation as well as the quality of test papers they set for their pupils may not be of the standard that could promote a good performance. Teachers may be more content-based than skills-inclined in their styles of teaching, promoting learning of content by rote rather than helping with acquisition of skills and problem - solving, and thus preventing the pupils from learning how to interpret their knowledge.

Facilities at schools for use by teachers and pupils may be lacking or poor. The teaching aids available, such as audio-visual material or library stock may be poor. The textbooks used at schools may be out of date or otherwise unsuitable.

A research study into any one of these problem areas should contribute towards improving the standard of history learning and teaching. However, the researcher has looked into only one of these areas: the textbooks. The focal point of the study is how adequately textbooks convey abstract ideas and, therefore, on how they aid concept formation.

Even in this age of computers, the textbook still remains the most commonly-used educational aid, especially in the Third World. Textbooks remain essential to effective schooling. They provide essential facts, techniques for learning and guidelines for subject absorption. In the Third World states, or deprived societies, the textbook is commonly the only book that a student uses. It is the only link between the pupil and the world of learning. It is therefore vital that an analysis of textbooks used at school be made. The case for this investigation is strengthened in situations where the teacher is inadequately trained, or does not have access to additional educational materials or up-to-date information. Furthermore, imported textbooks tend to reflect the values and orientations of the communities in which they were published. An analysis of textbooks should, if possible, also look into the question of applicability of material designed for different consumers with different persuasions, interests and values.

The researcher has also been partly motivated by the findings of the Commission of Inquiry into Education in the Republic of Transkei (1979). Regarding textbooks, the Commission claimed: "... many of the materials currently in use in Transkei schools are unsatisfactory. In some cases the course texts are adaptations of materials from other markets. In some instances the adaptations are perfunctory and show little understanding of local environmental needs. Illustrations are often poor, and type sizes and styles often unsuited to the maturational and interest levels of the pupils. There is very little evidence of attempts to control the language used in the textbooks, or to relate the vocabulary and sentence structure to the level of the pupils for whom the books are intended." This was the position in 1979. Is it still the same in 1987, the year in which the material for this investigation was collected?

1.2 Statement of the Problem

History, if interpreted as an informational subject, appears easy to learn and to teach, but this is not the case. It is, in fact, intricate because it involves complex causal relationships and deals with a past "reality" which can be only "reached" by interpretative investigation and empathic understanding.

Further, teachers and pupils depend very largely on language in teaching and learning the subject; thus language comprehension is crucial to the understanding of history. The way textbooks handle concepts can either aid or hinder pupils' understanding. However this investigation does not deal with any measurement of pupils' understanding because it would have added very considerably to the length and complexity of the study, but confines itself to the textbooks themselves.

One of the assumptions in the research is that pupils have difficulty in understanding concepts in history. This assumption has been frequently described and measured, and some assessment of the writer's work in this area is given later in this Chapter and in Chapter 2.

The basic concepts necessary to understand how history works are often not given due prominence in the textbooks. Some of these concepts are related to the nature of history itself, for example, those related to time; or to change and continuity; or those concerned with evidence from both primary and secondary sources; or those concerned with motive and intention. These might be described as the bases of the study of history or cornerstones on which a study of history is based.

Besides these basic concepts, history is replete with other terms and concepts that require special attention. There are in history words or concepts which are borrowed from other disciplines, and they are often highly technical. These are terms like frontier and culture from Geography and Anthropology; veto and legislative from Political Studies; bourgeoisie and class from Sociology; and feudal, agrarian or labour from Economics. Sometimes the terms acquire peculiar historical connotations, for example capitalism and class.

Some of the terms used in history are peculiar to a locality or period. Prairie and borough are terms particular to localities, while terms like noble, renaissance, crusade, and liberal are peculiar to historical periods.

Also commonly used in history are words with multiple meanings, meanings which change in different periods and localities, but which also have a common and colloquial use as well as a special historical sense. Figurative terms feature prominently too in history and these terms include cold war, political dinosaur, political yoyo, open door and, iron curtain. Some words are easily confused with other words like executive and execution, principle and principal, and we also have quantitative terms like shortly after, century, millenium, B.C. and A.D, contemporary, preceding and succeeding, which appear simple but may not be to a pupil in the junior secondary school classes operating in English as a second language. These terms are closely linked to the basic time concepts already referred to. Certain acronyms have become so commonplace that they are now part of the language of history. This category of concepts includes abbreviations like NATO, UN, WHO. They are often treated as independent words by pupils.

Finally a number of concepts have become value-laden. They have contemporary values added to them. For example, the term feudal has gathered unpleasant connotations. It is now pe.jorative. Bourgeoisie is now associated with criticism of the middle class; capitalism is associated with the exploitation of the masses; liberation movement is associated with a movement for freeing people by violent means. These terms have existing or current values attached to them and pupils often have to be helped to

isolate the terms from their contemporary values.

Because of the difficulties shown, the presentation of concepts and the strategies to internalize them on the part of the pupils, are either an aid or a hindrance to the study of history . Finally as it has already been suggested in passing, the problem of concept acquisition becomes more acute for pupils who study history through a second language. Improving strategies of concept presentation could improve the pupils' understanding of history. The selection of textbooks which have a variety of methods of concept presentation and explanation could be of much help to teachers in this regard.

1.3 Scope of the Study

In this study the research concentrated on the analysis of history textbooks used in Std 5, the first year of the junior secondary course, and Std 8, the first year of the senior secondary course. The researcher saw it as important to look into the initial year in each case because what is done in these initial years could be crucial in the development of understanding and self-confidence in the subsequent years.

The researcher has further considered it necessary to look into these levels because there is a considerable difference in age and maturity between pupils in Std 5 and Std 8. Ideally strategies used in Std 5 should differ from those used in Std 8 because of the differences in the pupils' level of maturity and cognition. Pupils in Std 5 would normally fall within the 11 to 13 age range and those in Std 8 would fall within the 14 - 15 age range. As is the case in all Black schools, however, there are some pupils who are considerably older than these normal age-ranges. Nevertheless in this study, the researcher shall concern himself with the majority, and hence with material meant for use by the 11 - 15 year-old pupils.

The textbooks chosen in each class were those appearing in the list recommended by the History Subject Committee for use in the junior and senior secondary schools. Teachers at school are expected to choose from the recommended list those books which seem to satisfy best their pupils' needs.

The researcher investigated briefly the criteria used by the Subject Committee and the teachers in selecting textbooks. For this purpose

the book-reading questionnaire used by the Subject Committee was examined. (See Appendix I for the form used by the History Subject Committee).

Most books that were the subject of this study are not prepared specifically for Transkei schools. The majority of them, 7 out of 8 books, are also used in South Africa, and they are prepared by South Africans. This is so because Transkei, although an independent homeland, still follows the core syllabus of the Joint Matriculation Board and thus its standards are monitored by the Joint Matriculation Board. Transkei has adopted the syllabi of the Cape Education Department, with very minor adjustments to suit local needs. There is a high degree of uniformity, as Dean (1983) observed, in the secondary school syllabuses used by all population groups in South Africa. The textbooks used in South Africa and her homelands are written for the syllabuses, and conform strictly and closely to these syllabuses, hence Transkei found it expedient and cost effective to draw from the same source as the South African schools and follow the same pattern of choosing textbooks. This expediency, however, masks the fact that African pupils study history through a second language.

South African history textbooks are generally criticised as operating from within the historiographical model propagated by Afrikaner Nationalist historians. Although bias and prejudice is not a subject of this study, it is to be expected that some conceptual difficulties would arise in a situation where African pupils have to use history books which are written by Whites from their own value perspective.

There is another problem which has often been highlighted in South African textbook-writing. Textbooks are criticised for presenting history as basically a non-problematic exercise, as a product and not as a process. Presenting it as a process would involve a number of activities which would give pupils deeper insight and better concept understanding, for example, use of evidence, simulations and games. Hence a researcher in my position must check whether or not in their styles of concept presentation the books currently in use do make the necessary shift and change of emphasis from the old to the new history .

Four books in each case were chosen, that is, four Std 5 and another four Std 8 books. The analysis of the textbooks has centred mainly on concept presentation, but considered other important points, for example, assessment of difficulty level of the books according to a selected formula, use of headings and sub-headings, use of illustrations, sentence length and complexity.

CHAPTER 2

2. REVIEW OF LITERATURE

In the introductory chapter it was claimed that textbooks still remain the most commonly used educational aid in Third World States. If this is so, it will apply to Transkei too, as Transkei shows all the marks of a Third World state. Examination results reflecting the very low level of performance of the history candidates in Transkei, were also shown in this chapter. It was further indicated that, although the age-range of pupils doing Std 5 and Std 8 is normally 11 - 15 years, in all Black schools there are pupils who are considerably older than this normal age-range. The poor results could indicate a delayed development of formal thinking, and it would be appropriate, therefore, to look into the problem in terms of the research done on development of formal thinking in history. Various scholars have studied concept formation and the development of thinking, amongst others Piaget & Inhelder (1969), Hallam (1969), and Jurd (1978).

Piaget (1969) identifies four stages of cognitive development : the sensori-motor, pre-operational stage, concrete and formal operational stage. The following figure shows Piaget's stages of cognitive development.

Figure 2.1

Summary of the Periods of Cognitive Development

Period	Characteristics of the Period	Major Change of the Period
Sensorimotor (0 - 2 years)		Development proceeds from reflex activity to representation and sensorimotor solutions to problems.
Stage 1 (0 - 1 months)	Reflex activity only; no differentiation.	
Stage 2 (1 - 4 months)	Hand-mouth co-ordination; differentiation via sucking reflex.	
Stage 3 (4 - 8 months)	Hand-eye co-ordination; repeats unusual events.	
Stage 4	Co-ordination of two schemata	

(8 -12 months)	object permanence attained.
Stage 5 (12-18 months)	New means through experimentation - follows sequential displacements.
Stage 6 (18-24 months)	Internal representation; new means through mental combinations.

Pre-operational
(2 - 7 years)

Egocentric stage (2 - 4 years)	Problems solved through representation - language development (2-4 years); thought and language both egocentric.	Development proceeds from sensorimotor representation to prelogical thought and solutions to problems.
Intuitive stage	Cannot solve conservation problems; judgments based on perception rather than logic.	

Concrete operational

(7 - 11 years)	Reversability attained; can solve conservation problems-logical operations developed and applied to concrete problems, cannot solve complex verbal problems.	Development proceeds from prelogical thought to logical solutions to concrete problems.
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Formal operations

(11 - 15 years)	Logically solves all types of problems - thinks scientifically; solves complex verbal problems; cognitive structures mature.	Development proceeds from logical solutions to concrete problems to logical solutions to all classes of problems.
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During the first stage, from birth to about two years of age, the child gains acquaintance with the environment through his senses, and through movement. His activities consist mainly in physical manipulation of objects. Behaviour is dictated by senses and motor activity. He then gradually incorporates a picture of the world in which he lives, by assimilating and accommodating new experiences.

The second stage, the pre-operational stage, is that of restricted reasoning, covering the period from about two to seven years of age. During this stage the child develops ways of representing events and objects through symbols, including verbal symbols of language. He becomes aware of such things as number and space, of concepts of more or less, shorter and longer, bigger and smaller, but his judgements are still based on senses, hence he says there is more water in the taller jar, because to him it appears to be "taller". He considers only one variable of a situation.

During the concrete operational stage, about 8 - 11 years, the child can recognize objects and internalise the sensory experience. He will know that there is the same amount of water in each jar because he saw the same amount being poured into each. He can now conserve. However, his thinking still remains confined to concrete situations. When he has reached the age of twelve, he can think about abstractions. Logical thinking is now possible and he can weigh ideas and reason by implication.

Piaget's stages of cognitive development seem to have some relation with those of the Wisconson Model of Concept Learning (Klausmeier and Hooper, 1974). This model consists of four stages of concept development: the concrete level, the identity level, the classificatory level, and the formal level. The concrete level refers to the stage at which the child recognises an object and represents it internally. He learns the word "dog". This is the motoric experiencing of objects. The child learns to attend to differences in features of objects such as size, shape and colour.

The identity level, (the second stage), unlike the concrete level that involves only the discrimination of an object from other objects, refers to the recognition of the same object at different times and places; the child sees the dog again and repeats the word. He can also now see different types of dog, but recognises them all as dogs. The new and critical operation is generalising. The classificatory level is reached when the child can treat two different examples of objects of the same class as equivalent, even though he cannot give a clear basis for his views. He should be able, for example, to treat his toy dog and that of the neighbour as both poodles although he may not give an elaborate account of the attributes of poodles. At the formal level of cognition the child should be able to give not only defining attributes but also abstract properties of concepts. This stage is an equivalent of Piaget's stage of formal operational thought.

In Piaget's view the stage of formal operational thought is reached around the age of 14 years. Although individual pupils differ in ages at which they attain the different stages of cognition, the sequence of the levels of cognition remains the same : sensori-motor, pre-operational, concrete and formal operational thought. None of these stages can be skipped nor can the order of their attainment be reversed or altered in any manner, but the pupils' ages of attaining the different levels may differ. Some pupils may attain the level of abstract thought at 14 while some may do so a little earlier and others much later than that age.

Much store has been set by the work of Piaget. Some historians have done research on cognitive development with specific reference to history. Thompson (1967), Peel (1967), Hallam (1968), Coltham (1971), Jurd (1978) are examples. Their studies tested Piaget's theory. The results of their findings have corroborated the stages of cognitive development suggested by Piaget, but have found that the age at which pupils reach the stage of formal operational thought apparently occurs considerably later, around 16 years. These studies brought to the fore the significance of the stages of cognitive development or levels of thinking to the teaching and learning of history, but also called into question why it is that pupils tend to reach the stage of formal operational thought considerably later in history than in other subjects.

Da Silva (1972) took the matter a little farther by trying to explore the developmental aspects of acquisition of meanings of words. Pioneering work in this regard, however, was undertaken by Werner and Kaplan (1952). They did research on how pupils reached the meanings of words embedded in sentences. Although they too recognised the existence of stages in the acquisition of conceptual meanings, their study did not bring out clearly the developmental aspects of the acquisition of word meanings.

The study by Da Silva was designed to investigate the process by which pupils ascribe meanings to coded words standing for historical terms, working on contextual cues only. The research instrument he used was a word-context test, consisting of ten passages. Each passage had one artificial word embedded in it. The pupil reading the passage was expected to deduce the meaning of the artificial word from its context. Each of the artificial words signified an economic or political conception characteristic of the history learning at secondary school level. In one passage for example, the word malmir was substituted for the concept depression or slump (Da Silva, 1972, p.263).

The test was administered to 160 pupils chosen in equal numbers from selective and non-selective schools. The pupils fell within the age range of 12 to 16 years.

The responses of the pupils were categorized into four types: logically restricted responses, circumstantial conceptualization, logical possibilities, and deductive conceptualization. Logically restricted responses are irrelevant and irrational and show lack of comprehension of the passage. In circumstantial conceptualization students attempt solutions on the basis of one aspect of the data, thereby showing failure to grasp essentials of the problem. Responses of the pupils in the category of logical possibility show a capacity to combine two or more pieces of evidence and the ability to relate cause and effect. Pupils in the category of deductive conceptualization explore a passage in its entirety in a deductive way and draw responsible inferences, essentially taking account of all aspects of the problem. This category is characterised by sustained argument on the basis of principles developed inductively or deduced analytically.

This research study by Da Silva can be taken to be corroborating the ideas of Peel (1967). Peel also refers to levels of thought : the levels of describer thinking and explainer thinking, with explainer thinking being an equivalent of Da Silva's deductive conceptualisation.

A child will only be able to receive information and conceptualize it deductively if he is in a state where he can understand this information. This requires that the information be presented in a manner suited to the child's level of cognition. The pupil will only make meaning of the information by virtue of his particular level of cognitive development.

The problem of concept understanding is evidenced by confused explanation of concepts that pupils give during examinations and during discussions. This is not only to do with capacity for logical thinking, but also with the ability to understand and use language. This problem becomes more significant for pupils whose medium of instruction is a second language. The results of this study suggest the need to consider language teaching strategies seriously in the teaching of history, especially because the mother tongue tends to influence or interfere with the language of instruction.

This study could therefore be of assistance to teachers in selecting textbooks with varied means of introducing concepts. Such varied strategies of introducing concepts should be suited to the pupils level of cognitive development and language difficulty as Klausmeier^e et al (1974) have observed.

Research done by people like Russell and Saadeh (1962), and Reed and Dick (1968), cited by Klausmeier (1974) has shown that the capability of the child for abstract thinking increases with age. It is highly likely that the learning of abstract concepts depends very largely on command of language. There is need to analyse textbooks used at schools and to test their readability.

2.2 Textbook Analysis

Textbook analysis is not a new field of research and much work has been done on this topic. However, the major focus of the research on textbook analysis has been on bias and prejudice, through omission and commission, in the treatment of minority groups.

Early work on the analysis of textbooks is said to have started after the First World War (Dean, 1983). In 1925 the League of Nations recommended exchange of textbooks at international level. This encouraged their analysis. After the Second World War, the work of the League of Nations was continued by Unesco, the United Nations Educational, Scientific and Cultural Organization. In 1949 Unesco issued guidelines proposing criteria for evaluating textbooks, such as accuracy and fairness. Textbook analysis was carried out in countries like Germany, Britain, America and Canada, with the emphasis still on checking bias and prejudice. Hatch, for example, analysed textbooks used in the United Kingdom to check whether or not British and European history was given predominance over that of Africa and Asia (Hatch, 1962).

Other studies by McDiarmid and Pratt (1971) and Nash (1972), also centred on bias and prejudice. McDiarmid, for example, noticed bias such as the failure to be aware of discrimination and an inordinate political emphasis which resulted in history being presented mostly as war and conflict. These are biases of omission and commission. Failure to notice discrimination and the contributions of other racial groups are, amongst others, biases of omission, whereas practices like the use of pejorative or derogatory terms such as Kaffir or Nigger and the reproduction of myths like the "empty-land myth" in South African history are examples of biases of commission.

Besides the analysis of textbooks in the world at large, South African schools' history textbooks, too, have received some attention. Auerbach (1965) did research on history textbooks used in the Transvaal. His work examined, amongst other things, the differences between Afrikaans and English-language history textbooks. He also examined the use of emotive words, and assessed the extent to which the books reflected reasonably recent research findings. His results showed a strong tendency for these findings either to be ignored or older interpretations of subject matter to be repeated.

Auerbach's study was followed by others, for example Linda Chisolm (1981), Elizabeth Dean (1983) and J M Du Preez (1983). All these studies sought to trace bias and prejudice in school history textbooks and also to show how textbooks are used for the legitimation of the status quo.

These studies have adopted amongst others, techniques of analysis such as the qualitative and the quantitative approach. Qualitative analysis involves checking the "quality of the scholarship" (Boyce 1975 p175). Qualitative analysis therefore refers not so much to how much has been said about a topic, but more specifically to how it has been said. It involves checking biased wording, or the accuracy of factual detail based on the most recent scientific research. All in all qualitative analysis is concerned with style of writing or quality of scholarship.

Quantitative analysis, on the other hand, is intended to yield information about space allotted to topics in the textbook. In quantitative analysis, therefore, one looks into priority given to topics and histories of countries. The tendency is for authors at times to give more space to sections they like most and little space to those against which they are prejudiced. The noticeable trend for example in the South African school history textbooks is that "in all of them" South African history "is a history of Whites in South Africa. The non-whites, particularly the Blacks are presented primarily as obstacles to the achievement of White objectives, as a problem to the Whites. In consequence there has been little attempt to explore the history of the 'non-white' groups" (Dean, 1983, p. 31).

Linda Chisolm's findings in this regard are the same as Dean's: "The history that is, as a result, taught the African, Indian or Coloured denies his existence, as it is a heroic tale of the rise of the Afrikaner; the heroism of Black resistance to the conquest is hardly chartered." (Chisolm, 1981, p.137)

As Boyce (1975, p174) puts it, "space allocation is an indication of priority values with writers and publishers." It is worth mentioning, in passing, that omissions or giving little space to some topics may not always be due to prejudice but to other editorial considerations.

An omission may be due to the leaving out of some factors which may, to an author writing within the context of his own intellectual and cultural equipment, seem unimportant, but which to members of other cultural groups may be important. Textbooks, in putting emphasis on some topics to the neglect of others, may also be responding to a prescribed syllabus. So at times the limiting factor is the nature of the syllabus itself.

These analyses of the South African schools history textbooks have yielded much important information regarding bias and prejudice. This research, however, will deviate from the emphasis of previous research on South African school history textbooks. The emphasis will be on concept presentation as well as on other qualities considered when assessing history textbooks, for example, readability.

2.3 Primacy of Concepts in Learning

Definitions of "concept" are numerous. According to Yelon and Weinstein (1977, p.91) "a concept defines a class of objects, events or processes in terms of its common elements." Klausmeier, Ghatala and Frayer (1974, p.4) define a concept as "ordered information about the properties of one or more things - objects, events or processes - that enables any particular thing or class of things to be differentiated from and also related to other things or classes of things". Concepts, then, are organised information corresponding to meanings of words (Klausmeier et al, 1974 p.4).

Concepts may be either concrete or abstract. Either type, in order to be a concept, must have a set of critical or defining attributes, the properties of which make it unique and which distinguish it as a class (Yelon and Weinstein, 1977, p.191).

Dennis Gunning (1978; pp 14-15) gives the following four descriptions of a concept:

- (i) "Concepts are ideas usually expressed in words, to describe classes or groups of things, people, feelings, actions or ideas having something in common e.g. emperors, artillery, princes envy, retreat or liberalism".

- (ii) "Concepts can be ideas describing concrete actual objects". This type of concepts can be explained by showing a picture of the object, for example 'sword'."
- (iii) "Many concepts are abstract for example 'economics'".
- (iv) "A concept idea is not always presented in words which are nouns"
So we could have concepts like to 'rebel' or 'rebellious'."

To Dennis Gunning, therefore, a combination of these four descriptions should provide one with a workable or serviceable definition of 'concept'. For all these writers concepts are "organised information corresponding to meanings of words" (Klausmeier et al, 1974, p.4), but Gunning and Yelon and Weinstein stress the importance of classes or groups of things. Napoleon for instance is not a concept because there was only one of him. All these writers also stress that concepts can be concrete or abstract and need not always be nouns.

At times concepts can be described as either simple or complex. We can have, for example, concepts like 'slavery' or 'kingship' which are simple and concepts like 'democracy' and 'feudalism' which are complex (Scott, 1981, p.14). To these two groups, the simple and the complex, have been added the third category, that of organising concepts like 'cause', 'effect' or 'motive' (Ibid). So concepts like "continuity and change" and "similarity and difference" are in terms of this grouping, organising concepts. In this study the terms that will be used to categorize concepts are 'abstract', and 'concrete'. The distinction seems easier to draw between concrete and abstract concepts than between simple and complex concepts. Concrete concepts represent objects that can be seen. Their defining attributes refer to shape, size or other visible characteristic. 'Sword' is a concrete concept. It can be seen or touched. It is perceptible. Abstract concepts cannot be seen and must be learned by definition. 'Imperialism' cannot be seen.

When these definitions are considered it can be seen that concepts are very important in education. As Yelon and Weinstein (1977, p.191) put it: "conceptualising is a form of categorising. And categorising is the means by which objects around us are identified, a means of reducing the complexity of the environment". So then, man can be said to be able to maintain a constant and meaningful dialogue with his external relational world through concepts. Concepts are the substance of man's thought.

"The acquisition of concepts is what makes instruction possible. One cannot take the time to present to the student even a smaller fraction of all specific situations in which he may encounter for example the concept of 'edge' or 'a cell', or a striated muscle. But if, with the use of examples, he can acquire these as concepts, one may expect that generalising will expand to cover the whole of his experience. He can also communicate his intentions, his actions, and his thoughts to other people, again because the specific words he employs arouse concepts in his hearers that function just as his do" (Gagne, 1970 pp. 185-186). So concept learning is essential for formal education.

The role of concepts in thinking is explained by Kagan (1966, p.97) cited by Yelon and Western as follows :

"concepts are fundamental agents of intellectual work. The theoretical significance of cognitive concepts in psychological theory parallels the seminal role of volume in chemistry, gene in biology or energy in physics. Concepts are distillates of sensory experience and the vital link between external inputs and overt behaviours."

Concepts operate through the words of a language, and so comprise socially accepted or sanctioned ideas of persons who speak a particular language. Difficulties arise when one has to learn concepts through a language that one does not normally speak in everyday situations. Concepts cannot just be transmitted. They have to be internalised by the learner since he has to structure the world through them.

Flavell (1970) favours an explanation of concepts in terms of certain attributes that they have. Each concept has its own critical defining attributes, but Flavell, in this regard refers to attributes that are common to all concepts. He counts the following as the attributes to be considered: learnability, usability, validity, generality, power, structure, instance perceptibility.

Klausmeier Ghatala and Frayer (1970) define and explain these characteristics or attributes of concepts that Flavell writes about. Learnability, they explain, refers to ease or difficulty with which concepts are learned. It is easy to learn some concepts but difficult to learn others. Some are learned with difficulty even by people of the same language and culture. For instance one could compare the concepts "dog or tree" with the concepts "atom or eternity". The first two are said to be easy to learn because they have concrete examples or "perceptible instances" in the language of Flavell. 'Atom' and 'eternity' are difficult to learn because they are abstract or have no "perceptible instances" or concrete reality. Similar contrasts can be found in history - for example 'cannon' and 'liberalism'. In other words, ease or difficulty in learning concepts would seem to be related to the extent to which they are concrete or abstract, although clearly, the learner's level of maturity and his experience must also play a part.

Usability refers to the fact that concepts need to reach a level of "independence" by the user. This occurs if they are attained at a classificatory level which means going beyond the simple recall of critical attributes or giving examples of a concept, to a level at which one can generalize to newly encountered examples. Concepts attained at classificatory level are successfully usable if they enable the learner to generalise learned concepts to new situations or instances, recognise concepts in a class or recognise cause and effect and then solve problems involving the concept learned. It would not be enough to have a learner memorize a definition, for example 'democracy'. He should be able to recognize types of government or situations that can rightfully be referred to as democratic or totalitarian and describe them as such.

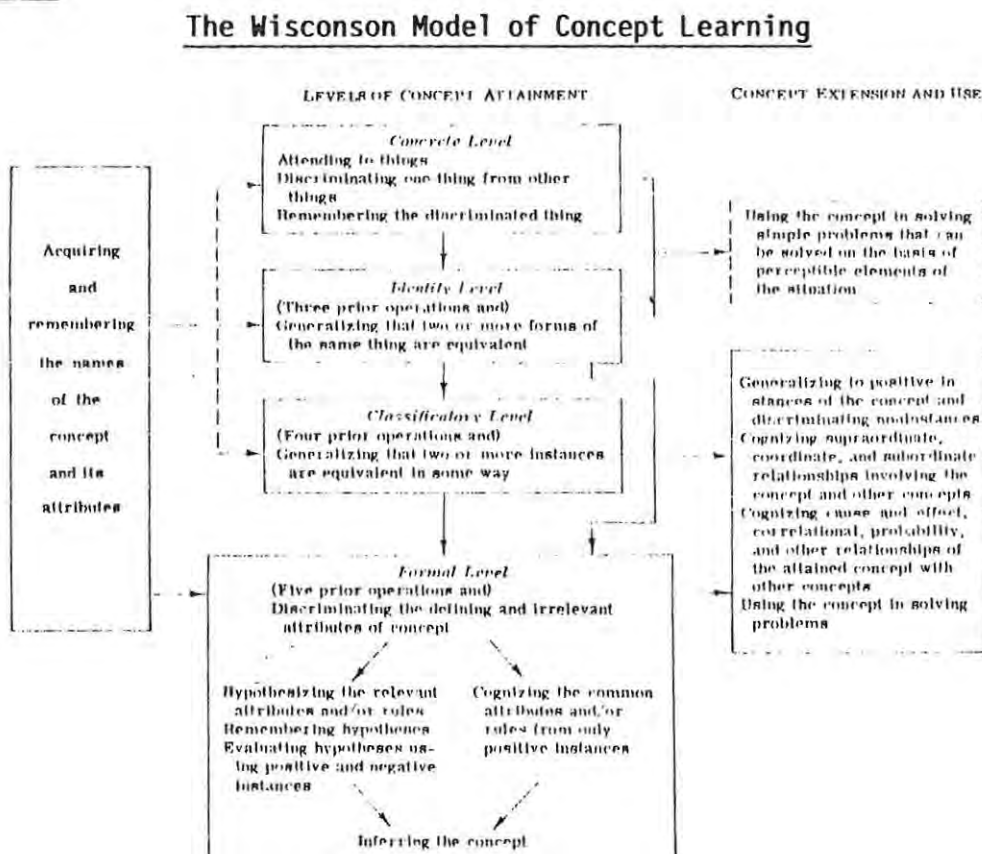
Klausmeier, Ghatala and Frayer (1974) when writing on validity of concepts, refer to the extent of agreement on 'meaning'. A concept is regarded as valid if experts agree about its meaning.

General concepts are those that have fewer defining characteristics. One may take, for example, the following two concepts: (i) man, and (ii) living things. The concept 'living things' is more general than the concept 'man'. It encompasses more things than the concept 'man'. If a concept helps towards the attainment of other concepts, it is said to have power. Many subjects have fundamental concepts on which the understanding of other concepts depends. This is specifically the case with subjects that have a developmental structure, for example mathematics. In mathematics one needs to understand subtraction, division, addition and multiplication before proceeding to more complex material. History, too, although it does not have a uniquely developmental structure, does have fundamental concepts which must be understood first before others can be understood.

Some concepts, for example, are fundamental to an understanding of the French Revolution: class distinction, revolution, constitution, autocracy, despotism, monarchy. However, consideration should be given to the fact that a learner may have his own concepts which do not tally with those of the scholars. The new information that the pupils get may be related to certain concepts that they have already formed. Misconception can easily occur if understanding of new information is based on ill-conceived basic concepts.

For pupils to learn concepts at the level of formal operational thought, they must acquire not only the labels for the concepts, but also the attributes of concepts. An analysis and description of how concept learning takes place was formulated through extensive research, by Klausmeier and his colleagues at Wisconsin, hence their model of concept attainment is called the Wisconsin Model of Concept Learning (Klausmeier et al 1974). In terms of this model, shown below, there are four levels of concept attainment: (i) concrete, the recall of critical attributes; (ii) identity, the recall of learned examples; (iii) classificatory; generalising to newly encountered examples and (iv) the formal level, discriminating between newly encountered instances.

Figure 2.2



Concept attainment takes place, therefore in a gradual and continuous way, under the influence of environmental factors. An important implication of this theory therefore is that a concept cannot be mastered at the highest of the four levels the first time it is learned. Teachers and textbook writers need to be aware of this.

The levels of concept attainment in the Wisconson Model seem to tally with those in the four stage model of Tom Seymour (no date) shown below. Seymour's stages of concept attainment correspond to the different levels in the cognitive domain of Bloom's taxonomy (Bloom, B., 1979).

Figure 2.3

Seymour's Four Stage Model of Concept Development

	<u>Taxonomy Level</u>
STAGE 4 Values are integrated into a "philosophy"	"synthethis" of a more sophisticated nature, also "evaluation"
STAGE 3 Generalizations are integrated into "values"	"synthesis" and "evaluation"
STAGE 2 Concepts are integrated into "generalizations"	"application", "analysis" and "synthesis"
STAGE 1 Words are integrated into "concepts"	"knowledge" and "understanding"

These four stages sum up Seymour's idea of what intelligence is: "the mental ability to perceive and integrate words into concepts; to integrate concepts into generalisations, and to integrate generalisations into values, and values into a philosophy or way of life" (no date, p. 1).

The implications of both the Wisconson and the Seymour model is that presenting or teaching a concept to pupils requires a series of steps and systematically-planned strategies designed to aid movement from one level to a higher level until the highest is reached. In Piagetian views of cognitive development, the child starts operating at the concrete level and gradually attaining the stage of formal operational thought. It is important to assess, therefore, whether history textbooks encourage such formal operational thought.

This leads directly to a consideration of the learning styles used in the textbooks. There are three possible approaches which textbook writers could follow. The first is to present information at dictionary-definition level. This appears to be standard or common practice of presenting concepts. At times, students can check the meanings of words in dictionaries. At others the textbooks give their own or dictionary definitions of concepts in a glossary or when introducing them in the current text. This does not necessarily guarantee, however, that the pupil can classify and generate further examples of the concepts himself, as Flavell pointed out.

The second approach is to ask the pupils to consider a number of examples. At times negative examples are added so as to increase differentiation. In some instances it is important to present examples and non-examples together where conceptual relationships are concerned, for example "short" and "long", "peace" and "war" and "democracy" and "tolitarianism". Although such an approach could increase understanding, it still does not guarantee independence of use of the concept by the pupil.

At other times concepts can be learned from the context of sentences in which they occur. This may be possible if the context surrounding the concept is familiar. Textbooks can encourage this kind of learning if it is made clear to the pupil the exact nature of the deduction task he has to perform, which then becomes intentional learning and a problem-solving task. If the textbook uses such an approach, specific intervention from the teacher, usually through questions, is necessary to force the pupils to perform the abstraction or deduction. This point is illustrated in Seymour's (no date) article in which the four stages of concept development are described. He uses two concepts from the field of economics:

Government Involvement in the Economy and Transaction in the Total Economic System. In both cases pupils are asked to respond to the concept by giving instances from their own experience, of what the word or phrase might mean.

Then they discuss the ways in which the examples could affect the economy of a country. Following this the pupils are asked to assess the appropriateness or efficacy of each example. Finally the pupils assess the philosophical or ideological implications of the judgements they have made.

A very similar approach is followed by Beyer (no date) when he illustrates the introduction of the concept Imperialism. Here two specific examples had been introduced in the textbook: the Spanish-American War and American foreign policies under the Eisenhower administration. Two important stages were included in Beyer's procedure after pupils had responded with an initial brainstorming session. The first was to set the conditions or limits within which the concept operated. The second was to ask pupils to give further examples of imperialism in action to decide the extent to which they fitted with the rules or conditions. Although Beyer does not classify, as a specific stage of development, Seymour's assessment or judgemental stage, it is clear from the transcripts of the discussions provided in the article that pupils frequently added their evaluations of the concept.

The point is that these interesting and very thorough lessons might have been initiated by the textbook presentation but the guidance provided by the teacher's methodology also played a significant part in the learning experience. The textbook, in these examples, provided the initial stimulus for the teacher-pupil interaction and for subsequent checking work by the pupils.

In the examination of the textbooks included in this study, an analysis will be made of how they made use of one or more of these approaches.

It has already been suggested that concept learning involves generalising to all instances of the concept and also discriminating instances of the concept from non-instances.

This depends mainly on the consideration of examples, both positive and negative. Three possible errors in pupils' thinking can, however, occur and are described by Klausmeier, Ghatala and Frayer (1974). These are: (i) over-generalization (ii) under-generalization; and (iii) misconception.

Over-generalization refers to instances in which negative examples of concepts are identified as examples. If, in mathematics, a student is taught the concept 'square' and then classifies a rectangle as a square (because both figures have four sides), he is clearly over-generalizing. As an example from history, if a situation that does not amount to a revolution (for example, a peaceful demonstration by students against loss of academic freedom), is identified as a revolution, that would be over-generalization.

In the case of under-generalization, some examples of concepts are identified as non-examples. A child learning the concept cutting tool, may recognize a knife as a cutting tool and generalise his knowledge of cutting tools to others like hunting knife, sickle, but he will be under-generalising if he does not recognise the hacksaw as a cutting tool. If a situation which should have been identified as a revolution is not recognised as such by a pupil, then, that is under-generalization.

There are some instances in which a pupil will have an insufficient number of examples and non-examples. He could then classify a concept on the basis of irrelevant attributes. This type of error is referred to as misconception. This research sought to find out the extent to which textbooks try to help pupils avoid over-generalization, under-generalization and misconceptions.

A number of learning styles appropriate for concept development have been mentioned: examples and non-examples (positive and negative instances); verbal cues concerning relevant attributes; concept definition with prompting questions related to the definition; sentences using concept names. It can be argued that the provision of a combination of different styles of concept explanation is better than concentration on a single style, for example definition only. This will also be examined in the analysis of textbooks.

Textbooks differ from other books because they are specifically designed to give information and instruction. They are unlike other books which, though perhaps having a didactic moral value, may be meant for entertainment, for example novels and drama books. The features of a textbook that make it different and assist it in its purpose are those that can make one's learning tasks easier and more enjoyable. How well the author succeeds in transmitting information to the reader will depend on the readability of the text (Johnson, 1979).

Gilliland's book (1972) covers many aspects of readability: interest and motivation, print visibility, assessment of readability and deeper comprehension.

Coltham in a shorter article looks more specifically at characteristics that can be examined for history text or history resource material. Both these writers' ideas will now be examined briefly.

In choosing textbooks teachers often concentrate on physical factors such as size, cover, binding, type style, page format, diagrams and illustrations, and also factors like accuracy of factual information and in some instances even the reputation of the publisher. They look for books with examples, end-of-chapter questions and tasks, organisation of the book, use of headings and sub-headings, and even supplementary material like study guides. Such criteria as these are highly subjective. However, as will be explained later in this chapter, subjective criteria should not be dismissed off-hand simply because they are subjective, but should be given their due consideration.

Although these factors are worth considering when assessing books, there is an important criterion which is often neglected, namely the question of how easy or difficult the book is to read and comprehend. This is simply referred to as readability. Before considering the different reading difficulty indices, it seems appropriate to give first a brief explanation of readability.

According to Johnson (1979) readability refers to all the factors that affect success in reading and understanding a text. The factors that affect readability, according to Johnson, are: interest and motivation of the reader; legibility of the print; and complexity of words and sentences in relation to the reading ability of the reader.

Dale and Chall (1948) as quoted by Gilliland (1972, pp. 12-13) offer the following definition of readability: it is the "sum total ... of all those elements within a given piece of material that affects the success which a group of readers have with it. The success is to the extent to which they understand it, read it at an optimum speed and find it interesting."

MacLaughlin (1968) cited in Gilliland (1972, p.14) defines readability as "the degree to which a given class of people find certain reading matter compelling and, necessarily, comprehensible."

Readability is concerned with the problem of matching the reader and the text. An accomplished reader is likely to be bored by simple, repetitive texts, while a poor reader will become discouraged by texts which he finds too difficult to read fluently. Of the definitions given, those by Dale and Chall, and Johnson agree on the factors that affect success in reading: comprehension, interest and motivation, and fluency, as well as complexity of words and sentences in relation to the ability of the reader. The factors include characteristics of the reader and those of the texts, the matching of which results in success in reading, for example legibility of print affects fluency or speed of reading. The factors involved in readability can be explained briefly as follows:

Fluency refers to the extent to which a person can read a given text at optimum speed. It is affected by the legibility of print because it reflects the ease with which text may be seen and the ease with which letters and words can be identified.

Interest refers to motivational aspects that persuade the reader to go on reading. This sustained persistence in reading depends on how the reader feels at the time he is reading, what he needs to know and also on his previous knowledge or experience. Intrinsic motivation is very important for successful reading. Pupils at school are compelled to read textbooks whether they like it or not. This means that textbooks must be readable so that pupils may be motivated to read them with understanding.

Understanding of the text depends on interest and fluency. For comprehension to take place the basic meanings of words and phrases must be understood and the material read must be related to the reader's previous knowledge and experience. If what is read cannot be related to the reader's experience and the words cannot be used independently of the context in which they are used in the book, then there is clearly no comprehension that has taken place.

Legibility of print encompasses the type, the layout, and the conditions of reading. There are many different types. Some are fancy and illegible and others clearly legible and simple. Bold type is often used for emphasis. The layout involves size of type, length of line and the spacing between the lines. Lines which are too short or too long are said to cause inefficient eye movements (Johnson, 1979). Reading conditions involve things like illumination and the brightness of the page in relation to the surroundings, for example the table. Brightness may be caused by the nature of the paper. It may be shiny or glaring thereby causing eye-strain. As said earlier on, the legibility of print affects fluency because a fluent reader depends on clear print and clearly-laid-out work for his information. Sentence structure too affects readability.

In summary, therefore it can be said that readability encompasses all the aforementioned factors. It refers to the ease with which the book can be read with understanding as a result of proper matching between reader and textbook characteristics. It involves an interaction between these already mentioned aspects of the reader and the book.

There are various ways of measuring and predicting readability of a text: readability formulae, question and answer techniques, graphs and charts and sentence completion and cloze procedure. Readability tests are administered or applied without the involvement of the reader. They are therefore predictive. On the other hand comprehension tests involve the reader and are, therefore, a means of measuring the extent to which an individual reader can handle the text. Readability indices or tests were developed as an attempt to obtain a fairly objective means of assessing textbooks. A brief explanation of each of the methods of testing books for readability will now be given.

Graphs and charts are used in an attempt to facilitate the assessment of readability. The commonly used graph to predict readability is the Fry Readability Graph. The Fry graph involves the random selection of three sample passages of 100 words each and the counting of the total number of syllables in the passage. The average number of syllables and the average sentence length are then calculated. The two averages are plotted on a graph. The graph gives the approximate grade level. To get the reading age, five is added to the grade level, on the assumption that young children start formal learning from the age of five.

The Mugford Readability Chart (Gilliland, 1972) makes use of such common variables as word length (in syllables) and sentence length (words). It takes repetition into account. The score is derived by adding four whole numbers.

Sentence completion and cloze procedure are a means of assessing comprehension. Sentences are taken from a passage and certain words at regular intervals are omitted. The degree of comprehension is the extent to which a person who has read the passage can replace the omissions correctly. The words to be replaced have usually been chosen to reflect only the content of the passage, not the linguistic complexity.

In comparing the passages, those in which higher scores are obtained are regarded as more readable than the others on which lower scores are obtained. The term is derived from the Gestalt term "closure" that is used to describe the tendency for a person to complete a pattern mentally (Johnson). Gilliland, (1972) argues that cloze procedure tests comprehension in a continuous prose passage instead of through a series of unrelated sentences. It therefore measures the ability of a reader to use a variety of contextual interrelationships in completing any particular work. It can therefore reflect the way in which reader can respond to using his reading skills.

The question and answer technique involves giving pupils of different ages a text to read. They are then questioned on the text to gauge their level of understanding of the text, and hence determine the reading age to which the text is suited.

Readability formulae are the most frequently used methods of predicting the readability of texts. They are based on the analysis of easily identifiable aspects of the text namely sentence length and word complexity. The application of a formula involves the selection of a sample from a text, counting the average number of words per sentence or the proportion of polysyllabic words in the sample and then performing a calculation to produce a score. The score indicates the difficulty of the sample (Gilliland, 1972).

These formulae include the following: the Fog Index, MacLaughlin Grading, Dale-Chall Formula and the Rudolph Flesch formula. Of these formulae the most commonly used is the Rudolph Flesch formula. They all include characteristics which can be quantifiably or objectively measured: word length, or number of syllables, or sentence length. From such measures calculations, usually involving one or more constants, are then performed. The results often appear as either indicating the average performance of children in a particular standard (grade level) or that of children of a particular age (age-level). Details of the Rudolph Flesch formula which is the formula to be used in this study, are given in Chapter 3.

Jean Coltham has a number of criteria which she regards as important in assessing history books. They involve mostly subjective judgements. They were developed at a conference at C.J. Mott College in 1969 (John Fines 1983). A schedule for assessing history writing appropriate to 8-14 age-level was developed. The Assessment Schedule that was developed catered for items such as use of language, special terminology, treatment of facts, concern for human beings, views of society, notion of change, cause and effect, time, illustrations, activities and exercises suggested, as well as the format of the books.

This study also made use of the criteria proposed by Jean Coltham in her assessment schedule. The assessment criteria used and the readability formula used together with the rationale for their use are obtained in Chapter 3.

The identity level, (the second stage), unlike the concrete level that involves only the discrimination of an object from other objects, refers to the recognition of the same object at different times and places; the child sees the dog again and repeats the word. He can also now see different types of dog, but recognises them all as dogs. The new and critical operation is generalising. The classificatory level is reached when the child can treat two different examples of objects of the same class as equivalent, even though he cannot give a clear basis for his views. He should be able, for example, to treat his toy dog and that of the neighbour as both poodles although he may not give an elaborate account of the attributes of poodles. At the formal level of cognition the child should be able to give not only defining attributes but also abstract properties of concepts. This stage is an equivalent of Piaget's stage of formal operational thought.

In Piaget's view the stage of formal operational thought is reached around the age of 14 years. Although individual pupils differ in ages at which they attain the different stages of cognition, the sequence of the levels of cognition remains the same : sensori-motor, pre-operational, concrete and formal operational thought. None of these stages can be skipped nor can the order of their attainment be reversed or altered in any manner, but the pupils' ages of attaining the different levels may differ. Some pupils may attain the level of abstract thought at 14 while some may do so a little earlier and others much later than that age.

Much store has been set by the work of Piaget. Some historians have done research on cognitive development with specific reference to history. Thompson (1967), Peel (1967), Hallam (1968), Coltham (1971), Jurd (1978) are examples. Their studies tested Piaget's theory. The results of their findings have corroborated the stages of cognitive development suggested by Piaget, but have found that the age at which pupils reach the stage of formal operational thought apparently occurs considerably later, around 16 years. These studies brought to the fore the significance of the stages of cognitive development or levels of thinking to the teaching and learning of history, but also called into question why it is that pupils tend to reach the stage of formal operational thought considerably later in history than in other subjects?

CHAPTER 3

DATA COLLECTION PROCEDURES

This research study is focussed on the analysis of some school history textbooks. Four Std 5 and another four Std 8 books were chosen. Further details about the books will be given in the next chapter. In analysing the books, a combination of methods was used to collect information about the books: interviews were conducted with 15 teachers, for each standard, to test the order of preference of the books; subjective criteria and also some objective readability tests were applied to the books. A range of categorized styles of concept presentation was used to check how selected concepts were introduced in each book. Concepts were extracted from selected chapters.

After checking chapters that seemed worth analysing, a list of concepts was selected from the Std 5 books and another from the Std 8 books. This study therefore, will not make a detailed account of each and every chapter in the books chosen. The following were the guiding principles and criteria used in determining chapters worth analysing.

The topics chosen had to be those that were reasonably fully covered in all the books, so that there was enough opportunity to choose key concepts that are essential to the understanding of the topic discussed in the chapter. To check this, the number of pages that each book used in a topic was used as a guide. A chapter chosen, therefore, had also to be of sufficient length and complexity so that a number of possibly different strategies could be identified.

In addition to these criteria, it was felt that the chapter chosen had to be fairly early in each of the two sections (general history and South African history). The assumption was that in such cases the concepts would be fairly new to the majority of the pupils, and a fuller presentation might be provided than in a chapter towards the end of the section. By then most of the concepts could have occurred in the preceding chapters, and therefore the writer might no longer feel it necessary to elaborate or explain them to the reader.

It is mainly on this ground, for instance, that in the Std 8 books, the chapter on the French Revolution was chosen.

It is not only of sufficient length and complexity to provide fertile ground for the introduction of new concepts, but is also the first chapter of the general history section. Pupils are, therefore, likely to be exposed to such concepts for the first time in their history course. Furthermore, most of the concepts in this topic, for example revolution, conservatism, liberalism, bourgeoisie, class distinction, divine right, and human rights, are basic to the understanding of the subsequent sections of general history such as the 1830 and the 1848 revolts.

Following these three criteria, four topics (two from Std 5 and two from Std 8) were chosen. For Std 5 the Development of the Art of Writing and Printing, from the general history section, was the first topic. In most of the books this occurs as the second chapter. The first chapter is frequently a general introduction which is dealt with too briefly to be useful for the purposes of this thesis. It is longer only in the book by Graves et al.

The second topic from South African history, the Development of the Cape Colony is the first chapter of the South African history section. As indicated earlier, the topic chosen for study in the Std 8 general history section was the French Revolution. In the South African history section for Std 8 the topic chosen is British Reaction to the Great Trek. Although it is not the first topic of the South African history section for this standard, it is a more extensive section covered in a larger number of pages than the earlier chapters. It nevertheless occurs fairly early in this section.

The concepts chosen for analysis are those that are considered to be basic for understanding the particular topic chosen, and for subsequent sections. It was not expected that every concept so selected would appear in every book. In fact, one purpose of the research was to see how many key concepts were covered in each book.

The instrument that was used to analyse the concepts is a range of styles of introducing concepts, was developed from literature survey described in the previous chapter and examines five possibilities of presentation. It is reproduced in Table 3.1.

TABLE 3.1.

Concepts		Mode of Explanation					Supportive Documents
Used	Not used	un explained	definition only	Definition & example	Definition & illustration only	Total	

In drawing up this scale, the researcher was partly influenced by Tennyson and Cocchiarella (1986), who list seven important ways in which concepts can be presented:

- (i) labelling and definition which involves giving the name of an object and the definition or description of the object or phenomenon; recall of the object and the definition are the key things in this regard;
- (ii) context embedding which involves presentation of a contextual situation in which a concept can be used;
- (iii) presenting a good example of a typical class of aspects of the concept;
- (iv) using attribute elaboration which involves directing attention to salient features of the concept;
- (v) interrogatory examples which entail presentation of examples as problems to be solved;
- (vi) using expository examples, that is presenting complete examples with concept classification; and

(vii) using embedded refreshment, which provides extra background information to aid learning.

One problem of performing such an analysis would be to ensure that the fine distinction between these seven categories would be consistently made. For example, categories (ii), (vi) and (vii) might be very difficult to apply accurately.

Another influence was the analysis scheme by Macrae (1987, pp. 60-62). The final categories were produced by combining aspects of his Table 25 with those of Table 26, with modifications of Tennyson and Cocchiarella (1986).

Definition, as the first category, was chosen because it is the most common means of explaining concepts. In fact it is the first step in the process of concept explanation and falls within the first level of concept attainment isolated by Seymour (no date) and Beyers (no date) which were described in Chapter 2. Definition refers to the giving of an explanation or description of an object or idea in the form of a statement or rule that states attributes of a concept. Learning a definition results in the pupils having conceptual knowledge which can be recalled and which implies the pupil's knowledge of the attributes of a concept. However, research has shown that definitions alone do not play a significant role in concept learning (Rietman and Bower, 1973). Learners rarely learn well from definitions, and the recitation of verbatim definitions is no guarantee of understanding. As indicated earlier in Chapter 2, pupils may use terms like "universe", "democracy", or "black power" verbally or in writing but still be conceptually ignorant of the basic meanings.

A pupil may recite, for instance, the following definition: "democracy is the government of the people by the people for the people", but fail to recognize practices in class which are democratic, like asking the class to elect their class monitor. For this reason other variables in aiding concept acquisition have also to be considered.

Research on concept acquisition, by for example Dunn (1983) and Tennyson et al (1983), has shown that concept acquisition is improved by the instructional variables of best example and directions to use the example. It is for this reason that the heading "examples/non-examples" has been included in the categories. It was suggested in Chapter 2 that examples promote generalization, the ability to recognize new examples; and that non-examples promote discrimination, the ability to exclude as concepts any examples lacking a critical attribute (Yelon and Weinstein, 1977, p. 198).

Although Tennyson and Cocchiarella (1986) suggest that "examples" can be subdivided into expository examples (those in statement format) and interrogatory examples (those in question format), this finer division was not used in this research, to make the final analysis simpler and more direct.

The context in which the concept is used should help the learner deduce the meaning of a concept even if the concept is not defined. A new concept may have one label but several definitions, each being dependent on a specific context. The column headed 'background information' refers to instances in which concepts are not specifically defined, but the information in the context is such that the meaning can be deduced.

The other headings, 'illustrations' and 'documents' have been included in the categories because they, too, are important variables that aid concept learning although not all concepts would lend themselves to such elaboration.

In using the categories it was hoped that a reasonably objective analysis of the way a concept was presented could be achieved. Had some of the finer distinctions in Tennyson and Cocchiarella's categories been used, it was likely that the allocation of a presentation to a category would vary from person to person. In the categories used in the present research, only two might possibly be classed as subjective: the one concerning 'background information' where the adequacy and amount of this might be variously interpreted; and the other covering "definition and example" where it might be difficult to decide on illustration that serves as examples.

In addition to this 'category' analysis, some other objective measures were also included. One such measure was the extent to which simple, compound and complex sentences are used. Sentence length and complexity may affect a pupils' reading and understanding of the contents of a book. It is argued that such a quantitative analysis need not be made for the whole chapter being studied. Instead, five passages (sometimes of more than one paragraph) of ten sentences each, were selected from the beginning, the middle and the end of each chapter. From these, the calculation of sentence type was undertaken.

Another objective assessment was to discover the difficulty level of the books, using the Flesch Formula. This is a test of readability which is concerned with the problem of matching between reader and text. Readability is concerned with all factors that affect success in reading and understanding a text. Factors that affect success in reading as shown in Chapter 2 are: interest and motivation of the reader, legibility of print, complexity of words and sentences in relation to the reading ability of the reader. The readability test that was used excluded such factors as interest and motivation. A comment on these aspects will be made later in this chapter.

The application of a readability formula involves the selection of a sample of passages from a text, counting the average number of words per sentence or the proportion of words with many syllables in the sample and then producing a calculation to produce a score. The score thus produced indicates the difficulty level of the sample of the text and the score obtained from analysing a sample of selected passages is taken to indicate the difficulty level of the whole book (Gilliland, 1972). The Flesch formula was chosen because it is reasonably simple and at the same time has a greater degree of objectivity since it is based on word and sentence length, variables that can be checked objectively.

Factors measured by the Rudolph Flesch formula reflect aspects of the difficulty of reading single words and sentences. The word factor measures sentence difficulty because syllable count reflects word length and in general terms longer words tend to be more difficult than shorter words.

Sentence length is associated with memory span, because the longer a sentence is, the more difficult it will be to remember parts of the sentence and, therefore, the more difficult it will be to understand the whole of it and the relationships of the parts of the whole. In short, the formula assumes that long words and sentences make reading, decoding and comprehension difficult (Gilliland, 1972).

The application of the formula involves the following steps: selection of at least three passages of one hundred words each, spaced throughout the book; counting the total number of syllables in the one hundred word passages (represented in the formula by NS); and counting the number of words per sentence (represented in the formula by WPS). This data is then substituted in the formula $206,835 - (0,846 \times NS) - (1,015 \times WPS)$. The result will fall between zero and 100, zero indicating a very difficult passage and 100 an easy one. The results of the three passages are averaged to obtain a final picture of the whole book.

The following is an example of the application of the formula to a passage which consists of a 100 words, 155 syllables, and 17 words per sentence:

$$\begin{aligned} & 266,835 - (0,846 \times 155) - (1,015 \times 17) \\ & \quad 131,13 - 17,255 \\ & \quad 131,13 + 17,255 \\ & \quad = 148,385 \\ & 206,835 - 148,385 \\ \text{Reading-ease score} = & \quad \underline{58,450} \end{aligned}$$

It is possible to avoid the calculation involved in this formula. The following table is available, which allows a rough interpretation to be made by using the two components of word and sentence length separately to gain an indication of the final reading-ease score.

Table 3.2

Reading Ease Score	Style	Typical Magazine	Syllables per 100 words	Average sentence length
0-30	Very Difficult	Scientific	192 or more	29 or more
30-50	Difficult	Academic	167	26
50-60	Fairly Difficult	Quality	155	21
60-70	Standard	Digests	151	17
70-80	Fairly Easy	Slick Fiction	139	14
80-90	Easy	Pulp Fiction	131	11
90-100	Very Easy	Comics	123 or more	8 or fewer

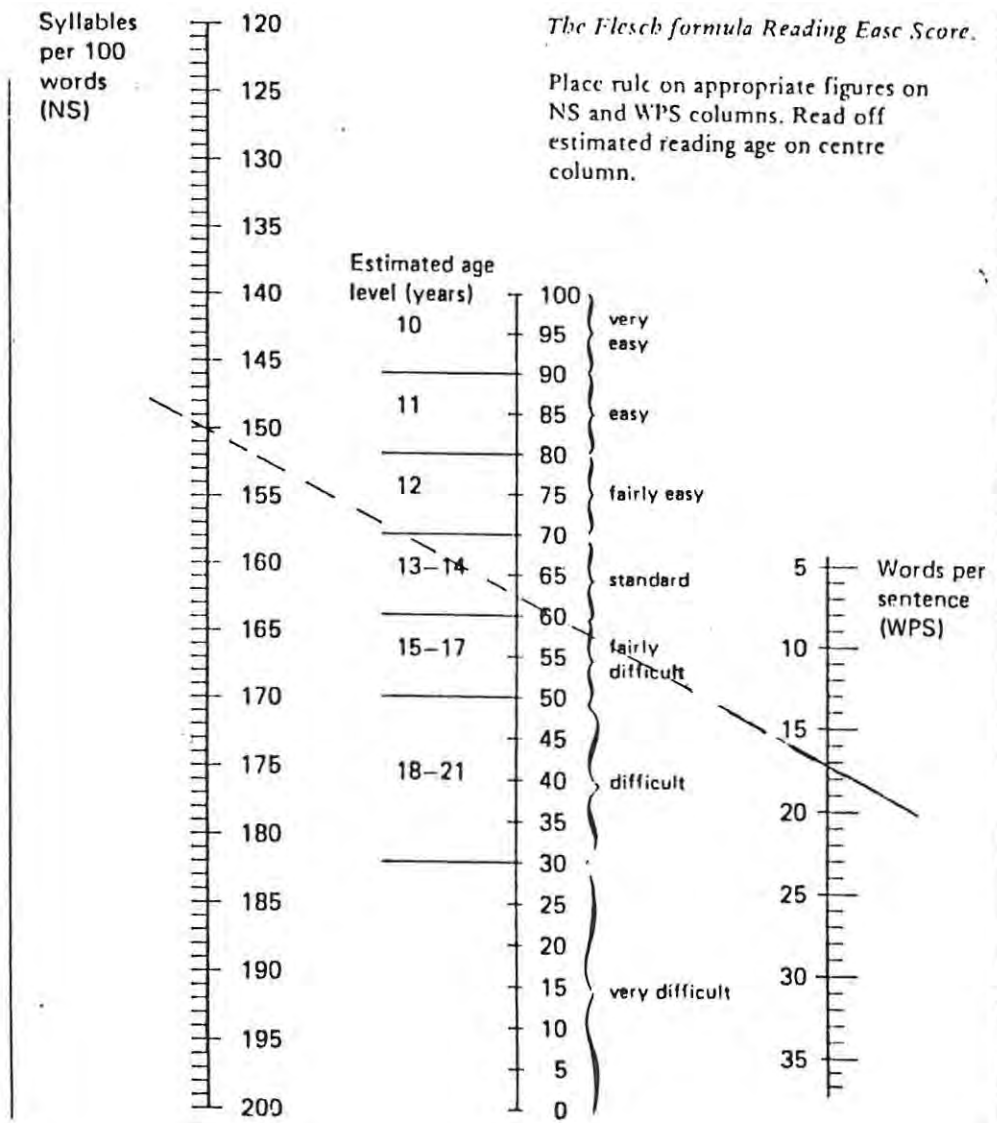
From Flesch: A New Readability Yardstick, Journal of Applied Psychology
2,3 June 1948

For example, a passage may have a syllable count of 155 and a sentence length of 17. The former suggests a Reading Ease Score of 60 to 70. It could, therefore, roughly be estimated that the appropriate score was close to 60 and the style was tending to the fairly difficult level. By applying the exact formula, the Reading Ease Score emerges as 58,45. This is reasonably close to the approximation made without using the formula.

The following figure by Kerry and Sands(1978) uses a graphical construction to give the difficulty level. The individual measures for syllables and sentence length are joined by a ruled line. Three measures can then be read off : the "style" ratings; the difficulty index, and an indication of the reading-age-level of the text. It should be noted that this last measure refers to reading age levels of mother-tongue speakers of English in Britain.

Figure 3

The Flesch formula Reading Ease Score



If the same scores as in the previous example are used the measures are revealed by following down the dotted line as : "fairly difficult; style; Reading Difficulty Index of 58 and a Reading Age of 13-14 years. The closeness of 58 to the precisely calculated result of 58,45 can be seen, and the greater ease in making the assessments is obvious.

By choosing the Rudolph Flesch formula, the researcher is not in anyway accepting it as a perfect formula, but as a very useful supplement to other subjective and objective criteria for judging textbooks. There are other formulae which could have been used, for example Gunning's Fog Index and MacLaughlan's Smog Index. These are easier to apply but they have been avoided because there is a tendency for the simpler formula to be less reliable than a more complex one. On the other hand, the Dale-Chall formula which is said to be consistently the best was avoided because it is the most tedious to use. Every word in the text has to be compared with a list of 3 000 words, which are regarded as simple words. Clearly the compilation of the list is highly subjective and is likely to vary with time as vocabulary usage changes.

It would be unwise to confine any analysis of textbooks to objective measures entirely. In planning other forms of assessment, the researcher was influenced by Coltham (1970) who uses a number of subjective criteria in her schedule for assessing history books. A description of her work was given in Chapter 2. In making use of her approach, six of the twelve forms of assessment described in her article are used: special terminology, the notion of change, the presentation of the concept of time, the use of illustrations, the quality of the exercises, and the format of the book.

In considering the aspect of special terminology, Coltham's procedure was followed: the rating is done in terms of the number of words (specially related to the topic) per three pages from a random selection of pages. Coltham suggests 'any rate higher than five' suggests a book of some difficulty for under 14-year-olds, although she is referring to mother-tongue speakers of English. Each piece of terminology was (also following Coltham) then rated in terms of the presence or absence of explanation.

The second factor was the notion of change. Coltham merely suggests a skimming of the book to find out if the idea is made explicit for the reader. In the present research, each chosen chapter was examined to see if the idea was present at all, and a few examples of how it was presented were given.

The third factor (that of the presentation of the concept of time) was handled in the same way as that of change, except that an impression of its handling in the whole book was attempted.

The fourth factor, (illustrations) was subjectively assessed for the book as a whole in terms of relevance to the text, and whether the pupil was expected to become actively involved in the examination of the illustrations. At the same time an impression was gained about whether colour was used at all and whether this was done effectively.

The fifth factor concerned exercises, and considered the nature of these ranging from straightforward recall to more complex skills such as summarising, note-making or synthesis of the material from the text.

Coltham's final factor is called format. Here the selected texts were examined in terms of the breaking down into smaller units and subsections and the use of sub-headings and the use of material separated from the text into "boxes".

One other factor was added to those suggested by Coltham: the presence or absence of extracts from documents. This was examined by looking at relevance to the text by assessing whether they were used to present contrasting evidence, and whether any pupil activities were linked to the documents.

To illustrate the approach towards textbook assessment used in this thesis, an extract from a book in the Grave's series, History for Today is presented and a series of examples of the various techniques is shown. The extract is from the Std 6 text, which has not been included in the detailed analysis in the remainder of this thesis.

(c) Science

(1) Characteristics of Renaissance science

Historians argue that the Renaissance period was really a period of preparation rather than discovery among men of science. Nevertheless, Renaissance curiosity prepared the ground for many later discoveries. Although **Renaissance men did not use precise scientific methods**, men like Leonardo da Vinci and Dürer observed and then sketched what they had studied.

The main features of Renaissance science were:

- increase in the amount of ancient scientific knowledge available for study;
- the influence of the Church on scientific work;
- the development of techniques and instruments.

The increase in the amount of ancient scientific knowledge available

Study of ancient manuscripts both helped and hindered Renaissance science. The **ancient documents introduced men to more precise methods of calculation and measurement**. This was especially the case with the use of Arab numerals.

Signs such as +, -, ×, ÷, <, > came into regular use.

However, these same **ancient writings also hindered scientific study, because Renaissance scholars believed that the wisdom of ancient writers** (such as Aristotle, Ptolemy and Galen) **could not be questioned seriously**. There was, therefore, a difference between what was observed and scientific facts and ideas based on the ancient theories.

There were some fourteenth-century scholars such as Heytesberg who seriously doubted the ancient theories, but did not develop their own.

The influence of the Church on scientific work

The **Church encouraged belief** in the theories of Ptolemy and Aristotle as these did not conflict with Christian doctrine of the time. **Ancient Ideas of the Earth as the centre of the universe fitted in with the beliefs about God, Heaven and man**. This restricted original or critical work, which differed from these ideas.

The development of techniques and instruments

During the sixteenth and seventeenth centuries, there were many **advances in the field of scientific instruments**. Scientists were particularly anxious to increase their accuracy in measurement and calculation. Among instruments which were developed were **the compound microscope, the telescope, the thermometer, the barometer and the**

Many others, such as Tycho Brahe, Vesalius, Paracelsus and Johannes Kepler could, however, be researched by you.



Sketch of the universe by Copernicus.

pendulum clock. The mathematical system known as 'calculus' became the tool of seventeenth-century scientists.

(2) Renaissance scientists

Once again, we can only single out a few scientists who exhibited characteristics of Renaissance times.

For some time, **scholars were concerned that observation (using new instruments) and the ancient theories did not agree.** By 1514, reform of the calendar was urgently needed. Men like **Nicolaus Copernicus** suggested that this was not possible without a new look at the ideas and methods of the Ancients.

In 1543 **Copernicus produced a detailed study called 'The Revolution of the Heavenly Bodies'.** This put forward **new ideas about the universe, the position of the Sun and planets (including Earth), and the movement of these.**

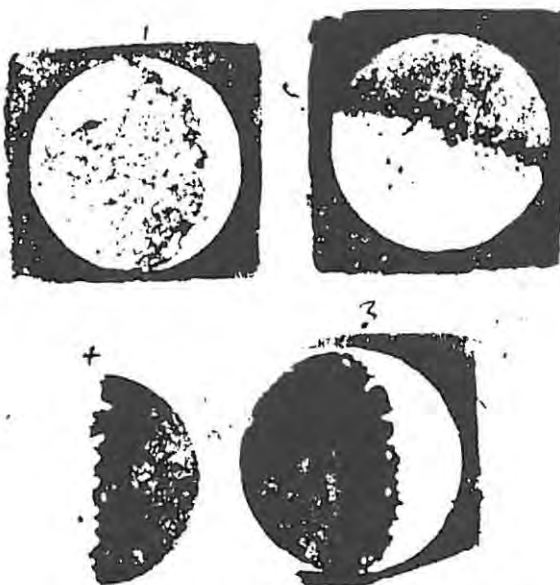
This was in direct conflict with the Church and the teachings of Aristotle, but was only declared heretical in 1616.

Born in 1564, twenty-one years after publication of this work, was the **first modern scientist who showed the importance of accurate measurement.**

His name was **Galileo Galilei.** Using the newly developed telescope, he was able to show that **Copernicus' theory could be proved.** He was charged with heresy, tried by the Church and forced to recant (i.e. take back what he had said).



An old telescope of the type which Galileo used.



Galileo's drawings of the moon as seen through an old telescope.

Not only had Galileo challenged the Church by suggesting that the Earth was only a planet and that all the Heavens moved, but he proved them wrong on other issues too. The Church had declared that the moon was a lightweight, polished ball. **Galileo, using a telescope, sketched the moon's surface.** He wrote:

"It is a most beautiful and delightful sight to behold the body of the moon . . . It certainly does not possess a smooth and polished surface, but one rough and uneven, and, just like the face of the Earth itself; is everywhere full of deep chasms."

Galileo died a disappointed man. Among his **other contributions to the development of science were his experiments with the pendulum and the speed of a falling body.** Legend (probably not true) says that he used the Leaning Tower of Pisa to test the effects of body weight on the speed of a falling body. **By using experimentation,** he demonstrated that falling bodies regardless of size have a steadily increasing rate of speed.

The first pendulum clock was developed ten years after his death.



This painting shows the fashion for studying the heavens.

Christian Huygens was only a small child when Galileo was charged with heresy. He grew up to be a **careful experimenter.** Among the contributions he made to the story of science were:

- the invention of the pendulum clock;
- the discovery of the rings of Saturn;
- the **wave or pulse theory about light;**
- **research into optics;**
- improvement in the telescope;
- calculations about the shape of the Earth.

Most of his work was only published after his death.

He was born in 1629.

He speculated about life on other planets.



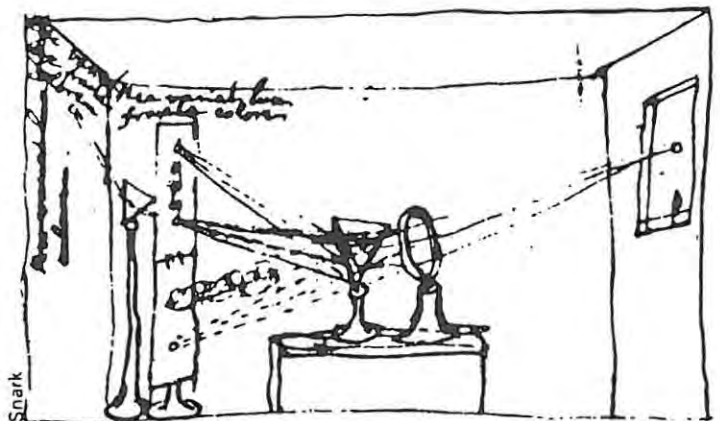
Newton.

He had shown that he was a new kind of experimenter who knew how to form a theory and test it.

Nine years after the death of Huygens, **Sir Isaac Newton** (in 1704) **defined light in terms of waves**. He **investigated the spectrum**. Here is a sketch of him demonstrating how he passed light through a small hole and then a prism to separate the colours of the spectrum.

This is how he described his findings:

"It was at first very pleasing to view the vivid and intense colours produced ..."



Newton's sketch of his experiment on the refraction of light.



Cartoon: The effect of gravity.

What is Greenwich Mean Time?

He wrote that **the same laws of Nature affect all heavenly bodies equally** (i.e. Sun, Moon, Earth, stars, planets). This was not in agreement with Church teachings. Newton is best known for **his laws about motion and the effects of gravity**. People made fun of his theory. Here is a cartoon of the time.

This picture shows the octagon room at the Royal Observatory at Greenwich in England. **Studies of the heavens eventually helped scientists to find a way of measuring longitude**. What instruments and activities can you observe here?



Greenwich Observatory.

During the Renaissance, men had dissected bodies to study anatomy and even experiment with skin grafting and blood transfusions. In Venice, doctors had to attend a four-year course at medical school and a yearly refresher course in anatomy. Regular meetings were also to be held to discuss cases.

When Pope Innocent VIII was dying, the blood of three boys of ten was used to try and save his life. He and the boys all died.

However, Renaissance medicine was strongly influenced by the theories of the Ancient Greek Galen. He had claimed that disease was the result of an imbalance between the humours (phlegm, blood, black and yellow bile)! In addition he claimed that blood flows up and down the body to the liver!

Although men like Paracelsus and Vesalius challenged these ideas, it was not until the seventeenth century that Galen was finally proved wrong. The man who did so was William Harvey (1587–1657). He observed, dissected and finally wrote a book *On the Motion of Heart and Body*. In this he showed that the heart (and not the liver) was the centre of the blood system and that the arteries and veins were connected.

(3) The effects of the new approach to science

The approaches to scientific knowledge were changed by Renaissance attitudes to theory. **Statistics and established facts replaced many of the ideas of the past.** The new scientific thinking separated educated and uneducated people, because **scientists could no longer accept teachings about the world without question.** This was to have an effect on how people thought about man, Nature and the teachings of the Church.

(4) Let's sum up: Renaissance science

Test your knowledge, after re-reading the section on science.

Renaissance science

<i>Name of scientist</i>	<i>His contribution</i>	<i>How this reflected Renaissance thinking</i>
Copernicus	?	?
Galileo	?	?
Huygens	?	?
Harvey	?	?
Newton	?	?

The following six concepts have been chosen from the extract, the criterion for choosing them being that they are essential to the understanding of the section appearing in the extract: renaissance science, experimentation, heavenly body, gravity, heresy/heretical, scientific instruments.

In the second step the style of their presentation has been checked against the following categories and tabled as follows:

Concepts	Use in texts		Definition Approaches					
	Used	Not Used	Un-explained	Definition Only	Definition & Example	Background Information only	Illustration/ & example	Documents
renaissance science	✓		✓			✓		
experimentation	✓		✓		✓		✓	
heavenly body	✓		✓			✓		
gravity			✓			✓	✓	
heresy/heretical	✓		✓		✓			
scientific instruments	✓		✓			✓		

Most of the concepts in this extract have not been directly defined, their meaning has been deduced from the context. Two of these concepts have been further explained by the process of illustrations. None has been presented through documents. In fact, not all concepts lend themselves to presentation by illustrations and documents.

The third step has been the application of the Flesch formula to this passage consisting of a sample of 100 words:

Galileo died a disappointed man. Among his other contributions to the development of science were his experiments with the pendulum and the speed of a falling body. Legend (probably not true) says that he used the Leaning Tower of Pisa to test the effects of body weight on the speed of a falling body. By using experimentation, he demonstrated that falling bodies regardless of size have a steadily increasing rate of speed.

The first pendulum clock was developed ten years after his death.



This painting shows the fashion for studying the heavens.

Christian Huygens was only a small child when Galileo was charged with heresy. He grew up to be a careful experimenter. Among the contributions he made to the story of science were:

He was born in 1629.

Number of syllables = 169
Average words per sentence = 16,6

$$\begin{aligned} \text{Reading ease} &= 206,835 - (0,846 \times 169) - (1,015 \times 16,6) \\ & \qquad \qquad \qquad 142,974 \qquad \qquad \qquad 16,849 \\ &= 47,012 \end{aligned}$$

- Using the Flesch pattern of reading ease scores the book is difficult.

The fourth step has involved the checking of the presence or absence of objectives, summaries, and glossaries. Although these do not appear in the extract, when a survey of the whole chapter is taken, it has been noted that the historical skills to be developed in this chapter as well as questions to be answered are indicated. Summaries are not made for the reader but, instead, the readers are given guided exercises on summarising in chart form. No glossary is given at the end of the chapter but only a list of words that require special consideration is given.

In addition to this objective criteria the extract has been assessed subjectively in terms of Coltham's assessment schedule, and also in terms of other criteria like use of documents and exercises.

The rate of introduction of new terms has been judged as follows:

On page 32 which does not appear in this extract, a time chart has been used as an exercise for pupils so that they gain a sense of time.

Once the full analysis of each textbook has been made, comparisons and contrasts between the approaches and the implications of the learning and teaching techniques are developed.

A look at the illustrations leads to the following observations: the illustrations are relevant to the section, for example the 'old telescope', Newton's sketch of his experiment, the cartoon on the effect of gravity, the picture of Isaac Newton. Some of the pictures are small and with some portions faint. This is clearly shown by the sketch of the universe by Copernicus on page 28.

With regard to the format, the contents of the extract, in keeping with the rest of the book, is presented under numerous headings and sub-headings. Key sentences and phrases are written in bold type. Part of the material in the text is isolated and appears in 'boxes'.

Documents in this extract have not been used except for a brief quotation on page 29.

The assessment of this extract gives an indication of how the analysis of the book was been carried out.

This study has relied on the adapted categories of Tennyson and Cocchiarella, and Macrae, the Flesch formula as a readability test and Coltham's suggested criteria for assessing history books.

By undertaking an analysis of these textbooks the researcher is not in any way suggesting that the role of the teacher is insignificant. His role finally is important but in the developing countries the textbook still features prominently in the teaching and learning of various school subjects, and therefore it deserves special attention.

In analysing the books attention was first given to Std 5 and then to Std 8 in respect of each criterion that was applied.

CHAPTER 4

DATA PRESENTATION AND ANALYSIS :: OBJECTIVE CRITERIA

4.1. General Features of the Books

As indicated in Chapter 1 in the remarks on the scope of the study, eight history books have been analysed : four Std 5 history textbooks and the other four for Std 8. In each case, these books are in the list recommended by the subject committee for History for use in the primary and secondary schools in Transkei. Teachers at school are supposed to select from the suggested list of books for each class. The books suggested are also used in other parts of South Africa, and as will be shown, the majority of them are written by South Africans.

The following are the Standard 5 books that have been analysed :

- History for Today by Graves and Consul,
- Junior History 5 by Olivier and Horn.,
- New ventures in History : Standard 5, by Qokweni et al.
- Objective History for All, by van Zyl.

History for Today 5, written by F E Graves and L H Consul, (referred to in the text as History for Today) was published in 1985 by Juta and Company Ltd. In terms of its contents, it answers to the demands of the 1985 syllabus that is currently used in South Africa and her homelands. It is a 248 page publication. In the very first page of the book the authors make introductory remarks on methodological approaches and aims, headed "How to use this Book ." This is a guide to both teachers and pupils. This introductory guide covers, amongst others, the following points : terminology, use of evidence, and activities for pupils.

Another distinctive feature of this book is that key questions are set, to stimulate the curiosity of the learner, at the beginning of each chapter.

These questions are preceded by a list of historical skills that should be developed in that particular chapter. Junior History 5 by J Olivier and J M L Horn, (referred to in the text as Junior History) is, like History for Today, a 1985 Juta and Co Ltd. publication. It treats the current Std 5 syllabus. It has a brief preface by the authors, far less detailed than that of History for Today. Assignments are given at the end of each chapter, but there are no introductory guides or specified objectives at the beginning of each chapter. The book has fewer pages than History for Today. History for Today is 248 pages and Junior History is 154 pages.

New Ventures in History by P G Qokweni et al (referred to in subsequent sections as New Ventures) has exactly the same number of pages as Junior History. It is 154 pages. The book was published in 1985 by MacMillan Boleswa. It answers to the slightly adapted Cape syllabus followed in Transkei. The contents of the book are not presented in chapters but in units. It divides the syllabus into 30 teaching units, one unit comprising a week's work. The division of work into units has been done to "facilitate planning a scheme of work for the school year." This book deviates from the pattern that is followed by a great number of history textbooks, not only with regard to the division of contents into teaching units, but also with regard to the sequence of General and South African History. It presents South African History first and then goes on to General History. The first unit of the book gives introductory information on studying history, covering the main ways in which we can find out about the past : recorded history, archaeology and oral history.

At the end of each unit the authors have presented a variety of questions and exercises to help pupils develop skills of note-making, summarising, comprehension, analysis and synthesis. The book does not have any note to the teacher or for the pupil on the methodological approaches and aims.

There is no list of objectives outlined at the beginning of each unit. This book, unlike the others with which it is being assessed, has a subject index at the end. It does, therefore, provide an opportunity for training pupils in using the index as early as Std 5.

Objective History for All : Std 5, written by M L van Zyl (referred to in the text as Objective History) was published by Book Studio (Pty) Ltd. The year of publication has not been indicated. However, the contents of the book follow the 1985 syllabus. Besides division into main topics, corresponding to what might be regarded as chapters, the contents are divided into 99 lessons covering a span of 33 weeks.

The book has notes for the teacher in the foreword. At the end of each lesson some questions and exercises have been set for the pupil. At the end of each module, a number of lessons covering a theme, "test yourself" questions are provided. There are no objectives set for any set or module.

This book, like Junior History and New Ventures in History comprises 154 pages. Objective History does not provide summaries of units.

From the foregoing remarks about the books, it becomes apparent that the research was dealing with recently published material. Three of them were published in 1985 and even the one that has no date of publication answers to the revised 1985 syllabus.

In these circumstances, it could reasonably be expected that the books would address the demands of the new history which lays more emphasis on intellectual skills than on content, and on understanding of concepts than on the acquisition of knowledge by rote and memorization.

The following Std 8 history textbooks have been analysed :

- History for Today 8, by Graves, Eksteen and Viglieno
- History 8 New Syllabus 1985 by Lambrechts et al.
- History in Perspective by Lategan and De Kock.
- Timelines 8 1985 Syllabus by Lindvelt et al.

History for Today 8, by Graves, Eksteen and Viglieno, (referred to in the text as History for Today) is part of a set of books for Std 5 to Std 9. It has more or less the same features as the Std 5 version. It was published by Juta in 1985. In the introductory section, the book has a note for the pupils. The note to the teacher explains the approach of the book in particular, the evidential approach, differentiation between Higher and Standard Grade, and on the format of the book. The note to the pupils advises them on activities suggested in the book and on how they should use the book. The book is organised into chapters, each of which is preceded by a summary of its contents. The summary is given in question form so that as the pupil reads he is expected to find answers to these questions. At the end of each chapter questions and exercises have been set for pupils of all abilities, the gifted and slow learners. Different signs are used to mark questions that are specifically meant for a stipulated category, for example, the highly gifted. A list of books for further reading is also provided at the end of each chapter. These are of help to both pupils and teachers. The book has an abundance of extracts, used as evidence, together with some graphs and pictures.

Timelines was first published in 1985 by Maskew Miller Longman. Its contents meet the demands of the 1985 syllabus. The book has a foreword in which remarks are made about assignments, questions and illustrations, and the objectives of the book are outlined in this foreword. The contents of the book are presented in chapters. At the end of each chapter reference books are given.

There is also a bibliography on General History and another one on South African History. At the end of each chapter a summary is given, in point form, followed by revision questions and assignments for both higher grade and standard grade separately. The book has 201 pages.

Lambrecht's History 8 (referred to in the text as History 8) was published in 1985 by Nasou Ltd. It has no preface which serves as a guide to the teacher. Its contents are presented in chapters. A chronological account of the most important events is given at the beginning of each of the two main sections, General History and South African History. At the end of each chapter, questions and class assignments are set, followed by a list of reference books. No summaries of chapters are given. The book has a subject index at the end. Lambrechts's book is 120 pages long.

Lategan's History in Perspective Std 8 was published by Perskor in 1979. Its contents are organised into chapters. The book has no preface or any form of guideline or note for either the pupil or the teacher. It moves immediately into an explanation of the concepts "nationalism" and "liberalism", as an introduction to the chapter on the French Revolution. Some questions are set at the end of each chapter. The questions are presented under the heading "Hints : Types of Questions." The contents of the book cover 133 pages. It has no index.

Most of the books referred to in this analysis for Std 8 classes are mainly 1985 publications, with the exception of one published before the 1985 syllabus revision : History in Perspective Std 8. Once again the analysis is dealing mainly with fairly recent material which should ideally meet the current demands of the new history.

A brief survey of the frequency of use of these books was made by contacting 30 teachers. It was found that the book commonly used in both cases was History for Today. New Ventures was the most popular in Std 5 and Timelines in Std 8. A more detailed indication of the popularity of the texts is shown in Table 4.1.

TABLE 4.1 : ORDER OF POPULARITY OF THE EIGHT TEXTS

BOOKS	STD 5 RESPONSES	BOOKS	STD 8 RESPONSES
New Ventures	8	Timelines	7
History for Today	5	History for Today	3
Junior History	2	History 8	5
Objective History	1	History in Perspective	0
TOTAL	15		15

It will be noted that none of the 30 respondents were personally using New Perspectives. This does not of course, mean that the book was not used by other Transkei teachers.

In a number of cases teachers were clearly not familiar with the criteria which could be considered when school textbooks are chosen and could, therefore be easily swayed by a powerful book sales representative who is experienced in the book trade, especially if he has some knowledge of the subject concerned. Some of the teachers interviewed expressed their need for guidance in textbook analysis so that they could have more factors to consider when choosing textbooks than they presently have.

In the analysis the eight textbooks referred to, both objective and subjective criteria were used. The objective criteria were: the difficulty level of books, using the Flesch Formula; the frequency of simple, compound and complex sentences; and the inclusion in the books of summaries, illustrations, glossaries, documents, and questions.

OBJECTIVE CRITERIA

4.2. Difficulty level of the books

Std 5 Books

Before applying other criteria the books were first checked for difficulty level, using the Rudolph Flesch Formula, the details of which were given in Chapter 3.

The following tables show the results that were obtained in respect of each of the eight books :

TABLE 4.2. SUMMARY TABLE : DIFFICULTY LEVEL OF THE BOOKS

STD 5 BOOK	Flesch Rating Reading ease score	Style	Kerry & Sands Age Level
History for Today 5	71,53	Fairly easy	12
Junior History 5	58,8	Fairly difficult	15-17
New Ventures in History	63,5	Standard	13-14
Objective History	77,7	Fairly easy	12

As the summary table shows, among Std 5 books, History for Today and Objective History are fairly easy. Junior History, which is fairly difficult, has a reading-ease score of 58,8 which when compared to the highest score 77,7, gives some 20 points difference. This is a very big gap. The gap is strikingly wide considering the fact that both books are intended for use by pupils of the same age level. In terms of the Flesch Readability Yardstick, in Table 3.2, the material ranges from quality magazines to digests. Even in terms of the age level, the gap is wide. History for Today and Objective History are appropriate for pupils of about 12 years of age while Junior History seems more suited to pupils in the 15 - 17 age range. This gives a fairly wide difference of 5 years. Junior History has, on the average, 18 words per sentence while the others, History for Today, New Ventures in History and Objective History have 13,8, 17,8 and 13,9 respectively. Since the Flesch formula is based on word and sentence length, this suggests that Junior History has many long words and sentences, factors which make reading difficult.

One has further to consider the fact that these books are used by pupils who do not use English as their native language but only as a medium of learning. A rough adjustment could thus be made so that what is categorized as "fairly easy" by Flesch might be interpreted as "standard," what is "standard" might become "difficult, and what appears as "fairly difficult" would at least rate as "difficult" for such readers. Some long words may not be difficult for the native speakers of the language, because they come across them frequently in their reading even outside school : words for example such as tremendous, requirement, residence, necessity, are all multisyllable words, but are ones which could possibly be found in a Std 5 pupil's recognition vocabulary, even though he might not often use them in the speech which he himself generates. For a second language speaker, however, such words could prove considerable stumbling blocks.

There is yet another point that needs to be taken note of in the Flesch test of readability. As has been shown, the formula is dependent upon the length of words and sentences, which can be measured objectively. Length of words is not however, an absolute test of difficulty in decoding. For example, "antidisestablishmentarianism" is a long word with 12 syllables in all. "Colonel" on the other hand is a short word with only two syllables that are pronounced, but is very difficult to decode because of the unusual sound - symbol relationship. Antidisestablishmentarianism, on the other hand, is not difficult to decode because by separating the components such as 'an'/'ti'/'dis'/. the reader will recognise a basic root in the word : 'establishment'. It is then possible to blend the syllables together again. This process cannot work with the shorter word 'colonel'.

Colonel, antidisestablishmentarianism, and phthisis are three words of 2, 12 and 2 syllables. Each of them reflects an abstract concept, which could add to decoding difficulties. It has already been suggested that some long words, because of their frequency of use, are not difficult to decode.

An interesting example comes from Burt's Graded Word Reading Test, originally devised in England in the 1920's. In this text, the word 'refrigerator' comes towards the end of the list and is expected to be read by average pupils of 13 years of age. In the 1920's, refrigerators were rare household goods. If the test were to be re-standardized for English pupils in the 1980's, this would need to be allocated to a much lower reading level, because most children have such machines in their homes, and have seen them frequently advertised. Despite its five syllables, the word would be unlikely to present major difficulties to younger readers.

These examples suggest the need to approach Reading Difficulty indices with caution, and certainly suggest that they should not be used in isolation.

A word may be simple, short in form and straightforward in orthography, but may be difficult to a second language speaker because of the influence of the mother tongue. Xhosa, for example, has one word which means "upper/higher" as well as "north". Similarly, there is only one word which means both "lower" and "south". So a Xhosa-speaking pupil will not take "North" to mean only the direction opposite "South" but also upper and higher. South in Xhosa is umzantsi and north umntla. There are words like entla (in the north or upper section or) and ezantsi (in the south or lower section).

In the case of the South African terrain these misconceptions are further strengthened by words like lowveld and highveld.

This can lead to the common misconception, that as one goes north one is going up higher. This misconception becomes clear if one considers the problems of pupils talking about the direction in which the Nile river flows. They often say it must flow South because South tends to be associated with a lower section. Further, if a map, for example that of Africa, is hung against the wall, the impression that the South is lower is further strengthened. Putting it on a flat surface would help in correcting misconceptions of this nature. A similar situation is experienced when one uses a map of the world instead of a globe. It gives the impression that the USA is far from Russia. The globe can help correct such a misconception.

It is now possible to examine the result of the application of the Flesch formula to the four Std 8 texts analysed in this study.

TABLE 4.3 : SUMMARY TABLE : DIFFICULTY LEVEL OF THE BOOKS
STD 8

BOOK	FLESCH RATING		KERRY & SANDS RATING
	Reading - ease score	Style	Age-level
History for Today	63	Standard	13 - 14
History 8	54	Fairly difficult	15 - 17
History in Perspective	53,4	Fairly difficult	15 - 17
Timelines	53	Fairly difficult	15 - 17

What emerges from this table is that the reading-ease scores vary from 53 to 63, giving a ten point range. This range of ten points is large but is not as large as that found in the Std 5 books, with their 20-point range. With the exception of History for Today, the rest of the books are fairly difficult.

History for Today is most appropriate for the age-level of 13 - 14, a normal age-range for Std 8 pupils. The rest of the books are suitable for use by the 15 - 17 age range, that is Std 9 and 10 pupils. This group should, in terms of maturational level, have reached the stage of formal operational thought. These Std 8 books, excluding History for Today, have many long words and sentences and can, therefore, be expected to be difficult for the Std 8 pupils to read.

4.3 SENTENCE STRUCTURE OF THE BOOKS

One of the components in the Flesch calculations is concerned with straight-forward sentence length. Sentences should also be considered, however, in terms of their internal structure. Three categories can be isolated : simple, compound and complex sentences. It was argued in Chapter 3 that sentences with large numbers of dependent clauses lead to comprehension difficulty, especially on the part of the young inexperienced readers or those for whom the language is not the mother tongue. A complex sentence could make it difficult for the young readers to retain the main idea long enough while reading a number of subordinate clauses. Simple sentences tend to make fewer demands on the reader's understanding. Compound sentences, which are simple sentences joined together by a co-ordinate conjunction, present fewer difficulties than complex sentences.

Not all simple sentences are short. In some cases, long phrases are included which tend to have the same daunting effect as complex sentences. The following is an example of a long simple sentence from Timelines (p.82).

"In this way the ideas of equality, liberalism (freedom and democratic government) and nationalism helped to establish a new political order in Europe towards the close of the eighteenth and during the nineteenth century."

It should be noted, however, that the difficulty of such a sentence (of 53 words) is accounted for in the Flesch formula, whose index would be considerably inflated by the inclusion of so long a sentence.

It was explained in the previous chapters that five passages of ten sentences each were chosen from each textbook selection and each sentence was placed into one of the three categories. The results are shown in Table 4.4. The totals for each book represent a distribution of sentence types from a sample of 50 sentences.

TABLE 4.4 : LEVEL OF COMPLEXITY OF SENTENCES IN THE BOOKS

STD 5

STD 5

Number of simple, compound and complex sentences in selected passages

Percentage of simple, compound and complex sentences

Books	Simple	Compound	Complex	Total	Simple	Compound	Complex	Total
1. History for Today	32	2	16	50	64%	4%	32%	100
2. Junior History	31	2	17	50	62%	4%	34%	100
3. New Ventures	28	5	17	50	56%	10%	34%	100
4. Objective History	31	8	11	50	62%	16%	22%	100

STD 8

1. History for Today	26	6	18	50	52%	12%	36%	100
2. History 8	23	5	22	50	46%	10%	44%	100
3. History in Perspective	31	7	12	50	62%	14%	24%	100
4. Time-lines	18	7	25	50	36%	14%	50%	100

Several points emerge from an analysis of this table. The first is the comparatively small number of compound sentences.

This small number is, in fact, surprising as one would have expected a larger number than complex ones. The next point is the large proportion of simple sentences in the Std 5 texts with a very small range of four, from 28 in New Ventures to 32 in History for Today. Broadly speaking only one third of the sentences from Std 5 texts is complex. This seems to reflect an awareness on the part of the authors of this feature of their writing.

When the Std 8 texts are considered, there is a tendency for an increase in compound and complex sentences and a proportional reduction in simple sentences. A particular exception in the Std 8 texts is History in Perspective which maintains a high proportion of simple sentences, and by far the smallest number of complex sentences. The general picture of more complex writing at this level is, however, an appropriate change, since "with increased age, increased complexity of structures is normally acceptable". (Coltham, J B, 1976).

4.4 USE OF HEADINGS AND SUB-HEADINGS

The books were checked for headings and sub-headings. Headings were accepted as the main topics and their subsections were taken as sub-headings. Headings of chapters were not considered. The following example shows the pattern of analysis that was used. The extract comes from History for Today 8.

Textbook arrangement

Analysis

**Chapter Topic : The Revolution in France
1789-1795**

Headings : The Causes of the French - Revolution	Heading
(a) What was the political crisis ?	Subheading
(b) What was the economic crisis ?	Subheading
(c) What was the social crisis ?	Subheading
(i) Government	Sub-section of Sub-heading
(ii) Church	Sub-section of Sub heading
(iii) Economy	Sub-section of Sub heading

1.2 The Course of the Revolution

Heading

(a) The Meeting of the Estates- General and the Formation of the National Assembly 1789.	Heading
(b) Constitutional Government in France 1789 - 1791	Heading
(c) Constitutional Government in France the Republic, National Convention and the Directory 1792 - 1799	Heading
(1) Why did France become a Republic?	Sub-section of Sub-heading
(2) What problems did the Republic have to face ?	Sub-section of Sub-heading
(3) How did the Republic react ?	Sub-section of Sub-heading

In considering the make-up of the texts analysed, it seemed important not only to note the number of headings, sub-headings and subsections in the chapter, but to relate these to the total length of the chapter. A very large number of headings could so break up the text that it is almost turned into series of notes rather than a series of continuous prose passages. The analysis for the Std 5 tests is shown in Table 4.5.

TABLE 4.5 : INCIDENCE OF HEADINGS AND SUBHEADINGS - STD 5 TEXTS

Book	No. of Chapters	No. of Pages	No. of Headings	Av. pages per Chapter	Av. Headings per Chapter	Av. Headings per page
History for Today	11	248	156	22,5	14,1	0,6
Junior History	16	194	348	12,1	21,8	1,8
New Ventures	30 units	149	227	4,9	7,6	1,5
Objective History	13	152	83	11,6	6,3	1,8

Several clear points emerge from this table. There is a wide discrepancy in chapter length from a low of 11 pages to a high of 22 pages. New Ventures is an exception as it will be remembered that the book is divided into week-long units rather than conventional chapters. The considerably greater length of History for Today's chapters is paralleled by the much smaller number of headings than in the other three books which produce a very similar result of 1,5 to 1,8 average headings per page. It will be remembered that in the Std 5 Reading Difficulty Level analysis, History for Today emerged as the easiest text to read. Set against this finding is the fact that History for Today has the longest chapters and the smallest number of sub-headings. It is necessary, therefore, to consider a further objective criterion : of the large number of illustrations and pupil activities. These are particularly frequent in History for Today. For example, in the chapter on the Development of written communication (pages 8 to 28) there are only four headings and three sub-headings. If the sub-heading section on the development of the Western alphabet is considered, however, (pages 13-15) there are no other headings of any sort but there are four major illustrations and three "boxed" pieces of extra information.

These tend to break the text and so ease the reader's task.

If the purely objective assessment is used, the impression could be given that History for Today consists of long unbroken prose passages, which is not that gained when subjective measures are included in the assessment techniques. This is a good example of the final necessity of combining both subjective and objective measures. A subjective interpretation of whether a large number of headings aids or hinders learning will be made in the subject analysis of the text.

The analysis for the Std 8 texts is shown in Table 4.6.

TABLE 4.6: INCIDENCE OF HEADINGS AND SUB-HEADINGS - STD 8 TEXTS

Book	No. of Chapters	No. of Pages	No. of Headings	Av. Pages per Chapter	Av. Pages per Chapter	Av. Headings per page
History for Today	11	225	213	23,2	19,3	0,8
History 8	10	114	211	11,4	21,1	1,8
History in Perspective	13	134	207	10,3	15,9	1,5
Timelines	13	195	285	15	21,9	1,5

The analysis presented for the Std 8 text shows a slightly different pattern. As in the previous table there is a wide discrepancy in chapter length, from an average of 10 pages in History in Perspective to 23 in History of Today. In the average number of headings per chapter the range is again narrower in the Std 8 series than in the Std 5, with the lowest number being 15 and the highest 21. When the calculation of the number of headings per page is done, History for Today once again produces a very much lower figure than is found in the other three texts.

If sections in this text are examined in the same way as was done with the Std 5 counterpart, however, the very large number of illustrations, cartoons and diagrams, together with the extensive use of documents, break a text which might otherwise be extremely long.

It might be argued, however, that if headings are designed to lead less experienced readers through a text, then two different pictures for the three-year age discrepancy should emerge when the Std 5 and 8 texts are compared. In fact this does not occur. This close similarity is shown when the last columns of both Table 4.5 and Table 4.6 are compared.

4.5 USE OF ILLUSTRATIONS

A straight-forward compilation of the frequency of illustrations in the eight texts was undertaken next. The analyses of illustrations in both the Std 5 and the Std 8 texts are shown together in Table 4.7.

TABLE 4.7: SUMMARY TABLE FOR ILLUSTRATIONS

Book	Total Chapters	Total Illustration	Total Pages	Av. Pages per Chapter	Av. Ill. per Chapter	Av. Ill. per page
Std 5						
History for Today	11	283	248	22,5	25,7	1,14
Junior History	16	193	194	12,1	12,1	0,99
New Ventures	30 units	121	149	5,0	0,4	0,8
Objective History	13	60	152	11,7	5,6	0,4
Book	Total Chapters	Total Illustration	Total Pages	Av. Pages per Chapter	Av. Ill. per Chapter	Av. Ill. per page
Std 8						
History for Today	11	214	255	23,2	19	0,8
History 8	10	93	114	11,4	9,3	0,8
History in Perspective	13	56	134	10,3	4,3	0,4
Timelines	13	126	195	15	9,7	0,6

It is obvious that illustrations are important for a pupil's understanding of the past. Their frequent use in any text should be a positive factor. A greater number of pictures for younger readers should be expected. Set against this ideal, however, is the fact that illustrations are expensive to reproduce and large scale markets for South African texts cannot be expected.

Once again the range is very wide in the four Std 5 texts. Objective History has approximately one illustration every two pages, a frequency which more than doubles in History for Today.

As the Std 8 texts are examined, the only one which indicates a drop in the frequency of illustrations is History for Today, and the similarity in frequency is immediately apparent. Clearly, there are many other features of illustrations, beyond that of frequency, which need to be considered. This topic will be returned to in the subjective assessment of the texts.

Within the limits of an objective analysis, however, the type of illustrations can be calculated and compared. This is done in Table 4.8.

Before the table is examined, however, it should be noted that the intention was to compare types of illustration in common chapters. The chapter chosen in contrast to those chosen for the analysis of concepts was the last chapter in each section. Two selected chapters from each textbook were chosen.

Std 5 - General History - Voyages of discovery

S.A. History - British and Batavian Administration

Std 8 - General History - The Economic Revolution

S.A. History - Communities south of the Limpopo in

TABLE 4.8: TYPE OF ILLUSTRATIONS the 19th century

Book	Type of Illustration						Total per book
	Pictures & Drawings	Maps	Cartoons	Graphs & Photographs	Tables & Sections		
Std 5							
History for Today:	Gen Hist	24	17	-	-	01	42
	S.A. Hist	03	01	-	-	05	09
	TOTAL	27	18	-	-	06	51
Junior History:	Gen Hist	18	05	-	-	-	23
	S.A. Hist	07	02	-	-	-	09
	TOTAL	25	07	-	-	-	32
New Ventures:	Gen Hist	07	03	-	-	-	10
	S A Hist	06	-	-	-	-	06
	TOTAL	13	03	-	-	-	16
Objective History:	Gen Hist	07	03	-	-	-	10
	S.A. Hist	02	01	-	-	-	03
	TOTAL	09	04	-	-	-	13
Std 8							
History for Today:	Gen Hist	24	06	05	01	04	40
	S.A. Hist	44	08	-	-	06	58
	TOTAL	68	14	05	01	10	98
History 8	Gen Hist	06	01	-	-	-	07
	S.A. Hist	02	01	-	-	-	03
	TOTAL	08	02	-	-	-	10
History in Perspective	Gen Hist	02	02	-	-	-	04
	S.A. Hist	01	01	-	-	-	02
	TOTAL	03	03	-	-	-	06
Timelines	Gen Hist	11	01	01	-	-	13
	S.A. Hist	06	05	-	-	-	11
	TOTAL	17	06	01	-	-	24

As Table 4.8 shows, none of the books in the Std 5 selection has graphs and cartoons. Instead they concentrate on pictures, drawings and maps. History for Today also has charts. History for Today has by far the largest number of illustrations. The range is very wide from 13 to 51, a difference of 38 illustrations.

The same pattern emerges in the Std 8 selection. Most books concentrate on pictures and maps. Only History for Today has all the categories of illustrations, with graphs, cartoons and tables, which the rest of the books lack. The variety of illustrations is more limited in the other three books. History for Today has a total of 98 in the selected chapters while the book with the lowest number, History in Perspective, has only 6 illustrations in the selected chapters. In fact this book has in total only 21 maps and 31 pictures, 22 of which are portraits of people. In other words, the whole book has fewer illustrations than History for Today's two chapters. The range is therefore very wide at 92.

The lack of graphs and cartoons in the Std 5 books may be understandable when considering the age-level of the pupils, though, of course, they should be introduced to them. But such illustrations should be present in the books for Std 8 pupils. Std 8 pupils are supposed to be introduced to practices such as interpreting cartoons and graphs and should have had experience in the skills of translation, interpretation, application, analysis and others which aid concept understanding, (see for instance, Gunning, 1978).

The main thrust so far has been on the frequency of different types of illustrations. The analysis of the quality of the illustrations will be made under subjective criticism.

So far as the number of illustrations is concerned, the findings of the Taylor Commission of 1979 still seem to be pertinent, because most of the texts have very few illustrations and some of these, it will be shown later, are not helpful. However, recent texts like History for Today do bring about considerable improvement in the nature of history textbook writing and presentation.

4.6 Presentation and Handling of Concepts

STD 5

Two topics were chosen from which 40 concepts were selected, 20 from each topic. The topics chosen were the Development of the art of Writing and the Development of the Cape Colony. The first topic was on general history in each book. The likelihood was that the reader would be coming across many of the concepts for the first time. The second topic was chosen because it was the first section of South African History. This second topic, The Development of the Cape Colony, because it is a fairly wide one, offered a good opportunity of introducing many concepts. However, unlike the first topic, this second one is not the very first section pupils read in this book. However, the possibility of many concepts being strange to the pupils remains, especially as one of the books, in the organization of its contents, begins with South African history instead of the traditional practice of starting with general history. That book is New Ventures in History : Standard 5.

The following table shows the concepts that were selected from each topic :

TABLE 4.9

	<u>TOPICS</u>	<u>CONCEPTS</u>
<u>GENERAL HISTORY</u>		
1.	The Development of the Art of Writing	1.1 Cuneiform 1.2 Stylus 1.3 Inscription 1.4 Hieroglyphics 1.5 Demotic Writing 1.6 Decipher 1.7 Alphabet 1.8 Numerals 1.9 Numerals 1.10 Volumen 1.11 Manuscript 1.12 Communication 1.13 Papyrus 1.14 Cursive Writing 1.15 Monastery 1.16 Parchment 1.17 Consonant 1.18 Pictograph 1.19 Vowels 1.20 Ideographs
<u>SOUTH AFRICAN HISTORY</u>		
2.	The Development of the Cape Colony	2.1 Garrison 2.2 Castle 2.3 Indigenous 2.4 Barter 2.5 Leningsplaas 2.6 Proclamation 2.7 Landdrost 2.8 Fiscal 2.9 Freehold 2.10 Drostdy 2.11 Pastoralists 2.12 Monopoly 2.13 Governor 2.14 Infantry 2.15 Rattle Watch 2.16 Legislative Power 2.17 Free Burghers 2.18 Khoikhoi 2.19 Heemraden 2.20 Slavery

Table 4.9 shows the concepts that were selected from each topic. In addition to this list of 40 concepts reflected in Table 4.9, a special table, reflecting the concepts not used was drawn up. Table 4.10 shows which book left out the biggest number of concepts and which one left out the least number. The expectation was that only a few concepts, if any, would be left out by the texts since the chosen concepts are regarded as essential for understanding the sections concerned.

TABLE 4.10

TABLE OF CONCEPTS NOT USED IN TEXTS : STD 5

CONCEPTS NOT USED

	HISTORY FOR TODAY 5	JUNIOR HISTORY 5	NEW VENTURES IN HISTORY	OBJECTIVE HISTORY FOR ALL	TOTAL
stylus			*		1
inscription			*		1
decipher			*		1
volumen	*		*	*	3
communication		*		*	2
monastery			*		1
cursive writing				*	1
consonant		*	*		2
ideograph		*		*	2
pictograph				*	1
garrison	*			*	2
indigenous				*	1
leningsplaas		*	*	*	3
proclamation		*	*	*	3
landdrost		*			1
freehold		*			1
drosty			*	*	2
pastoralists		*			1
monopoly		*		*	2
Governor		*	*		2
infantry		*		*	2
rattle watch			*	*	2
legislative power			*		1
heemraden		*			1
TOTAL	2	12	12	13	39
TOTAL USED	38	28	28	27	121
MAXIMUM	40	40	40	40	160

Std 8

From selected topics in the Std 8 books, a further 40 concepts were chosen. The guiding principles used in choosing the Std 5 concepts were applied to the selection of concepts from the Std 8 books. The following table shows the concepts chosen.

Table 4.11

<u>TOPICS</u>		<u>CONCEPTS</u>	
<u>GENERAL HISTORY</u>			
1. <u>The French Revolution</u>			
1.1	revolution	1.11	reign of terror
1.2	monarchy	1.12	hereditary
1.3	regime	1.13	bankrupt
1.4	benevolent despot	1.14	privilege
1.5	nobles/nobility	1.15	human rights
1.6	peasants	1.16	legislative
1.7	National Assembly	1.17	arbitrary
1.8	Constitutional monarchy	1.18	moderate
1.9	democratic	1.19	divine right
1.10	aristocracy	1.20	judiciary

South African History

2. British Reaction to the

1.1	imperialism	1.11	landdrost
1.2	sovereignty	1.12	allied
1.3	alienable	1.13	paramountcy
1.4	annexation	1.14	buffer-state
1.5	proclamation	1.15	diplomacy
1.6	jurisdiction	1.16	obstructionist
1.7	convention	1.17	emancipation
	policy		
1.8	colony	1.18	indenture
1.9	vassal	1.19	covenant
1.10	pastoralist	1.20	treaty-system

As in the Std 5 books, in addition to the list of concepts given in Table 4.11, with the Std 8 books too, a special table, Table 4.12, was drawn up to show the concepts not used.

TABLE 4.12

TABLE OF CONCEPTS NOT USED IN TEXTS: STD 8

<u>CONCEPTS NOT USED</u>	<u>BOOKS</u>				<u>TOTAL</u>
	<u>HISTORY FOR TODAY 8</u>	<u>HISTORY 8</u>	<u>HISTORY IN PERSPECTIVE</u>	<u>TIMELINES</u>	
regime			*		1
benevolent despot		*	*	*	3
aristocracy		*	*	*	3
heredity			*		1
legislative		*			1
arbitrary			*	*	2
moderate			*	*	2
divine right		*	*	*	3
judiciary	*				1
imperialism	*		*	*	3
sovereignty	*	*			2
proclamation			*		1
jurisdiction	*	*	*		3
colony			*		1
vassal		*	*		2
pastoralist	*		*	*	3
allies		*	*	*	3
paramountcy				*	1
buffer state	*		*	*	3
diplomacy	*	*	*		3
obstructionist	*	*			2
indenture		*	*	*	3
covenant	*	*	*		3
treaty system			*		1
emancipation		*		*	2
TOTAL NOT USED,	9	13	19	12	53
TOTAL USED	31	27	21	28	102
MAXIMUM	40	40	40	40	160

As in the case of Std 5, with the Std 8 concepts too, the majority of concepts left out, about 64%, were from South African History. Some of these concepts, like sovereignty, pastoralist; proclamation, covenant, indenture, vassal, were expected to be used by most books especially on a section dealing with the relations between the Boers and the British in the Cape Colony.

Table 4.13 and 4.14 show the analysis of the approaches towards the selected concept in the eight texts. The information is presented in three groupings: the first two columns show whether the concept was used at all, the second grouping of five columns, headed "Definition Approaches" indicates the way in which the concepts were initially presented; the sixth column, headed "Supportive Approach", shows whether a document was used to add further enrichment to the presentation of the concept. These groupings were explained in greater detail in Chapter 3. The analysis presented few difficulties and it can be claimed that the figures obtained were reasonably objective.

At times, however, some difficulties occurred. For instance, in a few circumstances it was not very easy to decide whether a concept should be allocated to the "unexplained" column or to the "background information only" category. At other times it also became difficult to avoid overlap in placings between the "definition and example" and the "definition and illustration" columns. For instance, the concept "rattle watch" which was used in the book, History for Today, Std 5. The use of this system in Amsterdam, and the role of men in the Night Watch were explained in the form of an example. As well as this, an illustration was used to clarify the concept further. In the end, because of the greater clarity of the illustration, the concept was placed in the category "Definition and Illustration".

In fact very few cases emerged where it was impossible to place the handling of a concept in only one category. There was a total of 320 concepts which might have been analysed (40 per book and a total of eight books). Of these possible 320 concepts, the books eventually used 223.

In only six cases (2,6%) was it finally decided that the method of handling would have to be placed in more than one category.

SUMMARY TABLE : PRESENTATION AND HANDLING OF CONCEPTS

TABLE 4.13

STD 5

BOOKS	CONCEPTS USED IN TEXTS		DEFINITION APPROACHES								TOTAL				SUPPORTIVE APPROACH	
	(MAXIMUM 40 PER TEXT)		UNEXPLAINED CONCEPTS		DEFINITION ONLY		DEFINITION AND EXAMPLE		BACKGROUND INFORMATION ONLY		DEFINITION AND ILLUSTRATION		TOTAL DEFINITION APPROACHES		DOCUMENTS	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
HISTORY FOR TODAY	38	95	1	2,63	7	18,4	9	23,6	6	15,7	15	39,4	38	99,7	0	-
JUNIOR HISTORY	28	70	6	21,4	7	25	2	7,1	2	7,1	11	39,2	28	99,8	0	-
NEW VENTURES	28	70	2	7,1	10	35,7	2	7,1	8	28,5	8	28,5	29	103,4	0	-
OBJECTIVE HISTORY	27	67,5	3	11,1	16	59,3	6	22,2	2	7,4	2	7,4	27	100	0	-

Table 4.13 shows, the approaches to concept explanation. In terms of the approaches towards the definition of concepts the majority of the books relied on use of "definition only" as a means of explaining concepts. Objective History for All used definition only for explaining concepts, and this is a commendable practice considering the age level of the Std 5 pupils, examples and illustrations should be used to aid concept understanding. None of the books has used documents to aid concept understanding which might reinforce the definition explanations.

Some more conservative teachers might claim that documents, because of their difficulties, might not be suitable for pupils as young as those in Std 5. Such attitudes do not seem to be followed by other contemporary textbooks, not only in Britain but also in South Africa. An example would be the book Living History for Std. 5

Some concepts were left unexplained and the percentages of those that were left unexplained (over one in five of the words) varies from Junior History's 21.4% to a low of 2,63% by History for Today.

On the whole the rate of unexplained words is not alarmingly high except in the case of Junior History 5. History for Today still comes out as the best one with very few unexplained concepts and with a larger number, 39,4%, explained by use of illustrations.

SUMMARY TABLE : PRESENTATION AND HANDLING OF CONCEPTS

TABLE 4.14

STD 8

BOOKS	CONCEPTS USED IN TEXT		DEFINITION APPROACH								TOTAL		SUPPORTIVE APPROACH			
	(MAXIMUM 40 PER CENT IN TEXT)	UNEXPLAINED CONCEPTS	DEFINITION ONLY		DEFINITION AND EXAMPLE		BACKGROUND INFORMATION		DEFINITION AND ILLUSTRATION		TOTAL DEFINITION APPROACHES		DOCUMENTS			
			N	%	N	%	N	%	N	%	N	%	N	%		
HISTORY FOR TODAY 8	31	77,5	5	16,1	14	45,1	7	22,5	0	-	5	16,1	31	99,8	7	23,3
HISTORY 8	27	67,5	10	37,0	14	51,8	0	-	2	7,4	1	3,7	27	99,9	0	-
HISTORY IN PERSPECTIVE	21	52,5	12	57,1	5	23,8	1	4,7	3	14,2	0	-	21	99,8	0	-
TIMELINES	28	70	5	17,8	17	60,7	2	7,1	3	10,7	2	7,1	29	104	0	-

As Table 4.14 shows, History 8 has many words explained by definition only (51,3%), but comes second to Timelines which has 60,7% of the concepts explained in this manner. In this column the lowest book is History in Perspective with 23,8%. History for Today has the highest percentage of words explained by "definition and example" and History 8 lags behind in this regard. History in Perspective has the highest percentage of words whose meaning can only be gleaned from background information. History for Today has made use of more illustrators than the other books, with 16%, while History in Perspective scores zero in this category. Only History for Today has used documents to reinforce concept understanding, a feature which might be expected in a Standard 8 book.

All the books appear to use mainly definition only to explain concepts. In a few instances no direct explanation is given, but the reader can deduce the meaning from the background information given. Some texts, for example *History in Perspective*, do not define "monarchy" directly but use it such that the reader could guess the meaning of the concept. On page 5 of the book, under the heading "The Decline of Absolute Monarchy" the following explanation is given :

"During the 18th Century the whole of Europe subscribed to the principle of absolute despotism. In other words the King was not responsible to his people for his actions. The people saw his position as being the will of God.... The King could make and enforce laws and could even pronounce sentences on people." In fact the writer goes on until the end of this section without harzarding an explanation of what monarchy is. Even the term "absolute despotism" which he used under the heading on absolute monarchy goes unexplained. Its meaning has to be deduced from the context. *History in Perspective* italicizes concepts to draw attention to them but does not explain them in any of the possible modes of explanation. The following are examples of italicized, but unexplained words : toll boundaries, constitutional monarchy, despotism, sovereignty. The only explanation of constitutional monarchy given is "as found in Britain", assuming that pupils are familiar with the British constitutional framework.

As the tables show it is only *History for Today* that goes beyond the definitional approaches in explaining concepts. As has already been said, it uses illustrations to explain concepts, for example, "bankruptcy", "National Assembly", "moderate" and uses evidence not only in the form of illustrations but also extracts from original sources. The pupils are given, for example, an excerpt from the Declaration of the Rights of Man. This is a commendable step.

The researcher is quite aware that not all concepts would lend themselves well to all modes of explanation, but attempts should be made where possible to go beyond simply giving definitions. Besides the explanation of concepts in the texts, some books give lists of words that should be known. Both the Standard 5 and the Standard 8 texts of History for Today provide a listing of key words. Further, they set some questions to give pupils opportunity to explain and use concepts.

4.7 Rate of Introduction of Concepts

Using a different list of words, a check was made of the rate of introduction of concepts and whether they were explained or not. The concepts differed from book to book because the researcher simply counted the number of new concepts introduced per three pages. According to Peel as cited by Coltham (1983), the following are the two particular difficulties in the frequency of terminology met in school books; use of words which already carry personal and concrete meanings; and the introduction of words with particular relevance to historical material, often with little assistance to discover their meanings. The test was meant to check the latter.

The rate of introduction of new words was checked by counting the number of new concepts introduced per three pages. According to Coltham (1983) they are then rated 0-1, 1-3 or 3-5 to indicate low to high rate respectively. The rate above 3-5 is very high and indicates that the book is difficult and suitable for pupils of 14 years of age and above. In terms of Coltham's criterion, the concepts should also be checked for presence or absence of explanation.

The following table indicates the results achieved when checking the Standard 5 books.

Table 4.13

Summary : Rate of Introduction of Concepts - Standard 5

BOOK	NO OF CONCEPTS	CONCEPTS EXPLAINED	PERCENTAGE EXPLAINED %
History of Today	5	4	80
Junior History	8	4	50
New Ventures	11	10	90,9
Objective History	8	8	100

As indicated earlier on, the percentage of words unexplained is not alarmingly high, except in the case of Junior History although the rate per page is high in each book, more especially in New Ventures. The saving grace is that the number of concepts explained is fairly high, 100% in Objective History and 90,9% in New Ventures, except for Junior History 5. Furthermore there are other modes of explanation, like the use of illustrations to reinforce concept understanding, and they are found mainly in History for Today.

As in Standard 5, the assessment of concepts in Standard 8, according to the categories already discussed under heading 4.6, was followed by a checking of the rate of introduction of concepts together with the presence for absence of an explanation. The following table reflects the rate of introduction of concepts together with the percentages of concepts explained by the Standard 8 texts.

Summary Table : Rate of Introduction of Concepts - Standard 8

BOOK	NO OF CONCEPTS	CONCEPTS EXPLAINED	PERCENTAGE EXPLAINED
History of Today	16	16	100%
History 8	13	5	38%
History in Perspective	20	12	60%
Timelines	16	13	81,25%

History for Today has no unexplained concepts. History 8 and History in Perspective had a higher percentage of unexplained concepts. 62% and 40% respectively. Timelines has only 18% unexplained concepts. This is serious considering that the rate of introduction of concepts is above 3 - 5 and that also in terms of the "difficulty level test" the books appeared as fairly difficult. History for Today, although having a high rate of introducing concepts, has them explained in different modes. These percentages of unexplained concepts are even higher than the 33% noticed by Macrae in his study.

On the whole, from the assessment made through these various objective measures, it appears that most of the books, with History for Today excluded, do not do much to aid concept understanding. They do not seem to take cognisance of the need to promote a skills-based approach to history learning.

The objective measures used to assess the books do, however, need to be supplemented by subjective assessment as each of the objective measures might have its own weaknesses as indicated in Chapter 3.

CHAPTER 5

DATA PRESENTATION AND ANALYSIS : SUBJECTIVE CRITERIA

On several occasions in the quantitative analysis of the textbooks, it was noted that such analysis had limitations and should, therefore, not be used in isolation. In this chapter, subjective interpretations of the textbooks will be examined. The following criteria, which have been explained fully in chapter 3, were used : use of headings and subheadings, use of illustrations, handling of time and chronology, handling of notion of change, use of documents, and quality of pupils' assignments and exercises.

5.1 USE OF HEADINGS AND SUB-HEADINGS

It has been suggested that carefully planned headings and subheadings help the reader in his structuring of the material to be learned. At times some headings are put in the form of questions so that, as the pupil reads, he seeks to find an answer to the topic question. However, overuse of sub-divisions of chapters, it was also shown, does have the negative effect of breaking the narrative flow of the history text. At best it seems designed to make the material more easily understandable.

STD 5

History for Today tends to have its headings framed in the form of questions. An example of the technique occurs in Chapter 7 on Voyages of Discovery : The attempts to reach the East. The sub-divisions of the chapter are : "How was the East important to Europe ? Why did the Portuguese challenge a system of trade which had worked for centuries ? What problems faced early explorers ? What was the role of Prince Henry the Navigator ?" Through the use of questions the authors hope that they can arouse curiosity and interest in their readers. Other books do not follow this practice.

Besides putting headings in the form of questions, some questions for the chapter are asked at the beginning of the Chapter. Some of the questions draw attention to specific terms which need to be learned, for example questions like "What is the meaning of industry ?" "What is agriculture ?" This feature is common throughout this book.

STD 8

In the Std 8 series as well, History for Today uses headings in question form and some of the questions draw attention to specific concepts, for example

"What is meant by revolution ?"

"What was the political crisis ?"

"What was the social crisis ?"

"Why did France become a Republic ?"

Although the questions clearly do not themselves explain concepts, they do create curiosity about them. All the other six books examined have much more conventional approaches to the language of the headings.

5.2 USE OF ILLUSTRATIONS

STD 5

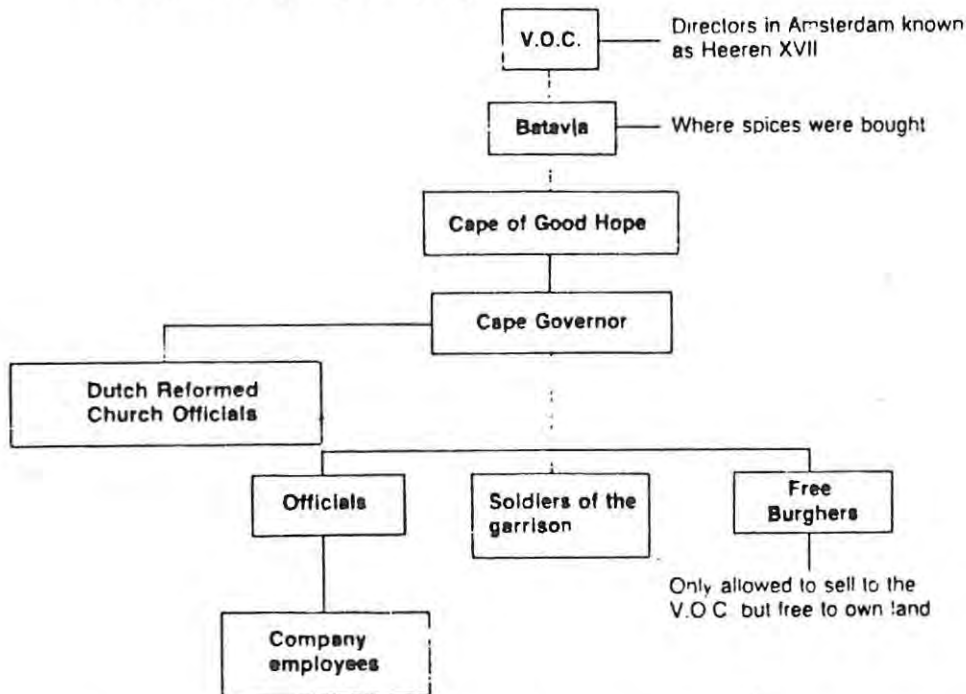
In each case the whole book was considered when analysing the number of illustrations. However, note should be taken of the fact that only two topics in each case have been considered in analysing illustrations, namely the Art of Writing, and the Development of the Cape Colony, for Std 5, and the French Revolution, and the British Reaction to the Great Trek for Std 8.

As indicated earlier on in the section on objective criteria, most of the books include pictures and maps as illustrations, which should also help understanding. Two books, *New Ventures in History* and *History for Today*, use graphs and tables as well. None of the books includes cartoons, a pardonable omission when one considers the age-level of the Std 5 pupils. Graphs and charts are important for introducing, amongst others, the skill of translation. *History for Today* provides useful material of this nature. The writers draw some charts and then ask pupils to complete the charts. On page 24, for example, they have a chart like this :

TYPE OF WRITING	DESCRIPTION DRAWING	WRITING MATERIAL	LANDS WHERE FOUND
cuneiform	wedge-shaped	clay, stone,	Sumer, Mesopotamia
hieroglyphics		stylus	Ancient Persia
Phoenician/ Semitic			
Greek			
Roman			
Chinese			
Arabic			

By consulting the text, the pupils complete the chart, and at the end of their task they have provided a factual summary of some ancient orthoglyphics. Such an exercise by itself does not guarantee understanding, but it does provide a systematic pattern from which further understanding could be developed.

In the section on the Development of the Cape, a flow chart gives, in shortened form, the levels of authority from the V.O.C. Directors to the Company employees.



The pictures and other illustrations used in History for Today are not merely decorative. They are used to aid understanding. One example is the series of illustrations which explain pictograms and ideograms. These are compared with modern signs like road signs which use symbols to represent ideas or convey thoughts. The designers of this series have succeeded in placing all their illustrations close to the appropriate text. Examples of cuneiform writing, for instance, appear on the page where this is discussed.

New Ventures, like History for Today, has illustrations to aid understanding of the text, though they are fewer than those in History for Today. Pictures and maps are normally appropriately positioned in the pages where topics to which they are relevant are discussed. Some questions on pictures, however, appear at the end of a unit, instead of following the picture immediately. For example, on page 89 the pupils are asked to refer to the picture of the printing press and are given a task. History for Today would have set this task in a block next to the picture.

Junior History, also, has many relevant illustrations and maps. They all have captions. However, the reader is not asked to perform operations upon the illustrations, through questions which draw attention to particular points of a picture, and then to interpret these points. For example, the illustration on the development of the alphabet has potential but pupils are not given any tasks on this illustration. Similar comments can be made about illustrations in Objective History.

The textbooks analysed, therefore, on the whole, have illustrations but do not make conscious attempts to use them as evidence or learning aids. There seems to be a lack of integration between text and illustrations. When these are used, they should be treated as sources of evidence, from which pupils can be given some skills in, for example, identification, classification, dating and attribution, or comparing and contrasting.

STD 8

As in Std 5, History for Today not only has the largest number of illustrations, 214 in 255 pages, with an average of 1,14 illustrations per page, but also directs attention to pictures and maps by questions or tasks e.g. pupils are asked to work out the significance of the geographical situation on the treaty states. They are referred to the map on p.145.

Illustrations are also used to concretize abstract concepts. For example the following concretizes the concept Divine Right.

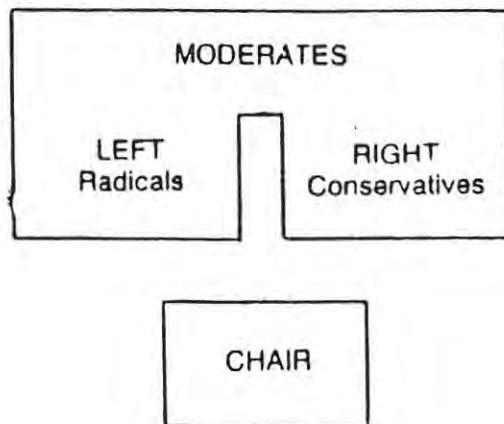


Concept of the divine right of kings

Another example, amongst others, of the use of illustrations to explain concepts directly is shown in figure : 5.2. This illustration in figure 5.2 shows how political concepts of left and right developed during the French Revolution. The term left, is nowadays used to refer to a range of radical political views and to those holding them. It came about as a metaphorical extension of the seating plan of the Estates General in France in 1789. The nobility sat on the King's right and the Third Estate on his left. Those who wished for a compromise between the conservative nobles and revolutionary Third Estate were in the centre. To this day that perception of politics as a continuum from left to right has survived.

FIG 5.2.

The constitution under the Convention.



Our use of these terms derives from these days of the Revolution in France and refers to the seating arrangements in the various assemblies.

Of all the books analysed, both Std 5 and Std 8, the History for Today series is the only one that seems to put the illustrations to good use. On page 19 for example, there is a question to attract attention to a cartoon :

FIG 5.3

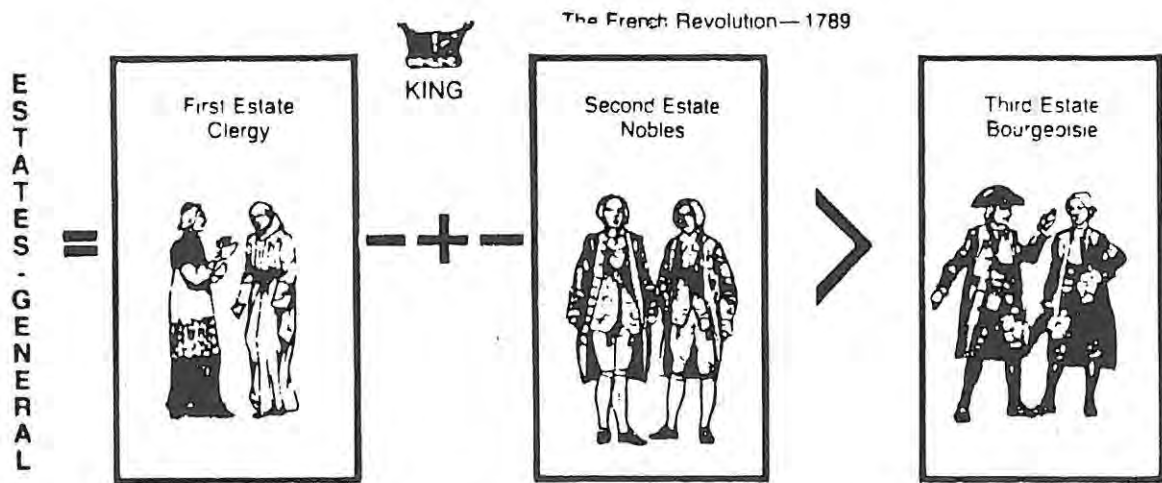
Below is a famous cartoon about the effects of the new legislation on the Church. What message does it convey?



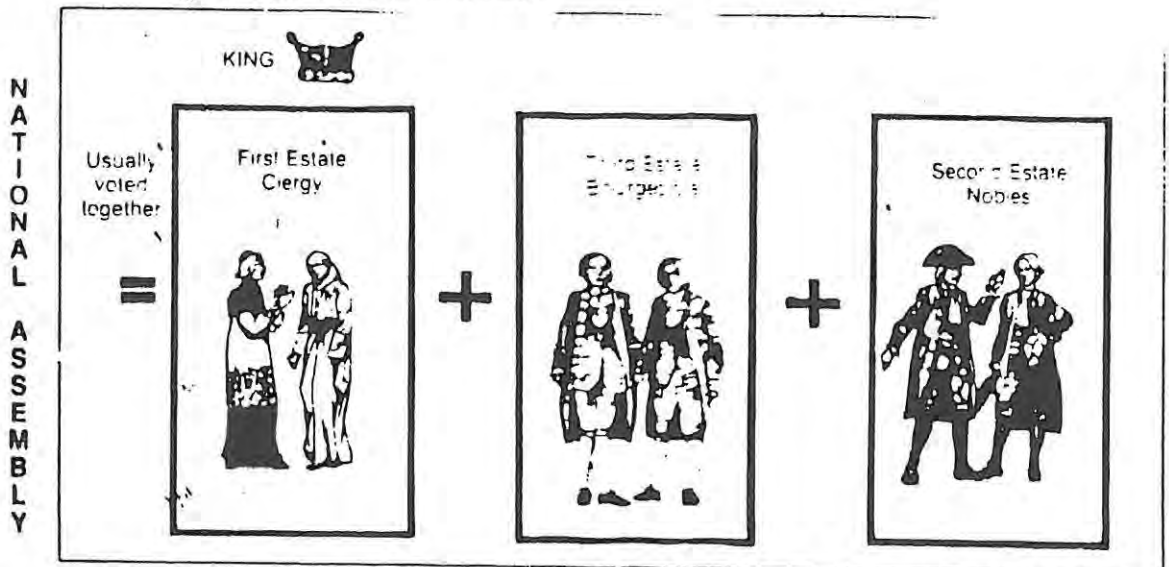
The Press. Patience my lord, your turn is coming. This symbolizes the confiscation of church land and the surrender of clerical privileges

This makes the cartoon more meaningful than it would be if it were simply thrown in without explicit directives. The book also has sketches to show the concept of economic crisis : social crisis; composition of the Estates General; and that of the National Assembly.

FIG 5.4



Together could outvote the Third Estate



One man, one vote - since Third Estate could not be outvoted

History 8, too, has some good illustrations with tasks set on some of them. For example, on Page 7 pupils are challenged to analyse the sketch, although, unfortunately, no guide is given as to what questions should be used to seek answers.

FIG. 5.5

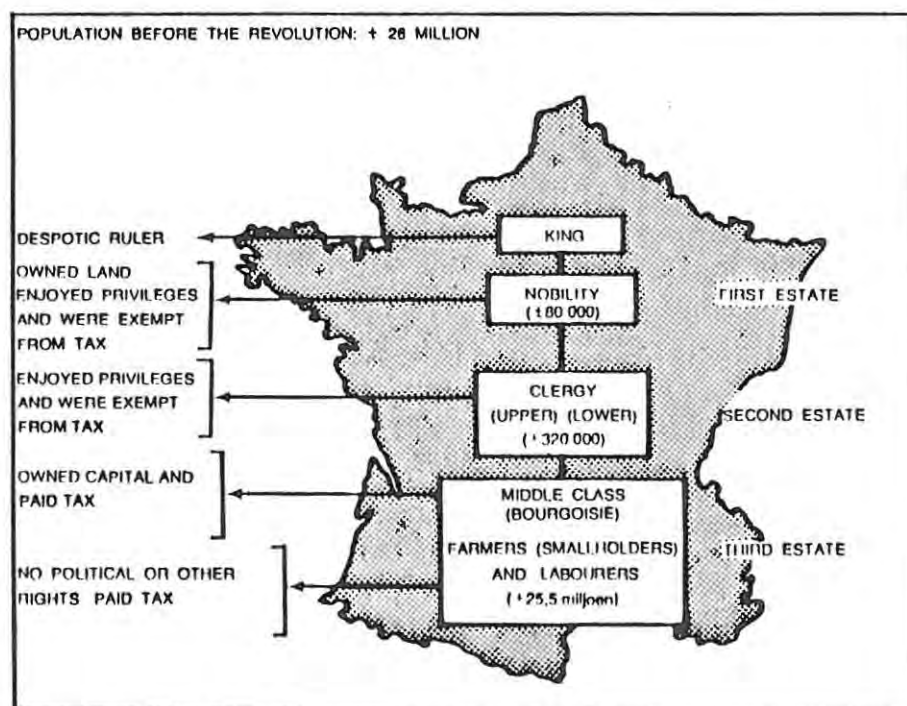


Sketch of the privileged clergy and nobility (Can you analyse the sketch?)

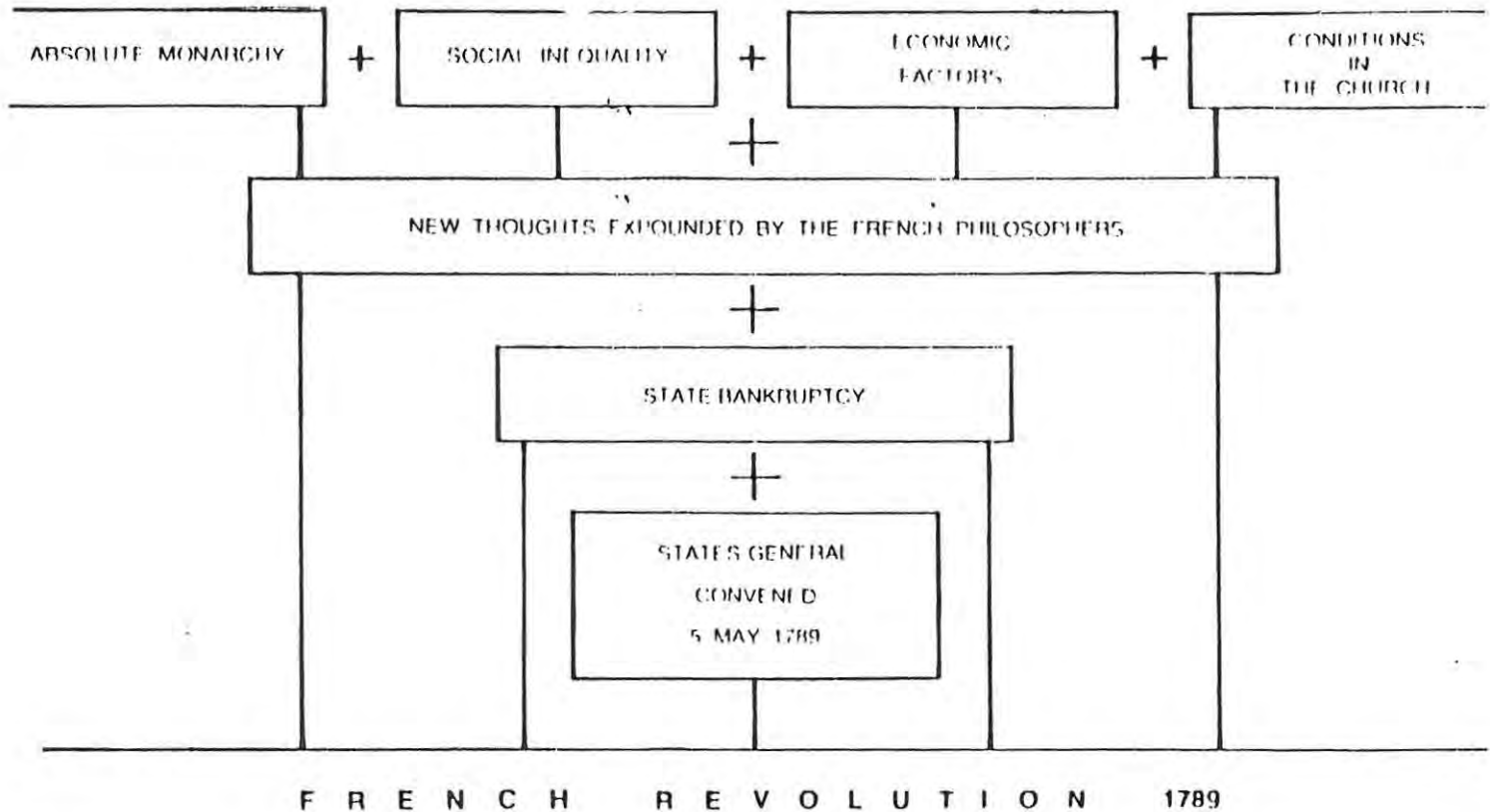
Timelines, too, has a comparatively small number of illustrations and does not do much to put these to use as sources of evidence. It, however, does introduce a dimension that is lacking in the other books. This is the use of colour to make the illustrations sharper and easier to see. This could be hoped for of books in the junior classes but none of the Std 5 books uses colour.

History in Perspective has the smallest number of illustrations. They are relevant but few and far between. However, it does have some illustration of class distinction and a chart summarising the causes of the French Revolution.

FIG 5.7



- Class distinction in France



5.3. Handling of time and chronology

In addition to the use of illustrations the books were checked for the strategies used in handling time and chronology. There is currently much criticism of the chronological approach to the structuring of history material and the traditional approach that gave pre-eminence to learning of dates and chronological sequencing. The criticism, is, on the whole, justified but it does not in any way detract from the importance of understanding of time in the teaching and learning of history.

The research checked the different strategies adopted to help pupils learn the language of time, and time concepts like "contemporary", "duration", or "anachronism". What strategies or exercises are used to help pupils calculate and communicate measurement of time? How are they helped to develop what Garvey calls the "historical attitude" to time?

Objective History in its first section, "The Development of certain elements of Western civilization and culture" does explain, in words, only the concepts A.D. and B.C. No aid in the form of a time line is used. In the exercises set the pupils are asked "Why is the birth of Christ taken as the centre point in the Christian calendar ?" They are further given an exercise that involves some sequencing : "In your exercise book write down the following list of people in the correct order in which they invaded and occupied Mesopotamia". Beyond these few exercises very little if anything has been done to help towards development of sense of time, except setting, here and there, single answer questions requiring remembering dates, e.g. "When did the Phoenicians work out their own alphabet ?", and the remembering of definitions : "The age of re-awakening is also known as the

Junior History, in addition to explanation of terms 'ancient civilization' and 'Middle Ages', has a time-line to illustrate how history has evolved over the ages. This book, like Objective History, assumes that much is already understood by the pupils in Std 5. Although it has a good time-line, no questions are set to check understanding of time concepts or to re-inforce their understanding.

New Ventures makes use of a time-line to explain the concept B.C. and concepts like 'stone age' are explained and examples of stone age weapons and tools shown in the form of illustrations.

FIG 5.8

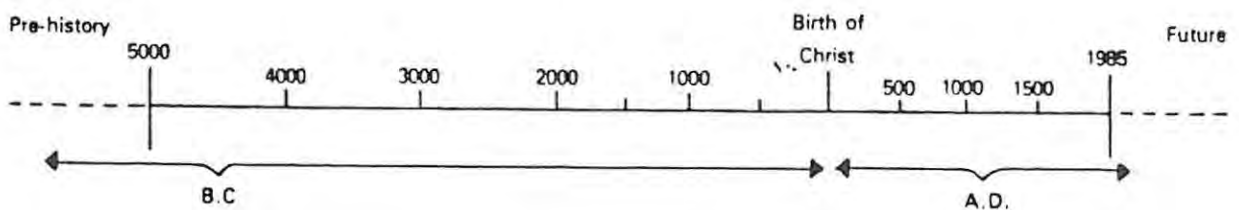


Diagram to show B.C. and A.D.

At the end of this unit, questions and exercises are set e.g. "Why is the Stone Age so called?" The question is not simply designed to elicit a memorized answer but, at least, to show some understanding of what characterized this period. It is not "What is the Stone Age?" Further exercises to test the understanding of the concepts B.C. and A.D. are given:

1. Arrange the following dates in their correct order:

1345 A.D., 1911 A.D., 210 B.C., 537 A.D.

2. Match the date with the century:

1089 17th century

1985 12th century

1660 20th century

1842 11th century

1123 18th century

1720 19th century

Pupils are also tested on the understanding of time terms like century: 'Name the century in which the following events occurred':

(a) The first Portuguese voyages of discovery took place.

(b) White rule was finally established in Transkei.

There are many exercises in the book in which pupils are either asked to write events in the order of occurrence or to write dates associated with certain events. However, there are two exercises in which the pupils are asked to transport themselves to a certain point in time e.g. "Imagine you are a Burgher farmer at the beginning of the eighteenth century. Write a letter to a friend explaining why you have decided to change to stock farming, even though it meant moving."

In these ways this book is better than Objective History or Junior History.

History for Today devotes the first chapter to the concepts Ancient Civilizations and Middle Ages. Concepts like pre-history are explained, as well as terms like Iron Age, Stone Age, Ancient, Middle, Modern, Contemporary. A time-line, with illustrations going with it, is used to explain the concepts of B.C. and A.D. Illustrations are used to explain the concepts like pre-history, ancient, middle, modern, contemporary history. It has already been shown how illustrations are used to show change over time or change and continuity.

Of these four Std 5 books, New Ventures, and History for Today outshine the others. They explain the time concepts but it appears more exercises could be devised, with, for example, concepts like 'contemporary', 'anachronism' and 'period'. It is commendable that the books use pictures to develop a sense of time.

5.4 The Notion of Change

Change and continuity is one of the fundamental concepts of the nature of history. History shows how man's ways of life (political, social, economic legal, educational language, aesthetics) have been changing over time. It shows not only how man has changed to adapt to his environment, but also how he has changed the environment, effected change and has resisted change. Some changes have been gradual while other have been rapid and traumatic.

How has this notion of change been presented in these books? Do they draw attention to features indicating change? Are there particular examples of the change? Are illustrations used to show contrast? Are there specific sections discussing the notion of change? Are there directions explicitly given to the reader to make comparisons? These questions are part of Coltham's criteria for assessing history textbooks. (1970).

STD 5

In Objective History, the reader or pupil is in many instances told that change occurred. For example, the Phoenecians improved the alphabet, and made beautiful coloured glass. No pictures or other illustrations are however, used in the topic on the Art of Writing to show the development of the different forms of writing. There is a table showing various number systems, from the Egyptian to the modern, but no contrasting illustrations are juxtaposed and no tasks are given to make comparisons. Some exercises are given about change, though these are few, for example "write a paragraph on the changes brought about by Caxton in the printing of books." "Use the following: Gothic, Roman Style letters, translations." Nowhere in this section is an attempt made however, to show that development of the art of writing is a change that took place over a long time. There is very little direct opportunity, in this section, to explore the notion of change.

Junior History is a little better than Objective History. There is description of gradual development from use of simple pictures, lines or dots until use of symbols that are being used to express even abstract ideas or factual reports in writing.

There are illustrations that show different forms of writing and the different stages of the development of the alphabet from the Phoenecian to the Roman alphabet, and also the development of capital letters to small letters. Change is explained without the use of contrasted pictures.

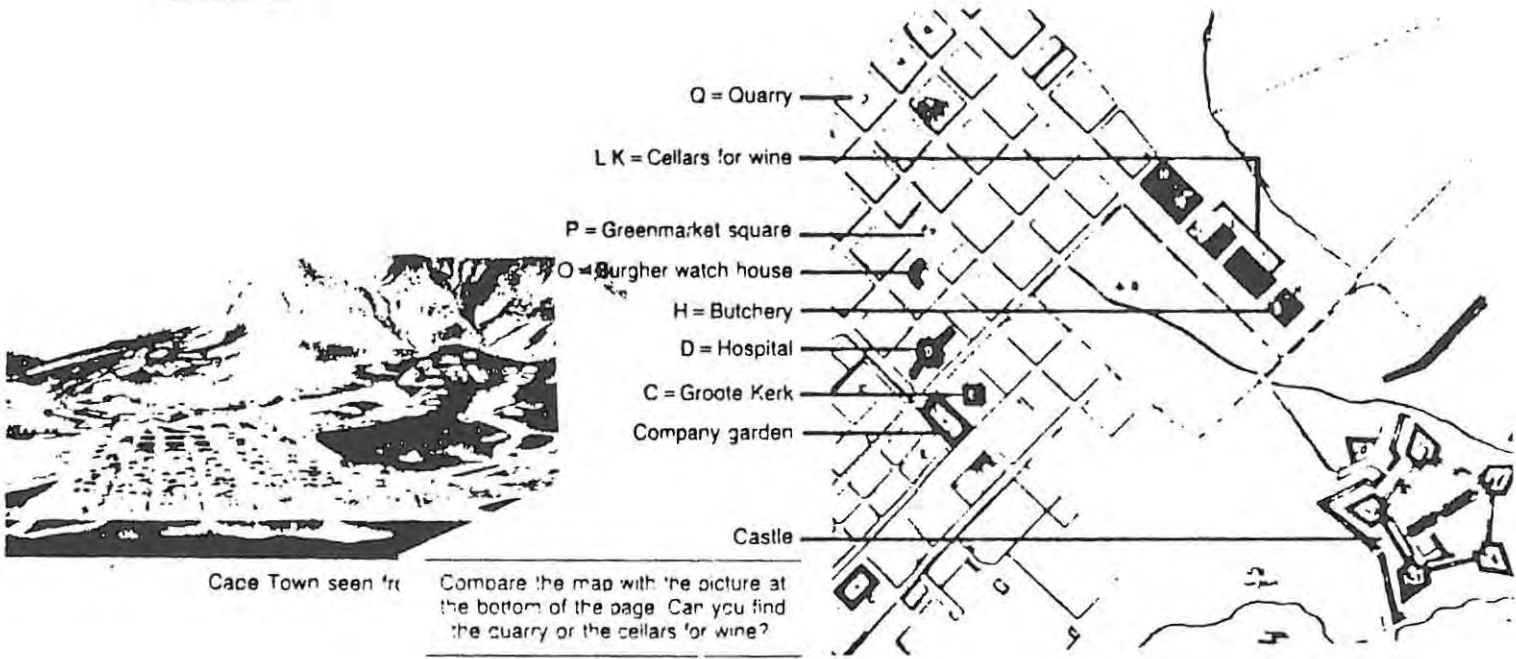
Even on the second topic, the Development of the Cape Colony, the two books Junior History and Objective History do not do much to show the changes except mentioning changes as part of the story. This topic has room for showing change in the social, political, economic and other aspects such as religion or education.

New Ventures shows change by, for example, showing the different stages of the development of the alphabet. The development of numbers is shown in a table. There is no use of contrasting pictures or maps. The topic on South African history, The Development of the Cape Colony, is treated in the same manner. The section involves many changes but they are not explicitly discussed.

In History for Today, the discussion of the notion of change is included in the section on time. When discussing the concepts of Ancient, Middle and Modern three sets of pictures are used which show change over time. As opposed to the other books History for Today uses more pictures to depict change. Pupils are asked to complete a table showing stages in the development of writing. The book also has a table showing how symbols became our alphabet.

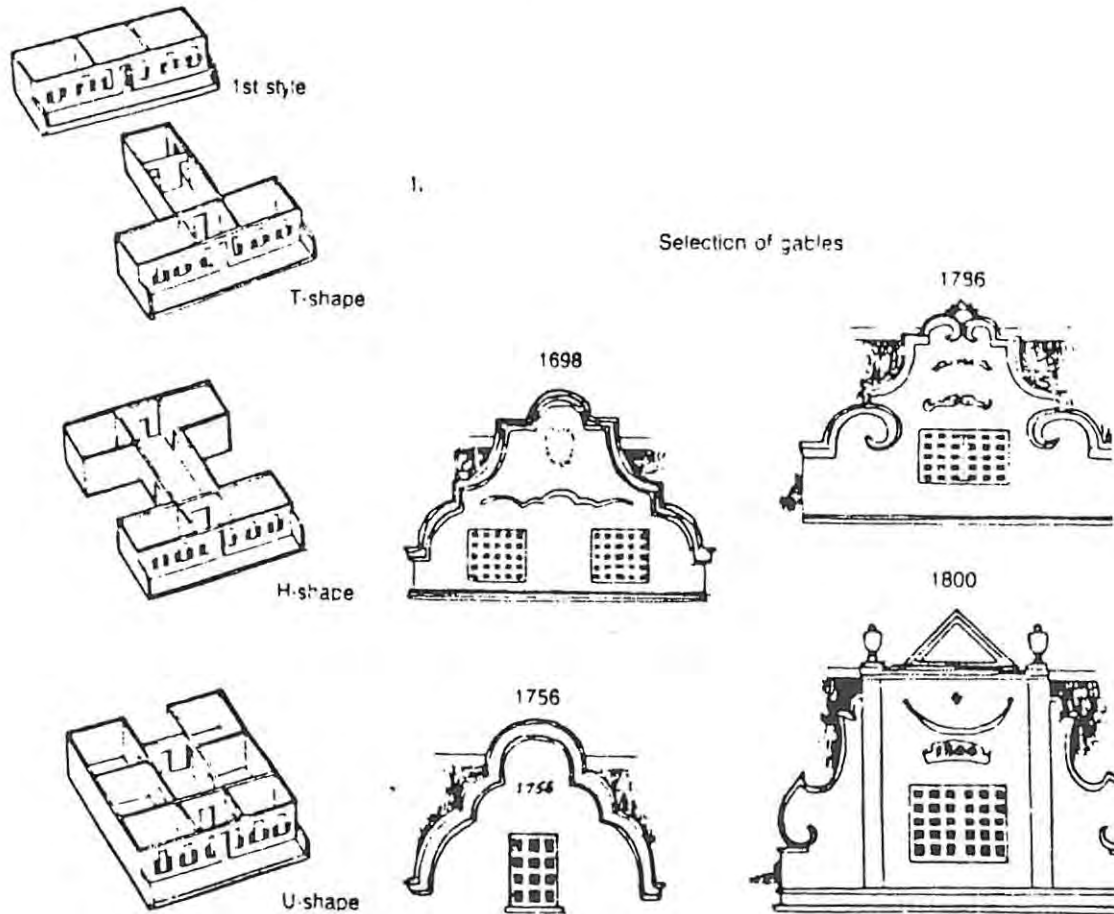
In the topic on South African History, the Development of the Cape Colony, the writer does direct pupils to "Refer to your modern atlas" to find towns like Paarl, Stellenbosch, which are modern towns. This task is given next to a map showing how the Cape had expanded by 1707. There are also maps that can be compared, one showing the early settlement along the Liesbeek and another showing Cape Settlement by 1707. Also pictures showing the development of the Cape indicate the change. There are explicit directives to compare a map with a picture.

FIG 5.9



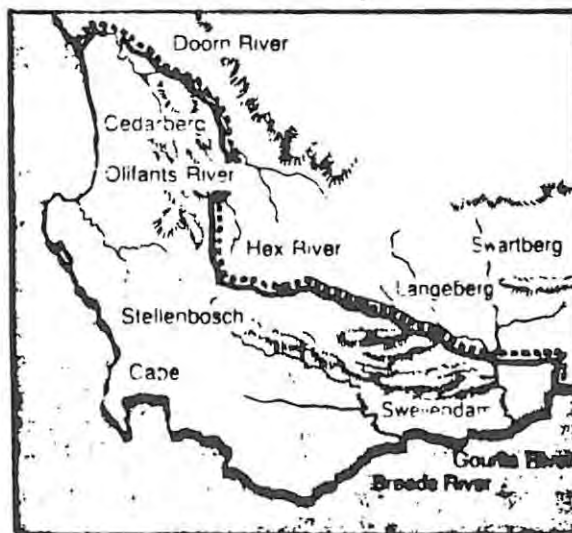
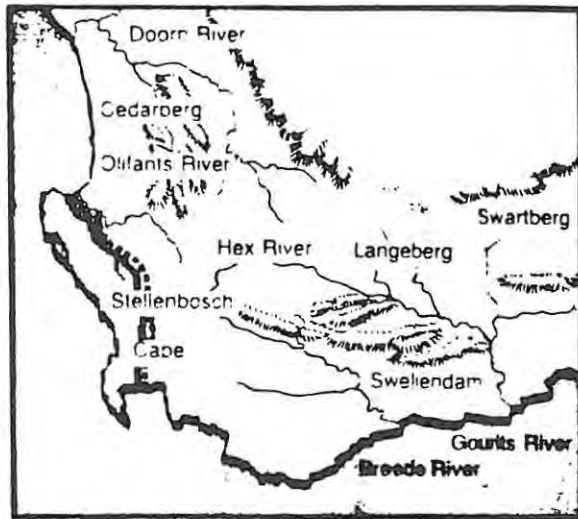
Change in architectural styles is also shown in pictures.

Figure 5.10



Maps can be juxtaposed to show development overtime. In this instance figure 5.11 shows development of the Cape over a period of 88 years, from 1707 to 1795.

Figure 5.11



History for Today, as compared with the other texts, excels in making use of illustrations to show change.

STD 8

In the Std 8 books, analysis was based on the topic of the French Revolution.

History in Perspective does indicate that up to the start of the French Revolution, European states were ruled by Kings and absolute monarchs. This means, therefore, that the revolution was a transitional point or stage. This is not explicitly expressed. One would have expected this to be explicitly stated and to be linked to the meaning of the term revolution and also be expanded to the different forms of change, either rapid or violent or gradual. The book does not use pictures or illustrations to show change. No tasks are set on change. The book does not provide any opportunities for a detailed study of the notion of change.

In the very first page of the first chapter, History 8 has an illustration of the causes of the French Revolution and also of the concepts of Old Order and New Order. Another picture shows the course of the French Revolution and the attendant changes. Two sketches are also used which depict "events preceding and during the French Revolution." Attention is drawn to details and the pupils are expected to indicate noticeable differences in dress between the two sketches. Various other concepts of change like 'radical', 'moderate' and 'reactionary' are used but not explained. An understanding of such terms is necessary so that an indication of the rate and direction of change hoped for by upholders of such beliefs, can be made clear. At no stage are pupils asked to interpret whether they see change described in the account as peaceful or not.

On the other hand there are a few questions in his conclusion: "Was the revolution inevitable? Could the reforms have been achieved gradually?" History 8 is, nevertheless, better than History in Perspective, which asks the pupils to make fairly sophisticated interpretations of the effects of change, although, as has been shown, little preparation was given to help them make such interpretations. Examples are used but not illustrations in Timelines clarify the notion of change, which is merely described verbally. There is, however, one chart which shows the development from monarchy, the different revolutionary and republican governments and then finally the return to monarchy in 1815.

History for Today gives an account of the nature of political revolution. The changes that occurred between 1789 and 1850 are explained: the development of nationalism, liberalism and democracy. The concept of change is also balanced against concepts like conservatism. Illustrations are used to indicate that traditional or conservative forces and liberal and national forces existed side by side, met with reaction and opposition, and resisted each other. An illustration is also used to show the complex factors that brought about change.

Figure 5.12



Conservative - Liberal + National
IN STEP



Conservative - Liberal + National
IN OPPOSITION



Conservative - Liberal + National
IN RESISTANCE

Another illustration shows the difference between the Estates General and the National Assembly. The change that came about during the revolution is shown clearly in the composition of the National Assembly.

Pupils are also given tasks on change e.g. on p. 23 under the heading "Look at the evidence," the pupils are instructed to "Study the documents below. What does it reveal about the reactions to the concepts liberalism and nationalism by rulers of neighbouring states?" Such a task helps the pupils to see that change does not always occur without opposition or reaction to it. Once again History for Today outshines the others. It has an edge over the others because of its use of evidence to reinforce the notion of change.

5.5 USE OF DOCUMENTS

Std 5

Among the Std 5 texts, it is History for Today that makes use of primary sources of evidence, although it is mainly pictures that are used and no serious document study is attempted in all the texts.

Std 8

With the exception of History in Perspective, the Std 8 texts do make use of documents. History 8 and Timelines use the documents mainly to set comprehension exercises. It is History for Today that makes abundant use of documents.

In History for Today the documents are not put at the end of the chapter for setting questions, but are included in the relevant portions of the content of the book. Pupils are given tasks set on the documents. For example on Page 17 there is the following:

Figure 5.13

• **The Declaration of Human Rights**

This abolished privileges and established new **liberal** principles such as the **rights of individuals** and various **freedoms**.

This idealistic document became the basis for many Western democracies. It emphasized the rights of individuals beyond their duties as citizens.

Look at the evidence

Study these extracts from the Declaration of Human Rights. Group them under the headings **Liberal** **National** **Reflects views of writer**, e.g.:

Rights	Liberal	National	Reflects views of writer
Men are born free and equal in rights	✓		Rousseau
etc.			

The Declaration of the Rights of Man, 1789

1. Men are born and remain free and equal in rights
2. The purpose of all political associations is the preservation of the natural rights of man. These rights are liberty, property, security, and resistance to oppression.
3. The principle of all sovereignty stems essentially from the nation. No group of men or individual can exercise any authority which does not specifically stem from it.
4. Liberty consists in being able to do whatever does not harm others.
5. The law only has the right to prohibit actions harmful to society. Nobody can be forced to do what the law does not require.

At times, pupils are given two documents to analyse. For example:

FIG 5.14

Look at the evidence

Extract A

The editor of *The Friend of the People*, Marat, wrote the editorial below.

(1) Who was he reviling? What did he feel was threatened?

'... O credulous Parisians! Can you be duped by these shameful deceits...?

Not satisfied with annihilating the patriotic associations, these scoundrels violate the liberty of the press, annihilate the Declaration of Rights—the rights of nature! They declare the oppressed ... the disturber of public peace. They declare every citizen a disturber of the peace. ...

... Infamous legislators, vile scoundrels, monsters sated with gold and blood, privileged brigands who deal with the monarch, with our fortunes, our rights, our liberty and our lives. Could [this editor] rally at his call 2 000 determined men to save the country ... he would burn the monarch and his **minions** in his palace. ...'

(2) Using what you have learnt about liberalism in this period, prepare your own speech either to defend the monarchy or to propose a republic.

Extract B

Here are the comments of a conservative editor of another periodical, *Le Mercure de France*.

'... The Assembly cannot fail to recognize the fact that as a result of its doctrines and action ...

- it leaves every religious principle destroyed ...
- morals in the last stage of degradation ...
- the rights of property violated ...
- our forces, land and naval, in a worse state ...
- that it has shaken ... the foundation of all military organization.
- that it leaves our finances in chaos ...
- that our influence and reputation in Europe are eclipsed
- that our commerce (and industry) is less flourishing ...
- that our internal police are more oppressive and less effective. ...

A vast number of citizens do not desire the old any more than the new regime and the reproaches ... have no bearing on the reform of the older system. ...'

- What aspects of nationalism are to be found in this extract?

History for Today emerges, therefore, as better in its use of documents when compared to the other texts. Through the documents pupils are given the skills needed and opportunities for gaining the skills of looking at evidence critically. The questions that are asked on the documents encourage translation and analysis, not recall of facts. For example, the question on the Declaration of the Rights of Man is meaningful activity for the child, as the child has to sift the liberal from the national rights.

History 8, too, does make use of documents but only in the questions section at the end of each chapter. It is a good idea to introduce pupils to the use of documents. However, this is no justification for throwing in any piece of evidence or document simply for the sake of having used a document. History 8 has, amongst others, the following document on the South African section, British reaction to the independence of republics after the Great Trek

FIG 5.15

Enrichment material

Comment on each of the nine provisions of the Sand River Convention, 1852.

Eerstens. Hare Majesteit Assistent Commissarissen waarborgen ten volsten aan de zeyde van het Britsche Gouvernement aan de Emigrante Boeren. Noord van den Vaalrivier, het recht om haare eigene affaire te bestieren en haarlieden te regeren volgens haare eigene wetten, zonder beoeyenis hoe ook genaamd van het Britsche Gouvernement en dat geen overschreiding van het grondgebied ten Noorden van Het Vaalrivier zal gedaan worden, door gemelde Gouvernement. Met de verdere verzekering dat het (de) vurigste begeerten van den Britsche Gouvernement is om vrede, vryhandel, en vriendelyke verstandhouding met de Emigrante Boeren bewonende of die noch bewonen zal, deze landstreek voort te zeten, en word verder verstaan dat deze stelzel van geene bemoeienis is wederzyds.

Twedens. Zo er eenige misverstand zoude plaats vinden met betrekking tot de mening van de woorden Vaalrivier, - deze kwestie zover als de linie van de spryten van de Vaalrivier betref zal beslis worden door Commissarissen wederzyds gekozen.

Derdens. Dat H.M. Assistent Commissarissen hiermede ontkennen alle bondgenootschappen hoe ook genaamd ten Noorden van die Vaalrivier gekleurde natien.

Vierdens. Word hiermede verstaan dat geene slaverny is of zal worden gepraetiseerd of toegelaten in de landstreek Noord van den Vaalrivier door de Emigranten Boeren.

Vyftde. Wederzydsche vryheid en gemak zal verschaft worden aan handelaars en reizigers, weerzeide van de Vaalrivier en word verder verstaan dat yder wagen bevattende ammunitie en vuurwapenen, komende van de Zuid van de Vaalrivier zal een certificaat produceeren geteekend door een Britsche Magestraat of andere amptenaar als daartoe geauthoriseerd is, zulks te doen, van de hoeveelheid amunitie en vuurwapende in zyn bezit by den eersten Magestraat Noord van de Vaalrivier die ageeren zal volgens bestaande

Zesde. Word verder vastgesteld dat geene objectie zal gemaakt worden, door eenige Britsche Authority aan eenige van de Emigrante Boeren in het koopen van ammunitie in eenige van de Britsche Colonies, in Zuid-Africa, en word wederzyds verstaan dat de handel, in ammunitie met de gecolleurde is ten strengste verboden, zowel door het Britsche Gouvernement, als door den Emigrante ten Noorden en ten Zuyden van den Vaalrivier.

Zevende. Verder word vastgesteld dat zoveel als mogelyk is - alle criminele of andere schuldigen partyen, die den wet zal ontvlugten aan beide zeide van de Vaalrivier, zal van beide partyen worden uytgeleverd, indien zulks vereischt, en dat de Britsche Rechtbanken zowel als die van de Emigranten Boeren zal wederzyds open zyn, voor alle wettige processen, en dat alle dagvaardingen, voor getuigen wederzyds gestuurd zal bekrachtigd worden, door den respectieve Magistraten om zulke getuigen te doen compareeren waar zy vereischt worden.

Achste. En is vastgesteld dat huwelykscertificaten verschaft door zodanige beampten, als daartoe bevoegd zyn zal, voldoende beschouwd worden om de kinderen van zodanige huwelyken te gerechtigten haare erfportien te kunnen ont-

One is concerned how the Std 8 pupils are expected to comment on this document, Even if they speak Afrikaans, they still might not understand a document written in Dutch. Had there been some limits on the aspects that their comments should touch upon, the exercise could have been less discouraging.

Timelines, too, does make use of documents, but also, like History 8, not in the text, but at the end of the chapters, where other questions are asked. The following is an example.

FIG 5.16

- 4 Read the following adapted extract from a document and answer the questions which follow:

"The National Assembly regards itself as brought together to draw up the constitution of the French Kingdom, to restore public order and to maintain the true principles of the monarchy, that nothing will prevent it from continuing its discussions . . . and in conclusion, wherever its members may gather, the National Assembly will convene, and herewith it declares faithfully that all the members of this assembly will take an oath not to dissolve, to assemble when circumstances demand it, till the constitution of the Kingdom has been drawn up on a sound foundation."

- (i) In which town or city did this meeting take place?
- (ii) Which body met here again for the first time since 1614?
- (iii) Which two problems arose during this first meeting?
- (iv) Who became the first leader of the National Assembly?
- (v) Where was the oath, which is referred to above, taken?
- (vi) How many members were there in the National Assembly?
- (vii) Who were the king and queen of France at this stage?

The document has been used as stimulus material, a springboard for asking many other questions on the French Revolution. The questions are mostly of the recall type with the answers not really having to come from the document. The skill tested or developed is the simple recalling of 'facts'.

A document should ideally be used to introduce pupils to skills of looking at evidence critically. The questions asked on this document in Timelines could have been asked without inserting the document at all. The purpose for which they have to read the document is, therefore, not clear. The same criticism would apply to their document on the South African history topic, The British Reaction to the Great Trek.

FIG 5.17

- 4 The following passage is a translation of the summons to war by Andries Pretorius. Read it carefully and answer the questions which follow:

Mooi River
8 April 1848

In spite of the British government's promise of 12 May 1843 to protect us and our farms, the Blacks exerted such pressure on us that we suffered great losses and were forced to leave the country, now under British control. Now it has also come about that the territory from the Orange River and the Drakensberg, up to the Vaal River, of which we obtained parts from the legal owners by exchange, has also been taken from us by the Proclamation. Full rights have also been given to the Blacks. Therefore all men are called upon to defend our legal property, which has cost our men, women and children much bloodshed.

- (i) Which country had the Trekkers left a short time before? (1)
(ii) Which proclamation is referred to here? (1)
(iii) Briefly describe the events which took place after this summons by Andries Pretorius. (5)

History in Perspective does not make use of documents at all. In terms of current trends in history teaching, the book is weak. Of the Std 8 books, the only one that does not insert documents simply for the sake of having them, but also makes meaningful use of them to help pupils develop skills of inquiry, is History for Today. The Std 5 books, too, could have made use of simple documents to introduce pupils to inquiry skills.

5.6 QUALITY OF ASSIGNMENTS

STD 5

All the Std 5 books assessed have questions and exercises set for the reader at the end of each chapter or unit. However, the tasks and exercises set for the pupils in the books differ widely in quality. In looking at the quality, those that are accepted as of good quality are those that go beyond eliciting simple recall of "facts".

Objective History sets some exercises requiring not only recall of 'facts' but some practice in writing paragraphs in their own words.

Pupils are given key words to use in the building up of the paragraph on the given topic. This can be an introductory exercise on skills of note-making and synthesising. On p.12 Objective History suggests a project, that of pupils having a class newspaper to which they have to contribute articles or reports on something which happened in the school. On p.15 has this task :

'Find some clay and roll it into a flat tablet : Use a sharp stick to make wedgelike marks on the clay tablet. Leave clay tablet in the sun until it is hard". This type of task seems useful to make pupils have a clear idea of cuneiform writing.

Junior History, too, has exercises and questions. The simple questions authors ask seem suited to the level of the pupils, though the essay questions seem to take for granted that they already have the skills of essay writing. The following questions, for example, would be difficult. "Give an explanation of the cultural life of the Italian city, Florence. Concentrate on how artists and scholars were protected by rich merchants." Free essays of this nature appear demanding for a Std 5 pupil. Such pupils need exercises that will train them in the art of essay writing. Structured essays should be done before free essays. As this topic, The Art of Writing, is the first chapter, the exercises could have been structured and designed to develop skills and then, as the book progresses, make more complex demands.

In other cases the framing of questions is poor: For example

"5. How do we understand humanism?

(a) How did humanism influence the literature and art?

(b) How did the Italian humanists differ from the humanists of Northern Europe?" p. 6.

The first portion, "How do we understand humanism?" is extremely broad. If it is to be included, it should, at least, follow and not precede the more specific tasks asked for in (a) and (b).

There is not much variety in the nature of the questions asked by the author. In fact, most of the assignments that Objective History sets are free essay assignments. What does the author expect the Std 5 child to do in response to the following questions: "Describe the extent and importance of the monasteries and libraries of the Middle Ages?" This one, typical of many others, is far too free and open.

On the other hand, History for Today has some structured exercises like "Write short paragraphs on the following concepts:

(a) Alphabet

(b) Bible

(c) Paper."

This is the type of question we would expect for Std 5 pupils. On p. 190 History for Today has an exercise like this:

FIG 5.18

Let's sum up	
<i>Feature</i>	<i>Why it was important</i>
1. Castle	1. To protect settlement from foreign attack.
2. Grootte Kerk
3. Greenmarket Square
4. Burgher Watch House
5. Harbour and jetty
6. Butchery
7. Wine and cornstores
8. Boeren Plein

This exercise is designed to help develop the skill of summarising and is a good exercise for Std 5 pupils.

In Figure 5.20 the full exercise is given to illustrate both the short recall questions as well as the more extended activities requiring more complex understanding. The whole set of questions ends with the empathy question of the order of priorities the children have for van Riebeeck's tasks.

The next Figure, 5.21, shows a similar pattern of developing exercises, this time in connection with the Art of Communication. Both these exercises deserve praise for their imaginative approach and their developing of ideas from one stage to the next.

Question 3 from New Ventures to give an indication of the time problems in writing as opposed to printing, is good in that it forces the child to exercise his imagination.

New Ventures, has exercise to help pupils with skills of note-making. The exercises are further designed to help pupils analyse and extrapolate. They do not merely ask for the recollection of memorized material. Exercise 4, for example, in the questions shown below, requires of the child to put himself in the position of van Riebeeck and sift the Council's instructions in terms of priority. This is the desirable type of exercise to help pupils see things in terms of the times at which they were happening. From such exercises discussions which seek to foster empathy could follow. For example, they might be asked to imagine the problems van Riebeeck faced.

Questions

- 1 In which century did most of the events described in this unit occur?
- 2 Name the two Portuguese explorers mentioned in the unit. Which of them discovered the Cape Peninsula?
- 3 What goods did the Portuguese carry from the East Indies to Europe?
- 4 Explain briefly why the Dutch took over this trade.
- 5 Write down four important facts about the Dutch East India Company.
- 6 How many months did van Riebeeck's voyage from Holland to the Cape take?
- 7 Using one sentence only for each, write down the four problems that van Riebeeck faced after his arrival.

Exercises

- 1 If you look at the map on page 27 you will see a scale line. This tells you that one centimetre on the map represents 1000

kilometres. Use this scale to work out the rough distance between Portugal and the East Indies.

- 2 Read the unit again and write down the important things that happened in the following years. Then arrange the list in correct date order.

1647; 1595; 1652; 1488; 1659; 1602

- 3 Complete this paragraph.

Because of the long voyages sailors had to live on ____ and _____. They could not get enough fresh ____ and _____. Because of this they suffered from diseases, especially one called _____. A ship called _____ was wrecked at _____ in 1647. The crew survived by exchanging goods for _____ from the _____. _____ and _____ recommended that the Cape should be a permanent _____ for the Dutch East India Company.

- 4 Look at the instructions which the Council of Seventeen gave to van Riebeeck. If you had been him, which of these would you have tried to do first? Give your reasons.

Questions

- 1 Where did the modern alphabet come from originally?
- 2 Which people added the vowels to the alphabet?
- 3 What contribution to the alphabet was made by the Romans?
- 4 Choose the correct answer from the words in brackets.
 - (a) The (Greeks, Egyptians, Romans) were among the earliest people to develop a system of recording numbers.
 - (b) In the ninth century the (Indian, Greek, Roman) scholars taught the Arabs the (Moslem, Greek, Hindu) system of numbers which later became known as the (Hindu, Arabic, Moslem) system.
- 5 Who were the people who wrote the 'books' in the Middle Ages?
- 6 Who was the inventor of the first printing press?
- 7 Why was the invention of the printing press so important?

Exercises

- 1 Complete this paragraph.

The word 'alphabet' comes from the words _____ and _____ which the Greeks used as the first two _____ of the alphabet. The Phoenician's alphabet had _____ letters. Today our alphabet has _____ letters.

- 2 Write the following numbers in Roman numerals: 10, 25, 42, 68, 83.
- 3 Choose a paragraph from this book and write it out very carefully and clearly. How long did it take you? How long do you think it would take you to write out a page of the Bible? And the whole Bible? This may give you some idea of how long it took the monks to write their manuscripts.
- 4 Look at the picture of the printing press on page 88. Can you see how it works? If so, try to explain to others in the class. See if you can find out what a modern printing machine looks like. There may be a printing firm in your area, or you can find out from other books, or from your teacher.

On the whole, then, New Ventures and History for Today have a fair variety of exercises of good quality as compared to Objective History and Junior History. Question 3 from New Ventures is good in helping the child exercise his imagination.

Std 8

History in Perspective has questions at the end of each chapter, like the following:

"What do you understand by the following terms?

- (a) Nationalism
- (b) Liberalism."

A question like this usually yields memorized definitions. Perhaps if some descriptions of the concepts could be given and then the pupils asked to supply the correct concepts, the question could be more meaningful.

A great number of assignments given are open questions. For example: "Discuss the statement: The Revolution was the work of the Middle Class in France." The problems encountered in such essays have been discussed when the Std 5 texts were considered.

History 8 has assignments of better quality than History in Perspective. For example, the following topics for debate are suggested:

- (a) "It was not necessary to have a revolution to bring about change.
- (b) In the end the revolution did more harm than good."

However, it appears that these topics can spark debate, though one perhaps would have preferred that they be put in the form of questions, so that they are not seen to be biased in terms of one point of view, namely, what they state when not put in question form. For example, "Was it necessary to have a revolution to bring about change?", is better than "It was not necessary to have a revolution to bring about change."

They also suggest an interesting activity on page 19: "Divide the class into four groups, respectively representing the king and his court, the clergy, the nobility and the Third Estate. Have each group defend its conduct prior to and during the revolution. This should take the form of a class debate." It is through such simulations and games that pupils are made to feel and experience history by recreating through acting the roles of the historical figures.

Timelines has, at the end of each chapter, revision questions and assignments, consisting mainly of short answer questions. Some of the short questions asked are in the negative form that is not really favourable, for example, "From each of the following choose the item which does not fit in with the others:

table; gabelle; guilds; corvee."

Timelines also has a commonly used assignment, of which the following is an example: "Work out a theme on" Perhaps something more specific would have been helpful.

History for Today, too, has assignments set out at the end of each chapter. They are mainly essay questions, some of which are structured.

Some of the books do not separate assignments from test questions. They mix them, while others separate questions from assignments and activities.

On the whole, assignments in the Std 8 books are suited to the Std 8 level but there is a lack of variety. In this respect, there is need for improvement.

From the foregoing analysis of the Std 5 and Std 8 history textbooks according to a number of subjective criteria, it appears that, of all the books, the series by Graves and others, History for Today, is the best. This series has surpassed the others in terms of all the criteria used: use of headings, use of illustrations, handling of notion of change, use of documents and quality of assignments and exercises. There is room for improvement in the other texts, especially on the evidential approach, if they are to meet the levels of the New History.

It will be remembered that in the analysis of the objective criteria, Graves' series set the pace by going well beyond the definition approach in explaining concepts, by using illustrations and documents, which reinforce concept understanding.

It can, therefore, be claimed that both objective and subjective criteria would appear to support each other in pointing towards the same series as the best in aiding pupils' conceptual understanding of historical material. Further implications of the findings and some recommendations will be contained in the next, and final, chapter of this thesis.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusion

In the opening chapter it was noted that the Taylor Commission of Inquiry into Education in the Republic of Transkei in 1979 remarked that "illustrations in textbooks are often poor and type sizes and styles often unsuited to the maturational and interest levels of the pupils. There is little evidence of attempts to control the language used in the textbooks, or to relate the vocabulary and sentence structure to the reading levels of the pupils for whom the books are meant." This was the position in 1979. This thesis was, therefore, partly concerned with looking at currently used history textbooks to see if the position had improved in the decade since the report was written.

The eight school history textbooks analysed were assessed in Chapter 4 and Chapter 5 in terms of fourteen objective criteria and nine subjective criteria; twenty-three criteria in all. The objective criteria used were: difficulty level score, target age-range, sentence structure, average number of headings per page, average number of illustrations per page, number of pictures per book, number of maps per book, concepts used but not explained, concepts explained by definition only, concepts explained by definition and example, concepts explained by background information only, concepts explained by definition and illustrations, number of new concepts introduced per three pages, and the number of new concepts explained in such three pages.

The researcher, in selecting the objective criteria, was influenced by writers like Tennyson and Cocchiarella (1986) and Macrae (1987) on modes of concept explanation, Gilliland (1972) on the test of difficulty level, and others like Coltham (1970) on sentence structure, use of illustrations, type of illustrations, and rate of introduction of new concepts.

The subjective criteria, namely the use of headings, reinforcing of illustrations, relation of illustrations to relevant sections, use of illustrations to explain concepts directly, colouring of illustrations, time and chronology, notion of change, use of documents and the quality of exercises and assignments, were taken from the ideas of Coltham (1970).

Chapters 4 and 5, in which the detailed analysis was described are long and involved. Some attempts must be made to summarise the findings. At the same time, the techniques described in this thesis could find practical application when two or more textbooks need to be compared. One way of combining both the summary and the comparison needs would be to devise a ranking system which could form the basis of a simple quantitative analysis. This chapter attempts to do this and to highlight the conclusions which seem to emerge from this study.

Grids of both the objective and subjective criteria were drawn up in respect of each class for which the books were intended. The books were ranked from one to four in respect of each criterion, with one indicating a high rank and four a low rank. A book that had the most desirable quality in terms of its score got a rank of 1 and that which had the least desirable, a rank of 4. The approach will be explained more fully in the case of each summary.

With regard to the objective criteria, for example, the book with the highest reading-ease score received a rank of 1 and that with the lowest score a rank of 4. It will be remembered in the Rudolph Flesch Formula, the nearer the score is to 100 the easier the book is to read. For example, a book with a reading-ease score of 70 is more acceptable than that with a score of 50. For the Junior Secondary pupils a book with an age-range of 12 years is more acceptable than one with the 15 - 17 range. So the 15 - 17 one would rank 4.

A book with many headings ranks highly because, it has been argued, these make reading easier. The same argument is used for book illustrations. The more illustrations, it is claimed, the better. So a book with many illustrations ranks highest. The approach is repeated for the extent of pictures and maps in the books.

As far as the handling of concepts is concerned, a book with many concepts used but the fewest being explained ranked low. The book that most frequently used definitions to explain concepts ranked lowest. A book that explained many concepts by definition and example ranked highest as did the book that most frequently explained concepts by use of both definition and illustration. The book that most frequently used background information only to explain concepts did not get a high ranking as it encourages guessing of the meaning by the concepts. The book introducing the largest number of new concepts per three pages received the lowest ranking, as did the book that provided little explanation of new concepts introduced.

As a result of giving a ranking to each characteristic, it was possible to make a numerical calculation to sum all the objective criteria, produce a global ranking for each book, and so place each book in a final rank order.

As the following tables show, in respect of each of the books recommended for Std 5 and Std 8 there has not been much improvement on what was observed by the Taylor Commission in 1979.

Std 5

6.1.1 Objective Rank Order

The following are the scores and rankings of the books in terms of the fourteen objective criteria used.

Table 6.1 Books Objective Rank Order: Std 5

Objective Criteria

Book Scores and Rankings

Rank of 1 to 4 : 1 = desirable quality
4 = least desirable quality

	History for Today		Junior History		New Ventures		Objective History	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank
1. Reading-case score	71,53	2	58,8	4	63,5	3	77,7	1
2. Target age level	12	1	15-17	4	13-14	3	12	1
3. Sentence structure (simple sentences)	32	1	31	2	28	4	31	2
4. Average headings per page	0,6	4	1,8	1	1,5	3	1,8	1
5. No. of illustrations per page	1,14	1	0,99	2	0,8	3	0,4	4
6. No. of pictures per book	27	1	25	2	13	3	9	4
7. No. of maps per book	18	1	7	2	3	3	4	4
8. Concepts used but not explained	1	1	6	4	2	3	1	1
9. Concepts explained by definition only	7	1	7	1	10	3	16	4
10. Concepts explained by definition & example	9	1	2	3	2	3	6	2
11. Concepts explained by background info. only	6	3	2	1	8	4	2	1
12. Concepts explained by definition & illustration	15	1	11	2	8	3	2	4
13. No. of concepts introduced per 3 pages	5	1	8	2	11	4	8	2
14. No. of concepts explained per 3 pages	4	2	4	4	10	2	8	1
Cumulative ranking		21		34		44		32
History for Today	= 1	21						
Objective History	= 2	32						
Junior History	= 3	34						
New Ventures	= 4	44						

In the ranking of items, only the number of simple sentences was considered, as it was felt that these would give a sufficient indication of the nature of sentences in a book. The book with the largest number of simple sentences receives the highest ranking because it makes reading easier for the pupils.

It will be noted that the scores for Objective History and Junior History differ by only two points. If these two books are rated virtually equal on the selected characteristics, then a clear difference of ten points separates the first from the second and third and a further ten points from the middle level books and the one that is least satisfactory - New Ventures.

A further feature of the grid is the relative consistency of the rankings for characteristics within each book. History for Today has ten first rankings out of a possible total of 14. New Ventures (the worst book according to the selected criteria) has ten rankings of 3 and three rankings of 4. Consistency is not as apparent in the other two books, but Junior History still achieves as many as six rankings of 2.

Because of the clear differences between the books, and because of the relatively strong internal consistency, it was decided to use a reduced range of characteristics to see if the cumulative rankings changed. Seven criteria were included in this shortened version: the reading-ease score, sentence structure, concepts used but not explained, concepts explained by definition only, by definition and example, by background information only and by definition and illustration. It was argued that these were the important objective criteria that affected the quality of a textbook. Another purpose for the shortened rating was to cater for teachers who would use the criteria to assess books. If they are all included, the analysis becomes cumbersome and might discourage teachers from using it.

The following table, Table 6.2, shows the ratings obtained when using this shortened version.

Table 6.2

Shortened Ranking : Objective Criteria : Std 5

Objective Criteria

Book Scores and Rankings

	History for Today		Junior History		New Ventures		Objective History	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank
1. Reading -case score	71,53	2	58,8	4	63,5	3	77,7	1
2. Sentence Structure	32	1	31	2	28	4	31	2
3. Concepts used but not explained	1	1	6	4	2	3	1	1
4. Concepts explained by definition only	7	1	7	1	10	3	16	4
5. Concepts explained by background information only	6	3	2	1	8	4	2	1
6. Concepts explained by definition and example	9	1	2	3	2	3	6	2
7. Concepts explained by definition and illustration	15	1	11	2	8	3	2	4
Cumulative Ranking		10		17		23		15

TEXT	Rank	Score
History for Today	1	10
Objective History	2	15
Junior History	3	17
New Ventures	4	23

As the table shows the results obtained when all the fourteen criteria were considered are the same as those obtained when the shortened ranking was used. It would seem that the shortened and simpler ranking can be used without any fear that it might prejudice the assessment.

6.12 After the ranking of objective criteria, the books were again ranked in terms of subjective criteria. They were ranked on nine criteria: the use of headings, the reinforcing illustrations by means of questions and directive statements, the relevance of illustrated sections of the text, use of colour with illustrations, use of illustrations to explain concepts directly, time and chronology, use of documents, the quality of assignments and exercises, and notice of change.

A different ranking scheme was used for this purpose. It seemed important to be able to use a zero score when a particular characteristic was not used or considered by the authors.

The book that ranked best in terms of each category was, therefore, ranked 4 and the worst scored 1. If a book did not use the characteristic, it was ranked zero. For example, it was possible for a book to rank zero on using illustrations to explain concepts.

The following table, Table 6.3, reflects the rank order of the books in terms of the subjective criteria used for their assessment. The information is based on explanations in Chapter 5 of this thesis, where the subjective analysis is made. A higher score suggests that a book meets many of the criteria.

Table 6.3 : Subjective Rank Order : Std 5

	1 = 4	2 = 3	3 = 2	4 = 1	0 = 0
<u>Subjective Criteria</u>	<u>Text</u>	<u>Rank</u>	<u>Scores</u>		
	History for Today	1	31		
	New Ventures	2	22		
	Junior History	3	15		
	Objective History	4	10		
	<u>Books</u>				
	History for Today	Junior History	New Ventures	Objective History	
1. Use of headings	4	3	3	3	
2. Illustrations : reinforcing them with questions	4	2	3	1	
3. Illustrations : relation to relevant sections	4	2	3	2	
4. Illustrations : to explain concepts directly	4	0	0	0	
5. Illustrations : use of colour	0	0	0	0	
6. Time and chronology	4	3	3	1	
7. Notion of change	4	3	3	1	
8. Use of Documents	4	0	3	0	
9. Quality of assignments and exercises	3	2	4	2	
	31	15	22	10	

As with the objective criteria, large differences occur between the best and the middle-level books and between them and the worst book. Evidence for internal consistency emerges fairly clearly. All in all, the best book, in terms of subjective criteria, is History for Today. The least satisfactory is Objective History.

When the rankings are compared, however, the books do not retain a consistent order, as is shown in Table 6.4.

Table 6.4

<u>Text</u>	<u>Objective Rankings</u>		<u>Subjective Rankings</u>			
	Full Ranking	Shortened Ranking	Rank	Score	Rank	Score
History for Today	1 — 21	1 — 10	1	31	1	31
Objective History	2 — 32	2 — 15	2	22	2	22
Junior History	3 — 34	3 — 17	3	15	3	15
New Ventures	4 — 44	4 — 23	4	10	4	10

In terms of both the objective and subjective criteria, History for Today emerges as by far the best of the textbooks assessed when objective and subjective criteria are used. This strengthens the view that for a more balanced judgement it is better to use both the objective and the subjective criteria of assessment. A book, when assessed objectively may have the highest number of pictures but when assessed subjectively in terms of the skilful use of pictures it may emerge as poor. Objective assessment consists mainly in counting factors assessed but the subjective assessment stresses on how the text helps pupils understand the material. The need to use both approaches in assessing history textbooks cannot be over emphasised. We need to consider both the quality and the quantity of factors that promote the readability and usability of a book.

It is now possible to turn to the four Std 8 texts. Exactly the same procedure, as was described in the first part of this chapter was followed for the texts designed for older readers.

Std 8

6.1.3 Objective Rankings

The same ranking of 1 to 4 was used in the Std 8 textbooks, with 1 standing for the highest and 4 the lowest rankings.

STD 8

Objective Criteria

Book Scores and Rankings:

Rank of 1 to 4 : 1 = desirable qualities

4 = least desirable qualities

	History for Today		History 8		History in Perspective		Timelines	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank
1. Reading-ease score	63	1	54	2	53,4	3	53	4
2. Target age level	13-14	1	15-17	2	15-17	2	15-17	2
3. Sentence structure (simple sentences)	26	2	23	3	31	1	18	4
4. Average headings per page	0,8	4	1,8	1	1,5	2	1,5	2
5. No. of illustrations per page	0,8	1	0,8	1	0,4	4	0,6	2
6. No. of pictures per book	68	1	8	3	3	4	17	2
7. No. of maps per book	14	1	2	4	3	3	6	2
8. Concepts used but not explained	5	1	10	3	12	4	5	1
9. Concepts explained by definition only	14	2	14	2	5	1	17	4
10. Concepts explained by definition and example	7	1	0	4	1	3	2	2
11. Concepts explained by background information only	0	1	2	2	3	3	3	3
12. Concepts explained by definition and illustrations	5	1	1	3	0	4	2	2
13. No. of concepts introduced per 3 pages	16	2	13	1	20	4	16	2
14. No. of concepts explained per 3 pages	16	1	5	4	12	3	13	2
Cumulative Ranking		20		35		41		34

Text	Rank	Score
History for Today	1	20
Timelines	2	34

Text	Rank	Score
History 8	3	35
History in Perspective	4	41

One thing emerges clearly from this table, in contrast to the objective ranking of results for the standard five texts. History for Today is by far the best, but the three remaining books reflect a range of only seven points, which suggests that there is not much to distinguish them on the selected criteria.

A slightly different pattern emerges when the objective ranking is shortened, as shown in Table 6.6. Although History for Today continues to rank the highest even in this shortened ranking, Timelines shifts from second to fourth position. The results in the shortened ranking cluster the three texts, Timelines, History 8 and History in Perspective very close together: 20, 19, 19 points. In other words, the shortened assessment re-inforces the close similarity which was suggested in Table 6.5 between these three texts.

Table 6.6

SHORTENED RANKING STD 8

<u>Objective Criteria</u>	<u>Book Scores and Rankings</u>							
	History for Today		History 8		History in Perspective		Timelines	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank
1. Reading case score	63	1	54	2	53,4	3	53	4
2. Sentence Structure	26	2	23	3	31	1	18	4
3. Concepts used not explained	5	1	10	3	12	4	5	1
4. Concepts explained by definition only	14	2	14	2	5	1	17	4
5. Concepts explained by definition and example	7	1	0	4	1	3	2	2
6. Concepts explained by background info. only	0	1	2	2	2	3	33	3
7. Concepts explained by definition and illustration	5	1	1	3	0	4	2	2
CUMULATIVE RANKING	9		19		19		20	

TEXT	RANK	SCORE
History for Today	1	9
History 8	2	19
History in Perspective	3	19
Timelines	4	20

The shift in ranking, when the shortened form is used, is illustrated in Table 6.7.

Table 6.7 Full and Shortened Rankings: Std 8.

<u>Text</u>	<u>Full Ranking</u>		<u>Shortened Ranking</u>	
	<u>Rank</u>	<u>Score</u>	<u>Rank</u>	<u>Score</u>
History for Today	1	20	1	9
Timelines	2	34	4	20
History 8	3	35	3	19
History in Perspective	4	41	2	19

A change in actual rank position in this situation is, it is argued, not very serious.

In addition to objective criteria the books were also ranked on subjective criteria. As in the Std 5 case, the book that ranked best was ranked as 4 and the lowest was ranked as 1. A book that did not rank a particular criterion was given zero. The guide as to which book is the best in terms of each criterion was given by the analysis in Chapter 5. The following table, Table 6.8, shows the subjective rankings.

Table 6.8

Subjective Rankings : Std 8

Ranking 4 = best
 1 = worst
 0 = not done

Criteria

Texts

	<u>History for Today</u>	<u>History 8</u>	<u>History in Perspective</u>	<u>Timelines</u>
1. Use of headings	4	3	3	3
2. Reinforcing illustrations with comments	4	3	4	2
3. Interspersing of illustrations on relevant sections	4	2	1	2
4. Illustrations to explain concepts directly	4	0	0	0
5. Colour in illustrations	0	0	0	4
6. Time and chronology	4	2	1	3
7. Notion of change	4	0	0	0
8. Documents	4	3	0	3
9. Quality of assignments	4	3	2	2
Cumulative Ranking	32	16	11	19

<u>Text</u>	<u>Rank</u>	<u>Score</u>
History for Today	1	32
Timelines	2	19
History 8	3	16
History in Perspective	4	11

History for Today ranks high in all the criteria except the use of colour in illustrations. It surpasses the other books by catering for most of the skills needed in the New History: use of cartoons, documents and illustrations to explain concepts, use of headings in question form, and reinforcement of illustrations with tasks or comments, which none of the textbooks assessed use. This book is surely an improvement on the type of textbooks described by the Taylor Commission.

History in Perspective still confirms the findings. Its illustrations are poor and so is the quality of its assignments. On the whole, even with the Std 8 texts, there is still room for the introduction of the skills-based approach. Textbooks must offer a variety of tasks and use illustrations to encourage skills of analysis, synthesis and evaluation. Textbooks have to go beyond definition only to explain concepts. Concepts are fundamental to the understanding of history. Textbooks should do much to aid concept understanding by the tasks they give and the illustrative material they use.

In addition to the subjective ranking, a comparison was made of the subjective and objective rankings reflecting both the full and the shortened rankings. The following pattern, reflected in Table 6.9, emerged.

Table 6.9 Subjective and Objective Criteria Compared: Std 8

<u>Text</u>	<u>Objective Criteria</u>		<u>Subjective Criteria</u>			
	<u>Full Ranking</u>		<u>Shortened</u>		<u>Rank</u>	<u>Score</u>
	<u>Rank</u>	<u>Score</u>	<u>Rank</u>	<u>Score</u>		
History for Today	1	17	1	9	1	32
Timelines	2	34	4	20	2	19
History 8	3	35	3	19	3	16
History in Perspective	4	41	2	19	4	11

The more erratic rank order (in comparison with the Std 5 books) of three books emerges clearly from this table. Once again, however, the closeness of their scores, on all three tables, means that shifts in ranking are not surprising. In this situation, however, it should be noted that the rank order for the full set of objective characteristics is identical to that obtained for the subjective criteria. The use of the shortened ranking could yield useful results but needs to be treated with caution. It should not be accepted as a complete tool unless it is complemented by the subjective tests.

Both the Std 5 and the Std 8 textbooks, in terms of language, are difficult, and this is a serious handicap for a pupil who is not a native speaker of English.

On the whole, therefore, the current textbooks still need much improvement to be of help to target pupils in Std 5 and Std 8. They need to emphasize skills instead of content. Understandably the books were written to meet the demands of chronologically-structured syllabuses, but if there are a few which can try the new approach, there is surely no reason why others should not.

Peter Rogers (1981, p. 28) claims that: "what is really wrong with the history textbook then, is that it fails to teach what most needs to be taught - procedures." He describes historical procedures as connected with identification and proper use of evidence. "It must provide pupils with criteria for the proper use of sources. It must provide the story part, the narrative or factual content, which is based on empathy and inference; must draw attention to the use made of sources." With the exception of History for Today, all the texts analysed do not exploit the procedures suggested by Rogers.

Concept development, which is crucial to the understanding of history, has been neglected by most textbooks. Generally, then, most of the history textbooks in Transkei in Std 5 and Std 8 are not doing enough to aid concept acquisition or understanding.

Further, it seems that formal operational thinking in the teaching of history has been neglected. Research is needed to design learning acti-

vities that will enable pupils gradually to approach formal operational thought.

A brief comparison can now be made of the assessment form used by the Transkei Department of Education for teachers to rate new books (see Appendix I). The form is very brief and inadequate. It is designed more for ease of use rather than for getting much information about the book. It has no room for checking the skills-based and concept-based approaches. It is designed to elicit mainly yes or no responses, thus limiting room for further comments. The form requires mainly subjective responses from teachers. It is designed for history as a product, not history as a process. There is concern about whether the books screened by use of this form will equip the child for his examination, which examination itself needs much improvement. This form is not designed to assess history texts specifically, but any expositional textbook. It therefore needs to be redesigned.

6.2 Recommendations

It can be argued that the procedures used in this thesis lead to a clear and understandable assessment of a school history textbook. It is clear that some of the procedures are time-consuming to apply. It has been shown, however, that a shortened form of assessment of objective criteria will still give a reasonable picture of the quality of the book.

In these circumstances, it could be argued that the methods used could replace the existing form shown in Appendix I. A more extended form, based upon the ideas described in this thesis, is presented in Appendix II. It is nevertheless recognized that some training should be given teachers in the meaning and use of the criteria. This training should be included in the pre-service preparation of teachers and should be considered for in-service courses as well.

The approach, however, should not be confined to new textbooks as they

come onto the market. Because of the understandable reliance upon the textbook in the present circumstances of Black education and because of the textbooks' shortcomings revealed in this thesis, it is equally important that practising teachers analyse their books in the same way, so that the teaching methods can compensate for these shortcomings. Arguments, therefore, for pre-service and in-service training are strengthened.

APPENDIX I

QUESTIONNAIRE - BOOK READING

To be completed fully by each reader.

NAME OF READER

ADDRESS.....

.....

1. To what extent does the book cover the syllabus ?

.....

2. Is the textbook accurate with regard to its factual content ?

.....

3. Is the subject matter presented scientifically and methodically ?

.....

4. Will the book encourage the young reader to further his studies ?

.....

5. What is the educational value of the contents ?

.....

6. What is the quality of (i) the print ?

.....

(ii) illustrations ?

.....

(iii) paper and binding ?

.....

7. What is the linguistic standard of the book ?

.....

8. Do you consider the textbook adequate to equip the child well for his examination ?

9. Would you consider it as

- | | | |
|---------------------------|---------|--------|
| (a) Library book | Yes / / | No / / |
| (b) Handbook for pupils | Yes / / | No / / |
| (c) Handbook for teachers | Yes / / | No / / |

SIGNATURE OF THE READER

DATE :

APPENDIX II

Suggested History Textbooks Assessment Questionnaire

A. Particulars of the reader

1. Name of the reader
2. Address of the reader
-

B. General information about the book

1. Title of the Book :
2. Author/s :
3. Year of publication :
4. Class for which book is written :
5. No. of pages :

C. Assessment

1. Does the book have the following :
index [], glossary [], and bibliography []
(Tick appropriate space)

2. Language

If you have been trained in the use of readability test

2.1 What is the ratio of simple, complex and compound sentences in the book ?

.....
.....

2.2 What readability tests have you used to test the book ?

.....

2.3 What is the readability rating of the book ?

2.4 In general terms do you think that the language in which the book is written is suitable for the class for which it has been written in terms of readability ?

3. Concepts

3.1 What is the book's rate of introduction of concepts ? (This can be checked by reading those pages selected randomly and counting the number of difficult or special terms introduced in those pages. They are then graded 0 1, 1 3 or 3 5 from low to high.)

3.2 Are concepts in the books explained mainly by :
(tick appropriate space)

- definitions only []
- definitions with examples []
- have to be deduced []
- mainly from background information
- combinations of all the above []²

3.3 How does the book present those concepts like cause and effect and change and continuity ? Does it for example use pictures to show changes over time.

.....
.....
.....

4. Time

How does the book help pupils gain sense of time and chrobology ? Does it use pictures, time charts, time lines, for example ?

.....
.....

5. Illustrations

5.2 How many pages does the book have ?

5.3 How many illustrations appear in the book ?

.....

5.4 What is the avareage number of pictures per page ?
(divide the number of pictures by that of pages)

.....

5.5 Are there any questions and exercises or tasks set on the illustrations ?

YES []

NO []

6. Bias and Prejudice

6.1 Are there any detectable instances of bias and prejudice in the book ? (For example use of emotionally - laden words, racially offensive terms, ethnocentrism i.e. looking at issues from one's own value perspective etc.)

YES []

NO []

7. Format

Is the format of the book orderly and attractive ?

YES []

NO []

8. Questions and Exercises :

8.1 Does the book have questions, exercises and assignments ?

YES []

NO []

8.2 In general do you rate the questions as of good quality ?

YES []

NO []

9. Write down fully any other comments you have on the book. (You can even use a separate paper for those additional comments).

.....
.....
.....
.....
.....
.....

10. Would you recommend it
(a) for use as a class text ?

YES []

NO []

(b) as a reference book in the library ?

YES []

NO []

SIGNATURE OF READER

DATE :

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