

'A SEARCH FOR EDUCATIONAL RELEVANCE':

An Investigation into the Teaching of the Rural Settlement
Component of the Secondary School Syllabus with Special
Reference to Venda.

THESIS

Submitted in partial fulfilment of the requirements for the
degree of Master of Education
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by

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DECLARATION

I hereby declare that this is my original work and has not been submitted for the award of any degree at any other university.

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ABSTRACT

School geography has been identified as the one subject which has the most potential to develop pupils' ability to identify with their community and with their environment. Through the development of a sense of place pupils are encouraged to become effective perceivers, users, appreciators, evaluators and developers of their environment (Catling 1987). This approach to the teaching of geography implies that the content and the teaching strategies need to be perceived as relevant. Relevance in this study is taken to incorporate not only the needs of the pupils and the community but also of the subject.

The location of this study in Venda, an area which is predominantly rural in nature sought to emphasise the important role which rural settlement geography can play in aiding the development of these pupils' sense of place and social identity. The research therefore concentrated on the approaches and teaching strategies used in the teaching of rural settlement in Venda secondary schools. This was achieved through a survey which involved geography teachers and pupils in the Thohoyandou inspection area.

The place of rural settlement in the current geography curriculum was established through an analysis of the relevant syllabuses, textbooks and senior certificate examination papers. This analysis was primarily undertaken to illuminate the extent to which rural settlement geography in the South African curriculum complies with accepted criteria for relevance.

The study revealed that the teaching of rural settlement in Venda is textbook-related and teacher-directed with no attempt to capitalise upon the pupils' experience of their rural environment. This was largely ascribed to the constraints of the syllabus and the demands of the examination system. When allied to the problems teachers have concerning syllabus development, the validity and relevance of this aspect of the syllabus is reduced. More importantly, because the local environment is not perceived as having value in the teaching of geography, the Venda pupils' perception of the value of their environment is diminished.

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DEDICATION

To the Lord, my Provider, who has given me the wisdom to finish this thesis.

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CHAPTER 1

1. INTRODUCTION: BACKGROUND OF THE RESEARCH

Geography is perceived as a bridge between the natural and the human sciences (Graves 1980). The study of geography therefore lends itself to a wide variety of dynamic approaches and teaching strategies. Developments in geographical education are influenced by shifts in geographical thinking and learning theories which in turn are strongly influenced by change in society (Beddies 1973; Graves 1979; Johnston 1985)

Although it is important that South African school geography remains in the mainstream of current geographical thinking, it ought to create a balance between the needs of geography and the needs of the pupils within a rapidly changing social environment. The teaching of geography in an efficient, effective and successful way calls for the consideration of 'needs' as well as for variety in teaching strategies and approaches to meet these needs.

Eleanor Rawling (1980:61) maintains that "geography of the 1980s in Britain was characterised by the insistence on beginning with the needs of the children rather than the needs of the subject." 'Needs' have been defined by Woods and Barrow (1979) as those things that are of interest and are valued by the person concerned. When considering the 'needs' of the pupils, the teacher should take into account "the knowledge the pupils consider as being of value, provide pupils with the means and ability to survive and what the pupils need now and in the future" (Woods and Barrow 1979:121-122).

Woods and Barrow (1979) and Graves (1979) furthermore have argued that the 'needs' of the society and of the pupils should be the sole criterion in determining the content of the curriculum. Much of the strength of the curriculum may be determined by the extent to which it reflects the needs of the society. Schools are the products of societies and to a large extent reflect their values and preoccupations. Thus, changes in the curriculum should be in line with changes in the society. The curriculum however tends to lag behind as a result of examinations and textbooks which take a long time to accommodate 'new' changes (Ballantyne 1986).

Huckle (1982:17) maintains that if geography is to survive as a genuinely worthwhile subject enjoyed and valued by pupils and adults it will have to adjust to the 'needs' of the 1980s and beyond. Huckle (1982) argues that the consideration of the pupils', the subject's and the society's 'needs' may ultimately lead to relevance. It may be the search for relevance which brings about 'new' curriculum outlines, 'new' textbooks and changes in the examination systems. Above all, it may be that this search for relevance has indirectly created and maintained a shift in emphasis from traditional teaching strategies to learner-centred ones.

Milner (1975:78) states "that the subject is relevant when it relates learning to the real world of the learner". Although the emphasis of this thesis is on relevance, it must not be seen in the narrow context of relating primarily to the interests of the pupils and their 'needs' only. The

curriculum is founded on the four main traditions of geography. Therefore our teaching must be broad enough to encompass these traditions so that the child develops a worthwhile sense of geography.

Rural and urban settlement forms part of the settlement geography section of the secondary school syllabus. The topic of rural settlement was first included in the syllabus in 1973 (Nicol 1980). Rural settlements are primarily associated with peoples who are actively engaged in producing food from the land. The study of rural settlement at school level involves the investigation of origins, patterns and functions in the rural landscape (Chisholm 1962; Everson and Fitzgerald 1969; Clout 1922; Roberts 1987).

Presently the section concerning rural settlement at secondary school level in the current geography syllabus for 1985 is featured in Standards 7 and 10, though also peripheral at Standards 8 and 9.

This study focusses on the teaching of rural settlement in Venda secondary schools. Delimitation of the study to Venda must be seen in the context of Venda as a country which is largely agricultural. The majority of Vhavenda are therefore located in rural settlements.

The geographical background of rural settlement below has been included to provide a contextual background for the study of rural settlement in Venda, with the aim of describing the rural settlement with which the Venda child

is acquainted, and to compare this settlement with that taught in schools.

1.1 THE GEOGRAPHICAL BACKGROUND OF A RURAL SETTLEMENT IN VENDA.

Field observation was undertaken in Venda. Venda is one of the Independent National States in South Africa and was granted independence in 1979. It lies between latitude 22 and 24, and longitude 29 and 30. This 'Homeland' is bordered by Zimbabwe in the north, Gazankulu on the south east, and Lebowa on the south. Venda's capital city is the developing town of Thohoyandou, which is situated about 500 km from Johannesburg.

Much of the surface area of Venda is mountainous. The area is characterised by summer rains with the exception of the north-east region. Venda has a high annual rainfall which ranges from 800 mm to 1000 mm.

The favourable climatic conditions make the area suitable for crop farming. Compared to other 'Homelands', Venda has very fertile soil and many perennial rivers.

The population density of the Vhavenda is low when compared to those of other 'Homelands'. Venda is the common language, and the Vhavenda, like other ethnic groups in South Africa, have their own unique culture.

Venda is divided into five districts. These are Mutale, Thohoyandou, Dzanani, Vuwani and Thsitale. The Thohoyandou circuit is located in the Thohoyandou district which is

centrally situated. This circuit stretches from the Kruger National Park and includes Sibasa, Makwarela, Shayandima and Thohoyandou townships. Thohoyandou was established as a seat of government in 1979, which accelerated its growth and development. Industrial sites are located 5km from Thohoyandou on the main road to Louis Trichardt and Punda Maria (Fig.1.).

As Thohoyandou is a developing urban settlement, it is still surrounded by a number of villages. These villages constitute a representative sample of the socio-economic origins of the Venda people, their culture, their lifestyle and their values.

Mbilwi village is about 6 km north of Thohoyandou and 2 km from Sibasa. The village is rugged and hilly but well watered with three springs (refer to Plate 1.1). The village is also located near the Mutshindudi River.

Mbilwi was an example of a dispersed settlement in the 1960s. As a result of the rationalisation of the 'Homelands', Mbilwi was transformed into a nucleated or clustered settlement to facilitate the provision of services. Thus the present nucleated settlement pattern is superimposed on the previous dispersed settlement.-

Traditionally the Vhavenda people made use of local indigenous woods to construct their homes. The anti-deforestation policy however prevented further cutting down of trees, and villagers have had to seek new building materials. The people began to use stones and dried kiln-

fired bricks. The houses are smeared with mud painted in different colours and thatched with grasses which are available in the surrounding area (Plate.1.2). The building style of their houses is that of a cone-cylinder, with or without windows (Plate.1.3). The building styles, however, are influenced by modern technology which encourages people to build modern houses in that part of the village which has been set aside for new development.

Mbilwi is a remote area which does not have its own clinic or post office. The clinic is situated at Makwarela, some 6km distant from Mbilwi. Nevertheless, the clinic is centrally located to serve other villages surrounding Thohoyandou. Services such as shops, a post office and banks are available at Sibasa which is 2km from Mbilwi village. The village has two cafeterias, one located next to the chief's kraal (Plate.1.4) and the other one on the newly proclaimed area of the village. There is a lower primary school (Plate.1.5) not far away from the chief's kraal, a higher primary school and a Baptist church (Plate 1.6. and Plate 1.7.). Senior secondary schools are located in the vicinity of Sibasa and are not very far from Mbilwi.

The traditional land tenure was arranged in such a way that the grazing land was held in common by the people, with individual plots allocated to the extended family by the chief. The people who have higher status and responsibilities to the community were given big plots. The people used to practise subsistence farming. When the soil became depleted, the chief gave them another area of the forest to clear. This system was however, changed as a



Plate 1.1 Mbilwi Village



Plate 1.3 Cone cylinder houses

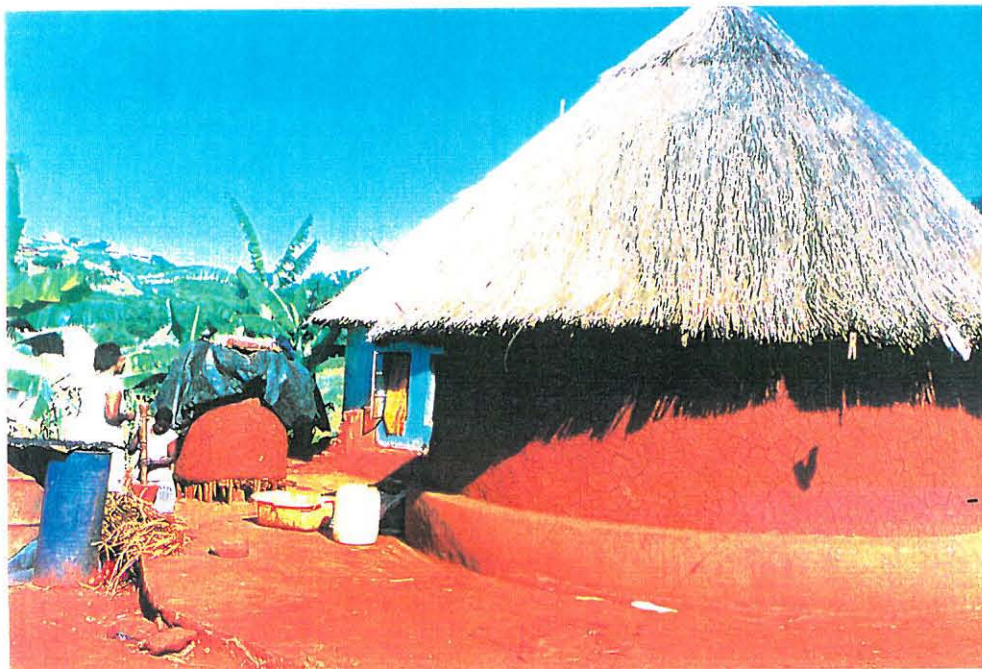


Plate 1.2 The building material



Plate 1.4 A cafeteria & chiefs kraal



Plate 15 A cafeteria—proclaimed area



Plate 17 The Baptist church

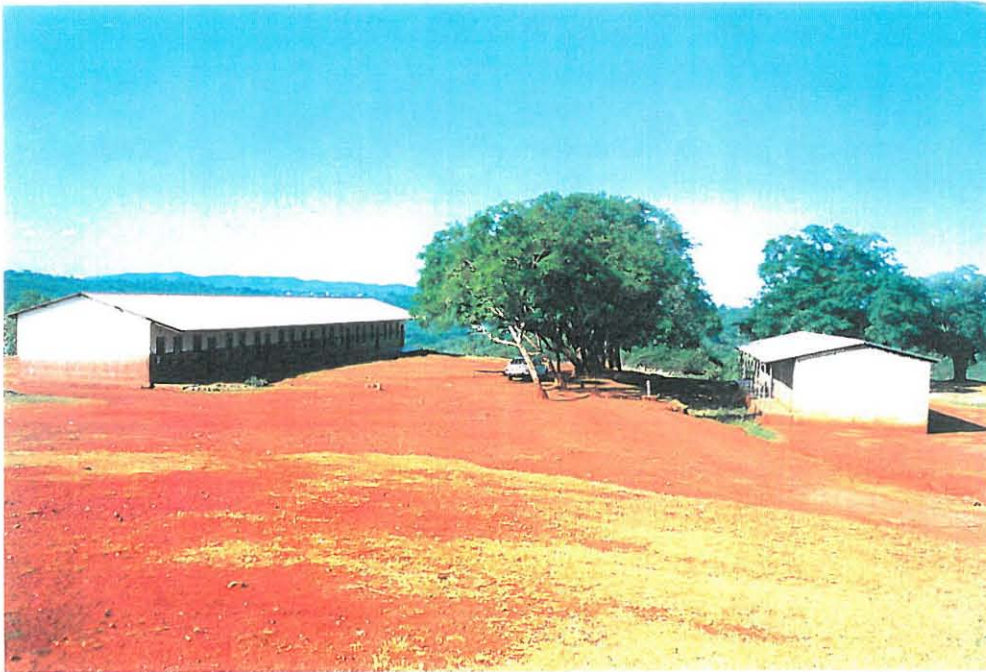


Plate 16 Tshidmbuvhe I P school



plate 18 The newly Proclaimed

result of the rationalisation policy as the land was divided into smaller plots. During the past five years the Department of Agriculture and Forestry in Venda has established irrigation schemes on the flood plain of the Mutshindude river. The farmers practise rotational cropping and produce crops such as maize, ground nuts, sweet potatoes and vegetables. Very few of them produce cash crops such as tobacco and sugar cane. Not all the people of Mbilwi village are crop farmers. Some are stock farmers, whilst others are professionals and labourers in the developing town of Thohoyandou.

The eastern part of the village is devoted to plantations of bluegum trees which are used for roofing, whilst in the north, the area bordering the Mutshindudi river, is a newly developed irrigation scheme. To the south, near Sibasa, there is a newly proclaimed residential area which is characterised by modern houses (Plate 1.9). Mbilwi village is thus in the process of changing, as the commonage is becoming occupied by modern houses.

This geographical background to the study area has emphasised the location of Mbilwi village with regard to other settlements, their patterns and the changing pattern of the village, building materials and building styles, services available and the socio-economic conditions of the villagers.

The emphasis on rural settlement is an attempt to identify the extent to which the existing syllabus, textbooks, examination and teaching strategies influence the

perceptions of the teacher and pupils towards their environment.

1.2 STATEMENT OF THE PROBLEM

Geography syllabuses since the 1960s have emphasised the development of concepts, skills, values and attitudes rather than the presentation and emphasis of facts. Modern geography also emphasises the need to provide pupils with

opportunities to reflect upon and to explore the human environmental issues with which geography is concerned. The experiential and utilitarian approaches to geography arise from an educational theory which is related to learning as a process in which the child is involved.

The Department of Education and Training (D.E.T.) syllabus is influenced by recent geographical thinking. However the dichotomy which exists between the intended outcomes of the preamble and the actual outcomes which result from the syllabus content and the existing examination system has led Ballantyne (1988) to refer to 'Black' pupils as alienated by their present geography curriculum. The syllabus is to some extent eurocentric and remote from the interests and experiences of rural pupils.

Research by Ledger (1978); Levy (1984) and Ballantyne (1986), suggests that the predominant strategy used in the teaching of geography in South African high schools remains a form of 'teacher tell'. Pupils do not participate actively and this leads to lack of interest and to negative attitudes. It is hoped that the development of a more

relevant, learner-centred approach, in which pupils participate actively, and make use of examples of local settlement, will be of assistance to geography teachers in Venda.

The rural heritage of Venda pupils should be both appreciated and understood, while the importance of a healthy agricultural environment for the needs of not only the future Vhavenda but also of the country of Venda must be realised and understood. There is a need to develop a programme of study in rural settlement geography which will develop in pupils a sense of harmony with the rural landscape. It is therefore hoped that the evidence produced by this study will lead to the development of such a programme

1.3 GOALS OF THE RESEARCH

The purpose of the study is two-fold:

1. To investigate the extent to which Venda teachers' and pupils' attitudes towards their own environment is influenced by the approach to rural settlement geography in the existing curriculum.
2. To investigate the extent to which the approaches used in the teaching of rural settlement geography in Venda schools foster a sense of relevance and promote meaningful and effective learning.

This study is undertaken to identify ways of approaching rural settlement geography which will develop in the pupils a sense of harmony with the rural landscape.

1.4 RESEARCH LOCATION

The research was undertaken in the Thohoyandou circuit in Venda during the second semester of 1990. The research involved all the geography teachers at secondary school level, as well as 15 Standard 10 geography pupils in the abovementioned circuit.

1.5 CHAPTER OUTLINE

Chapter 2 of this study provides a justification for the inclusion of rural settlement in the South African geography curriculum. The chapter analyses the concept of 'relevance' and examines the criteria used to ensure relevance in the teaching of the rural settlement section of the geography syllabus.

Chapter 3 outlines procedures relating to the collection of the data whilst Chapter 4 investigates the place of rural settlement in the South African geography syllabus.

Chapter 5 analyses the data gathered from the survey conducted in Venda.

Chapter 6 highlights the results, draws conclusions and makes recommendations.

CHAPTER 2.

2. JUSTIFYING THE INCLUSION OF RURAL SETTLEMENT IN THE
SOUTH AFRICAN SECONDARY SCHOOL GEOGRAPHY CURRICULUM

2.1 INTRODUCTION

South Africa is characterised more strongly by a rural than an urban landscape. Therefore, although the population is becoming increasingly urbanised, the rural landscape continues to play a role in the pupils' experiential understanding about South Africa. For this reason alone, rural settlement geography has a part to play in the South African curriculum.

The predominantly rural nature of Venda seems to indicate that one of the most potentially worthwhile aspects of the geography curriculum should be that of rural settlement. This chapter examines rural settlement geography in relation to current geographical theory in order to provide a justification for the inclusion of rural settlement geography in the South African school curriculum. This aspect is furthermore analysed in relation to the concept of 'relevance'.

The chapter seeks both to justify the inclusion of rural settlement geography in the curriculum and to identify the way in which it ought to be presented and developed in order to optimise its value for pupils from a rural background.

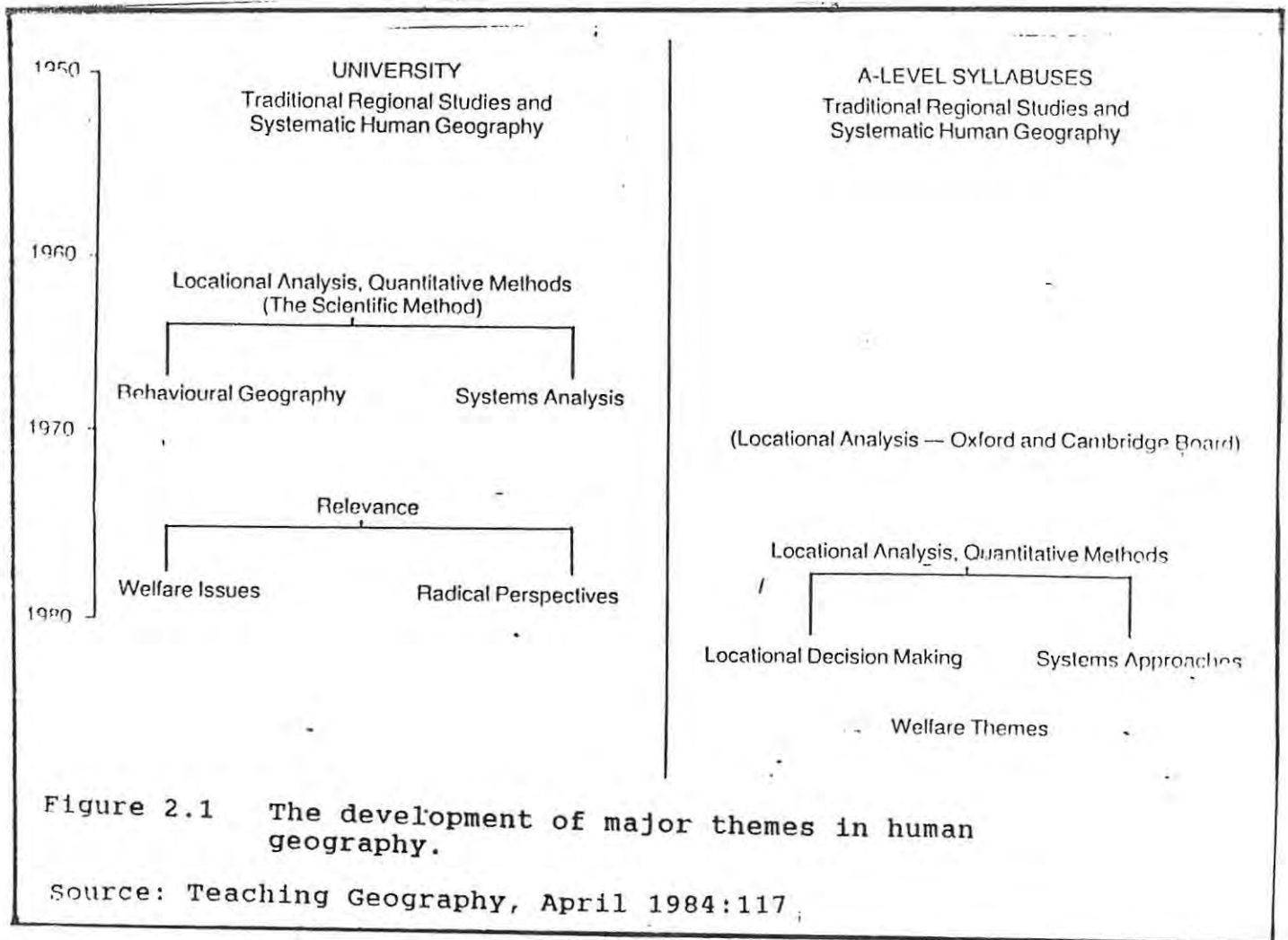
2.2 THE RELEVANCE OF RURAL SETTLEMENT GEOGRAPHY

The term 'relevance' has become a popular catchphrase increasingly used by various groups and individuals. Dunlop (1976:5) states that educationalists perceive relevance as pertaining to the immediate experience of the children, although it is also sometimes defined as equivalent to 'interest' or 'value'. Both 'interest' and 'value' are however subsumed by the concept of relevance (Dunlop 1976). Therefore if the geography curriculum is said to be relevant it ought to be of value to the pupils.

Barrow (1982:35) argues that "whether things are relevant, real or useful is not a simple matter of fact but a judgement involving personal tastes". Therefore that which is relevant to one individual or group is not necessarily perceived as relevant to others.

Ntlanganani (1988) further argues that the relevance of the curriculum for a society depends on the definition of relevance and its application.

The origin of the contemporary concern with relevance, as illustrated by Fig.2.1, suggests that it is closely related to recent developments in geography such as the introduction of welfare and radical geography. These sections of geography emphasise the needs of the society of the 1990s and beyond.



Graves (1979) argues that neither the needs of the subject nor the needs of the society or the pupils should be neglected. Graves (1979) maintains that there should be a body of geographical concepts or ideas that the pupils have to be taught and learn. When drawing up a curriculum, there should be a balance between the needs of the individual, the society and that of the subject.

Alan Patmore, in writing about the relevance of geography, contends that:

It is a challenge and privilege to give students, whatever their age or experience, their opportunity to wonder, to weep, over the world of man. If estranged from reality, and emotions of reality, geography is indeed irrelevant and can have little justification in any curriculum. A sense of reality is the beginning of relevance, and I want simply to re-examine, or rather re-emphasise, the relevance of geography as we know it to both the classroom and the wide world of which the classroom is both the mirror and the microcosm. (Patmore 1980:270)

Relevance in current geographical thinking emphasises personal experience (Pearce 1987). It means something that one can relate to or which is within one's experience. For relevance to be achieved in the learning situation pupils must have a framework of reference based on their previous learning.

If the study of rural settlement geography is to be relevant, according to the preceding analysis, it should therefore:

- i) Provide for the pupils' needs in that they are able to relate to the subject matter;
- ii) Provide opportunities for the pupils to develop essential skills;
- iii) Consider the interests of the pupils and the needs of the society and the community;
- iv) Be related to current geographical theory.

To determine the essential factors of current geographical theory, the study of rural settlement is related to an analysis of geography in terms of the four traditions of geography and in relation to current geographical paradigms.

2.3 RELEVANCE OF RURAL SETTLEMENT ANALYSED IN RELATION TO THE FOUR TRADITIONS OF GEOGRAPHY

Geography as a discipline has developed according to four traditions which help to make the subject a unique and discrete field of knowledge (Pattison 1973:270). These comprise:

- i) The man-land tradition;
- ii) Spatial perspective;
- iii) The regional viewpoint;
- iv) The earth science component.

These traditions may be illustrated by Figure 2.1 below.

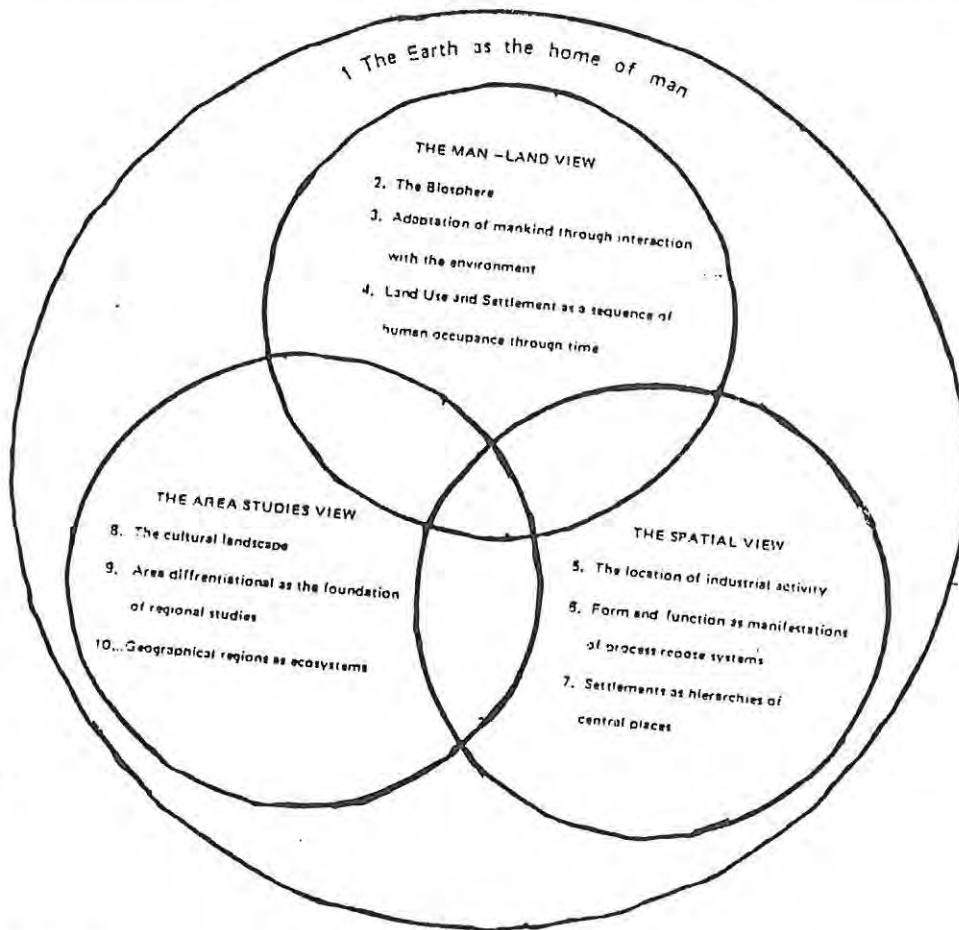


Figure 2.2 The four main traditions of geography.

Source: Pattison 1973:2

Doxiadis (in Swanevelder et al. 1976:97) defines a settlement as:

a grouping of people, building structures and communication networks that function as a single integrated system on a regular, daily basis.

It is interesting to note that the three elements mentioned in the definition are people, building structures and communication networks. Doxiadis' identification of a settlement from a geographical perspective has wider implications as it may be seen to incorporate the four major traditions of geography.

In the first instance, the geographer is interested in settlement from the point of view of the man-land relationship which identifies how people group together, how they earn their livelihood, and how they function as communities within the environment.

The spatial component of this definition concerns the location of the settlement and the various settlement patterns which evolve in relation to a particular environment.

Doxiadis' definition also implies a regional viewpoint as settlements will differ from place to place and from community to community.

The final component implied in the above definition of settlement is that of the earth science perspective which is related to the way in which physical factors influence the settlement. Thus it implies the influence of climate, geology and soils on the development of the settlement and its characteristics.

The study of rural settlement must of necessity incorporate these four basic traditions of geography if it is to provide a comprehensive picture which is allied to current geographical thinking.

The field of study that should be embraced by rural settlement ought therefore to include the following:

- i) The location of rural settlement;
- ii) Patterns and land use;
- iii) Building materials and building styles;
- iv) Land tenure and the cultural landscape;
- v) Prevailing socio-economic conditions.

The study of location in rural settlement geography refers to the location of settlement with respect to the physical environment.

Patterns within rural settlement are defined as the arrangement of buildings with respect to one another. The material and architectural style of buildings in settlements are related largely to the cultural and technological development of the society, the degree of permanence of the settlement and the nature of the environment (Money, 1972). It must be remembered that where technology is limited, heavy reliance is placed on materials available locally. The traditional Venda huts are an example of this principle (Chapter 1).

Land tenure and the resulting landscape occurs when man has established and maintains pastures and has cultivated pieces of land marked out as 'holdings'. Thus the extension of land holdings and the development of the forms of cultivation create changing patterns in the landscape (Money, 1972).

None of the above factors operates in isolation, nor are they the only ones which influence the nature of habitation. Aspects relating to the affluence of the community and availability of resources will of necessity influence rural settlement types.

Rural settlement encompasses many variables that are complex in nature. Variables such as land use patterns, internal morphology and functions may give guidance in constructing a definition of rural settlement types. It is not enough to say that rural settlements are characterised only by primary activities because villages are in a constant state of change. On the other hand, rural settlement geography cannot be confined to the study of small units such as farmsteads, hamlets and villages. This is because there are large nucleated settlements which are essentially rural in nature, as in the case of the traditional Tswana settlements.

Most of the definitions in the South African textbooks consider only some of the variables such as pattern and function. This is highlighted by the definition of rural settlement given by Hurry et al. (1984:145) as "those settlements in the countryside (which) range from individual farms to small holdings".

Earle et al. (1987:199) define rural settlements as "communities of food producers". Again, the definition is incomplete as it considers one set of activities and disregards other variables of rural settlements.

According to Steyn (1985: 184)

Rural settlement geography studies the locational features and relationships of farms and other urban settlements, the form of building structures, the nature of services, as well as the social structure and behavioural characteristics of a population whose activities are focussed on primary agricultural production.

The above definition includes almost all the characteristics which encompass the notion of rural settlement.

Knapp's definition (1988:440) provides a more concise summary of the various components which characterise rural settlement, but emphasises nucleated settlement patterns rather than the dispersed settlement:

A rural settlement is a place where a group of people live more or less permanently, allowing them to share problems of shelter, defence, cultivation and services as well as to enjoy social activities.

The fundamental difference between a rural and an urban settlement lies in its function rather than in site or pattern. Rural settlements are concerned with primary activities.

South African textbooks tend to emphasise agriculture at the expense of other primary activities. This may be ascribed to the fact that mining, fishing and forestry communities are increasingly absorbed in settlements which have lost their rural identity.

2.4 CURRENT GEOGRAPHICAL THEORIES

Having looked at what rural settlement studies should include according to the four traditions of geography, it may be useful to examine these traditions in relation to recent geographical theories.

A search for a philosophical base for geography has characterised much contemporary geography as it is taught in universities and has indirectly influenced approaches to the study of geography at school level. Hall (1984:1) remarks that:

each of us has our own variety of philosophical traditions and approaches to knowledge and this directly controls what is taught and how it is taught in the geography classroom.

Hall (1984) identifies four approaches to geographical knowledge, viz, Empiricism, rationalism, positivism and humanism. The ecological perspective is a recent approach which draws its knowledge from empiricism, rationalism, positivism and humanism.

2.4.1 Empiricism

This theory emphasises that knowledge is a product of our experiences. Thus the emphasis lies on facts gained through sensory perception and intuition (Hall 1984:4). Empiricism, however calls for the gathering of information without concentrating on the causes or relationships that might bring order, pattern and regularity to the recorded facts.

Remnants of this theory continue to prevail in current geographical teaching strategies. For instance, in fieldwork pupils may still use their senses such as sight to observe certain aspects in the local environment.

2.4.2 Rationalism

The emphasis on intellectualism which is a characteristic of rationalism is perceived to be problematic as it may result in concepts being reduced to labels and abstract terms to proper nouns. Rationalism places the emphasis on the mind and its ability to generate, organise, interpret, anticipate or speculate about events (Jensen 1985), and Hall 1984). Hall (1984) maintains that the rationalist perspective affirms the primacy of ideas, theories and concepts which make sense of the external world.

The use of a rationalistic approach in teaching rural settlement is useful to encourage pupils to think logically and to be able to reason things out. A rationalistic approach also facilitates the understanding of concepts which are necessary for the study of aspects of geography such as rural settlement.

2.4.3 Positivism

The geography of the 1960s and 1970s combined empiricism and rationalism into a system of enquiry which is described as positivism (Fig.2.3). According to (Hall 1984:5) the positivistic perspective includes the following:

- i) Postulating a set of principles or assumptions about phenomena, patterns or relationship.
- ii) The use of analytical methods to produce a theoretical model.
- iii) Searching for, recording and classifying information in accordance with the explanatory model.

Positivism puts the students in situations which demand responses from the data and the development of skills such as problem solving, analysis and enquiry-based learning.

Positivism has however been strongly criticised by humanists for its combination of empiricism and rationalism, on the grounds that these disregard people and their values and feelings.

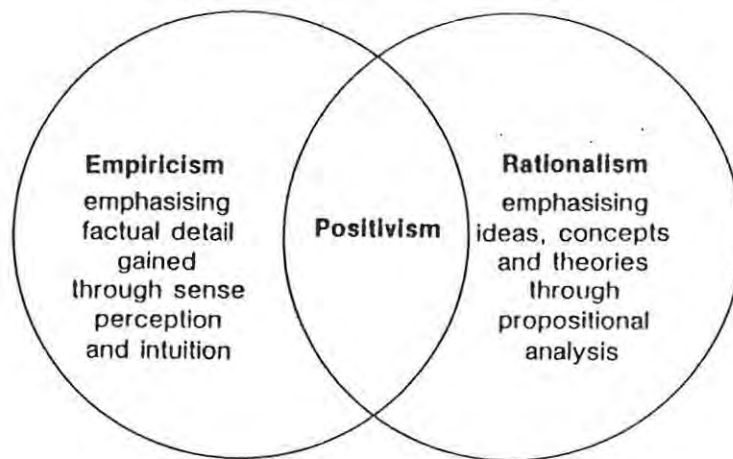


Figure 2.3 Positivism at the intersection of empiricism and rationalism.

Source: Hall 1984:5

When looking at the four major traditions of geography, the spatial perspective and the earth science components are still positivistic in nature. The study of rural settlement thus lends itself to a positivist approach. For instance, Von Thunen's land use model or Christaller's central place theory require pupils to test the hypothesis in the field or in relation to regional differences.

2.4.4 Humanism

Humanistic perspectives involve a search for ideas behind actions and are founded on a desire for better interpretation. They seek to foster understanding through the use of personal responses of imagination, feelings and values. Hall (1984:7) states that humanism "derives its authenticity by appealing directly to personal knowledge". The humanistic perspective regards the acquisition of knowledge as product of assimilated experiences. The main aim of a humanistic perspective is to emphasise personal responses of the imagination, feelings and values in order to promote understanding of decision making processes.

The man-land tradition and the regional viewpoint can be embraced by a humanistic approach. In the rural settlement section of the current geography syllabus, aspects such as land tenure, cultural landscape, field systems and prevailing socio-economic conditions are not dealt with, but are valuable in humanistic terms.

2.4.5 Ecological perspective

The ecological perspective is a geographical paradigm that has emerged in the 1980s. Preston-Whyte (1982) refers to the ecological perspective as 'environmentalism'. Figure 2.2 illustrates the part played by the ecological perspective in unifying empiricism, humanism, positivism and rationalism. Approaching the study of rural settlement from the ecological perspective therefore allows the teacher and the pupils to utilise not only a wide variety of strategies, but to explore rural settlement as a dynamic environmental entity.

Current thinking about geography is translated into the aims and objectives of school geography curricula and reflects that which is considered to be relevant.

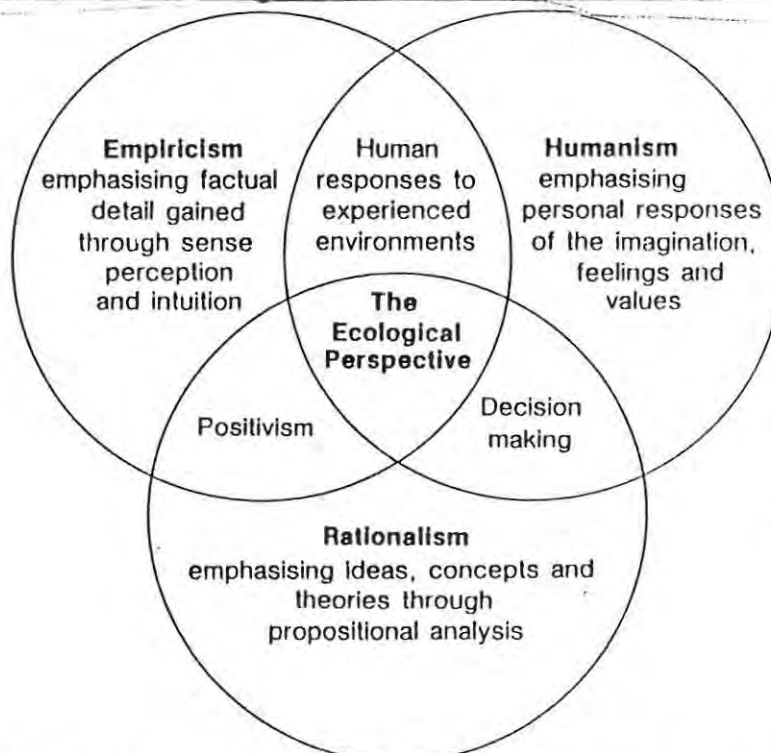


Figure 2.4 The ecological approach to knowledge at the intersection of empiricism, rationalism and humanism.

Source: Hall 1984:7

2.5 RURAL SETTLEMENT GEOGRAPHY IN RELATION TO THE AIMS AND OBJECTIVES OF THE CURRENT SOUTH AFRICAN SECONDARY SCHOOL CURRICULUM

Rural settlement studies are mainly located in the secondary school geography syllabuses of Standards 7 and 10, though there are some aspects pertaining to rural settlement in Standards 8 and 9. According to Nicol (1980), the topic of rural settlement was included in the junior secondary syllabus at Standard 7 level for two main reasons:

- i) It is one of the newer aspects of geographical study;
- ii) It can afford pupils the opportunity to study aspects of geography by direct observational methods.

Those pupils who do not continue with geography after the junior secondary phase will therefore have had the opportunity to explore what is perceived as an essential aspect of human geography. The inclusion of rural settlement in the geography syllabus may be further justified by examining the general aims and objectives of the current geography syllabus for 1985.

Four broad aims are emphasised by the 1985 core syllabus for geography. These are:

- i) Knowledge
- ii) Skills
- iii) Perception
- iv) Appraisal (attitudes and values).

Griffiths (1987:204) defines skills as

something that requires the full use of human faculties, physical, mental and moral, and so it is something that should be highly valued in human beings.

The geography curriculum specifies what sorts of skills should be acquired through the teaching of geography. These skills include the development of oracy, literacy, graphicacy and numeracy. Skills related to problem solving, creativity, the use of imagination as well as personal and social skills are also indirectly considered in the preamble of the current syllabuses. The teaching of rural settlement geography cannot be achieved without a consideration of skill development. Thus skills are "those learned habits which children need to acquire to work confidently and independently" (Griffiths' 1987:206).

Perception is developed according to the way in which the pupils perceive their environment in relation to the actual environment. This perception influences the pupils' concept of space.

Rural settlement geography lends itself to the development of spatial perception both with regard to the nature of rural settlement studies and in terms of direct observation through fieldwork and other strategies which help the pupils to make sense of the rural landscape.

Geography is neither valueless nor value free (Clark 1989). Therefore an important aspect of the geography curriculum is the development of attitudes and values. The current geography curriculum emphasises values across a broad spectrum which includes the development of positive social and environmental value and attitudes.

Rural settlement geography in the South African context mirrors the wide diversity of the South African population and is an ideal means of developing the values supported by geographical theory.

The emphasis on the development of a fundamental body of knowledge which is useful and meaningful to the pupils reflects a utilitarian approach to geographical education, an approach which is paralleled by the notion of relevance as suggested by Ball and Ball (1973). Understanding the section on rural settlement in the geography syllabus requires an interpretation of concepts used and an acquaintance with a specific body of knowledge.

An analysis of the specific objectives contained within the current geography syllabus reveals that opportunities are provided for the study of rural settlement within the personal experience of the pupils. Thus the teaching of rural settlement is able to encourage the pupils to know more about their local areas (Bailey and Bins, 1987). The current syllabus for the junior and senior secondary phases meets the criteria which Graves (1980) perceives as essential facets of geographical education. Thus, the study of rural settlement may be approached:

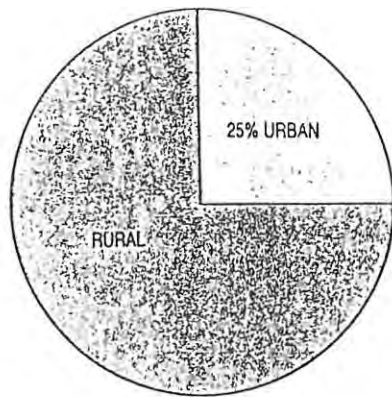
- i) as something that pupils can relate to with ease.
- ii) by giving pupils a frame of knowledge which can be based on their experiences.
- iii) by applying it to everyday experiences.
- iv) by enhancing pupils' observational skills through field work in local areas (Nicol 1980).
- v) to foster interest in the pupils' historical origins (Roberts 1983).
- vi) to assist pupils in the understanding of the dynamics of rural settlement and how to adapt to changes in the rural sector. This aspect is further supported by Huckle (1973) who comments that the school must educate pupils for a life of continual changes.

- vii) to assist pupils in understanding the interdependence between man and the environment, urban and rural areas.
- viii) as a means to enhance pupils' sense of belonging to a particular community and their wish to contribute in their own communities (Gowing in Walford 1973).

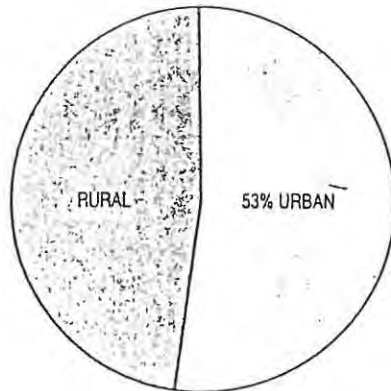
The above aspects highlight the fact that the study of rural settlement is important in the geography syllabus for the very reason that it forms an integral part of the cultural landscape which is part of the pupils' heritage. Figure 2.5 illustrates that the population of rural areas is decreasing as a result of urbanisation in South Africa. 25% of South Africa's population will however still be rural in character in the year 2000.

Rural settlement geography may be further justified in terms of its pertinence in the development of attitudes and values which will help pupils to:

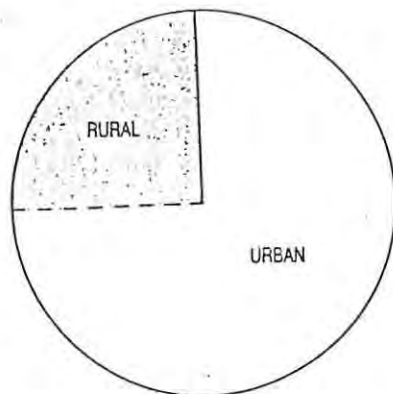
- i) develop their appreciation for rural areas thus "fostering an attachment to place as an empathetic insider" (Huckle 1982:17).
- ii) explore their attitudes towards the understanding of complex issues such as unemployment, poverty and inequalities in living standards (Bodem 1976).
- iii) develop new attitudes and values in their society which will aid them in their ability to adapt to rapid changes which characterise the present socio-economic situations in the South African society.
- iv) develop individuals as members of a society.
- v) develop an understanding of their own society as well as those of others.
- vi) teach pupils to make mature judgements in the face of change.



1910 Urbanisation in South Africa: 1910



1980



2000

Figure 2.5 Decrease in population as a result of urbanisation in South Africa.

Source: Delaney 1987:182

The above analysis serves to emphasise the role and value of rural settlement geography in the current South African situation. For the Vhavenda, rural settlement studies are particularly pertinent in view of the largely rural nature of the country.

2.6 TEACHING APPROACHES

Teaching approaches may be equated with teaching style. Teaching style refers to "the way in which teachers differ in the kinds of relationships they establish with their pupils and the kinds of social climate they establish" (Ballantyne 1986:36). In other words a teacher may take a formal or informal or democratic approach when presenting a topic to the pupils. Teaching approaches involve how the topic will be taught and determine the choice of teaching strategies for learning.

Pupils however need a variety of approaches as they do not all learn in the same way; as Bailey (1974:29) has remarked, "to teach as though all pupils learn in the same way is a grave mistake".

The teaching of rural settlement calls for a variety of approaches if it is to achieve desirable outcomes. This section will focus on relevant teaching approaches that may facilitate the effective teaching of rural settlement at secondary school level.

Roberts (1983:122) suggests the following approaches for teaching rural settlement:

- i) The structural functional approach which is concerned with the nature of the particular place.
- ii) The locational approach which is concerned with the reason for choosing the particular site and the relationship with other settlements.

Apart from the abovementioned approaches, the following may also be used when teaching rural settlement:

- iii) The positivistic approach which involves hypothesis testing.
- iv) A humanistic approach which deals with personal experience, feelings and values.
- v) An ecological approach which emphasises the man-environment interaction.

It is important for geography teachers to make use of a variety of approaches when teaching rural settlement for the following reasons:

- i) Rural settlements worldwide are undergoing change in such a way that the distinctive characteristics of a rural settlement are disappearing. Nowhere is this more noticeable than in the 'Black' rural settlements of South Africa.
- ii) The different patterns, locations and people with unique cultural backgrounds calls for a variety of teaching approaches and teaching strategies. (Roberts 1983:122)

- iii) Rural settlement is a subdiscipline of geography (Fig.2.6) which requires an integration of various disciplines. Thus it calls for a holistic approach. (Roberts 1983:122)

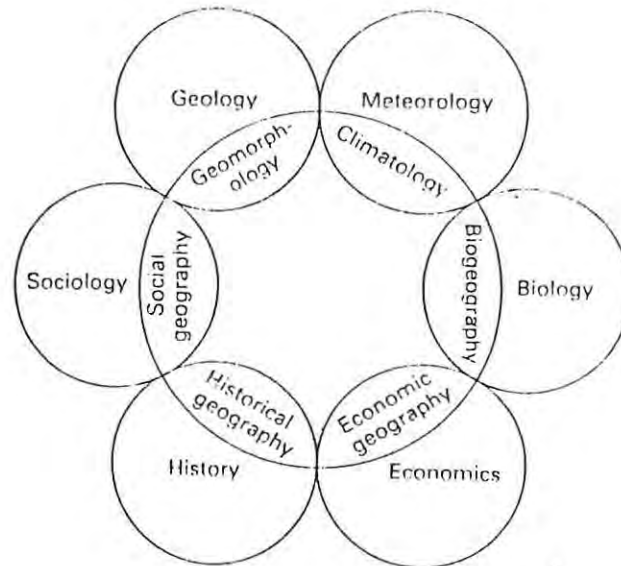


Figure 2.6 The circumference of geography.

Source: Jensen 1985 :4

2.7 TEACHING STRATEGIES

Current geographical theories and changes in both syllabuses and examinations encourage teachers to employ teaching strategies which foster the development of geographical concepts, skills, attitudes and values. Hall (1984) recommends the need for a variety of teaching strategies in order to develop a range of skills.

Ballantyne (1986:36) defined teaching methodologies "as the many ways in which teachers can organise their classes, present ideas to their pupils and use their teaching media so as to advance their pupils' learning".

The rural settlement section of the geography syllabus may be regarded as a practical unit which lends itself to a variety of teaching strategies such as fieldwork, games and simulations, data processing, group discussion and models. Nevertheless teachers have to choose teaching strategies that suit them best and assist them to achieve the objectives stated at the beginning of a lesson unit. Rawling (1980) concurs with Craig (in Nicol 1980:45) in maintaining that "variety in teaching strategies is the spice of geography".

In order to achieve relevance, the teachers have to use a variety of teaching strategies for the following reasons:

1. To cater for a wide range of capabilities.
2. "Students' approaches to learning are different and it requires the tutor's sensitivity and skill in accommodating the variety of students' styles within the climate of intellectual growth" (Jaques 1984:39). Therefore the teachers have to use methods which enable pupils to attend willingly to what they are to learn.
3. To develop a variety of skills.

4. To develop positive attitudes and values towards the study of rural settlement. Thus, when teaching rural settlement, pupils should be encouraged to explore the connection between the subject matter and their own feelings and behaviour. Value in education - a humanistic approach to education - is the relating of facts and concepts in a subject area to the pupils' own lives (Boardman 1986).

2.7.1 Fieldwork

Fieldwork may be defined as an outdoor learning activity. The main objective of school fieldwork is to place children in a situation where they can work from reality whenever local examples of the topics are within easy reach. Fieldwork is also a significant part of rural settlement study which can place pupils in practical situations.

Thus pupils are involved in various degrees of observation and self-activation. Fieldwork however cannot be used in isolation. Ledger (1978) illustrated how fieldwork occupies a focal point in geographical education (Figure 2.7). Fig.2.7 also reveals that teaching strategies such as games and simulations, role play, models and problem-solving and others are embraced by fieldwork. These strategies may be used for fieldwork or as a follow-up or an alternative to fieldwork.

Fieldwork is one of the relevant teaching techniques for a learner-centred approach in geographical teaching. Its main advantages are as follows:

- It offers opportunities to pupils for active discovery.
- It serves to stimulate social interaction especially where the students are working in pairs or groups.
- It offers opportunities for applying the knowledge gained in the classroom.

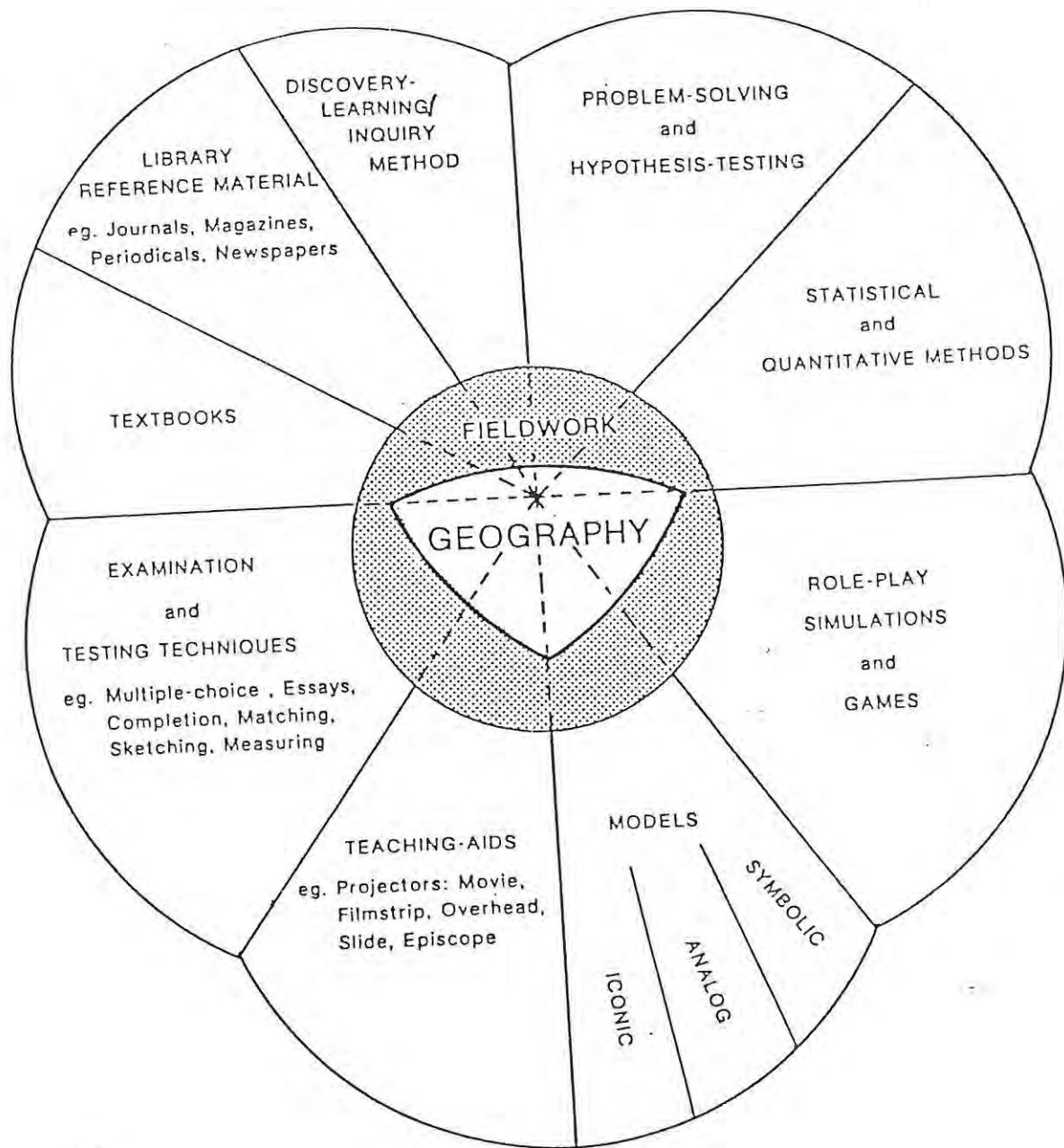


Figure 2.7 Teaching strategies: A model for new geography in South Africa.

Source: Ledger 1978; 11

- Pupils may experience a range of skills such as observation, recording, classification as well as data analysis.
- It encourages pupils to be active participants in their learning situations and enhances their perception of a man-land interaction.

2.7.2 Games and simulation

Games and simulation are some of the teaching strategies that can be used to generate pupils' enthusiasm for learning, provided that they are properly planned. Such strategies are often used to bring reality into the class situation. Ledger (1978:11) stresses this aspect in the following statements:

Simulation and games enable students to be involved in decision making activities, make closer contact with real life and assist them to realise that there is often more than one possible solution to the problem and that chance factors operate in most situations.

It is possible to use games and simulation when teaching rural settlement. Thus pupils would be encouraged to participate actively in the lesson by assuming roles which depict real-life situations. Although many of the games suggested in textbooks are eurocentric in nature, it is possible to adapt them in order to suit rural settlement in South Africa. For instance a settlement game in Walford (1973:18) (Appendix 1) designed to show pupils that the location of settlement depends on many interacting factors can be modified and used with the Standard 7 and 10 pupils.

2.7.3 Data processing

Data processing involves the use of diagrams, pictures, slides and photographs. Graphs, maps and charts provide a further means to bring reality into the classroom. Data processing is perceived to be a highly skill-centred strategy. It is through data processing that pupils learn to extract basic information from a book or picture, learn to recognise significant features and develop their reading skills.

Having considered appropriate teaching strategies and approaches, we shall now relate them to the basic distinction between process-based and product-based educational models. The model which seems best to cater for the aspects discussed in this chapter in relation to the analysis of the concept relevance, is thought to be the process model.

The process model is based on learner-centred activities such as the following:

1. To initiate and develop in youngsters a process of question posing.
2. To teach research methodology where children look for information to answer a question and use the framework developed in the course and apply it to new areas.
3. To help youngsters to develop an ability to use first-hand resources as evidence from which to develop hypotheses and draw conclusions.

4. To conduct classroom discussions in which youngsters learn to listen to others and to express their own views.
5. To give sanction and support to open-ended discussions.
6. To encourage children to reflect on their own experiences.
7. To create a role for the teacher in which he becomes a resource rather than an authority (Hanley, Whitla, Moo, Walter 1970:5 quoted in Stenhouse 1981:92).

An analysis of teaching strategies for the teaching of rural settlement reveals the flexibility with which this section can be approached and emphasises the wealth of experiences to which pupils may be exposed in the study of the section.

2.8 SUMMARY

The discussion of the study of rural settlement in this chapter highlighted the most important issues that should be considered when teaching the rural settlement section of the geography syllabus. The discussion revealed that rural settlement should be defined in terms of its location, patterns and land use, building materials and building styles, land tenure and cultural landscape and the prevailing socio-economic conditions.

Rural settlement geography ought to be included in the settlement geography syllabus on the basis of relevance which has been identified on the following levels:

1. Rural settlement by definition encompasses the four main traditions of geography.
2. Rural settlement has the potential to meet the needs and interests of the pupils and that of their communities, even of the wider South African society, by instilling a love of South African rural heritage. Factors such as the interdependence between rural and urban landscapes mean that the approaches which are appropriate to the teaching of rural settlement geography are related to current learning theories and a learner-centred emphasis.
3. The aim and objectives of the current syllabus, which reflect recent geographical theories, may be applied to the teaching of rural settlement geography.

CHAPTER 3

3. RESEARCH PROCEDURES3.1 INTRODUCTION

The purpose of the study was to investigate the extent to which Venda teachers' and pupils' attitudes towards their own environment is influenced by the approach to rural settlement geography in the existing geography curriculum.

In order to achieve the above, the following was undertaken:

- i) The place of rural settlement in the South African geography syllabus was assessed through the analysis of syllabuses, textbooks and external examination question papers in relation to the weighting given to this aspect of the syllabus and in terms of its relevance as identified in Chapter 2.
- ii) Rural settlement types in Venda were analysed by means of a case study which identified the current location of settlements and the socio-economic situations. The field observation was compiled to provide background information which might be utilised to suggest ways to make rural settlement geography more relevant to Venda pupils, while continuing to work within the constraints of the existing syllabus and those of the examination system.
- iii) A survey was conducted among geography teachers at secondary schools in the Thohoyandou circuit in order to identify current teaching strategies employed in the teaching of rural settlement geography in Venda and to identify teachers' perceptions and attitudes to rural settlement.

- iv) Pupils were interviewed to identify the problems experienced in the study of rural settlement, and their perceptions of the relevance of rural settlement.

3.2 PHASE I: THE GEOGRAPHICAL BACKGROUND OF THE STUDY AREA

The analysis of the place of rural settlement in the South African geography syllabus was related to the geographical background of the rural settlement in Venda. This was undertaken by applying a case study analysis of rural settlements surrounding Thohoyandou with particular reference to one rural village. The object was to contextualise the argument of this study.

Keeves (1985:49) defines a case study as a method which involves the gathering and recording of data with regard to a particular entity. In a case study, the researcher observes the characteristics of an individual unit, a child, a school or a community (Cohen and Manion 1989:124).

The advantages of using a case study are its practical nature and its potential to facilitate the depiction of a real situation. Moreover, it provides the evaluation data in more accessible form than any other kind of research.

A limitation of the case study is the shortcoming with regard to making generalisations, as according to Dane (1990) these can only be made on the basis of experimental research.

The geographical background of the study area included the identification and analysis of the following:

- a) The location of rural settlement.
- b) The rural settlement patterns.

- c) The factors which contributed to the establishment of a particular settlement.
- d) The building materials that were used and building styles.
- e) The prevailing socio-economic conditions.

3.3 PHASE II: ESTABLISHING THE PLACE OF RURAL SETTLEMENT IN THE GEOGRAPHY SYLLABUS

In order to establish the place of rural settlement in the current geography syllabus, geography textbooks and senior certificate examination papers were evaluated by applying the criteria for relevance as identified in Chapter 2. An analysis of each of the above was undertaken in order to provide the required evidence to determine the extent to which rural settlement geography is relevant in terms of

1. The content embracing the four main traditions of geography.
2. The content prescribed to achieve the aims and objectives of the geography syllabus.
3. The teaching approaches related to the current geographical theories.
4. Teaching approaches and teaching strategies to meet the 'needs' of the pupils.

3.3.1 Syllabus analysis.

The content of the two syllabuses selected for the analysis (the current 1985 and the proposed core syllabus of 1993) were evaluated to establish whether the content covered the

four main traditions of geography. Content was further analysed to ascertain whether the rural settlement section achieved the aims and objectives contained within the preamble. The status accorded to rural settlement was established by comparing this section with that of urban settlement.

3.3.2. Textbook analysis.

School textbooks are viewed by teachers as an essential source of the syllabus content to be mastered by the pupils. According to Maxwell (1985:68), "more than 90% of what occurs in the classroom, particularly high school classrooms, is shaped by and centres round the textbook". The important role played by textbooks necessitated an analysis of this teaching resource in terms of the rural settlement geography section. The analysis was done in the following manner:

The most common textbooks used by geography teachers in Venda were identified. Each of these was analysed using the following procedure:

- i) A content analysis was done by relating the section of rural settlement geography to the criteria identified in Chapter 2 as essential to rural settlement geography. Thus the content was analysed in terms of the four main traditions of geography.
- ii) Concept analysis was undertaken since it is through concepts that perceptions are developed. Furthermore, concepts are the means through which the world becomes meaningful and relevant. Concept analysis was undertaken in the following manner:

- a) The concepts were analysed by applying an adapted form of Coltham's (1970) criteria developed for the analysis of concepts in history textbooks. The procedures followed involved a 30% randomly selected sample of pages dealing with a section on rural settlement in each textbook. Concepts appearing in the selected pages were identified and rated according to Coltham's rating as follows:
- 0 - 1: indicates concepts which appear to have low frequency.
 - 1 - 3: indicates concepts of medium frequency.
 - 3 - 5: indicates concepts of high frequency.
- b) The concepts identified in this manner were analysed in terms of the following questions:
- a) Is the concept presented without a definition or explanation?
 - b) Is the concept defined or explained in an easily understandable manner?
 - c) Is the concept used in such a way that it helps the reader to gain clarity?
 - d) Is the concept illustrated by means of diagrams or photographs?
 - e) The above evidence could then be evaluated in terms of its relevance or by applying the relevance criteria.
- iii) The analysis applied to illustrations included all photographs and diagrams referring to rural settlement. The following questions were applied when

analysing the illustrations:

- a) What does the illustration tell us about the pattern of settlement?
 - b) What does the illustration tell us about the climate and vegetation?
 - c) What does the illustration tell us about building styles and morphology?
 - d) What does the illustration tell us about socio-economic factors which operate?
 - e) Are the concepts related to the four traditions of geography?
- iv) The fourth aspect was that of bias and stereotyping. The analysis was done by adapting the Garcia Armstrong Matrix (Appendix 2) designed to illustrate problems related to ethnicity in school textbooks (Garcia 1979). A 30% random sample of pages from each textbook was selected. Statements in the textbook which either directly or indirectly referred to 'Black' and 'White' people, communities or activities were identified. Examples of settlements used in the textbooks were furthermore analysed to determine the eurocentricity of the textbook.
- v) Suggested teaching activities were analysed by examining the activities in each exercise contained in each textbook. The total number of exercises and activities in each textbook was counted. Then a minimum of 30% of the exercises and activities in each textbook was analysed according to the following criteria:

- a) Does the activity consolidate the work done?
- b) Is the activity skill based or factually based? If skill based, are the skills of low, medium or high order?
- c) Where are the activities situated in relation to the text?

The author recognises that textbook analysis as described is not a complete analysis. Since the scope of this thesis prevented an empirical analysis of concept in relation to the question indicated or of the illustrations and the activities, the analysis undertaken in this study was designed to present an illuminative overview of the aspect referred to.

3.3.3 Analysis of examination papers set by the D.E.T. (Senior Certificate)

An examination is perceived as a form of evaluation to determine whether the students have achieved the objectives of a particular course. According to Graves (1980:71) "the method of evaluation must closely parallel the behaviour it is intended to measure". This shows that there ought to be a very close relationship between the examination and the aims and objectives of the syllabus.

The questions pertaining to rural settlement between 1985 and 1989 as set by the Department of Education and Training (D.E.T.) for Standard 10 were analysed using Bloom's taxonomy of educational objectives for cognitive and affective skills, as adapted from van Jaarsveld (1988).

As was the case with textbooks, the examinations were evaluated on the basis of whether the questions comply with

the content suggested by the four major traditions of geography. The method used was that of going through all the questions in each examination question paper on rural settlement, and identifying which traditions were represented.

It was frequently difficult to categorise the questions in this way and a certain degree of subjectivity in the process is unavoidable. This reduced the validity of the method used. In an attempt to overcome this problem, the author used cue words or instructional words as a means to identify a skill.

Finally, the examination papers were analysed in relation to the number of marks awarded to the rural settlement section as compared to that of urban settlement. This was done to establish whether there were discrepancies between the weighting of rural and urban settlement, as this may directly influence the attitudes of both teachers and pupils.

Higher grade papers were analysed as most geography pupils in Venda are entered as higher grade candidates for the final Standard 10 examination.

3.4 PHASE III: THE SURVEY

The survey involved teachers and pupils in the Thohoyandou circuit of Venda and was therefore undertaken in the area analysed to determine rural settlement types representative of Venda.

The survey was designed to identify current teaching strategies used in the teaching of rural settlement geography and to establish teachers' perceptions of and attitudes towards this section of the syllabus. Pupils were interviewed in the course of the survey in order to identify

problems within their experience in relation to rural settlement geography and to compare their perceptions of this aspect of the curriculum with that of the teachers.

The terms 'attitude' and 'perception' are used in a variety of ways and definitions vary from the more strictly psychological to the more general definitions used for educational research.

The term 'attitude' has been defined as "a way of thinking and behaving" (English language Dictionary 1987:81).

The origin of attitude "arises from attempts to account for observed regularities in the behaviour of individual persons" (Encyclopaedia Britannica Vol.12:360). Attitude "enables a person to slip into some frame of mind peculiar to himself" (Alport 1954:22 cited in Sarpong 1992). For the purpose of this survey, the researcher accepted Backman's definition of the term 'attitude' (in Ballantyne 1986:90), viz.: "certain regularities of an individual's feelings, thoughts and predisposition to act towards some aspect of his environment."

The term 'perception', like that of attitude, is predominantly used in psychology. The concept of perception is, however, used in other disciplines in a broader sense. Perception refers to "the process whereby sensory stimulation is translated into organised experience" (Encyclopaedia Britannica 1979, Vol.14:38). Perception is also defined as "the awareness of things that you have by means of your senses, especially the sense of sight" (English Language Dictionary 1987:1064). This study views perception as the process which allows an individual to understand and internalise concepts (Graves 1980).

In this research, the survey method was chosen as a suitable instrument for gathering data (Cohen and Manion 1989) in relation to the relevance of teaching the rural settlement section in the geography syllabus at secondary school level. It is further considered to be an appropriate means to

collect information which emphasises and highlights existing conditions relating to the subject under study (Cohen and Manion 1989).

The most problematic aspects of surveys are the issues of reliability and validity. Reliability in this study means the ability of an instrument used to give consistent answers when used over and over again (Sanders and Pinhey 1983). Validity in survey research is defined as the extent to which the results can be accurately generalised to populations and conditions (Wiersma 1986).

The questionnaire was chosen as a data gathering technique for investigating the teaching strategies used and for eliciting information about ways in which teachers perceive rural settlement geography. The questionnaire was preferred to the interview as the former is able to gather information from a large population in a form easy to analyse (Cohen and Manion 1989). The author felt it was important to obtain information from as wide a selection of the population as possible. Therefore interviews were considered to be too restrictive.

Interviews were however chosen as an instrument to obtain information from the pupils as it was necessary to establish the pupils' 'needs'. Interviews by their nature allow the researcher to probe more deeply (Wiersma 1986).

The questionnaire and interview schedule was piloted using a group of colleagues in the M.Ed. course at Rhodes University in 1990, and at a local high school in Grahamstown.

The results of the pilot study helped to identify a number of problems with the initial questionnaire and interview schedule, and these were modified before administration to the chosen survey population.

3.4.1 Sampling procedures

The survey population of the questionnaire included all geography teachers in the Thohoyandou circuit. The survey was restricted to Thohoyandou for the following reasons:

1. The nature of the study is such that it militated against the use of a wider survey population.
2. The constraints imposed by the study notwithstanding, the Thohoyandou circuit provides a representative sample of Venda in that there are both rural and urban schools within the district.
3. The Thohoyandou circuit is the largest single circuit in Venda and therefore provided a valid sample of geography teachers; it is also the most densely populated area of Venda with the greatest number of schools.

Of the 17 secondary schools in the circuit, 13 offer geography up to Standard 10. The questionnaires were distributed to all secondary schools, providing a survey population of 55 geography teachers. For the interviews, 4 of the 17 secondary schools offering geography were selected using a convenience sample based on the following criteria:

- i) The need to obtain as representative a sample of pupils as possible. Therefore two schools located in the urban area and two schools in the rural area were selected.
- ii) The four schools were chosen as a representative sample in terms of the various facilities and amenities provided by the school and in relation to the senior certificate results.

The problems related to interviews necessitated a sample which was realistic in terms of the time available. The author chose to use a purposive sample in that only Standard

10 pupils were interviewed for the following reasons:

- i) An in-depth study of the rural settlement section of the geography syllabus is done in Standard 10.
- ii) Standard 10 pupils were assumed to be in a position to present a more mature view than the Standard 7s.
- iii) Standard 10 pupils have encountered rural settlement before, and therefore have experience of rural settlement.

The interview sample consisted of 15 Standard 10 geography pupils who were interviewed individually. The size of the sample was determined by the time available and the nature of the study. Care was taken, however, to select the students in order to provide as wide a range of experiences as possible. Attempts were also made to select the students by using random sampling techniques for the above-mentioned reasons. The technique was successful in all but four cases interviewed. In the latter instance, the teacher had pre-selected the four pupils which tended to reduce the validity of the sample.

Despite the efforts made to avoid problems relating to validity and reliability, the author accepts that this survey had the following limitations:

- i) The questionnaire results would have provided greater reliability had it been possible to increase the sample size. Validity would also have been increased with follow-up interviews with the teachers.
- ii) The interviews would have had greater validity and reliability had it been possible to increase the sample size and had the entire sample been based on true random selection.

3.4.2 The administration of questionnaires

Wiersma (1986:179) defines a questionnaire as a "list of questions or statements to which the individual is asked to respond in writing". The questionnaire can either be administered under the supervision of a researcher or as a postal survey (Cohen and Manion 1980).

The questionnaire included both open and closed responses. The closed response technique has the advantage of providing for ease of analysis (Sanders and Pinhey 1985); Wiersma 1986). Open-ended questions were included to give the individual more freedom of response since the closed question format reduces the amount of information that is given. Furthermore, open-ended questions allow the respondents greater freedom of expression. Therefore, despite the length of time needed for the analysis of open-ended questions, they are a valuable source of information.

The merits of using questionnaires are as follows:

- They are less expensive and less time-consuming than other methods.
- The brevity in the questionnaire encourages response.
- They are easy to code.
- They are able to reach a large population which increases the validity of the findings (Cohen and Manion 1989, Wiersma 1986)

Although the questionnaire is less expensive and less time-consuming, it has limitations. These limitations include:

- The problem respondents may have in understanding the questions.

- The problems respondents experience where not all the options are covered.

A more serious problem may occur when respondents do not answer the questions honestly as the responses may be designed to please the researcher rather than provide the opinion of the respondents. In order to overcome this problem, open-ended responses were included.

Care was taken to avoid ambiguity in the structuring of questions and attempts were made to elicit the most truthful responses by structuring the questions in as neutral a manner as possible. The author tried to overcome the problem of distortion by including a number of questions which were similar in content but framed in a different way.

The questionnaire was structured in the following manner:

1. Section A was designed to obtain information relating to composition of the survey population.
2. Section B was designed to obtain information regarding teachers' perceptions of the place of rural settlement in the curriculum.
3. Section C analysed teachers' attitudes to the teaching of rural settlement.
4. Section D was designed to obtain information about teaching approaches, teaching strategies and resources used in the teaching of rural settlement geography.

Sections B and C could be compared to assess the reliability of answers.

The greater preponderance of closed questions allowed for the capturing and analysis of data by means of computation. Questionnaires were administered by the author in an attempt

to reduce the problems of a postal survey.

3.4.3 The administration of interviews.

A research interview is a survey instrument which involves a direct or indirect conversation between the interviewee and the interviewer with the purpose of obtaining useful information investigated by the research topic (Cohen and Manion 1989). In terms of its design, it can either be formal, less formal, completely informal or non-directive, which makes it more flexible than other research methods.

The main advantage is that of direct interaction, which allows for a greater depth of information relevant to the topic concerned. Interviews also give a clear indication of the extent to which interviewees understand the topic, of their values and preferences as well as their attitudes (Cohen and Manion 1989).

In spite of its advantages, the administration of interviews is time consuming and more expensive than the use of questionnaires.

Semi-structured interviews were used for this study. These allow the interviewer to gauge the values, preferences and attitudes of the respondents more effectively than in a questionnaire (Cohen and Manion 1989). An advantage of using the interview format is the freedom that the interviewer has in modifying the questionnaire where necessary (Cohen and Manion 1989). This proved to be valuable in cases where language could inhibit the answers of respondents. Semi-structured interviews further allow the interviewer to probe and evaluate the limits of the respondents' knowledge regarding the topic being researched (Wiersma 1986; Cohen and Manion 1989).

The interviews for this study attempted to gain clarity regarding:

1. The extent of pupils' knowledge of rural settlement geography.
2. The skills which they have developed as a result of studying rural settlement geography.
3. Their perceptions of and attitudes towards the study of rural settlement geography.

A diagnostic component was included in the interviews. Pupils were shown a photograph of a rural settlement type as a means to assess the extent of their knowledge. Care was taken not to direct the questions but to allow the pupils freedom in their responses.

3.4.4 Data analysis.

The analysis of the teaching of rural settlement in both questionnaires and interviews was carried out through the following procedures:

- i) For purposes of evaluation, responses in questionnaires and interviews were grouped together under various subheadings which are central to this research topic. This was done with the aim of providing a simplified picture of different aspects of the situation. When analysing the data, both frequencies and percentages were primarily used to establish group responses.
- ii) Another aspect which was used in the analysis of data was cross-tabulation. It was used to see if there were links and differences between the groups. The cross-tabulation was included with the aim of testing whether the group responses to each item would be the same or not.

3.5 SUMMARY

The method selected for the study was designed to illuminate theory, approaches and strategies relating to rural settlement geography in the South African context, as a means to establish the degree of relevance of rural settlement for the Venda pupil.

To this end, an analysis of the current geography syllabuses, textbooks and senior certificate examinations was undertaken. The survey conducted among teachers and pupils in Venda was undertaken to identify the teaching approaches, strategies and resources to which Venda pupils are exposed in learning rural settlement geography.

CHAPTER 4

4. THE PLACE OF RURAL SETTLEMENT IN THE SOUTH AFRICAN
GEOGRAPHY CURRICULUM

4.1 INTRODUCTION

The justification for including rural settlement geography in the South African school curriculum (Chapter 2) emphasised its relevance on four levels. This chapter examines the place of rural settlement in the existing South African geography curriculum by analysing the current secondary school syllabuses, textbooks in common usage and recent senior certificate examinations. Each of these is evaluated according to the following criteria:

- i) The extent to which each embraces the four traditions of geography.
- ii) The opportunities provided to achieve the aims and objectives of the geography syllabus.
- iii) The extent to which the approaches are related to current geographical theories.
- iv) The extent to which the approaches meet the 'needs' of the pupils.

While it is accepted that urban settlement is more complex than rural settlement, nevertheless rural settlement studies continue to be relevant in the South African curriculum for the reasons discussed in Chapter 2. It is therefore felt that this section of the syllabus ought to be preserved as indicated in Chapter 2, in order to provide both a more relevant and realistic overall picture for secondary school pupils.

4.2. THE CONTENT OF RURAL SETTLEMENT IN THE STANDARD 7 AND 10 GEOGRAPHY SYLLABUS

4.2.1 Syllabus analysis

The preambles to the 1985 and the 1993 draft core syllabuses provide the teachers with guidelines regarding the aims, objectives and teaching approaches which should be applied in the interpretation of the prescribed syllabus content.

The examination of the syllabus which follows relates to the prescribed content for rural settlement geography; the analysis proceeds in terms of the justification for rural settlement geography in the South African geography curriculum (Chapter 2).

Rural settlement is directly covered in the Standard 7 and 10 syllabuses in the current (1985) D.E.T. geography syllabus, but has been placed in Standard 9 in the proposed draft core syllabus for 1993. The content in each of these syllabuses is shown in Tables 4.1 and 4.2.

TABLE 4.1

A COMPARISON OF THE CONTENT FOR STANDARDS 7 AND 10 IN
THE 1985 GEOGRAPHY SYLLABUS.

RURAL SETTLEMENT STD.7	RURAL SETTLEMENT STD.10
i) Functions (land use). SP	i) Definition and function.SP
ii) Settlement - nucleated and dispersed. SP	ii) Types: nucleated and dispersed. SP
iii) Services - transport, irrigation, communi- cation and dispersal of waste. SP ML	iii) Factors influencing site situation and form. ES
iv) Problems - environmen- tal problems, depopu- lation and labour. ML	iv) Depopulation of rural areas. ML
	v) Development strategies for rural areas, eg. basic needs. ML
	vi) Planning for rural areas. SP

KEY

SP: spatial perspective

ML: man-land

ES: earth science component

RV: regional viewpoint

TABLE 4.2
A COMPARISON BETWEEN 1985 AND 1993 DRAFT CORE
SYLLABUS.

THE CURRENT 1985 SYLLABUS STD.10	THE 1993 DRAFT CORE SYLLABUS STD.9
i) Definition and function SP	3.1 Settlement geography and rural settlement. SP
ii) Types, nucleated and displaced. SP	3.2 The function of rural settlement. SP
iii) Factors influencing site and situation and form. ES	3.3 Site, situation, and the influencing factors. ES
iv) Depopulation of rural areas. ML	3.4 Problems and strategies in developing areas, i.e. depopu- lation. ML
v) Development strategies for rural areas, eg. basic needs. ML	3.5 Problems and strategies in developing areas: overpopula- tion. ML
vi) Planning for rural areas.	
 Key	
SP = Spatial perspective	ES = earth science component
ML = Man land perspective	Rv = Regional viewpoint

The content of the syllabus for both Standards 7 and 10 is strikingly similar, with the exception of the aspects of developmental strategies and planning for rural settlement, which are included in the Standard 10 syllabus only. It is interesting to note that there is a repetition of the concepts to be dealt with in both Standards 7 and 10. Such repetition is welcomed: it is a way of consolidating pupils'

understanding of the concepts that have been introduced in Standard 7, and illustrates the principle of conceptual progression which is considered to be educationally sound. Thus Brunner's idea of a spiral curriculum is implemented in the geography syllabus in terms of its content (Graves 1979).

Table 4.2 compares the content of the current 1985 and the 1993 draft core syllabus. Rural settlement studies in both syllabuses are similar except for the fact that the 1993 draft core syllabus appear to emphasise concepts such as depopulation and overpopulation to a greater extent than the 1985 syllabus.

In comparison to urban settlement rural settlement is given less emphasis both in terms of the prescribed content and in relation to the teaching time allocated. This reduces the relative status of rural settlement geography and therefore the perceived relevance of this aspect of geography.

An aspect to be noted in the current 1985 syllabus is that there is no mention of the teaching approaches and strategies to be used when teaching rural settlement per se.

The guidance given in the 1993 proposed core syllabus regarding teaching strategies is generalised rather than specific to the various sections of the syllabus. Unless teachers understand and interpret the syllabus preamble, the content is likely to be presented as it appears in the textbooks, and this may detract from the relevance of this section of the syllabus for a particular group of people.

When teaching rural settlement, geography teachers have to think about why they are teaching it and what they want their pupils to achieve. The Department of Education and Culture syllabus for higher grade geography (1987:19), however, includes the following directives for the teaching of rural settlement:

- Where possible, meaningful fieldwork should be undertaken and the scientific method should be applied;
- General patterns as well as deviations should be included so as to present a global view;
- South African examples should be used, where appropriate.

Directives such as these may be useful pointers for teachers, but cannot be interpreted as guidelines in that there is no elaboration as to how they might be achieved. The continued emphasis on the scientific method for a section such as rural settlement detracts from a holistic understanding of rural settlement and reduces its study to a clinical and antiseptic examination of facts and propositions.

The content was analysed to ascertain the extent to which the syllabuses encompass the four main traditions of geography. Tables 4.1 and 4.2 reveal that spatial perception is emphasised throughout, while aspects relating directly to the man-land and the earth science traditions are either neglected or poorly represented.

On the basis of what has been discussed in Chapter 2, it is noted that some of the traditions of geography are included in the syllabus and others are neglected. Therefore implementation of a holistic approach, which has its roots in current geographical theory, will depend on how individual teachers interpret and develop this section.

The syllabuses were further analysed in terms of whether they achieve the aims and objectives for teaching rural settlement discussed in Chapter 2.

The content of rural settlement geography as presented in the syllabus makes no direct attempt to indicate the skills, values or attitudes which are appropriate for this aspect of geography. The onus is once again on teachers' interpretations of rural settlement geography and teacher ability to apply the tenets inherent in the preamble.

TABLE 4.3

EXAMPLES OF THE TOPICS WHERE RURAL SETTLEMENT IS
PERIPHERAL IN THE GEOGRAPHY SYLLABUS

STD	AREA IN THE SYLLABUS	RURAL SETTLEMENT
Std.8	General geographical techniques.	Simple field investigation - an investigation of at least one of the following: i) Rural study ii) Urban study
	Climatology	Relief rainfall
	Population geography	Population movement Migration - rural/urban migration Population growth

TABLE 4.3

STD	AREA IN THE SYLLABUS	RURAL SETTLEMENT
		Problems and possible solutions of population explosion
Std.9	Regional geography	Developing countries
	Economic geography	Renewable and non-renewable resources eg. farming and mining
	Regional geography	Developing countries
Std.10	Ecosystem, environmental balance and conservation	Human impact on ecosystem Environmental problems
	Regional geography	People of South Africa Economic activities

Table 4.3 indicates aspects in the secondary syllabus which are peripheral to rural settlement. These aspects include themes such as mapwork, climatology, population geography, regional geography, economic geography and ecosystem. The rural environment might be utilised for the teaching of a number of these sections in the syllabus.

4.3 THE TREATMENT OF RURAL SETTLEMENT IN SOUTH AFRICAN TEXTBOOKS

There is evidence that the textbook is the primary resource for the teaching of geography (refer Chapter 5). Graves (1979) maintains that when carefully designed and well planned, the textbook can be a source of productive learning for all students, yet it should not control the teaching of the subject. Where the teaching is bound by the textbook, pupils will be more likely to resort to rote learning rather than to approaching geography thoughtfully and rationally. Furthermore, teachers ought not to concentrate solely on one textbook, because each textbook has its own approach which may not be wholly appropriate for the achievement of desired outcomes.

Textbooks prescribed for Standards 7 and 10 were analysed. The Standards 7 and 10 textbooks were used in this study for the following reasons:

1. Standards 7 and 10 are the levels in the secondary school which include sections specifically dealing with rural settlement geography.
2. The selected textbooks are the most widely used in all South African schools.
3. The selection of textbooks also reflects their use in the D.E.T. senior certificate examinations.

The survey conducted in Venda revealed that not all the textbooks considered were currently being used. Figure 4.1 shows clearly that teachers in Venda depend largely on

Active Geography, followed by Senior Geography. Only one teacher out of 45 respondents used New Window on the World.

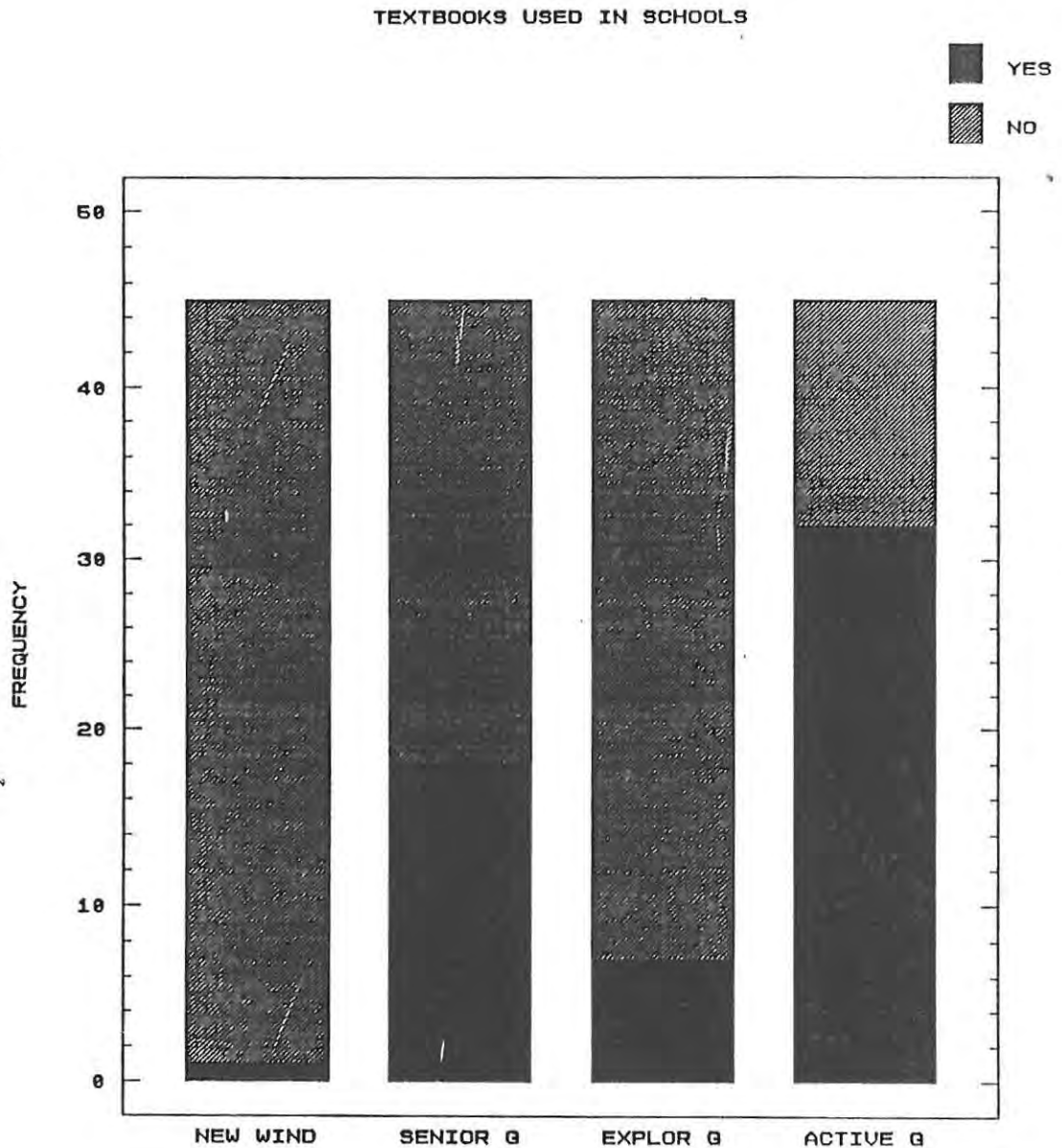


Figure 4.1 Textbooks currently used in Vanda secondary schools.

The selected textbooks were analysed in terms of concepts, content, illustrations, bias and stereotyping, eurocentricity and teaching activities, in order to provide evidence for evaluation pertaining to relevance.

Table 4.4 lists the textbooks analysed for the study. For the sake of clarity the textbooks will be referred to by their titles in this chapter.

TABLE 4.4

LIST OF GEOGRAPHY TEXTBOOKS ANALYSED

1. Earle, J.L., et al. (1987). New Window on the World 10. Johannesburg: Juta and Company.
2. Earle, J.L., et al. (1988). New Window on the World 7. Johannesburg: Juta and Company.
3. Hurry, D.B., et al. (1987). Exploring Geography Standard 10. Goodwood: Via Africa United.
4. Nicholson, J.M., and Morton, J.G., (1984). Discovering Man's Environment: Geography Standard 7. Pietermaritzburg: Shuter and Shooter.
5. Steyn, J.N., et al. (1986). Active Geography: Standard 10. Cape Town: De Jager-Haum.
6. Swanevelder, C., Kotze, J., and Roos, T., (1987). Senior Geography Standard 10: Higher and Standard Grades. Goodwood: Nasou.

4.3.1 Concept analysis

Concept analysis was based on the following:

- i) An analysis of the frequency with which concepts are employed is the best method, as frequency of use aids understanding. Frequency scores were given on the basis of the following table:

0 - 1 : low frequency
1 - 3 : medium frequency
3 - 5 : high frequency

Thus concepts with low frequency in the 30% random sample of pages were indicated by one star under 0 - 1, those with medium frequency indicated by two stars under 1 - 3 scores and lastly, the ones with the highest frequency were indicated by three stars under 3 - 5 scores.

- ii) The concepts were further analysed on the basis of how they were presented, in terms of their clarity and the degree of understanding which they encourage.
- iii) The concepts were finally considered in terms of the extent to which they incorporate aspects relating to the four traditions of geography.

Table 4.5 below illustrates the frequency of concepts in Standard 10 textbooks.

TABLE 4.5A
 CONCEPT ANALYSIS IN STANDARD 10 TEXTBOOKS.

CONCEPTS	ACTIVE		SENIOR		EXPLORING NEW WINDOW			
Patterns (S)		***		***				
dispersed (S)		***		***		***		***
nucleated (S)		***		***	**			**
land values (ML)	*							
agro village (ML)	*							
double village (ML)	*							
site (S)	*		*				*	
landownership (ML)	*							
location (S)		**						
relief (ES)	*							
push factors(ML)	*							
pull factors(ML)	*							
farmstead (ML)	*							
villages(S)		**		**				**
rural square (RV)			*					
German (RV)			*					
depopulation (RV)			*					
environment (ES)			*				*	
containerisation (ML)			*					
function (ML)			*					
form (S)		**		**		***		
linear (S)		**			**			**
communities (ML)					**			

TABLE 4.5A continued.

CONCEPTS	ACTIVE	SENIOR	EXPLORING	NEW WINDOW
food producers (ML)		*		**
density (S)				*
open field				*
system (S)				*
betterment village (RV)				*
organic rural				
village (ML)				*
closed settlement (ML)				*
situation (S)		**		*
native resource(ES)				*
distribution (S)		**		*
size (S)		*		
hamlet (ML)		*		
village (ML)		**	**	
urban (ML)	*	**	*	*
rural (ML)	*	**	*	**
morphology (S)		*		
primary activities		*		
(ML)				
unifunctional (ML)		*		
multifunctional (ML)		*		
internal structure(S)		**		
temporary				
nucleation (S)		*		
agrarian landscape(ML)		*		
wet point				
settlement (RV)		*		

TABLE 4.5A continued.

CONCEPTS	ACTIVE			SENIOR			EXPLORING NEW WINDOW					
dry point												
settlement (RV)				*								
micro climate (S)				*								
TOTALS ACCORDING TO	8	4	3	21	8	3	2	5	2	11	5	1
NUMBER OF CONCEPTS	15			32			9			17		

0-1 = 42; 1-3 = 22; 3-5 = 9 TOTAL = 73

KEY

S = spatial perspective

ES = earth science component

ML = man-land

RV = regional viepoint

The results revealed that 57.5% of the concepts were characterised by a low frequency of usage in the text. The individual concepts tended to be introduced without the sort of reinforcement needed to develop a thorough understanding.

The number and variety of concepts introduced into the text are related to the accessibilty or otherwise of the material. In this regard, it was interesting to note in the 30% page sample that Senior Geography Standard 10 had the highest density of concepts , while Exploring Geography Std.10 introduced the smallest number of concepts.

TABLE 4.5B

FREQUENCY OF CONCEPTS IN TERMS OF THE FOUR TRADITIONS OF
GEOGRAPHY

CONCEPTS	ACTIVE	SENIOR	EXPLORING	NEW WINDOW	TOTAL
R= regional viewpoint	0	5	0	1	6
ML= man-land	8	11	5	8	32
S= spatial perspectives	6	5	4	5	20
ES= earth science component	1	1	0	1	3
TOTAL	15	22	9	15	61

The results revealed in Table 4.5B indicate that concepts pertaining to the man-land tradition and the spatial perspective dominate in textbooks, while the regional viewpoint and the earth science component are poorly represented see chapter 2.

Table 4.6A and 4.6B indicate the analysis of the selected Standard 7 textbooks.

TABLE 4.6A

CONCEPT ANALYSIS OF STANDARD 7 TEXTBOOKS

CONCEPTS	NEW WINDOW ON THE WORLD			DISCOVERING MAN'S ENVIRONMENT		
rural settlement(RV)			***	*		***
rural (RV)	*					
urban (RV)	*			*		
man-made features(ML)				*		
patterns (SP)	*			*		
nucleated (SP)		**		*	**	
dispersed (SP)		**				***
fieldwork (ML)	*					
farming (ML)		**		*		***
smallholding (ML)	*					
industries (ML)		**		*	**	
rural field studies (ML/SP)		**			**	
primary activities(ML)						
subsistence (ML)				*		
intensive farming(ML)				*	**	
pruning (ML)				*		
deciduous (ML)				*	**	
altitude (ES)				*		
market gardens (ES)				*		
TOTAL ACCORDING TO FREQUENCY	5	5	1	12	5	3
TOTAL NUMBER OF CONCEPTS		11			20	

0-1 = 16; 1-3 = 10; 3-5 = 4 Total = 30

The analysis of the Standard 7 textbooks revealed a similar trend to that of the Standard 10 textbooks, in that concepts are not reinforced through frequent usage. Of the two Standard 7 textbooks analysed, Discovering Man's Environment has almost double the number of concepts than New Window on the World. Since the former textbook is almost exclusively used in Venda schools, this highlights the problems with English second language pupils will experience with the text.

Table 4.6B below indicates the concepts analysed in terms of the four traditions of geography.

TABLE 4.6B

FREQUENCY OF CONCEPTS WITH REGARD TO THE FOUR MAIN
TRADITIONS OF GEOGRAPHY

TRADITIONS OF GEOGRAPHY	NEW WINDOW ON THE WORLD	DISCOVERING MAN'S ENVIRONMENT
ES = earth science	3	2
ML = man-land	8	5
SP = spatial perspective	2	9
RV = regional viewpoint	0	1
TOTAL	14	17

Table 4.6B reveals the preponderance of the man-land and spatial perspectives in the Standard 7 textbooks. Once again the regional viewpoint and earth science component are either poorly represented or neglected altogether.

A comparison of the selected textbooks revealed that textbooks such as Senior Geography Standard 10 and Discovering Man's Environment standard 7 introduce a large body of concepts, whilst New Window on the World Standard 7 has relatively few concepts. It was found that New Window on the World used diagrams to illustrate concepts, with consolidation exercises related to the diagrams. Pupils using this textbook at Standard 7 level are therefore not overburdened by a confusing variety of concepts which might detract from their understanding of settlement geography.

The second phase of concept presentation analysis applied the following questions to rural settlement in the textbook:

- i) Is the concept presented without a definition or explanation?
- ii) Is the concept defined or explained in an easily understandable manner?
- iii) Is the concept developed in the text to help the reader to gain greater clarity?
- iv) Is the concept illustrated by means of a diagram, maps or photographs?

For this phase of the analysis the 30% page sample was not used. The section on rural settlement was read in its entirety and the way in which concepts were dealt with in the textbooks was evaluated.

Analysis of the concepts in relation to the four questions revealed that Active Geography Standard 10 explains and develops the concepts in the most accessible manner for the English second language speaker. The concepts in this textbook were clearly defined by means of explanations that

were short and concise, as well as providing sufficient depth of meaning. Of the Standard 7 textbooks selected, New Window on the World enhanced conceptual development by the use of diagrams and other visual material.

The structure of the text and the visual materials create a useful balance which relieves the text of excessive density - all of which helps the English second language pupil.

While it is accepted that this analysis has been able to present only an overview of the way in which concepts are developed in the selected texts, it has seemed to highlight the question of the accessibility of the texts to the second language speaker.

4.3.2 Content analysis

The concepts identified in Phase I were analysed in relation to the four traditions of geography (Chapter 2). Table 4.7A indicates the total concepts selected in Phase I with regard to the four main traditions of geography.

The results revealed that the conceptual emphasis in rural settlement geography is on the man-land and spatial components rather than on the earth science and regional aspects of the four traditions. This corresponds with the syllabus analysis and emphasises the need for teachers to create greater relevance in their coverage of this section of the syllabus.

Content analysis of the textbooks was also carried out in terms of the total number of pages allocated to rural settlement in each textbook, as a means to compare the implied status of rural settlement geography with that of urban settlement. Table 4.7 compares the number of pages

devoted to rural and urban settlement.

TABLE 4.7

COMPARISON OF THE PAGES COVERED BY
RURAL AND URBAN SETTLEMENT

NAME OF TEXTBOOK	STD	No. pages of R.S.	No. pages of U.S.
1. Active Geography	10	24	32
2. Senior Geography	10	48	108
3. Exploring Geography	10	43	27
4. New Window on the World	10	15	83
5. Discovering man's environment	7	43	26
6. New Window	7	13	25

The above table reveals that, generally speaking fewer pages are devoted to rural settlement than to urban settlement, with the only exception being Exploring Geography Standard 10 and Discovering Man's Environment 7. This is because these books have included case studies of rural settlements

4.3.3 An analysis of illustrations.

An analysis of illustrations in the rural settlement section of the geography syllabus included all the photographs and diagrams in each textbook. A 30% random sampling of pages was not possible as some of the textbooks have few illustrations. Illustrations in each textbook were assessed according to the following criteria:

- a) Are illustrations complementary to the text?
- b) Are they useful in interpretation of the text?
- c) Are the illustrations located in a functional position?

Each textbook was rated according to these criteria on a scale ranging from 1-5, where the following values were assigned:

1. Requirements not met.
2. Requirement met in general.
3. Requirement met completely.

The Tables (4.8A and 4.8B) below provide a overview of the illustrations pertaining to rural settlement in each text.

TABLE 4.8A
RESULTS OF THE CRITERION ANALYSIS OF ILLUSTRATIONS
IN STANDARD 10 TEXTBOOKS

	ACTIVE			SENIOR			EXPLORING			WINDOW		
	1	3	5	1	3	5	1	3	5	1	3	5
a. Complementary to the text			***	**			*				*	
b. Useful in the interpretation of text			***			***	**				**	
c. Functional position	**			**			*				*	

TABLE 4.8B
RESULTS OF THE CRITERION ANALYSIS OF ILLUSTRATIONS

STATEMENT	IN STANDARD 7 TEXTBOOKS					
	NEW WINDOW			DISCOVERING MAN'S ENVIRONMENT		
	1	3	5	1	3	5
a. Complementary to the text			***			*
b. Useful in helping interpret text			***		**	
c. Function and positioning of illustrations			***			*

1. Requirements not met.
2. Requirements met in general.
3. Requirements met completely.

The analysis revealed that the illustrations used in Active Geography, while largely diagrammatic in nature, are the most relevant in terms of text support. It was interesting to note that the illustrations in New Window on the World Standard 7 are poorly developed in relation to the text and the interpretation of the text.

4.3.4 Bias and stereotyping

Bias refers to the tendency to show prejudice against one group and favouritism towards another, whilst stereotyping can be defined as a fixed general idea that is believed to represent a particular group of individuals (Clark 1990 pers comm).

Bias and stereotyping in textbooks may not only detract from the relevance of a particular aspect for a specific group of people, but may also present a distorted view of various groups or individuals detrimental to the image of that group. In fact bias and stereotyping may reduce pupils' empathy and understanding.

Fig.4.2 below sets out the analyses according to the Garcia Armstrong matrix (1979) designed to illustrate problems related to ethnicity in school textbooks.

A 30% random sampling of pages relating to rural settlement was applied to each textbook. The selected pages were scrutinised to identify statements and illustrations which directly or indirectly referred to Black and White people in South Africa.

	1 No reference to status vis a vis other named groups	2 Indication of status equal to or higher than that of other named groups	3 Indication of status lower than that of other named groups	
ACTIVITY/PASSIVITY No reference to actively or passivity of target group	✓✓✓✓ ✓✓✓✓ ++++++ 	✓✓✓ --- 	---	A
Activity characterizes target group	✓✓	++++++	 ✓✓	B
Passivity characterizes target group			++	C

Matrix for use in the Garcia-Armstrong Matrix System for Textbook Analysis.

KEY

- Active Geography ✓
- Senior Geography +
- Exploring Geography -
- New Window |

Figure 4.2A Bias statements in standard 10 textbooks.

	No reference to status vis a vis other named groups	Indication of status equal to or higher than that of other named groups	Indication of status lower than that of other named groups	
		2	3	
ACTIVITY/PASSIVITY No reference to activity or passivity of target group	X X X X X ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	X X		A
Activity characterizes target group	X X	X X X ✓ ✓	X X X ✓ ✓ ✓ ✓ ✓ ✓	B
Passivity characterizes target group			✓ ✓ ✓	C

Matrix for use in the Garcia-Armstrong Matrix System for Textbook Analysis.

KEY

New Window on the World 7 X

Discovering Man's Environment ✓

KEY

New Window on the World 7 XDiscovering Man's Environment ✓

Figure 4.2B Bias statements in standard 7 textbooks.

The results reveal a preponderance of neutral statements. The more recent textbooks in South African schools would therefore seem to be sensitive to statements related to bias and stereotyping, and have apparently consciously attempted to eradicate statements which may lead to the development of negative attitudes.

4.3.5 Eurocentricity

Textbooks were further analysed in terms of eurocentricity. This term is taken to mean the extent to which the textbook is situated within a European rather than an African or South African context. Textbooks which emphasize eurocentric approaches or which overemphasise examples from outside the pupils' framework of experience are detrimental (Catling 1987, Boardman 1986 and Clark 1990 pers comm).

Eurocentricity was analysed by examining the use of examples in the textbook and by analysing the diagrams and photographs. A further element was added to this analysis in that examples which specifically relate to Venda children's experiences were considered.

TABLE 4.9

AN ANALYSIS OF ILLUSTRATIONS TEXTBOOKS WITH REGARD TO EUROCENTRICITY

TEXTBOOK	STD	BLACK			WHITE			OTHERS	EXAMPLE
		SA	OUT	IN	SA	OUT	IN		
1.Active Geography	10	3	2	2	3	4	3	4	
2.Senior Geography	10	6	1	4	8	2	9	11	
3.Exploring Geography	10	1	2	17	9	1	8	3	
4.New Window on the World	10	6	2	2	5	3	2	11	
5.New Window on the World	7	2	1	3	3	4	6	0	
6.Discovering Man's environment	7	5	1	6	5	8	3	5	
TOTAL ILLUSTRATIONS		23	9	34	33	22	31	34	186

The results revealed that 65.2% of the illustrations, diagrams and examples used in the textbooks are South African, regardless of colour. Therefore, 34.8% depict conditions outside South Africa. 42.29% of the illustrations, diagrams and examples refer directly to examples in the South African White community. The only textbook which included specific cultural groups was

Exploring Geography Standard 10 which included case studies of the Zulus and Venda.

These results therefore revealed that claims of excessive eurocentricity in modern textbooks are not entirely founded on fact when based on the ratio between South African examples and those of other countries. The examples relating to White culture do however show something of an imbalance. It would increase both their interest level and relevance were textbooks to make use of case studies specific to the various ethnic groups.

4.3.6 Activities

Suggested activities contained within the textbooks play an important role in providing guidelines for teachers concerning teaching approaches and the development of skills and values. This factor is particularly important where the textbook is used as the primary resource for teaching geography. Therefore the activities and exercises in textbooks ought to be designed in such a way that they reflect the objectives related to the development of concepts, skills, values and attitudes appropriate to the section being taught.

The analysis of activities in the selected textbooks was undertaken to provide an overview of the activities in relation to the following criteria:

1. The extent to which the activities were based on the development of skills, values and attitudes.
2. The degree of factual recall required by the activities.

3. Whether the activities were found exclusively at the end of the section or whether they were related to the various sub-sections within the subject.

This last criterion was included as it was felt that for activities to be worthwhile they need to relate to as many aspects within a section of geography as possible. Furthermore, they have greater relevance when associated with the specific section.

The textbook analysis revealed that the majority of the activities and exercises were based on factual recall, except in New Window on the World 7. It was also noted that those activities that were skill-based concentrated on skills which required very little application, problem solving, evaluation and synthesis. Furthermore, only New Window on the World developed activities throughout the section of rural settlement. Therefore the textbooks analysed were disappointing in terms of their attempts to develop the sorts of skills, values and attitudes which are emphasised by the syllabus aims.

Other than New Window on the World for Standards 7 and 10, the activities were all situated at the end of the section.

The analysis of the textbooks therefore revealed that the emphasis is primarily on spatial perspective and man-land relationships, thereby relating to the content rather than the aims of the syllabuses. Conceptual development and the introduction of concepts were found to be most accessible to the second language speaker in New Window on the World and Active Geography. The former textbook for Standard 7, furthermore, made the most effective use of the illustrative material. It was gratifying to note that modern textbooks

for geography contained relatively few examples of bias and stereotyping. Eurocentricity has also been reduced in modern textbooks.

4.4 THE PLACE OF RURAL SETTLEMENT IN THE EXTERNAL EXAMINATION

This section examines the rural settlement section of the geography syllabus in the D.E.T. senior certificate examinations. The Standard 10 geography question papers on rural settlement from 1985 to 1989 were analysed by adapting Bloom's taxonomy of educational objectives for cognitive and affective skills, as used by van Jaarsveld (1988). Only the Higher grade examination papers were considered. The reason for this is that the pupils in Venda write geography on the higher grade. If they do not pass higher grade, then the symbols are converted to standard grade.

The analysis of the questions reflects the type of cognitive skills required. The following list of questions in each year from 1985 to 1989 is analysed in terms of whether factual recall (low) was required, or whether the answers required pupils to employ skills related to comprehension and interpretation (medium), or whether the question was related to analysis, synthesis, evaluation or problem solving (high).

TABLE 4.10
THE ANALYSIS OF QUESTIONS
IN TERMS OF LOW, MEDIUM AND HIGH ORDER SKILLS.

YEAR LOW ORDER QUESTION MEDIUM DIFFICULTY HIGH ORDER SKILLS

1985	-Describe the tra- ditional rural settlement pat- terns of the Black population groups of South Africa. Show what changes have occurred in this pattern. S [20]	-Describe and ex- plain the factors which may influ- ence the position of a farm buil- ding. S/ML [18]	-Give a clear definition of a settlement. S/ML [6]	-Explain the social and cultu- ral factors which have led to certain rural settlements having a nuclea- ted pattern and others dispersed pattern. Give suitable examples. ML [24]	-Discuss the role played by topo- graphy in the distribution of rural settlement. S/ES [12]
------	--	---	---	--	--

TOTAL MARKS [80]

TABLE 4.10 continued.

YEAR	LOW ORDER QUESTION	MEDIUM DIFFICULTY	HIGH ORDER SKILLS
1986	-Make a list of settlements from the smallest to the largest according to size. Also a brief discussion where possible of each settlement.	-Briefly discuss the physical factors which influence the location and form of settlement.	
	S [28]	ES/S [16]	
	-List types of activities found in the rural-urban fringe		
	ML [6]		
	-A village is defined as.....		
	ML [2]		
	-The largest form of a rural settlement is called....		
	S [2]		
	-The main factors influencing the location of rural settlements are...		
	ML/ES [2]		
	TOTAL MARKS [56]		

TABLE 4.10 continued.

YEAR LOW ORDER QUESTION MEDIUM DIFFICULTY HIGH ORDER SKILLS

1987 -Planning for future develop-
 ment of a region requires that a
 number of basic needs be provided.
 List eight of these. ML [8]

-Discuss the factors which influ-
 ence the growth and development
 of a rural settlement.
 ML/S [30]

-List the factors influencing the
 site of a rural settlement.
 S [6]

-Explain, using examples, how
 physical features influence the
 choice of sites for habitation.
 ES [30]

-A settlement where a single
 supply of water exists is called
 S [2]

-A terp is a/anvillage.
 S [2]

-When houses are built close to
 each other away from the fields
 and grazing lands, they are called...
 ...rural villages.
 S/ML [2]

TABLE 4.10 continued.

YEAR LOW ORDER QUESTION MEDIUM DIFFICULTY HIGH ORDER SKILLS

-An x-shaped
village is usually
the result of....

S [2]

TOTAL MARKS [80]

1988 -Research is one
F of the possible
E solutions to the
B rural problems.
R Describe forced
U resettlement.

ML [20]

A -Explain the
R following con-
Y cept: site.

S [2]

-Which type of
research will
however solve
this problem in
the long run?

ML [2]

-What type of
settlement is
represented by
Figure 3. S [2]

-Discuss the
reason for this
community choo-
sing this parti-
cular site. Make
use of suitable
examples to jus-
tify the choices
of other communi-
ties. ML/S [30]

-How do political
factors influence
rural settlement.

ML [6]

TABLE 4.10 continued.

YEAR	LOW ORDER QUESTION	MEDIUM DIFFICULTY	HIGH ORDER SKILLS
1988	-The choice of a site for a rural village or home-stead was historically affected by a number of factors. List any five factors.	S/ML	[10]
	-.....settlements are communities of non-food producers.	ML	[2]
1989	-Name the factors which have influenced the choice of a site in rural settlement.	ML/S/ES	[12]
	-A community type farm where the farmer owns his land, receives the profits from his crops yet shares in the use of farming implements is called a.....	ML	[2]
			-For a successful rural development to take place, certain developmental strategies need to be used. Say what you think these developmental strategies ought to be. ML [10]

TABLE 4.10 continued.

YEAR	LOW ORDER QUESTION	MEDIUM DIFFICULTY	HIGH ORDER SKILLS
	-Rural settlements are single functional and concerned with...	S/ML	[2]
	-Name the factors which have influenced the choice of site in the rural areas.	S/ML	[12]
	TOTAL MARKS		[38]
	TOTAL No. OF QUESTIONS		= 20

KEY

ML = man-land

ES = earth science

S = spatial perspective

RV = regional viewpoint

A summary of Table 4.10 indicates that 64.5% of the questions tested in the final examination pertaining to rural settlement from 1985 to 1989 emphasised low order skills, whilst 6.5% related to high order skills. Analysis of the questions further revealed that 31.3% of the questions asked were repeated during the period studied. These questions required pupils to provide an explanation of the factors influencing the site of rural settlements.

TABLE 4.11

ANALYSIS OF 1985-1989 FINAL EXAMINATION PAPERS
IN TERMS OF THE FOUR TRADITIONS OF GEOGRAPHY

4 TRADITIONS OF GEOGRAPHY	1985	1986	1987	1988	1988	1989	TOTAL
				FEB	NOV	MAY	
SPATIAL	4	3	6	3	1	3	20
MAN-LAND	3	3	3	4	2	5	20
EARTH SCIENCE	1	2	1	0	0	1	5
REGIONAL	0	0	0	0	0	0	0
TOTAL	8	8	10	7	3	9	45

Table 4.11 indicates the geography traditions covered in the examination question papers during the past 8 years. It is interesting to note that the earth science component is rarely covered in the examination questions, whilst spatial and man-land perspectives are dominant.

This highlights the fact that the examination is more closely related to the syllabus content than to the aims and objectives which underpin the current syllabuses.

The table that follows (Table 4.12) reflects the marks awarded and the nature of questions in the rural settlement section of geography examinations in terms of Bloom's taxonomy as used by van Jaarsveld (1987).

TABLE 4.12

AN ANALYSIS OF EXAM. QUESTIONS

IN TERMS OF THE NATURE OF THE QUESTION (1985-1989)

YEAR	EXAM QUESTION AND MARKS ALLOCATED	NATURE OF QUESTION IN TERMS OF BLOOM'S TAXONOMY
1985	HUMAN GEOGRAPHY	
	-Describe the traditional rural settlement patterns of the Black population groups of South Africa. Show what changes have occurred in this pattern. [20]	Factual recall and application of facts.
	-Describe and explain the factors which may influence the position of a farm building. [18]	Factual recall and sort information into categories.
	-Explain the social and cultural factors which have led to certain rural settlements having a nucleated pattern and others dispersed pattern. Give suitable examples. [24]	Recall and application of facts.
	-Discuss the role played by topography in the distribution of rural settlement. [18]	Recall and application of facts.

TABLE 4.12 continued

YEAR EXAM QUESTION AND MARKS ALLOCATED	NATURE OF QUESTION IN TERMS OF BLOOM'S TAXONOMY
1986 -Make a list of settlements from smallest to the largest according to size. Also a brief discussion where possible of each settlement. [28]	Recall and classification,
-Briefly discuss the physical factors which influence the location and form of settlement. [16]	Recall and application of facts.
-List types of activities found in rural urban fringe. [6]	Factual recall
-A village is defined as.....[2]	Recall and knowledge of terminology.
-The largest form of a rural settlement is called.....[2]	Concept and factual recall.
-The main factors influencing the location of rural settlements are [2]	Factual recall.
TOTAL [56]	

TABLE 4.12 continued

YEAR EXAM QUESTION AND MARKS ALLOCATED	NATURE OF QUESTION IN TERMS OF BLOOM'S TAXONOMY
1987 -Planning for future development of a region requires that a number of basic needs be provided. List eight of these. [8]	Factual recall
-Discuss the factors which influence the growth and development of rural settlement. [30]	Recall and application.
-List the factors influencing the site of a rural settlement. [6]	Factual recall.
-Explain, using examples, how physical features influence the choice of sites for habitation.[30]	Recall and application of facts.
-A settlement where a single supply of water exists is called.... [2]	Factual recall.
-A terp is a/an village. [2]	Factual recall
-When houses are built close to each other away from the fields and grazing lands, they are called..... rural villages. [2]	Factual recall
-An X-shaped village is usually the result of [2]	
TOTAL [88]	

TABLE 4.12 continued

YEAR	EXAM QUESTION AND MARKS ALLOCATED	NATURE OF QUESTION IN TERMS OF BLOOM'S TAXONOMY
1988 NOV	-The choice of a site for a rural village or homestead was historically affected by a number of factors. List any five factors. [10]	Factual recall.
	-.....settlements are communities of non-food producers. [2]	Factual recall.
1988 FEB	-Resettlement is one of the possible solutions to rural problems - describe forced resettlement. [20]	Attitude and values - factual recall.
	-Which type of resettlement will however solve this problem in the long term? [2]	Factual recall, attitude and values.
	-Explain the following concept: site. [2]	Factual recall.
	-What type of settlement is represented by Figure 3? [2]	Identify and application of facts.

TABLE 4.12 continued

YEAR	EXAM QUESTION AND MARKS ALLOCATED	NATURE OF QUESTION IN TERMS OF BLOOM'S TAXONOMY
	-Discuss the reason for this community choosing this particular site. Make use of suitable examples to justify the choices of other communities. [30]	Factual recall. Application of facts/analysis and evaluation.
	-How do political factors influence rural settlement. [6]	Recall, attitudes and values.
	TOTAL [62]	
1989 MAY	-Name the factors which have influenced the choice of site in rural settlement. [12]	Factual recall.
	-For a successful rural development to take place, certain development strategies need to be used. Say what you think these development strategies ought to be. [10]	Recall, understanding of consequences and evaluation.
	-A community type farm where the farmer owns his land, receives the profits from his crops yet shares in the use of farming implements is called an/a [2]	Factual recall.

TABLE 4.12 continued

YEAR EXAM QUESTION AND MARKS ALLOCATED	NATURE OF QUESTION IN TERMS OF BLOOM'S TAXONOMY
-Name the factors which have influenced the choice of site in the rural areas. [12]	Factual recall.
TOTAL MARKS [38]	

The table reveals that questions that require recall of facts were the ones which dominated from 1985-1989. Most of the questions were characterised by cue words such as make a list of..., explain factors which..., name ..., mention... .

78.12% of the questions required the knowledge of concepts. The 1988 February question paper was the only one which tested pupils' attitude and values. This paper included questions related to high order skills, requiring the pupils to apply their knowledge and to employ analysis and evaluation. It is interesting to note that recall-type questions have decreased in number since 1985, whilst the questions which require medium and high order skills are beginning to appear in the D.E.T. question papers.

Table 4.13 below compares the marks awarded to rural and urban settlement from 1985 to 1989.

TABLE 4.13

A COMPARISON OF MARKS AWARDED TO RURAL AND URBAN SETTLEMENT
IN THE EXAM. QUESTIONS FROM 1985 TO 1989

YEAR	MARKS AWARDED	MARKS AWARDED	TOTAL
	TO RURAL S.	TO URBAN S	
NOV 1985	80	80	160
NOV 1986	56	84	140
NOV 1987	85	60	148
NOV 1988	12	92	114
FEB 1988	62	74	136
MAY 1989	38	102	140
TOTAL	336	492	838

The results indicated by Table 4.13 reveal that marks awarded to the rural settlement section of the geography syllabus have been decreasing as from 1986 to 1989 with the exception of 1987, whilst the marks awarded to urban settlement increased. The marks (12) awarded to rural settlement in 1988 were the lowest compared to urban settlement (92). The author found that the low marks awarded to rural settlement were the result of ecology, rural settlement and urban settlement being tested together in the same section. Nevertheless, the total marks for both rural and urban settlement decreased from 160 in 1985 to 114 in 1988, and 140 in 1989.

In the light of the above results it is clear that rural settlement geography is being accorded consistently less status when compared to urban settlement geography. This will influence teachers, causing them to concentrate more on urban than on rural settlement. There may be a subtle transfer of attitude from the examiners to the teachers and ultimately to the pupils.

4.5 SUMMARY

The analysis of syllabuses, textbooks and senior certificate examinations revealed that the traditions of geography which are dominant are the man-land and spatial perspective, whilst the other two are less considered. The situation is exacerbated by the approaches provided in syllabuses, textbooks and senior certificate examinations, which seemed not to meet the aims and objectives of the geography syllabus. For instance, the syllabus prescribed low, medium and high order skills to be covered, whilst examinations emphasised low order skills.

In the light of the above findings, we might conclude that the approaches used in the syllabuses, textbooks and examinations are not exactly aligned to current geographical theories, and do not adequately address the problem of meeting the 'needs' of the pupils.

CHAPTER 5

5. TEACHING RURAL SETTLEMENT IN VENDA SECONDARY SCHOOLS.5.1 INTRODUCTION

This chapter examines the current teaching strategies used for rural settlement and the teachers' and pupils' perception of and attitudes to this section of the syllabus.

The chapter is divided into two major sections:

1. The analysis of the questionnaires administered to the geography teachers.
2. The analysis of the semi-structured interviews conducted with the Standard 10 geography pupils.

The first theme is concerned with the analysis of the teachers' questionnaires. The results were obtained from the survey undertaken in the Thohoyandou circuit in Venda, which involved all secondary schools offering geography up to Standard 10. Forty-five out of fifty-five teachers were involved in this section of the study.

The questionnaires attempted to:

1. Establish geography teachers' attitudes towards the section on rural settlement geography.

2. Investigate the current teaching strategies and approaches used by teachers when teaching the section on rural settlement.
3. Identify the problems that teachers experience when teaching this section.

The semi-structured interviews involved 15 pupils from 4 of the 17 secondary schools in the Thohoyandou circuit, in order to establish:

1. Pupils' perceptions of and attitudes to the study of rural settlement geography.
2. The problems pupils encountered when studying rural settlement and their suggestions as to how the teaching of rural settlement could be improved.

5.2 SURVEY RESULTS

This section analyses the questionnaire conducted addressed to geography teachers in the Thohoyandou circuit in Venda. The results of the questionnaire are presented in the order in which the questionnaire was designed:

5.2.1 The general background of the geography teachers.

Section A of the questionnaire was concerned with the establishing the composition of the sample group (Appendix 3

Table 5.1 below reveals the results of this part of the questionnaire.

TABLE 5.1

COMPOSITION OF THE SAMPLE GROUP

(expressed as frequencies and percentages)

(N=45)

Q.No.	VARIABLES	FR	%
1.	SEX		
	Male	37	82.2
	Female	8	17.8
2.	QUALIFICATION		
	Matric	2	4.4
	JSTC	3	6.7
	STD	14	31.1
	B.A.	15	33.3
	B.Ped.	1	2.2
	B.A./B.Sc educ .	4	8.9
	B.Ed.	2	4.4
	M.A./M	0	0
	M.Ed.	0	0
	D.Ed./Ph.D.	0	0
3.	HIGHEST GEOGRAPHY COURSE ATTENDED.		
	None	2	4.4
	College	17	37.8
	University I	4	8.9
	University II	6	13.3
	University III	15	33.3

TABLE 5.1 continued

	Honours	1	2.2
	Masters	0	0
4.	PRESENT TEACHING POST		
	First year	3	6.7
	Teacher	31	68.9
	Senior teacher	8	17.8
	H.O.D.	2	4.4
	Deputy Principal	0	0
	Principal	1	2.2
5.	HIGHEST GEOGRAPHY STD. TAUGHT		
	Std.6	2	4.4
	Std.7	5	11.1
	Std.8	11	24.4
	Std.9	9	20.0
	Std.10	18	40.0
6.	YEARS OF EXPERIENCE TEACHING GEOGRAPHY		
	0 -1	4	8.9
	2 -3	18	40.0
	4 -7	13	28.9
	8 -11	6	13.3
	12-15	1	2.2
	Over 15	3	6.7

Table 5.1 reveals that the teaching of geography in the study area is male dominated. This pattern is similar to that identified by Ballantyne (1986) in his research relating to geography teachers in the Cape Education Department.

Academic qualifications, when related to the teaching of geography in the study area, reveal that 57.7% of the teachers have completed geography courses at University level, whilst 37.8% were trained in geography at teacher's training colleges.

The validity of the questionnaire was enhanced by the fact that 86% of the teachers responding to the questions indicated that they enjoyed teaching geography. The validity and reliability of the results are further enhanced by the fact that all, with the exception of 3 out of the 45 respondents, are teachers with more than one year of teaching experience. The results also revealed that the majority of these teachers (40%) have taught for 2-3 years.

A further factor which enhances the validity of the responses is the fact that 68.9% of the teachers will have had instruction in the new syllabus and they should therefore be acquainted with learner-centred approaches which are a feature of recent training courses. This is further highlighted by the majority of the respondents having a university qualification, and the fact that they are still new in the teaching profession.

5.2.2 Teachers' attitudes towards the teaching of rural settlement

This section of the questionnaire attempted to examine teachers' preferences and attitudes towards the teaching of rural settlement.

The respondents' attitudes to rural settlement are indicated in Table 5.2.

TABLE 5.2

N=45

TEACHERS' ATTITUDES TOWARDS GEOGRAPHY

Q.No.	VARIABLES	FR	%
7	YOUR INTEREST IN TEACHING:		
	1.Teaching geography only.	8	17.8
	2.Teaching geography and one other subject.	28	62.2
	3.Teaching geography and more than one other subject	9	20.0
8.	IF YOU HAD THE CHOICE WOULD YOU PREFER NOT TO TEACH GEOGRAPHY:		
	1.Yes	3	6.7
	2.No	42	93.3
18.	STATE PREFERENCES:		
	1.Climatology	15	33.3
	2.Geomorphology	14	31.1
	3.Rural settlement	8	17.8
	4.Urban settlement	5	11.1
	5.Regional geography	3	6.7

TABLE 5.2 continued

9.	WHICH ONE IS EASIER TO TEACH:		
	1.Urban settlement	17	37.8
	2.Rural settlement	28	62.2
191	TEACHING RURAL SETTLEMENT IS:		
	1.Very easy	13	28.9
	2.Easy	21	46.7
	3.Average difficulty	8	17.8
	4.Difficult	2	4.4
	5.Very difficult	1	2.2

Table 5.2 reveals that 80% of the respondents taught geography and one other subject. These results reveal that a degree of subject specialisation is possible.

From the fact that 42 out of 45 teachers indicated that they chose to teach geography, it may be inferred that these teachers are more likely to perceive geography as a subject which is worthwhile. As such, they are likely to be more committed to the teaching of geography than teachers who have been forced to teach the subject.

The responses to question 9 indicate that 62.2% prefer to teach rural settlement geography rather than urban settlement geography. It was noteworthy that the female teachers in particular preferred teaching rural settlement to urban settlement.

The results further revealed that the majority of teachers (64.4%) indicated a preference for physical geography though it is generally perceived to be challenging and demanding. However 17.8% of the respondents ranked rural settlement geography third.

The responses to question 19 (i) revealed that teachers generally find the teaching of rural settlement geography easier than teaching urban settlement geography. This may be ascribed to the fact that the majority of the pupils have rural backgrounds rather than urban backgrounds.

The bargraph below depicts teaching preferences in relation to teaching qualification.

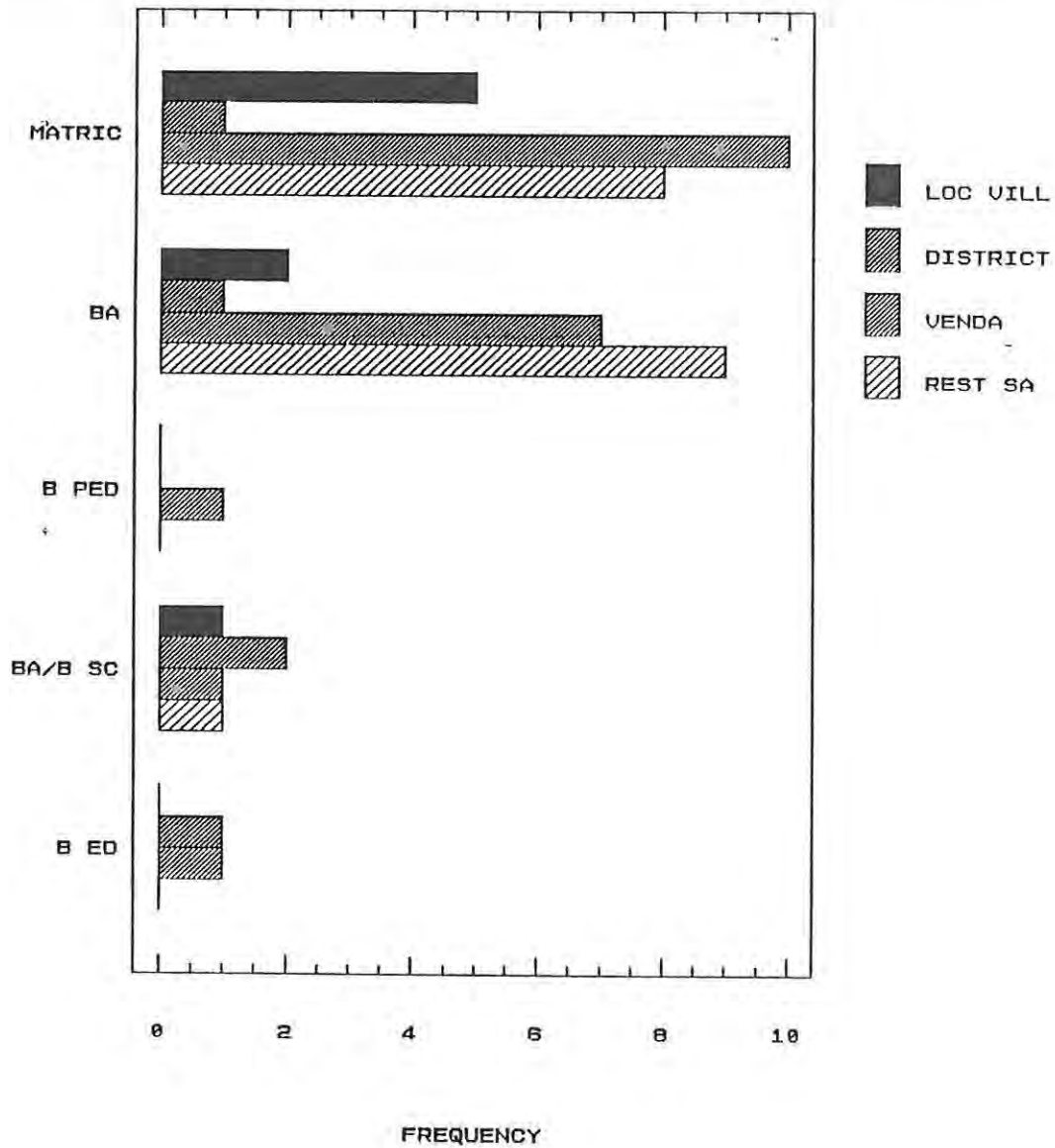


Figure 5.1 Bargraph depicting the interrelationship between the sections preferred the most and the teacher's qualifications.

In a comparison based on teachers' qualifications it was revealed that teachers with a training college qualification showed a greater preference for the teaching of rural settlement geography than their colleagues with university qualifications. This may be attributed to the fact that students trained at Teachers' Training Colleges

have few opportunities to explore geographical concepts and theories beyond that of the matriculation syllabus, and may therefore have difficulty with the more abstract concepts and theories associated with urban geography. Another relevant factor is that these teachers have a rural background rather than an urban background.

5.2.3 Teachers' perceptions of pupils' understanding of the study of rural settlement geography

The respondents were asked to indicate how they perceived their pupils' attitudes to rural settlements and the pupils' understanding of this section of the syllabus.

The following Table (5.3) presents the results of how the teachers perceive the pupils' attitudes towards the study of rural settlement.

TABLE 5.3

TEACHERS' PERCEPTIONS OF PUPILS'

UNDERSTANDING OF SETTLEMENT GEOGRAPHY.

(expressed as frequencies and percentages)

N=45

Q.No	VARIABLES	FR	%
19ii	PUPILS FIND RURAL SETTLEMENT:		
	1.Very interesting	10	22.2
	2.Interesting	19	42.2
	3.Of average interest	13	28.9
	4.Uninteresting	3	6.7
	5.Very uninteresting	0	0
19iii	PUPILS FIND RURAL SETTLEMENT:		
	1.Very easy to understand	8	17.8
	2.Easy to understand	28	62.2
	3.Difficult to understand	9	20.0
	4.Very difficult to understand	0	0
	5.Most difficult to understand	0	0
20	PUPILS FIND RURAL SETTLEMENT EASIER TO UNDERSTAND THAN URBAN SETTLEMENT:		
	1.Strongly agree	13	29.5
	2.Agree	25	56.8
	3.Undecided	1	2.3
	4.Disagree	5	11.4
	5.Strongly disagree	0	0

TABLE 5.4 continued

17	CURRENT APPROACHES IN THE EXISTING SYLLABUS ARE RELEVANT.		
	1.Strongly agree	8	17.8
	2.Agree	31	68.9
	3.Undecided	4	8.9
	4.Disagree	1	2.2
	5.Strongly disagree	1	2.2

Table 5.4 reflects that the teachers are satisfied with the existing syllabus and accepted its relevance for the pupils.

These results, when related to the teaching approaches, strategies and resources used by the teachers, raise questions of the extent to which the teachers understand the concept of 'relevance'.

5.2.4 The current teaching strategies, approaches and resources

Section D of the questionnaire examines the current teaching strategies and approaches employed in the teaching of rural settlement. The results as set out in Table 5.5 revealed three particular areas of interest in respect of claims made by the geography teachers concerning teaching approaches and strategies. Thus:

1. Use made of the local village when teaching sections of rural settlement.

Table 5.3 would seem to indicate that according to the teachers' perceptions, pupils generally find rural settlement geography as it is taught in accordance with the present syllabus, to be interesting, easy to understand and easier to learn than urban geography.

Table 5.4 below analyses the responses to questions 13, 14, 16 and 17.

TABLE 5.4

RESULTS OF THE PERCEIVED RELEVANCE OF RURAL SETTLEMENT

(expressed as frequencies and percentages)

% respondents N = 45

Q.No	VARIABLES	FR	%
13	IS RURAL SETTLEMENT IN STD.7		
	1.Very relevant for the pupils	4	8.9
	2.Relevant	31	68.9
	3.Irrelevant	10	22.2
	4.Very irrelevant	0	0
14	IS RURAL SETTLEMENT IN STD.10		
	1.Very relevant for the pupils	11	24.4
	2.Relevant	31	68.9
	3.Irrelevant	3	6.7
	4.Very irrelevant	0	0
16	WHICH IS MORE RELEVANT		
	1.Std.7	13	30.2
	2.Std.10	30	69.2

2. The use of the enquiry and problem solving method.

3. The issue of taking students out regularly.

TABLE 5.5

TEACHING STRATEGIES CURRENTLY USED IN VENDA.

Q.No.	VARIABLES	YES		NO	
		FR	%	FR	%
11	EXAMPLES USED WHEN TEACHING RURAL SETTLEMENT				
	1.Your local village	8	17.8	37	82.2
	2.Your district	5	11.1	40	88.9
	3.Venda as a whole	20	44.4	25	55.6
	4.Rest of South Africa	18	40.0	27	60.0
21	METHODS USED IN TEACHING RURAL SETTLEMENT				
	1.Enquiry method	29	64.4	16	35.6
	2.Problem solving method	23	51.1	22	48.9
	3.Chalk and talk	34	75.6	11	24.4
	4.Class discussions	36	80.0	9	20.0
	5.Games and simulation	6	13.3	39	86.7
	6.Worksheets	12	26.7	33	73.3
23	PUPILS TAKEN OUT FOR FIELDWORK				
	1.Yes	12	27.3		
	2.No	32	72.7		

TABLE 5.5 continued

24	HOW OFTEN ARE PUPILS TAKEN ON FIELD TRIPS		
	1.Once a week	1	2.5
	2.Once a month	2	5.0
	3.Once per term	4	10.0
	4.Once per year	8	20.0
	5.None of the above	25	62.5

Table 5.5 analyses the approaches and teaching strategies which are employed in the teaching of geography. The results reveal the following:

- i. Teachers do not generally use local examples when teaching rural settlement, but depend on the examples in the textbook, i.e. Active Geography. This is born out by the fact that 93.3% of the teachers rely on the textbooks as their primary resource for the teaching of geography.
- ii. The results obtained from question 21 give the impression that although chalk and talk and class discussions are the primary strategies in the teaching of rural settlement, enquiry and problem solving methods are also frequently used.
- iii. The results are however questionable when compared to the extent to which fieldwork, games, simulation and worksheets are used, since it is these latter strategies which best lend themselves to problem solving and enquiry approaches.

In spite of the accessibility of the rural settlement landscape as shown in the case study of a geographical analysis of the area, the results also revealed that fieldwork is not included as a general rule in the teaching of rural settlement geography, as indicated in Table 5.6.

Question 25 of the questionnaire (in Table 5.6) was designed to obtain information relating to the frequency of the implementation of teaching strategies such as field trips, worksheets, duplicated notes, games and simulation and map study.

The analysis of the frequency of these strategies used when teaching rural settlement will give an indication of the use of learner-centred approaches which are at the heart of current teaching methodologies

Table 5.6 reveals the incidence of teaching strategies which were frequently used and those which were seldom or never used. The results reveal that 43.2% of the respondents have never used games and simulation, whilst 36.4% often use worksheets. As has already been said, the use of these strategies characterises a learner-centred approach and enhances the pupils' perceptions of the subject as relevant.

However the results of questions pertaining to teaching strategies need to be related to the availability of resources which teachers use in rural settlement geography teaching. An analysis of these resources will further clarify the approaches and strategies which the teachers use.

Questions 22 and 25 in Table 5.6 were designed with the purpose of obtaining information with regard to the availability and the frequency with which stimulus materials were used when teaching rural settlement.

TABLE 5.6

FREQUENCY OF TEACHING STRATEGIES USED.

Q.No	VARIABLES FREQUENCY	FR/%	NEVER	V.SELDOM	SELDOM	OFTEN	V.OFTEN
25	1.Fieldtrips	FR	6	4	16	14	5
		%	13.3	8.9	35.6	31.1	11.1
	2.Worksheets	FR	6	5	17	15	1
		%	13.3	11.4	38.6	34.1	2.3
	3.Duplicated notes	FR	5	1	10	22	6
		%	11.4	2.3	22.7	50.0	13.6
	4.Games and simulation	FR	19	5	10	9	1
		%	43.2	11.4	22.7	20.5	2.3
	5.Map study	FR	1	2	8	17	17
		%	2.2	4.4	17.8	37.8	37.8

Textbooks, local maps, followed by pictures (see Fig.5.2) were indicated as the resources which were the most readily available.

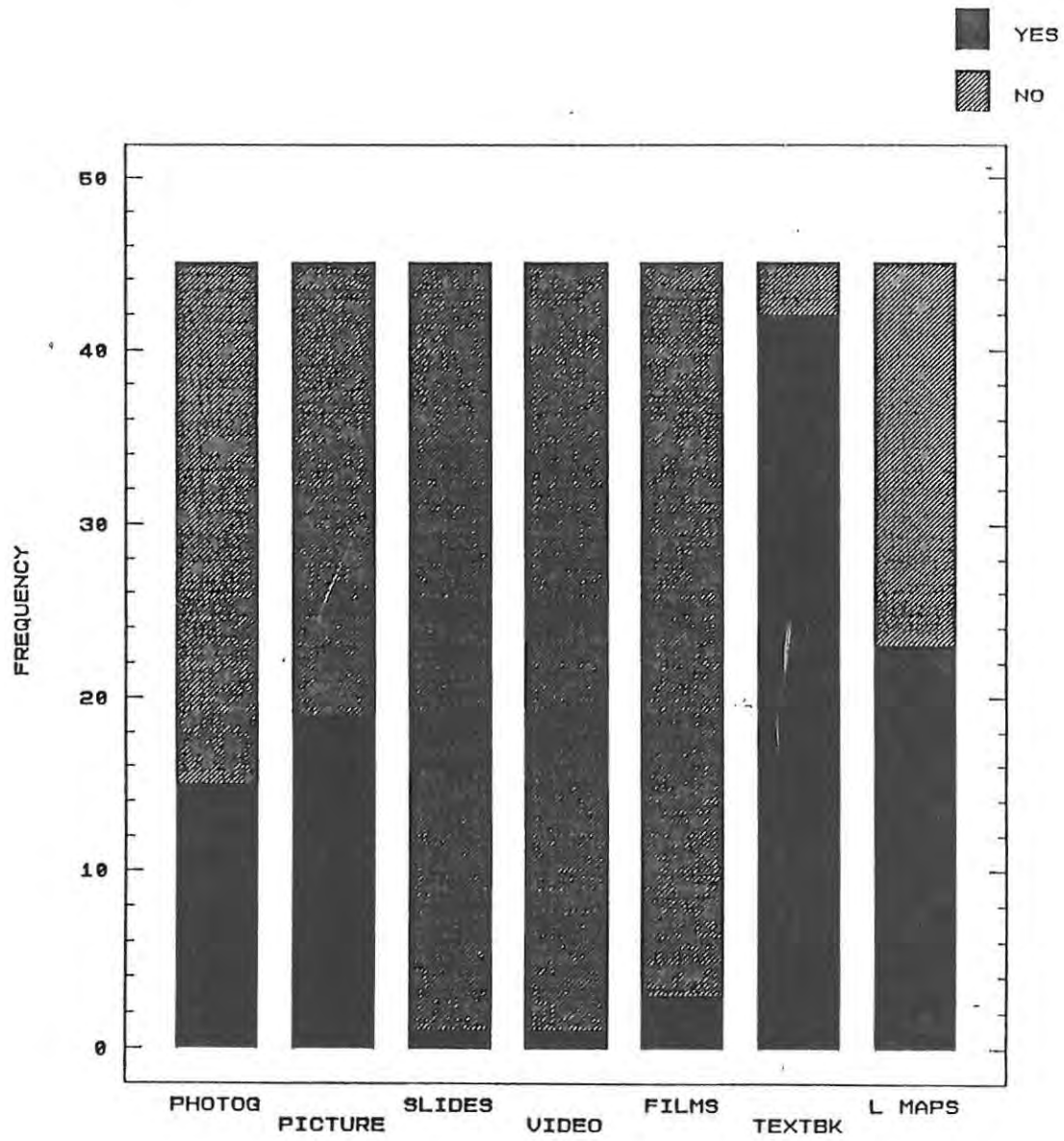


Figure 5.2 Resources available for teaching rural settlement.

TABLE 5.7

RESULTS OF THE FREQUENCIES OF RESOURCES USED.

(expressed as frequencies and percentages)

N=45

Q.No	VARIABLES	FR/%	NEVER	V.SELDOM	SELDOM	OFTEN	V.OFTEN
	FREQUENCIES OF RESOURCES AVAILABLE						
25	1. Photographs	FR	1	1	8	24	10
		%	2.3	2.3	18.2	54.5	22.7
	2. Pictures	FR	1	1	7	23	13
		%	2.3	2.3	15.6	51.1	28.9
	3. Video	FR	9	7	10	11	8
		%	20.0	15.6	22.2	24.4	17.8
	4. Slides	FR	13	3	13	12	2
		%	30.2	6.7	30.2	27.9	4.7
	5. Textbooks	FR	1	1	3	18	22
		%	2.2	2.2	6.7	40.0	48.9
	6. Duplicated notes	FR	5	1	10	22	6
		%	11.4	2.3	22.7	48.9	13.6

An analysis pertaining to the resources reveals that, other than textbooks, teachers rely on local maps, pictures and photographs to present rural settlement. The fact that slides, videos and films are seldom used may be attributed to the lack of electricity in a number of schools, mainly due to a lack of funds.

TABLE 5.8

JUSTIFICATION FOR TEACHING RURAL SETTLEMENT
IN STANDARDS 7 AND 10.

Q.No	VARIABLES	FR	%
10	TEACH RURAL SETTLEMENT IN DEPTH		
	1.Yes	17	37.8
	2.No	28	62.2
15	JUSTIFICATION FOR TEACHING RURAL SETTLEMENT IN STD.7 AND 10		
	1.Yes	4	8.9
	2.No	41	91.1

The responses to question 10 in Table 5.8 were very important in terms of the teaching of rural settlement, as 62.2% indicated that they do not teach rural settlement in depth. These responses highlighted the fact that teachers are guided by the textbooks and the syllabus interpretation of rural settlement geography rather than by a search for relevance as considered in Chapter 2.

Teachers' claims regarding the use of local maps in the teaching of rural settlement geography must therefore be questioned since the analysis of approaches and teaching strategies revealed that very few teachers make use of local examples in the teaching of rural settlement geography.

The fact that teachers saw rural settlement as being more relevant in Standard 10 may be attributed to the fact that the Standard 10 pupils are more readily able to understand the theoretical approach to rural settlement than the Standard 7 pupils. This is a further indication of the way in which teachers follow and accept the syllabus, not as a guide which can be adapted - particularly in the lower standards - to suit the needs and experiences of their pupils, but as a rigid and non-negotiable entity.

The analysis of the results relating to teaching approaches, teaching strategies and the resources used in the teaching of rural settlement geography emphasise the apparent problems teachers have in understanding the concept of 'relevance' when it is applied to this section of geography.

5.2.5 Problems and suggestions provided by the geography teachers

Questions 26 and 27 of the questionnaire were open-ended. Question 26 required the respondents to identify the problems they experience in teaching rural settlement geography. Question 27 (Table 5.9) invited the respondents to suggest aspects which they perceived to be relevant when teaching rural settlement geography.

TABLE 5.9

QUESTIONS RELATING TO PROBLEMS AND SUGGESTIONS FOR THE
TEACHING OF RURAL SETTLEMENT.

Q.No	QUESTIONS
26.	Write down some of the problems that you have when teaching rural settlement.
27.	Please feel free to add whatever you think relevant to the teaching of rural settlement.

The responses to question 26 were summarised as follows:

1. Lack of teaching resources.
2. Lack of funds to purchase the resources.
3. Inability to organise and administer fieldtrips.
4. Inability to use local maps.
5. The pupils' inability to express themselves.
6. Overcrowded classrooms.
7. Textbooks which do not correlate with practical situations in South Africa.

8. Poor co-operation between the teaching staff and top management.
9. Pupils do not seem to relate content to their own environment.
10. There is no geography classroom.

These problems, when linked to the pupils' inability to express themselves in English, highlight the reasons for teachers resorting to teacher directed learning.

Suggested ways of improving the teaching of rural settlement were as follows:

- i) 66.6% of the teachers were in favour of the implementation of fieldwork in the teaching of rural settlement.
- ii) The dilemma in which teachers find themselves was encapsulated by one teacher who commented that the use of local examples, which is of benefit to the pupils, could be problematic if the examiners had no knowledge of the conditions described by the pupils.
- iii) The respondents suggested that pupils should not rely on one textbook alone, but should make use of other resources such as newspaper articles.

Teachers, although they depend extensively on a single textbook, are aware that often this is not adequate for effective teaching. This however is a problem relating to the lack of finances needed for multiple copies.

The results of the questionnaire highlight the following facts:

- i. Teachers are generally aware of and trained to use modern media, but are frequently unable to do so to enhance the teaching because of lack of funds and lack of adequate facilities.
- ii. The respondents were also aware of the shortcomings of using a single textbook, but the problems which exist in the school, as well as the rigidity with which they follow the syllabus, leads teachers to resort to those methods of teaching which are most expedient.
- iii. Despite the general qualifications of the teachers, the results revealed a particular shortcoming which may be ascribed to initial teacher training methods. This problem seems to stem from the fact that teachers have not been educated in how to develop and interpret the syllabus to cater for the pupils' needs, or in order to capitalise on the pupils' local environment.

Thus few if any of the teachers who responded to the questions were able to perceive the opportunities which the rural settlement section of the syllabus provides for especially the Standard 7 pupils. Teachers were therefore unable to see how fieldwork could be incorporated into their teaching.

5.3 RESULTS OF THE SEMI-STRUCTURED INTERVIEWS

The semi-structured interviews were conducted with Standard 10 geography pupils from the Thohoyandou circuit in Venda for the reasons mentioned in Chapter 3.

The interview schedule was divided into two sections. The first section comprised a series of questions centred on the interpretation of rural settlement (Appendix 4) in order to establish the pupils' understanding of rural settlement and to assess the focus of the teaching of rural settlement.

The second section of the interview schedule was designed to obtain pupils' views of rural settlement in relation to the other components of the syllabus and to assess their attitudes to the section on rural settlement.

The pupils' responses were able to highlight and to further clarify the results obtained from the questionnaire.

5.4 THE ANALYSIS OF PUPILS' INTERVIEWS

5.4.1 Pupils' understanding of rural settlement

The purpose of question 1, the photograph of rural settlement (Appendix 4) was to test their perception and aimed at finding out if pupils were able to:

1. Identify rural settlement in terms of the criteria for defining rural settlements. Thus the questions were related to location, pattern, building materials and building styles, land tenure and cultural landscape, and the socio-economic conditions of the people.

2. Relate the picture to their own local areas in Venda.
3. Extract basic information from the picture, thus being able to pick up key aspects that characterise a rural settlement.

The analysis of the pupils' responses revealed that all the pupils were able to:

1. Identify or recognise the rural settlement in terms of nucleation or dispersion.
2. Recognise a rural settlement in terms of its functions. The pupils placed an emphasis on primary activities as the only aspect characterising rural settlement.
3. Note that rural settlement units are characterised by their building styles and building materials.

However none of them mentioned aspects relating to land tenure, the cultural landscape or socio-economic conditions.

The results revealed that all pupils had completed the section on rural settlement at the time of the research. This provided insight into the emphasis placed on this aspect of the syllabus.

The results revealed that the pupils concentrate more on patterns, functions, building styles and building materials. Generally it was found that pupils' perceptions of rural settlement were associated with the spatial perspective as one of the four traditions of geography discussed in Chapter 2.

The pupils' responses reflect the way in which rural settlement was taught, and highlight the fact that the teaching of this section is directly related to textbooks and syllabuses. It was interesting to note that in spite of the fact that many of the pupils live in rural villages, their answers did not reflect their own experiences, but simply that of the 'geography lessons'. Pupils, it would seem, do not perceive that which is happening in the real world as being geography.

5.4.2 Pupils' attitudes towards the study of rural settlement

The results reveal that 12 out of 15 pupils interviewed preferred to study rural settlement rather than urban settlement. The analysis of the results is as follows:

- i. The rural settlement section is the place where they live and therefore it is easy to relate to rural settlement.
- ii. They perceived rural settlement as a practical section which does not need a lot of theory.

The results further revealed that both the teachers and the pupils have positive attitudes towards the section on rural settlement in geography study. However, 20% of the pupils' responses and 6.7% (Table 5.2) of the teachers' responses

indicated that they do not find rural settlement geography to be of any interest. It is interesting to speculate that the 3 pupils and the 3 teachers who indicated that they do not like this section may be related to Ballantyne's (1986) argument that attitudes are learned. Further questioning of the pupils revealed that they find the teaching of rural settlement geography to be boring as there is "not so much to learn from it". Knowing what a rural settlement is, they would like to learn something new.

The majority of the respondents revealed that rural settlement is perceived as easy, interesting and practical and is the area in which they live.

5.4.3 Problems encountered by pupils when studying rural settlement

Questions 5 and 6 in the interviews (Appendix 4) attempted to find out what problems the pupils experienced in the course of their study of rural settlement.

The results reveal that 46.6% of the pupils indicated that they did not have problems in studying rural settlement geography, whilst 26.6% of the respondents indicated that they had problems with concepts contained in rural settlement geography. 13.3% indicated that they did not understand the teacher. One of the pupils mentioned that the problem lies with the textbook, as it quotes examples of overseas areas instead of those of the surrounding area, whilst another pupil said he did not understand the whole concept as the teacher was rushing to finish the syllabus. When asked why he did not stop the teacher, he mentioned that he was too shy to do so.

Question 6 was included purposely in order to find out if they would like to offer some suggestions on how their problems could be handled. This question highlighted the following aspects:

1. That the geography teachers should use teaching aids (stimulus materials) in order to facilitate the understanding of concepts.
2. That teachers should make use of fieldtrips to the local surrounding area and to urban areas so that they would be able to differentiate rural and urban areas.
3. They also suggested that teachers should not go too rapidly when teaching rural settlement and that they must use simple English as some of them did not understand the concepts.

5.4.4 Recommendations for the improvement of the teaching of rural settlement

As has already been said in Chapters 1 and 2, the 'needs' of the pupils should be taken into account when drawing up a curriculum (Rawling 1980). It was considered worthwhile to ask the pupils to come up with their own suggestions on how to improve the teaching of rural settlement.

The responses to the question generally revealed that pupils would welcome improvements and mentioned the following aspects:

- i. The establishment of study groups in their classes which will enable them to express themselves and learn to listen to others. The suggestion of study groups reveals that pupils would prefer to participate in their learning rather than to remain passive.
- ii. They again suggested the inclusion of field trips in the study of rural settlement, as pupils acquire knowledge through direct observation of the environment (Nightingale 1977 and Nicol 1980).
- iii. The use of stimulus materials such as pictures, videos and films were suggested for the improvement of teaching rural settlement. Thus the teachers should make use of stimulus materials as they are perceived to generate pupils' interest and to retain it for a longer period (Webster 1979).

In order to obtain a more accurate assessment of pupils' understanding of rural settlement, the analysis of questions 19(ii), 19(iii) and 20 were compared with questions 7, 8 and 9 in the semi-structured interviews for pupils. If, indeed, the teachers are really interpreting the teaching of rural settlement geography to the pupils as interesting and easy, then there should be similarities with the pupils' responses to question 5 of the semi-structured interviews, which revealed problems that the pupils have encountered when learning rural settlement.

The analysis of the responses regarding questions 13,14,16 and 17 revealed that teachers' perceptions of rural settlement as relevant did not differ significantly from the pupils' responses in the interviews.

The suggestions put forward by the pupils are similar in aspect, excepting the one concerned with the establishment of study groups. Both teachers and pupils, however, would welcome changes in the teaching of rural settlement. They both acknowledge the need for field trips in the local areas, the need for changes in teaching approaches and teaching strategies, as they emphasised the need for stimulus materials and study groups.

5.5 SUMMARY

The results of the survey revealed the following:

1. That both the geography teachers and pupils consider rural settlement as an easy section to deal with;
2. That there is a need to use current teaching strategies which are learner-centred rather than relying heavily on textbooks;
3. The need for fieldwork to be implemented when teaching rural settlement; and lastly
4. That the teachers did not understand the concept of 'relevance'.

From the above findings, it is clear that the teaching of rural settlement geography is not entirely relevant. Nevertheless, relevance can be achieved by developing curriculum units or encouraging teachers to use a case study approach of the local areas.

CHAPTER 6

6. CONCLUSION

6.1 INTRODUCTION

This study focused on the potential which rural settlement geography has for creating a sense of place and identity for pupils who come from essentially rural backgrounds. The assumption is that when pupils are able to identify with their own environment they may learn to appreciate and to live in harmony with that environment. This aspect of geographical education is perceived by Catling (1987) and Boardman (1988) as a primary purpose of the geography school curriculum.

Rural settlement geography was initially analysed in relation to current trends in geographical thinking, in terms of the aims and objectives of current geographical curricula and with regard to the notion of relevance. The second phase of the analysis was concerned with comparing the role rural settlement geography ought to play in the South African syllabus and with the way in which it is approached in terms of the syllabus content, textbooks and the senior certificate examinations. The final phase of the study investigated Venda teachers' and pupils' perceptions of rural settlement geography and the way it is taught in secondary schools in Venda. This chapter highlights the results of the study under the following headings:

- 6.2 The place of rural settlement in the South African curriculum.
- 6.3 Teachers' and pupils' attitudes to the teaching of rural settlement.
- 6.4 The relevance of teaching strategies currently employed in Venda schools.

The conclusions which were drawn as a result of this study led to a number of recommendations which it is hoped will result in the development of this aspect of the geography curriculum to the benefit of the pupils.

6.2 THE PLACE OF RURAL SETTLEMENT IN THE SOUTH AFRICAN GEOGRAPHY CURRICULUM

6.2.1 Rural settlement in current syllabuses

The analysis of the 1985 geography syllabus and the 1993 draft core syllabus revealed a discrepancy between the content and the general aims and objectives. Thus, while the four traditions of geography are emphasised in terms of presenting a holistic approach to content, rural settlement geography as prescribed in the content lays stress on only two of these traditions. This discrepancy is compounded by the fact that the general aims and objectives of the syllabus emphasise the need for a learner-centred approach. There is a need to implement corresponding teaching strategies such as fieldwork, games and simulations, which are currently largely ignored. The above shortcomings tend to reduce the role of rural settlement study. The relatively low status in terms of time and space allocated to rural settlement further reduces the relevance of rural settlement to pupils from an essentially rural background.

6.2.2. Rural settlement in selected textbooks

Textbooks, as the primary resource used in Venda secondary schools, were analysed to establish:

- i. The way in which textbooks interpreted the syllabus in relation to the four main traditions of geography.
- ii. The status accorded to rural settlement, not only in terms of the space allocated, but also in terms of the approach to this section of the curriculum.
- iii. The relevance of rural settlement to the Venda pupils in terms of the development of concepts, the use of illustrative materials, choice of examples and use of suggested activities.

Most significant in this study is the finding that textbooks do not cover all four main traditions of geography. A textbook may excel in one or two of the traditions while neglecting the rest. Moreover the textbooks do not cover all the topics suggested by the syllabus, and cover some at a very superficial level.

The following facts were highlighted in textbook analysis:

- i. In all the textbooks analysed, with the exception of New Window on the World, teachers are given few guidelines as to how to make this section of the syllabus relevant to the pupils.
- ii. Concepts used in the teaching of rural settlement are not well explained in all the textbooks analysed

- iii. Textbook analysis further revealed that many of the illustrations depict the 'White' culture in South Africa and are supplemented by overseas examples rather than that of 'Black' areas.
- iv. There is not enough progression of concepts as many of them are learnt for the first time at Standard 10 level.

These negative points notwithstanding, the textbooks examined have the following positive aspects:

- i. They are almost completely free of the bias and stereotyping that previous research relating to textbooks has identified.
- ii. They attempt to apply the notion of a spiral curriculum which involves learning from known to unknown and the simple to the complex.

The teacher who relies entirely on textbooks as the only resource will therefore not be able to impart a sense of relevance to pupils coming from a rural background. It is however accepted that no textbook designed for as heterogeneous a population as that of South Africa can achieve the sort of relevance needed by individual communities. This highlights the need for teacher education in the use of resources which are at hand in the teaching of a local environment.

6.2.3 Rural settlement in senior certificate examination papers

Department of Education and Training senior certificate examination papers from 1985 to 1989 were analysed in respect of the rural settlement section in terms of Bloom's taxonomy, as adapted by van Jaarsveld (1988). The analysis

of the senior certificate examination papers revealed the following:

- i. The marks awarded to both rural and urban settlement indicated that examinations placed greater emphasis on urban than on rural settlement. That examiners do not treat the two sections equally was shown by the fact that marks allocated to urban settlement were greater than those for rural settlement.
- ii. Further analysis of the questions revealed the domination of low order skills which require pupils only to recall factual information. Pupils were not given a chance to think and critically assess a situation as they are only required to reproduce facts.
- iii. The examination questions also revealed that rural settlement is examined in such a way that it does not encourage the development of positive attitudes towards the rural landscape. For instance, few questions on values and attitudes were reflected in the 1988 examination paper, whilst those of 1985 to 1987 did not include questions which embrace value and attitudes at all. This is an indication that values in geography are not really considered by the examiners. These findings corroborate Nyikana's (1988) statement that examiners find it difficult to set questions which will examine pupils' values. Thus they tend to concentrate on the cognitive rather than the affective domain.

The D.E.T. examinations therefore do not encourage teachers to use the sorts of participatory learning strategies which enhance the status of rural settlement. There is also very little emphasis placed on the interdependence between the rural and urban landscape, or the need to preserve and conserve the rural environment. This reduces the chances of pupils developing empathy or appreciation for their rural settlement heritage.

The importance of the examination as an internal means to bring about change in teaching approaches and teaching strategies cannot be over-emphasised. Therefore when analysing teaching practices, it was not surprising to find that the teachers' attitudes to rural settlement are largely shaped by the approaches used in the senior certificate examination papers and those of the textbooks, rather than by the syllabus aims and objectives.

6.3 TEACHERS' AND PUPILS' PREFERENCES AND ATTITUDES TO THE TEACHING OF RURAL SETTLEMENT

The results of the survey of teachers and pupils revealed the following attitudes to rural settlement:

- i. The majority of the respondents preferred to teach physical geography rather than settlement geography, whilst pupils prefer rural settlement.
- ii. The survey also revealed that both the teachers and the pupils generally find the teaching of rural settlement easy and interesting.

The similarities and recurrence of some of the findings from both questionnaires and interviews seem to confirm statements expressed earlier about teacher conservatism with regard to current teaching strategies. Nevertheless the suggestions put forward by both teachers and pupils generally call for changes in the presentation of rural settlement.

6.4 THE RELEVANCE OF THE TEACHING STRATEGIES CURRENTLY EMPLOYED IN VENDA SECONDARY SCHOOLS.

The relevance of the current teaching strategies was evaluated by means of questionnaires. It is interesting to note that the research results correspond with what has been discussed in Chapters 1 and 2, that teachers have recourse to teacher-directed learning rather than learner-centred approaches. This is confirmed by the results which indicated the predominant use of textbooks and the chalk and talk method.

Although the teachers claimed to use enquiry and problem solving methods, they have problems using resources that can be employed to enhance the strategies mentioned above.

The majority of the respondents also revealed that they do not make use of teaching strategies and stimulus materials such as videos, slides, games and simulations.

A further aspect revealed by the respondents was that they have never implemented fieldwork techniques in their local surroundings. Generally research findings proved to be significant in terms of considering the needs of the pupils when drawing up the curriculum. Further efforts to create relevance in the teaching of rural settlement to 'Black' pupils in South Africa must take into account their 'needs'.

6.5 RECOMMENDATIONS

Table 6.1 draws a comparison of the teachers' and pupils' perceptions of the problems encountered in the teaching of rural settlement.

TABLE 6.1

A COMPARISON BETWEEN TEACHERS' AND PUPILS' PROBLEMS

WITH REGARD TO THE STUDY OF RURAL SETTLEMENT

TEACHERS' PROBLEMS	PUPILS' PROBLEMS
1.Lack of funds to purchase resource materials.	1.Language problems.
2.Inability to use local maps.	2.Unable to understand concepts used in rural settlement.
3.Inability to organise and administer field trips.	3.Concepts not well explained.
4.Lack of conducive learning situations for pupils to express themselves.	
5.Textbooks do not correlate with the practical situations in South Africa.	
6.No geography classroom.	

These results revealed the fundamental problems that the teachers and the pupils have with regard to the teaching of rural settlement. Fieldwork has proved to be a significant part of a geography teaching program as it includes the continuing element of observation. Nevertheless the majority of geography teachers experience problems in administering and conducting fieldwork.

Table 6.2 however indicates that the pupils and the teachers have suggested almost identical things. Pupils' suggestions highlighted the need for a learner-centred

approach. Their suggestions relating to group work can be linked to the problems of language as indicated in Table 6.1.

TABLE 6.2
SIMILARITIES AND DIFFERENCES WITH REGARD TO
SUGGESTIONS BY BOTH TEACHERS AND PUPILS

TEACHERS' SUGGESTIONS	PUPILS' SUGGESTIONS
1. Fieldwork	1. Fieldwork
2. Local examples	2. Local examples
3. Variety of resources	3. Pictures, video and film
4. -	4. Groupwork
5. Geography room	5. -

In the light of the pupils' and geography teachers' suggestions, the following recommendations are made:

6.5.1 General recommendations for the rural settlement section of the geography syllabus

The following recommendations are made to improve the presentation of rural settlement:

- i. That the syllabuses, textbooks and examinations be restructured in order to accommodate all the four traditions of geography and to consider the 'needs' of the pupils. Thus the above-mentioned aspects should take into account the local environment.

- ii. The in-service training centres should offer courses on how to administer fieldwork.
- iii. The need for highly qualified subject advisors who will help the teachers who are experiencing problems with the implementation of current teaching strategies.
- iv. Initial teacher training to develop skills related to interpretation and syllabus development.

6.5.2 Specific recommendations with regard to the improvement of the teaching of rural settlement

The suggestions below are related to the need to improve the teaching of rural settlement:

- i. Fieldwork is regarded as the most relevant technique to be implemented in Venda secondary schools. The background of the geographical study area (Chapter 5) revealed a wealth of accessible resource materials which can be developed for fieldwork.
- ii. The need for geography teachers at tertiary level to develop curriculum units based on local sites in Venda may be of great help to the geography teachers at secondary school level.
- iii. Using a variety of techniques is the heart of geography. There is a need to implement techniques such as case studies at secondary school level. Geography teachers should be encouraged to develop a case study of their own local environment together with their pupils.
- iv. Although it is accepted that there is no electricity, geography teachers at secondary school level should make use of worksheets and other accessible resources and strategies which facilitate bringing

reality into the classroom, thus applying the theory to the actual environment.

- v. The teachers training colleges in Venda should establish a project that will include geography teachers at secondary school level in workshops related to problems in geography.
- vi. Greater emphasis needs to be placed on local environmental problems in the rural landscape in relation to the developmental theory contained in the new syllabus, i.e. basic needs.
- vii. When settlement types, locations and patterns are discussed, the use of local 1:50 000 topographic and 1:10 000 orthophoto maps ought to be an essential component of the teaching of rural settlement geography. Thus the local maps should have first priority when one is thinking of resources for teaching geography.
- viii. Teachers should be taught how to utilise the local maps and apply them to the local environment and to other areas which are different. This could be done effectively if the tertiary educators for geography were to establish a project or even to establish geography teachers study groups in each region.
- ix. Geography teachers should be encouraged to teach their pupils field sketching and field mapping. This may be done by tertiary educators by inviting geography teachers to local field trips where they are able to practice field sketching and field mapping.

6.6 LIMITATIONS OF THE STUDY

As a result of the focus of the study, it was not possible to do a complete qualitative analysis of the available textbooks. It was however necessary to consider the textbooks most commonly used in order to assess the place of rural settlement in the syllabus. The survey consisted of questionnaires and semi-structured interviews which should have been more numerous to increase validity, but due to costs and time, this was not possible. Furthermore, the analysis of the concepts and illustrations tended to be somewhat subjective as an overview of each of these aspects was presented, rather than a detailed analysis of each concept and illustration.

6.7 AREAS FOR FUTURE RESEARCH

In the light of this research, further research is needed in the following areas:

1. An investigation of teachers' attitudes towards changes in the teaching of geography.
2. An investigation of pupils' attitudes towards geography.
3. 'A search for educational relevance': an investigation into the 'needs' of pupils with regard to the teaching of geography at secondary school level.

Although this study is based on an investigation carried out in Venda secondary schools, it may be referred in general to South African schools, as textbooks, syllabuses and examinations are almost the same in all D.E.T schools and in the four provinces of South Africa.

6.8 SUMMARY

Rural landscape needs to be conserved and preserved. Learning through geography provides the means for pupils to develop a caring attitude to their local environment. If this is not done, pupils will never fulfil the aims of environmental education.

LIST OF REFERENCES

1. Bailey, P., (1974). Teaching Geography. London: David and Charles.
2. Bailey, P., and Binns, T. (eds.) (1987). A Case for Geography. Sheffield: The Geographical Association.
3. Ball, C., and Ball, M., (1973). Education for Change: Community Action and the School. Harmondsworth, Middlesex: Penguin.
4. Ballantyne, R.R., (1986). Changes in secondary school Geography Education: Teacher attitudes and practice. Unpublished Master's Thesis. Cape Town: University of Cape Town.
5. Ballantyne, R.R., (1988). Geography's position in the secondary school curriculum - pupil enrolment trends. South African Geographical Journal of Geography, Vol.70.
6. Barrow, R., (1982) The Philosophy of Schooling. Brighton: Wheatsheaf Books Limited.
7. Beddies, R., (1973) Developing the curriculum in Walford, R., (ed) New directions in Geography teaching. London: Longman.
8. Boardman, D., (ed) (1986). Handbook for Geographical Teachers. Sheffield: The Geographical Association.
9. Bodem, P., (1976). Developments in Geography Teaching. London: Open Books.
10. Catling, S., (1987). Criteria for geographical content in primary school curriculum in Bailey, P., and Binns, T., (eds.) (1987). A case for Geography. Sheffield: The Geographical Association.
11. Chisholm, M., (1962). Rural settlement and land use. London: Hutchinson.
12. Clark, E.A.G., (1989). Geography as a school subject in South Africa, 1839-1989. South African Geographical Journal. 71 (1) 46-55.
13. Clout, D.H., (1972) Rural Geography: An introductory survey. Oxford: Pergamon.
14. Cohen, L., and Manion, L., (1989). Research methods in Education. Sidney: Croom Helm.

15. Coltham, J., (1990) Assessing History textbooks. Teaching History. 3 May 1970.
16. Craig, J.K., (1980). Methods of Arousing and Maintaining the Interest of Secondary School Pupils in Geography, in Nicol, I.G., The Geography and the School. Dennesig: The Society of Geography.
17. Dane, F.C., (1990). Research Methods. California: Wordsworth.
18. Delaney, B.A., (1987). Travel Your World 7. Johannesburg: Maskew Miller Longman.
19. Dunlop, S., (1976). Places and People: A Guide to Modern Geogrpahy Teaching. London: Henneman.
20. Department of Education and Culture: Administration: Assembly: 1993. Draft core syllabus for Geography: Higher and Standard grade.
21. Department of Education and Training. Administration: 1985. The Secondary School Geography Syllabus for Geography: Higher and Standard grade.
22. Department of Education and Training. Administration 1993. Draft coresyllabus for Geography. Higher and Standard grade.
23. Earle, J.L., et al (1987). New Window on the World 10. Johannesburg: Juta and Company.
24. Earle, J.L., et al (1988). New Window on the World 7. Johannesburg: Juta and Company.
25. Encyclopaedia Britannica (1979). William Benton. Chicago. Vol 12. pp. 360
26. Encyclopaedia Britannica (1979). William Benton. Chicago. Vol.14. pp. 38
26. Everson, J.A., and Fitzgerald, B.P., (1969). Settlement Patterns. London: Longman.
27. English Language Dictionary (1987) Londen: Collins Publishers
28. Garcia, J., and Armstrong, D.G., (1979). textbook evaluation: A simple procedure for identifying treatment of selected groups. The social studies. Volume 70.
29. Graves, N.J., (1979). Curriculum Planning in Geography. London: Heinemann Educational Books.
30. Graves, N.J., (1980). Geographical Education in Secondary

Schools. Sheffield: The Geographical Association.

31. Gowing, D., (1973). A fresh look at objectives in Walford, R., (ed.) New Directions in Geography Teaching. (1973) London: Longman Group Limited.
32. Griffiths, M., (1987). The teaching of skills and the skills of teaching: a reply to Robin Barrow. Journal of Philosophies of education, Vol.2, p.203-206.
33. Hall, D., (1984). Knowledge in the Geography Classroom in Fien, J., Gerber, R., and Wilson P. (eds.) (1984). The Geography Teacher's Guide to the Classroom. (1-12) Melbourne: Macmillan Australia.
34. Huckle, J., (1973). Geographical Education: Reflections and Actions. London: Oxford University Press.
35. Huckle, J., (1982) Humanistic Geographical Education- An introduction in Wiegand P., and Orrel, K., (1982) New Leads in Geographical Education Sheffield: The Geographical Association
36. Hurry, D.B., et al (1987). Exploring Geography Standard 10. Goodwood: Via Afrika Limited.
37. Jacques, D., (1984). Learning in groups. London: Croom Helm.
38. Jensen, A.H., (1985). Geography: Its History and Concept. London: Croom Helm.
39. Johnston, R.J., (1985). Geography in the 1980s in Kent, A., (ed) (1985). Perspective on a changing Geography. Sheffield: The Geographical Association.
40. Knaap, B., (1988) Systematic Geographer. London: Unwin Hyman.
41. Keeves, J.P., (ed.) (1985). Educational Research, Methodology and Measurement: An International Handbook. New York: Pergamon press.
42. Ledger, R., (1978). The New Geography in South African high school teaching. Unpublished Master's Thesis: Cape Town: University of Cape Town.
43. Levy, B., (1984). Geography teaching in South African schools for Whites (1800-1980). Unpublished Master's Thesis: Johannesburg: University of Witwatersrand.
44. Maxwell, J., (1985). The future of Textbooks - Can they

help individualise Education? NASS Bulletin, pp68 - 74.

45. Milner, J.S., (1975). Teachers and New Geography. Teaching Geography. Nov. pp78-79.
46. Money, D.C., (1972). Patterns of settlement: Human Geography in Colours. Evans Brothers.
47. Nicholson, J.M., and Morton, J.G., (1984). Discovering Man's Environment. Geography Standard 7. Pietermaritzburg: Shuter and Shooter.
48. Nicol, I.G., (1980). Teaching Rural Settlement Geography. Journal of Geography, 5 (1).45-55.
49. Nightingale, C.S., (1977). An analysis of the education potential of sites in the Cape Peninsula for secondary school fieldwork in environmental studies. Cape Town: U.C.T.
50. Ntlangani, B., (1988). Curriculum and the People in Alternative Educative Education: The Road to a Democratic Future. 21st Annual Conference Report. Bellville: CTPA - UWC 20-23 June.
51. Nyikana, N., (1988). The responses of Standard 9 pupils to valuing strategies in Geography. Unpublished M.Ed thesis. Grahamstown: Rhodes University.
52. Patmore, J.A., (1980). Geography and Relevance. Presidential Address of the Geographical Society. Geography Vol.2.
53. Pattison, W.D., (1973) The four Traditions of Geography in Bale, J., Graves, N.J., Walford, R., (eds) Perspective in Geographical Education. Edinburgh: Oliver Boyd. pp 2-11.
54. Pearce, T., (1987). Teaching and learning through direct experience, in Bailey, P. and Bins, J.A., (ed) 1987. A Case for Geography. Sheffield: The Geographical Association.
55. Preston-Whyte, R., (1982). Environmentalism in geography. South African Geographical Journal 65 (1) 1-12.
56. Rawling, E., (1980). Geography into the 1980's. Sheffield: The Geographical Association.
57. Roberts, B.R., (1983). Problems and Sources in Historical Geography: Studying Rural Settlement. Teaching Geography. Vol.8, p.122-127. January
58. Sanders, W.B., and Pinhey, T.K., (1983). The Conduct of

Social Research. New York: Holt, Rinehart and Winston.

59. Sarpong, E., (1992). The attitudes and perceptions of Secondary School Pupils in Transkei towards Geography: A Case Study of the Butterworth District. Unpublished Master's Thesis. Grahamstown: Rhodes University.
60. Stenhouse, L., (1981). An Introduction to Curriculum Research and development. London: Heinemann.
61. Steyn, J.N. et al (1986). Active Geography Standard 10. Cape Town: De Jager - Haum.
62. Swanevelder, C., Kotze, J., van Huysteen, M. and Hanekom, F. (1976). Senior Geography for Standard 10. Goodwood: Nasou.
63. Swanevelder, C., Kotze, J. and Roos, T., (1987). Senior Geography Standard 10. Higher and Standard Grades. Goodwood: Nasou.
64. van Jaarsveld, P., (1988). The intergrative nature of the synoptic Weather Map in relation to adolescent cognitive structures and teaching of senior secondary meteorology - climatology. Unpublished Master's Thesis. Grahamstown: Rhodes University.
65. Walford, R. (ed.) (1973). New Directions in Geography Teaching. London: Longman.
66. Webster, A.S., (1979). Field studies in the Teaching of Geography with special reference to Natal. Pietermaritzburg: University of Natal.
67. Wiersma, W., (1986). Research Methods in Education. An Introduction. Boston: Allyn and Bacon.
68. Woods, R.G., and Barrow, R.St., (1979). An Introduction to Philosophy of Education. London: Methuen and Company Limited.

PERSONAL COMMUNICATIONS

1. Clarck, E.A.G., (1990). Associate professor, Education Department. Rhodes University.

APPENDIX 1

II Settlement game†

The settlement game unit as reproduced here is the version of C. A. Joseph of Marlborough College, Wiltshire, based on an idea of R. T. Dalton. It is used in a first-year (eleven- to twelve-year-old) course on the local region, but has also been used effectively with older pupils.

The game is designed to show pupils that the location of settlements depends on many interacting factors, some of which reflect the technology of earlier peoples. It also attempts to emphasize some of the complexity underlying settlement location that is not readily apparent from 'pure' study of the 1" Ordnance Survey. Each pupil is given the information sheet and the map. Their aim is to build up a settlement pattern, a route network and a regional organization (parishes). The actual game takes only a single or double period, depending on ability. Follow-up is given as much time as the game itself, and involves comparison and discussion of the patterns evolved.

As used at Marlborough, the unit is followed by a tracing of parish boundaries from the 1" to 1 mile OS map of the south side of the Vale of Pewsey (Sheet 167), and the plotting of settlements within the parishes. Shapes derived from the game are then compared with those derived from the map and reasons for the differences discussed. This (one hopes) leads on to an understanding of the local region in Saxon times, and so back to the actual settlements, and the factors affecting their locations.

Extension of the game

It is possible, of course, to make this a more sophisticated game with higher ability levels and age-ranges. Actual geological variation can be introduced as a factor, and mathematical weightings provided for the various factors.

An example of this can be found in chapter 2 of *Settlement Patterns* by J. Everson and B. P. FitzGerald (Longman).

Information Sheet

In the sixth and seventh centuries A.D. Anglo-Saxon settlers made their way to southern and eastern England. They came in small bands, usually peaceably, to a country where little land had yet been cleared for cultivation. Their tribal organization was strong, so that their settlements were established as clusters of houses around which lay arable land. But equipment was primitive, and although they had better ploughs than their predecessors, they could not cope well with areas of heavy soils. You must try and imagine an England immensely different from the present day. All land near rivers was liable to flood in winter, and most of the lowland was still forested. Only the lighter, sandy soils and such hills as the chalk downlands, would have been more open country with grass and shrubs.

The settlers had several needs, and must have chosen their sites carefully, for most of them have survived over 1,400 years to the present day. In order of importance their needs were:

- 1 Access to a constant supply of water. Water could not be carried.
- 2 Access to cultivable land. Travel wasted work time.
- 3 Avoiding waterlogged land. This was no use for crops or houses.
- 4 Access to woods. Timber was used for buildings and fuel, and acorns etc. provided food for pigs.

In order to meet these needs the settlements were spread about 1 mile apart in the best conditions, and 2 miles or more if the circumstances were worse.

The map (fig. 4) shows the sort of country that the Anglo-Saxons might have found. On this map:

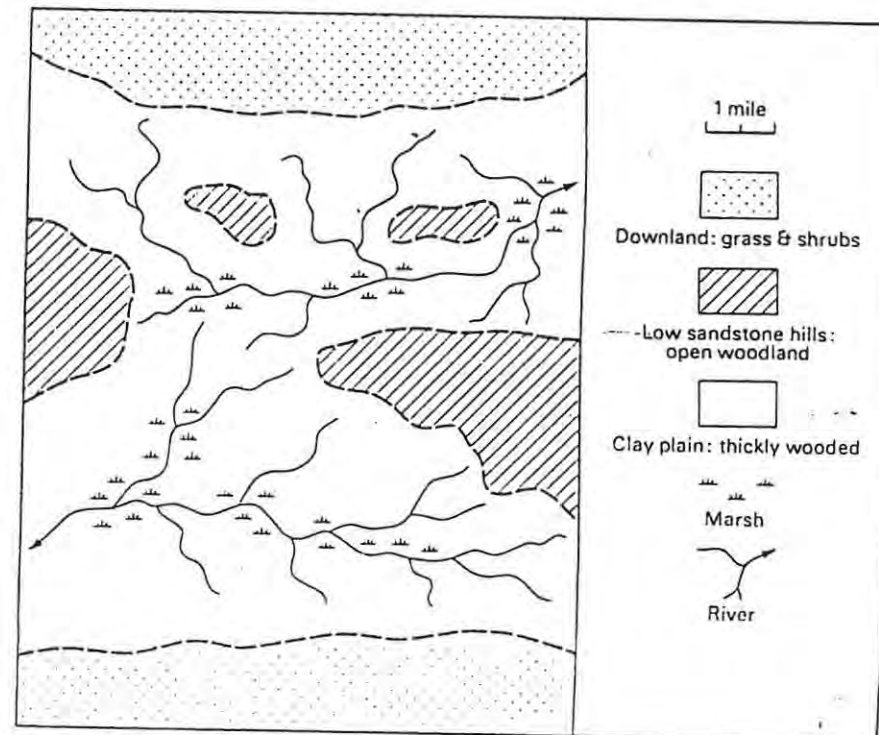


Fig 4. Map for settlement game

the maximum number of attractions may be seen when travelling a minimum distance. What route should he plan?

Suggested procedure for tackling the problem:

- 1 Pupils study maps, books, brochures, etc. and list the main tourist attractions of the Lake District.
- 2 Class discussion about the reasons that places are 'tourist attractions'. Consideration of lists and of differences within them. Can a rank order be established for the attractions? If so, on what basis?
- 3 Pupils plot agreed 'attractions' on a map.
- 4 Pupils consult maps of the road network of the area and determine the most economical route (i.e. the one which gives maximum value for minimum expense).

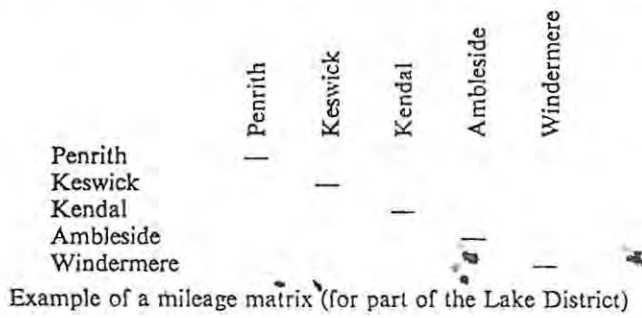
NB Route minimization is a complex process when dealing with a highly developed network, but in this area of adverse relief, there is, in fact, little choice of route possible.

Problem three

A multiple bakery manufacturer wishes to build a factory in the Lake District. From this factory, fresh bread will be delivered daily to all the towns. What is the best location for such a factory, presuming that the baker wishes to minimize his costs of distribution?

Suggested procedure for tackling the problem:

- 1 Preliminary study of a map of the area. Possible choice of a location by eye.
- 2 Pupils construct a 'mileage matrix' (see below). In the appropriate box they fill in the shortest road distance between each town and its neighbours.
- 3 From this, discuss which town appears most favourably placed to supply all the others in the area. Does this agree with the decision reached by eye alone?
- 4 Further discussion - relate back to what was found out about industry in Problem 1. Relate also to population factors. Might there not be a need for 'weighting' some of the mileages, in proportion to the size of the population of the towns? Would this make any difference to the decision reached in 3?



NB This problem introduces the theme of market size and distance from markets as factors in the location of industry. It may be useful at the end of this unit to go back to consider the pattern, scale and type of industry that the Kompass data reveals in Problem 1 (and see below).

Name of town	Name of factory	No. of employees	Name of town	Name of factory	No. of employees
Carlisle	Barwick Bros.	100	Carlisle	Linton Tweeds	90
	Bendall	100		Millican	70
	Border TV	83		Niven	50
	BRB Trust Estate			Otterburn Mill	100
	Management Scheme	1005		Pallinson Peat	9
	Engineering	60		Penguin Confectionery	350
	Carrs Biscuits	1550		Porter Engineering	60
	Cavagham & Grey	400		Pratchell	200
	Coulthard	150		Reid Bros	160
	Cowen Sheldon	300		Richardson Moss Litter	90
	Cowen	50		Robertson	200
	Dinky Wear	35		Robeson Border Transport	175
	Eden Construction	225		Teescott	200
	Ready Mix Concrete	30		Securier	100
Eskimo Manufacturing	80	Simonacco	130		
Ferguson Bros	800	McAlpine	320		
Glen Eden Textiles	255	Stenhouse Northern			
Hackney	220	Todd	100		
Harradine	350	Watt	90		
J. K. Innes	100	Sundar Fabrics	142		
Kangol Helmets	100				
Kangol Magnet	250				

An extract from a Kompass directory.

APPENDIX 2

TEXTBOOK EVALUATION:

A Simple Procedure for Identifying Treatment of Selected Groups

JESUS GARCIA
DAVID G. ARMSTRONG

In recent years, representatives of racial and ethnic groups and representatives of women's groups have pressed for an enlarged role in decision making at all levels. One major effort that has been directed toward examination of instructional materials designed for use in the schools. Particularly, textbooks have come under intensive scrutiny and concerned individuals have attempted to discern how authors are treating certain groups both in terms of the *quantity* of information provided and in terms of the *quality* of information provided.

Interest in textbook evaluation of this type has generated a need for assessment procedures that can be used by large numbers of individuals after relatively short training periods and that yield patterns with respect to a single text that remain relatively constant regardless of who is doing the evaluating. Some presently available techniques have been fairly successful in meeting these twin criteria. Some have been relatively strong in one area, but weak in the other. At this point, it is fair to say that no single instrument has established itself as definitive.

In the absence of a clearly superior procedure, committees charged with making comparative judgments about textbook authors' treatment of certain groups properly must rely on a cluster of assessment techniques. The procedure being introduced here is suggested as an approach that has potential for providing some kinds of information not generally retrieved by other techniques. Its flexibility provides the possibility of targeting almost any group. Its

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particular strengths relate to the issue of inter-rater reliability.

Before the operational features of the Garcia-Armstrong Matrix System are explored, it might be useful to discuss briefly several other techniques that have been widely promoted. One of these, the NEA Checklist, distributed by

the National Education Association (1975), identifies certain broad themes, makes a general prescriptive statement related to the theme, and then asks evaluators to respond to related questions focusing on a specific textbook with either a yes, a no, or a not applicable. A major stress in the NEA Checklist is *cultural pluralism*. Under the cultural pluralism theme, the checklist makes the following prescriptive statement: "U.S. history textbooks should portray the cultural pluralism of our nation as a value to esteem and protect." Raters are asked to respond yes, no, or NA to questions such as "Does this textbook acknowledge the legitimacy of a variety of acceptable life styles" and "Does this textbook describe the multi-directional nature of U.S. history south to north, east to west, west to east?"

Ease of Use

A strength of the NEA Checklist is its ease of use. Little prior training is needed. But, there are several severe limitations. First of all, there is no specific direction regarding how content in an entire textbook is to be weighed in arriving at conclusions resulting in a checking of yes, no, or NA. For example, it is quite possible that some sections of a text might indeed "acknowledge the legitimacy of a variety of acceptable life styles," whereas other sections might promote as acceptable only a narrowly-defined life style. No protocols are provided to help raters weigh the evidence in reaching a conclusion in such situations.

There is a serious question about reliability of judgments among numbers of individual raters using the NEA Checklist. This results because of a lack of functional criteria upon which judgments are to be made. What, for example, does it mean for a text to "acknowledge the legitimacy of a variety of acceptable life styles"? Clearly, different raters might place different interpretations on the intent of the phrase that could result in dramatic differences in judgments made with respect to a single title. The lack of functional criteria makes generalizing from ratings made according to the NEA checklist a very hazardous undertaking.

Another technique that has received a great deal of attention recently has been the Council on Interracial Books for Children's (CIBC) *Stereotypes, Distortions and Omissions in U.S. History Textbooks* (1977). The CIBC content analysis instrument specifically identifies the following ethnic or minority groups and restricts analysis of texts to content related to these groups. African Americans, Asian Americans, Chicanos, Native Americans, Puerto Ricans, and Women. In sections focusing on each of these groups, a list of specific *facts* are provided that reflect contents frequently thought to be absent in textbooks that have not presented a balanced treatment of these groups. The rater is charged with looking through a textbook of interest with a view to determining whether each fact list is present. Using a relatively simple numerical system bases on quantity and quality of coverage, the rater, responding to each fact provided, is asked to place a check mark indicating wheth-

er the text (1) provided incorrect information, (2) provided no information, (3) failed to deal even with the historical period from which the fact was derived, (4) provided limited information, and (5) provided full information. A total of points for each textbook reviewed can be computed. Texts with higher positive totals are thought to provide a more balanced treatment of the targeted group.

Evaluation of CIBC Procedure

Though a great deal of work has gone into the CIBC instrument and it can provide some useful information, the procedure does have some limitations. Clear decision rules helping raters to distinguish between such categories as "provided limited information" and "provided full information" are lacking. Consequently, inter-rater reliability may well be a problem. Finally, the CIBC procedure presumes a rather prescriptive deterministic view according to which history, properly, can only be viewed through what might be termed a "colonial model." According to this view, whites always oppress blacks, men always oppress women, and so forth. Certainly there is no intention to suggest that an intelligent reading of history does not reveal that in many (perhaps even most) instances whites have oppressed blacks and men have oppressed women. The point to be made, however, is that the "colonial model" of history suggests an appealing, but rather simplistic interpretation of events according to which no alternative explanations for plights of given ethnic and other minority groups can be seriously entertained.

For example, one of the "facts" in the CIBC procedure states that "Chicano poverty is the result of past and present racism." Clearly flowing from the "colonial model," this fact suggests that racism, alone, contributed to "Chicano poverty." Surely a social problem as complex as poverty cannot be assumed to be the result of a single causative factor. The CIBC framework would have users believe that historians have reached a consensus in regard to issues that are complex and that the facts flowing from this "colonial model" consensus are to be taken as irrefutable. The motives of those responsible for developing the CIBC procedure surely cannot be faulted. However, in their zeal to redress unbalanced textual treatment they have developed criteria that flow from as rigid and slanted historical perspective as that which they propose to redress.

Focus on Textbook

The Garcia-Armstrong Matrix System for Textbook Analysis introduces several factors that augment kinds of information provided by other available procedures. Additionally, the System, by using functional decision-rules has good potential for establishing high levels of inter-rater reliability. Ease of application is assured by clear guidelines for pinpointing specific sections of a textbook to which

the rater must attend. These guidelines permit time savings not possible when procedures are used that require an entire textbook to be searched for relevant content. Further, the System is very flexible in its focus. It can be used to gather data and render comparative judgments related to textbook authors' treatment of any group that can be identified in advance as a logical focus. Finally, the System focuses only on what has been put in the textbook. This feature assures that conclusions are based on what authors have done and not upon what their possible motivations might have been for failing to include consideration of certain topics in their books.

The System, of course, has limitations. As will be noted in the directions which follow, the individual sentence is the unit of analysis. These sentences are located by exclusive reliance on topical headings included in the index. This practice assumes that indexing has been done professionally and is comprehensive. It also assumes that the complete thought in the individual sentence is the appropriate unit of consideration when judgments are made regarding the adequacy or inadequacy of an individual group's treatment. It is conceivable that other units of analysis, photographs or paragraphs, for example, might provide different general impressions than analysis based on sentences. The trade-off is one of accepting the sentence as a logical unit of analysis in exchange for the great advantage of having available operational decision-rules that make it relatively easy to assign individual sentences to the appropriate category as defined by cells in the Garcia-Armstrong Matrix.

DIRECTIONS FOR USING THE GARCIA-ARMSTRONG MATRIX SYSTEM

1. Select a target group (for example, blacks) and several textbooks designed for use in the same course. Follow directions outlined in remaining steps for each textbook.
2. Look in the index to find pages on which material relating to the target group is to be found.
3. Turn to those pages, and identify all sentences in which there is either a specific mention of the target group by name (e.g., "blacks"), a mention of an individual known to be a member of the target group (e.g., W.E.B. DuBois), or a mention of a pronoun whose antecedent is clearly the target group or a member of the target group (e.g., "They typically do. . ." when the "they" clearly refers back to "blacks" or to whatever other group might have been identified as the target group).
4. Examine each sentence individually to determine which category or cell of the matrix best describes it. In making this decision, read carefully operational decision-rules for assigning sentences to individual categories. When a sentence has been assigned to a given category, place a mark in the appropriate matrix cell. Follow this same procedure until all sen-

tences have been considered and appropriate marks have been noted in appropriate matrix cells.

5. Next, determine the total number of sentences examined. Then, divide the total number of marks in each cell in the matrix to yield a percentage. This percentage will indicate the percentage of total sentences examined that were assigned to each category.
6. Comparative analyses can be made of percentages in each cell between and among the several textbooks being examined. (Readability of the texts in question, however, may limit comparisons.) Judgments can be made from these analyses that may vary in terms of the needs and expectations of those interested in the information.

OPERATIONAL DECISION-RULES FOR ASSIGNING INDIVIDUAL SENTENCES TO EACH CATEGORY OF THE GARCIA-ARMSTRONG MATRIX

(Please refer to the Matrix depicted in Figure 1 as these decision-rules are considered.)

Category 1A

Rules:

- a. The sentence does not compare the target group with any other group that is specifically named in the sentence.
- b. The sentence contains no references either to how the group acts upon the environment (activity) or to how the group reacts to the environment (passivity).

Category 1B

Rules:

- a. The sentence does not compare the target group with any other group that is specifically named in the sentence.
- b. The sentence suggests that the target group tends to act on its environment rather than to react to its environment. (Implies activity, not passivity).

Category 1C

Rules:

- a. The sentence does not compare the target group with any other group that is specifically named in the sentence.
- b. The sentence suggests that the target group tends to react to its environment rather than to act on its environment. (Implies passivity, not activity).

Category 2A

Rules:

- a. The sentence suggests that the target group enjoys a status equal to or higher than that of other groups specifically named in the sentence.
- b. The sentence contains no references to how the group acts upon the environment (activity) or to how the group reacts to the environment (passivity).

Category 2B

Rules:

- a. The sentence suggests that the target group enjoys a

Category 3C

Rules:

- The sentence suggests that the target group enjoys a status lower than that of any other groups specifically named in the sentence.
- The sentence suggests that the target group tends to react to its environment rather than to act on its environment (implies passivity, not activity).

General Ground Rule:

Whenever there is doubt regarding categorizing a sentence as belonging to Category 1A or to some other category, assign the sentence to 1A. This conservative approach is designed to assure that other categories are reserved for sentences in which very clear references are made to issues relating to activity/passivity and to status.

GENERAL CHARACTERISTICS OF EACH MATRIX CATEGORY

Category 1A. (No reference to status vis a vis other named groups and no reference to activity or passivity of target group) Category 1A is basically a "neutral" category. Sentences of this type present information that makes no reference (or at least no *clear* reference) to issues relating to activity and passivity or to status. The following sentences are examples of Category 1A sentences:

In 1910, the black population of Chicago was 150,000.

Category 1B. (No reference to status vis a vis other named groups and a suggestion that activity characterizes the target group). This category is used for sentences describing members of the target group who seem to be more clearly controlling events than being controlled by events. No comparative references to other groups are mentioned specifically in the sentence. The following sentences are examples of Category 1B sentences:

Justin Peterson, a black, led the group safely in the lower valley after a narrow escape during a howling High Sierras blizzard.

Category 1C. (No reference to status vis a vis other named groups and a suggestion that passivity characterizes the target group). In general, sentences in this category make no reference to status and imply an almost fatalistic "what will come will come" attitude on the part of the target group. The following sentences are examples of Category 1C sentences:

The Puerto Rican children huddled together and seemed to be totally confused by the situation.

Category 2A. (Target group's status is equal to or higher than that of other named groups and no reference is made to target group's activity or passivity). In sentences of this type, there usually is a simple description implying the target group to be either equal to or superior in status to any other specifically named group. (The other group must be named. Its existence cannot simply be implied from the context of the sentence.) Though the target

group is portrayed as having a status higher than that of any other named group, no particular mention is made of any particularly active role played by target group members in controlling events. The following sentences are examples of Category 2A sentences:

The scout at the flap of the tent bowed low to greet the Apache representatives but simply stared straight ahead when Percy the black guide, came up and prepared to go in for the meeting. (Assumes Apache target group)

Category 2B. (Target group's status is equal to or higher than that of other named groups and the target group's members are portrayed as working actively to control events.) Sentences in this category depict target group members in a favorable light in which they appear to act on the environment in a way that reflects positively on the status they enjoy as compared to members of other named groups. The following sentences are examples of Category 2B sentences:

Frequently Japanese, equipped with sidearms, were hired as foremen who walked the fields and barked orders at the perspiring Mexican laborers. (assumes Japanese target group)

Category 2C. (Target group's status is equal to or higher than that of other named groups and the target group's members are portrayed as tending to respond passively or react to events). Sentences in this category portray the target group as having a status that is high compared to other named groups. But target group members are depicted as playing passive, follower roles rather than active, leadership roles. The following sentences are examples of category 2C sentences:

The German officers stood in the first row followed in the second row by the Bulgarian officers as the Allied Commander began collecting the swords symbolizing surrender. (assumes Germans are target group)

Category 3A. (Target group's status is lower than that of other named groups and no references are made to target group's activity or passivity). Sentences in this category suggest that the target group enjoys a low status relative to other named groups. No particular references are included that relate to the members of the target group either acting on their environment or reacting to their environment. The following sentences are examples of category 3A sentences:

In 1905, blacks earned 46 percent less on average than did whites. (assumes blacks are target group)

Category 3B. (Target group's status is lower than that of other named groups and the sentence refers to target group members working actively to control events). Sentences of this type depict members of a low status target group who are characterized as actively seeking to influence events. The following sentences are examples of category 3B sentences:

After the Council refused to amend the ordinance giving whites exclusive rights to the favored seats in the front of the bus, black leaders organized a successful economic boycott of white-owned businesses. (Assumes black target group)

Category 3C. (Target group's status is lower than that of other named groups and there is a suggestion that passivity characterizes the target group). Sentences in this category compare the target group unfavorably, in terms of status, with other named groups. The members of the target group are described acting as followers rather than as leaders. The following sentences are examples of Category 3C sentences:

In the evenings, the blacks would sit on the grass while, on the porch above, the white minister assured them that in heaven they would find their reward. (Assumes blacks are target group)

Assessment

Certainly use of the Garcia-Armstrong Matrix System, alone, will not provide a comprehensive assessment of textbooks' ethnic group and minority group contents. However, the procedure does represent an expansion of techniques presently available. Specifically, the Matrix System provides decision-rules that are more operational in nature than those found in many other evaluation procedures. The Matrix System also is characterized by a flex-

ibility that permits it to be applied with respect to any ethnic group or minority group that might be of interest to textbook evaluators. Finally, the system is not complex and can be mastered quickly by classroom teachers, curriculum specialists, and laymen interested in comparative assessments of texts. Used in conjunction with other available procedures, the Garcia-Armstrong Matrix System has the capability of extending the range of information available to those charged with the important responsibility of making judgments about the adequacy of textbook treatments of groups that have not always been fairly depicted.

BIBLIOGRAPHY

- Committee on the Study of Teaching Materials in Intergroup Relations. *Intergroup Relations in Teaching Materials*. Washington, D.C.: American Council on Education, 1947.
- Council on Interracial Books for Children. *Stereotypes, Distortions and Omissions in U.S. History Textbooks*. New York: Racism and Sexism Resources Center for Education, 1975.
- Kane, Michael B. *Minorities in Textbooks*. New York: Anti-Defamation League of B'nai B'rith, 1970.
- Marcus, Lloyd. *The Treatment of Minorities in Secondary School Textbooks*. New York: Anti-Defamation League of B'nai B'rith, 1970.
- National Education Association. *Checklist for Selecting and Evaluating U.S. History Textbooks* (pamphlet). New York: National Education Association, 1975.
- Pratt, David. *How to Find and Measure Bias in Textbooks*. Englewood Cliffs, New Jersey: Educational Technology Publications, 1972.



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APPENDIX 3

TO: TEACHERS OF GEOGRAPHY

QUESTIONNAIRE ON THE TEACHING OF RURAL SETTLEMENT

The purpose of this questionnaire is to gain information about approaches when teaching rural settlement. There are no right or wrong answers. When answering questions, please reflect your own feelings and not what you perceive to be the correct answer.

30
1 - 2

INSTRUCTIONS

- 1 Please answer ALL questions.
- 2 Indicate your response by making a tick in the box next to your answer. i.e.

Female	<input type="checkbox"/>
	<input checked="" type="checkbox"/>
Male	<input type="checkbox"/>
	<input type="checkbox"/>

- 3 Write your answers in the spaces provided

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SECTION A
PERSONAL DATA

1 Sex: Male

Female

3

- 2 Academic qualification:

Matriculation	<input type="checkbox"/>	B.A./B.Sc Education	<input type="checkbox"/>
B.A.	<input type="checkbox"/>	B.Ed	<input checked="" type="checkbox"/>
B.Sc	<input type="checkbox"/>	M.A./M	<input type="checkbox"/>
B.Ped	<input type="checkbox"/>	M.Ed	<input type="checkbox"/>
		D.Ed/Ph.D	<input type="checkbox"/>

4

3 Highest course attended in geography:

None	1
College	2
University Course I	3
University Course II	4
University Course III	5
Honours	6
Masters	7

5 5

4 Present teaching post:

First year teacher	1
Teacher	2
Senior teacher	3
H.O.D.	4
Deputy Principal	5
Principal	6

2 6

5 Highest geography standard taught in 1989:

Std 6	1
Std 7	2
Std 8	3
Std 9	4
Std 10	5

5 7

6 Years teaching geography:

0 - 1

1

2 - 3

2

4 - 7

3

8 - 11

4

12 - 15

5

Over 15

6

2 8

7 On appointment to your present school were you interested in:

Teaching geography only

1

Teaching geography AND one other subject

2

Teaching geography AND more than one other subject

3

1 9

8 If you had the choice, would you prefer NOT to teach geography?

Yes

1

No

2

2 10

SECTION BRURAL SETTLEMENT IN THE CURRICULUM

9 Which one do you find easier to teach?

Rural settlement

1

Urban settlement

2

1 11

10 Does the present syllabus allow you to teach rural settlement in depth?

Yes

1

No

2

1 12

11 Which of the following examples do you use when teaching rural settlement? (Tick each one you use.)

Your local village	1
Your district	2
Venda as a whole	3
Rest of South Africa	4

2	13
3	14
1	15
2	16

12 Which textbooks do you use in your schools?

New Window on the World	1
Senior Geography	2
Exploring Geography	3
Active Geography	4

2	17
2	18
2	19
1	20

13 Do you find the treatment of rural settlement in Standard 7

Very relevant for the pupils?	1
relevant	2
irrelevant	3
very irrelevant	4

2	21
---	----

14 Do you find the treatment of rural settlement in Std 10

Very relevant for the pupils?	1
relevant	2
irrelevant	3
very irrelevant	4

1	22
---	----

15 Is it justified to teach rural settlement in Std 7 and Std 10 only?

Yes	
No	✓

2 23

16 Which is more relevant to your pupils, the rural settlement taught in

OR

Std 7	
Std 10	✓

2 24

Give a reason for your answer: Because it provides them with more a better understanding of their own local rural settlement.

1 25
26
27

17 Teaching the rural settlement of South Africa is a relevant topic in your school. Circle the correct answer.

Strongly agree (1); Agree (2); Undecided (3); Disagree (4); Strongly disagree (5)

2 28

SECTION C

ATTITUDE TO THE TEACHING OF RURAL SETTLEMENT

18 Which of the following sections of geography do you like teaching most? Kindly rank them in order of your preference. Write (1) next to the one you like most and (2) next to your second choice. etc.

Climatology	3 1
Geomorphology	2 2
Rural settlement	1 3
Urban settlement	5 4
Regional geography	4 5

3 29
2 30
1 31
5 32
4 33

19 Tick the one that best describes your feelings -

(i) 'Teaching rural settlement is...'

very easy	1
easy	2
average difficulty	3
difficult	4
very difficult	5

2 34

(ii) Your pupils find the study of rural settlement

very interesting	1
intereresting	2
of average interest	3
uninteresting	4
very uninteresting	5

2 35

(iii) The pupils find the study of rural settlement

very easy to understand	1
easy to understand	2
difficult to understand	3
very difficult to understand	4
most difficult to understand	5

2 36

20 'Pupils find the geography of rural settlement easier to understand than that of urban settlement'. Do you agree? Put a circle round your choice.

Strongly agree (1); Agree (2); Undecided (3); Disagree (4); Strongly disagree (5)

2 37

SECTION D

THE TEACHING OF RURAL SETTLEMENT

21. Which of the following teaching methods do you use when teaching rural settlement? Answer YES or NO.

	Y	N
Inquiry method	<input checked="" type="checkbox"/>	2
Problem solving method	1	<input checked="" type="checkbox"/>
Chalk and talk	<input checked="" type="checkbox"/>	2
Class discussion	<input checked="" type="checkbox"/>	2
Games and simulation	1	<input checked="" type="checkbox"/>
Worksheet	1	<input checked="" type="checkbox"/>

1	38
2	39
1	40
1	41
2	42
2	43

22. What resources are available in your school for the teaching of rural settlement. Tick those which are available.

Photographs	1
Pictures	<input checked="" type="checkbox"/>
Slides	3
Video	4
Film	5
Textbooks	6
Local maps	7

	44
	45
	46
	47
	48
	49
	50

23. Have you ever taken your pupils out for fieldwork in order to observe the local rural settlement?

Yes	1
No	<input checked="" type="checkbox"/>

	51
--	----

24. If so, how often do you take your students for fieldwork in local areas

- Once a week
- Once a month
- Once per term
- Once per year
- None of the above

1
2
3
4
5

5

 52

25. Indicate the frequency with which you feel the following teaching aids and techniques should be used when teaching rural settlement. Circle your choice.

- 1. Never
- 2. Very seldom
- 3. Seldom
- 4. Often
- 5. Very often

Aids and Techniques

level of frequency

	Never	V Seldom	Seldom	Often	V.often
Photographs	1	2	3	4	5
Pictures	1	2	3	4	5
Field trips	1	2	3	4	5
Worksheets	1	2	3	4	5
Video	1	2	3	4	5
Slides.	1	2	3	4	5
Textbook	1	2	3	4	5
Duplicated notes	1	2	3	4	5
Games & simulation	1	2	3	4	5
Map study	1	2	3	4	5

4
5
3
3
4
4
4
4
1
5

26. Write down some of the problems that you have when teaching rural settlement: shortage of local maps, or
teaching aids in general.

2
2

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27 Please feel free to add whatever you think is relevant to the teaching of rural settlement.

Pupils should be encouraged to make more
references in other books, articles and
newspapers which are relevant to rural
settlement.

1	67
	68
	69
	70

000000

I would much appreciate the opportunity to discuss the teaching of rural settlement with geography teachers in the Thohoyandou district in Venda. Would you be prepared to spare me half an hour at your school? I will telephone you to make an appointment.

Are you, therefore, prepared to discuss the teaching of rural settlement with me.

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

1 31

If "Yes". please fill in your name, address and telephone number.

Name: _____

Address: _____

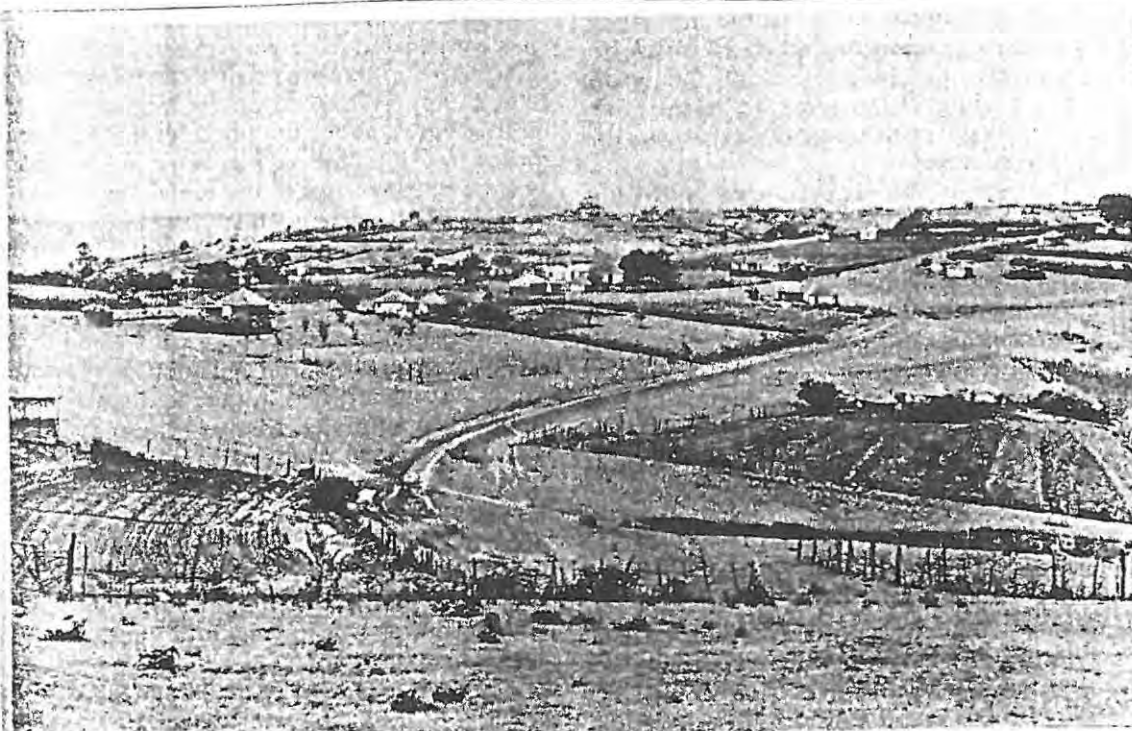
Telephone No: _____

Thank you for your co-operation.

Shoni Mphaphuli
 M.Ed Candidate
 Truro House
 Rhodes University
 GRAHAMSTOWN
 6140

APPENDIX 4**SEMI-STRUCTURED INTERVIEW : STANDARD 10 GEOGRAPHY PUPILS
TEACHING RURAL SETTLEMENT SECTION OF THE GEOGRAPHY SYLLABUS.**

1. Examine the picture that you are given and describe what you see.
2. Are you through with the section on rural settlement.
3. How can you identify rural from an Urban settlement.
4. What are the characteristics of rural settlement ?
5. Did you experience any problems when studying the section of rural settlement.
6. How did the teacher present the section of rural settlement geography
7. Would you prefer to study rural settlement or urban settlement.
8. Which one is more important to you?
9. How can teachers improve the section of rural settlement.



BART STEYN

Source: Swanevelder 1987 : 211

APPENDIX 5A



REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF EDUCATION AND CULTURE
ADMINISTRATION: HOUSE OF ASSEMBLY

NATIONAL EXAMINATIONS

SYLLABUS

FOR

GEOGRAPHY

STANDARD 10
(HIGHER GRADE)

Date of implementation: JANUARY 1987
Date of first examination: NOVEMBER 1987
Implemented by: DEPARTMENT OF EDUCATION AND TRAINING

A. AIMS WITH SYLLABUS**INTRODUCTION TO THE SYLLABUS**

1. Principles on which the syllabus is based
 - 1.1 Nature of Geography
 - 1.2 General education of the pupil
2. Objectives
 - 2.1 Knowledge
 - 2.2 Skills
 - 2.3 Perception
 - 2.4 Appraisal

B. GENERAL REMARKS ON SYLLABUS

1. Teaching Guidelines
 - 1.1 Approaches
 - 1.2 Techniques
 - 1.3 Differentiation
 - 1.4 Evaluation

C. EXPOSITION OF SYLLABUS CONTENT**D. EVALUATION**

A. AIMS WITH SYLLABUS

INTRODUCTION TO THE SYLLABUS

1. Principles on which the syllabus has been based.

1.1 Nature of Geography

Geography as a subject has many areas of overlap with other subjects in both the natural and the social fields of study. This syllabus takes into account the essential nature of Geography. It ensures that:

1.1.1 the four major traditions in Geography are upheld. These are:

- * man-land relationships
- * the spatial perspective
- * the regional viewpoint
- * the earth-science component.

1.1.2 a balance is maintained between Physical Geography and Human Geography

1.1.3 provision is made for both the theoretical and the practical aspects of the subject

1.1.4 sufficient flexibility exists to allow for the changing natures of the subject.

1.2 General education of the pupil

Education is concerned with the development of the "whole being" and not merely with imparting knowledge.

1.2.1 The most important aims, in the long term, are for the pupils to:

- * acquire and develop intellectual skills and abilities which will promote on-going education.
- * adjust to a society that is undergoing rapid and far-reaching social, economic and political changes
- * enter the world-of-work that is becoming increasingly more technologically orientated
- * develop their moral and emotional (affective) attributes.

1.2.2 The teaching of Geography should neither be specifically vocationally orientated, nor entirely university orientated. The syllabus should provide for two groups of pupils:

- * those who will receive no further instruction in the subject, and
- * those who will continue with the study of Geography at a tertiary level.

1.2.3 Although the syllabus is divided into a Junior Secondary Phase and a Senior Secondary Phase, the two phases must be related, and must allow for the progressive development of geographical knowledge, skills and attitudes.

2. Objectives

- * In lesson preparation teachers should bear in mind the higher abilities of comprehension, analysis, application, synthesis and evaluation.
- * This subject should be taught in such a way that pupils develop an eagerness for further study and individual inquiry.
- * Teachers should be aware of the contribution Geography is making to the general education of the pupil. It is this awareness that gives direction to day-to-day teaching.
- * Objectives should be meaningful to pupils and teachers alike, and must constitute both realistic and achievable targets.
- * The type and number of short-term objectives in Geography are numerous, and those selected for a lesson should be closely correlated with the nature of the subject matter and the resources available to the teacher.
- * Objectives can be classified into four main categories:

2.1 Knowledge

- 2.1.1 Pupils should acquire a fundamental body of knowledge which is meaningful and useful to them and which can be applied and reproduced in whatever form is required.
- 2.1.2 Pupils should recognize the unity of knowledge through the links that Geography has with other subjects.

2.2 Skills

2.2.1 No list of skills can be complete. The following should, however, be kept in mind:

- * The importance attached to different skills should be related to the abilities and maturity of the pupils.
- * The development of skills should enable pupils to deal with knowledge in an organized manner.
- * Pupils should gain proficiency in the use of skills through repetition and the application of these skills to new situations.

2.2.2 Geography makes a particular contribution to the following skills:

- * Oracy and literacy: thinking logically, writing concisely, speaking with assurance and accuracy
- * Numeracy: facility with simple statistical methods, graphs and tables
- * Graphicacy: the ability to draw, read and interpret
- * Interpretation: of pictures, photographs and maps
- * Fieldwork techniques: using either the traditional (survey) or the scientific approach.

2.3 Perception

The way in which the environment is 'perceived' in relation to the 'actual' environment influences the pupil's concept of space (spatial conceptualization).

2.3.1 In order to heighten the pupil's perception of their environment, it is necessary for them to:

- * recognize the relationships that exist between people and their environment
- * identify spatial patterns, spatial relationships and interaction (This is closely linked with an understanding of location, distance and accessibility.)

- * be aware of the underlying processes which act upon spatial patterns and relationships and which bring about change.
- * be aware of the world's place to place variety; to recognize the uniqueness of place.

2.3.2 Many studies require pupils to examine the spatial aspects of social and economic problems. Such studies provide opportunities for pupils to respond to problem-solving and decision-making situations through critical, divergent and creative thinking.

2.4 Appraisal

2.4.1 Studies in Geography should promote the formation and reinforcement of positive attitudes and values.

- * This is an emotional objective, for, without appealing to the emotions and without sufficient motivation, learning seldom takes place.

2.4.2 Pupils need to develop a social awareness. This means that they are expected to:

- * recognize the inter-dependence of man
- * acquire a tolerant attitude towards others with different social, economic and political circumstances.

2.4.3 Pupils need to develop an environmental awareness. They need to feel a commitment towards the environment by developing a 'caring attitude'. This means they are expected to:

- * recognize the need for conservation
- * understand that the balance of nature is largely dependent on man's wise management of his environment

They should be aware of how man uses/abuses his environment, particularly the resources available to him; the options and constraints that are placed on his actions

- * realize that the quality of life is influenced by the aesthetic aspects of man's environment as well as by an appreciation of the grandeur and wonder of Creation.

B. GENERAL REMARKS ON SYLLABUS

1. Teaching Guidelines

1.1 Teaching approaches

Teachers should make every effort to create effective learning experiences for their pupils. Whatever teaching approach is used, it is essential to develop a sense of reality in the teaching situation.

1.1.1 The holistic or global approach

- * It is particularly important that the components of the syllabus be viewed as parts of a whole and not as isolated compartments of knowledge.
- * The divisions of the syllabus should be regarded as a convenient means of grouping the characteristics of the individual components.
- * Wherever possible, the relationship and interaction between components should be stressed.

1.1.2 The descriptive versus the problem-solving approach

- * Although there is still room for some of the descriptive techniques of the old traditional Geography, emphasis should be given to a more problem-orientated approach.
- * Pupils should gain insight into the process of decision-making by participating in exercises such as simulation games.

1.1.3 The Systems approach

- * It is recommended that teachers introduce the concept of systems into their teaching.
- * Pupils should be aware that Geography encompasses the study of a very complex man-environmental ecosystem. This complex system is broken down into a number of sub-systems to facilitate its study.
- * Several components of the syllabus could be taught as sub-systems such as those associated with weather, drainage and urban sub-systems.

1.1.4 The inter-disciplinary approach

- * Concepts studied in Geography may overlap with those of other subjects such as Biology, Science and Economics.
- * Inter-disciplinary studies should form part of the broad teaching strategy. This will enhance the value of both the learning content and the learning objectives.

1.1.5 The scientific approach

- * Pupils should be trained in the scientific method of inquiry (statement of hypothesis, followed by the collection and classification of information, and finally, the testing of the hypothesis).

1.2 Teaching techniques

It is recommended that, where appropriate, teachers should:

1.2.1 Integrate the reading and analysis of photographs and maps with the relevant sections of the syllabus. This includes:

- * photographs: vertical, oblique and horizontal (i.e. aerial and ordinary);
- * maps: such as wall, atlas, topographic maps of Southern Africa (particularly the 1 : 50 000 SA series) and municipal maps of the local area.

1.2.2 ensure that pupils become competent in the use of various measuring instruments and other apparatus.

1.2.3 make use of diagrammatic representation of statistics. For example, climatic figures, economic data and population characteristics can be illustrated by means of curves, columns, rectangles, circle segments, dots, colour, pictorial diagrams and isolines.

1.2.4 Introduce quantitative techniques such as means, deviations (range), simple correlations, scattergrams, regression lines and probabilities. Emphasis should be on understanding what the different techniques reflect. Complicated calculations and constructions need not be required.

1.2.5 refer to models. These include:

- * * theoretical models (such as urban and economic models) which need to be tested against the real world. These enable Geography to be studied by means of a more problem-orientated approach
- * physical models (such as globes, tellurions and paper-mâché/sand-tray models) which provide effective representations of the real world.

1.2.6 undertake well planned and meaningful fieldwork

- * This includes: observation and measurement in the field; the recording and processing of data; the interpretation of written and graphical information.

1.2.7 encourage individual and group research techniques

- * Pupil involvement, independent activity, initiative, creativity and independence should constantly be extended.
- * Pupils should learn to rely on personal observations in the field (primary source) and to make use of secondary sources such as: reference books; maps, photographs and diagrams; films, tapes and slides; as well as television, the radio and the press.
- * Pupils need to develop worthwhile attitudes towards learning such as: respect for evidence; a critical appraisal of reporting; a suspicion of simplistic explanations; and a willingness to engage in rational discussion.
- * Pupils need to distinguish between central issues of importance and peripheral issues.

NOTE Pupils should undertake short independent study topics throughout the year on work related to the requirements of the syllabus.

1.3 Differentiation

- 1.3.1 Teachers should not expect the same amount and quality of work from all pupils. Differences in ability must be taken into account. However, each pupil can be expected to work at the highest possible level of his own ability.
- 1.3.2 Most of the topics studied are common to all grades. However,

pupils in different grades will not be expected to study these in the same depth. The approach to, and the control of work for less able pupils should be more direct.

1.4 Evaluation

Evaluation is concerned with both:

- * the measurement of pupil achievement, and
- * the effectiveness of lesson preparation, class management and the achievement of lesson objectives.

C. EXPOSITION OF SYLLABUS CONTENT

(12)

1. General Geographic Techniques

- * Continuation of work done in Stds 8 and 9
- * Wherever possible, the application of maps, aerial photographs and quantitative techniques (including graphical representation) should be integrated with relevant sections of the syllabus.
- * Well planned and meaningful fieldwork should be undertaken, whenever possible. The scientific method should be applied.

1.1 Reading, analysis and interpretation of aerial (oblique and vertical) photographs

1.2 Reading, analysis and interpretation of 1 : 50 000 topographic maps of South Africa.

2. Climatology

(30)

- * Synoptic charts should be used.
- * Relevant concepts learnt in Stds 8 and 9 should be applied.

2.1 Mid-latitude and tropical cyclones

Growth, decay and associated weather; consequences

- * These should be studied on a global scale

2.2 Weather and climatic explanations

2.2.1 Regional scale

Travelling disturbances and anticyclonic circulations and their effect on weather patterns in Southern Africa

2.2.2 Local scale

Valley climates and city climates

* Use Southern African examples where possible.

3. Geomorphology

35

In this section attention should be given to:

- * the drawing and interpretation of cross-sections and profiles
- * the use and interpretation of topographic maps and aerial photographs
- * well planned and meaningful fieldwork, where possible.

3.1 Drainage basins; long- and cross-profiles; stream channel characteristics; flow characteristics (normal and abnormal); river capture; superimposed and antecedant streams

3.2 Topography associated with: horizontal and inclined strata; massive igneous rocks

3.3 Slope characteristics

3.4 landscape evolution

* Cyclic explanation (peneplanation and pediplanation)

* Non-cyclic explanation (e.g. dynamic equilibrium)

4. Ecosystems, Environmental Balance and Conservation

15

* Relate to South Africa (Section 6.1.1)

4.1 Soils

Soil profile; soil forming factors

4.2 Concept of an ecosystem

- 4.3 Ecological processes: energy flow; nutrient cycling; self-regulation
- 4.4 Human impact on the ecosystem: imbalance of the ecosystem; environmental conservation and management

5. Settlement Geography

35

- * Where possible, meaningful fieldwork should be undertaken. The scientific method should be applied.
- * General patterns as well as deviations should be indicated so as to present a global view.
- * South African examples should be used, where appropriate.

5.1 Rural settlement

5.1.1 Definition and function

5.1.2 Types: nucleated and dispersed

5.1.3 Factors influencing site, situation and form

5.1.4 Depopulation of rural areas

5.1.5 Development strategies for rural areas

- * eg. basic needs philosophy

5.1.6 Planning for rural areas

5.2 Urban settlement

5.2.1 Processes and characteristics of urbanization

- * Should be done in a comparative context to present a global view

5.2.2 Factors influencing the following: site and function; situation

5.2.3 Distribution of urban centres

- * Should include concepts of central places; spheres of influence; threshold and range of services; urban hierarchies

5.2.4 Land-use zones (including the rural-urban fringe)

- * Should be considered in terms of underlying forces and processes
- * Concept of urban models should be applied

5.2.5 Urban morphology

5.2.6 Urban problems and possible solutions

5.2.7 Planning improved urban environments

6. Regional Geography

53

6.1 The Republic of South Africa

- * Pupils should be familiar with DISTRIBUTION MAPS, which form an integral part of the regional course, such as: political divisions; chief towns and transportation routes; relief and drainage; major climatic regions.
- * Extensive use should be made of the atlas.

6.1.1 Environmental problems and possible solutions

- * This should include reference to droughts and floods; soil erosion; vegetation imbalance; pollution; wild life extinction.
- * The concepts of ecosystems and environmental balance should be applied. (Refer to Section 4 of the Std 10 syllabus).

6.1.2 Population

Density, distribution, composition, growth and movement.

6.1.3 The economy

- * Relevant concepts studied in Std 9 should be applied.

6.1.3.1 Contribution to the gross domestic product (G.D.P.) by the primary, secondary and tertiary sectors

6.1.3.2 Primary activities

The role of agriculture and mining with regard to factors which promote or hinder development

PAPER 1: 1 1/2 hours (80 marks).

- * Compulsory questions on photo and map reading, analysis and interpretation will be set.
- * The emphasis will be on interpretation, and questions will be related to aspects of Physical, Settlement and Regional Geography.

PAPER 2: 3 hours (320 marks).

- * This paper will be divided into THREE sections.
- * FOUR questions must be answered. ONE from each section and the FOURTH question may be chosen from section A, B or C.
- * Layout of paper for the Higher Grade and the Standard Grade:

SECTION A PHYSICAL GEOGRAPHY

TWO questions set, at least ONE must be answered.

SECTION B SETTLEMENT GEOGRAPHY

TWO questions set, at least ONE must be answered.

SECTION C REGIONAL GEOGRAPHY

THREE questions set, at least ONE must be answered.

- * COMBINED questions may be set in each section; for example, a question in section A may comprise the Geomorphology, Ecology and Climatology components.
- * HIGHER GRADE: Questions may either be SYSTEMATIC or of the COMPOSITE variety. A composite question in one section (eg. Section A) may include aspects from one or both the other TWO sections (B and/or C), provided the marks allocated to aspects from other sections do not exceed 25% of the total marks for the question.
- * STANDARD GRADE: emphasis should be on the SYSTEMATIC type of question.

1.3 Differentiation between Higher Grade and Standard Grade, for both internal and external papers, should be achieved through the type of questions set and on their mark allocation.

6.1.3.3 Secondary activities

The PWV complex and ONE other major industrial region (Durban - Pinetown; South Western Cape; Port Elizabeth - Uitenhage)

- * Attention should be given to problems and possible solutions.
- * Reference should be made to the other major industrial regions.

6.1.3.4 Tertiary activities

The position of the RSA in the world trade system

- * Refer to the balance of payments.

6.1.3.5 Economic development

- * Attention should be given to concepts of centralization and decentralization including border industries and growth points.
- * Reference to spatial models of economic growth could be made to place these developments in a global perspective.

6.2 South West Africa (Namibia) OR ONE Independent State

6.2.1 Factors influencing economic development

6.2.2 Economic links with the RSA

D. EVALUATION

60

1. EXAMINATIONS

1.1 There should be continuous evaluation for all standards:

1.2 A final public examination will be set at the end of the Std 10 year.

1.2.1 Although the examination will be set on the Std 10 syllabus, candidates will be expected to draw on their overall knowledge of concepts and skills developed in previous years.

1.2.2 This examination will consist of TWO papers (400 marks):

APPENDIX 5B



REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF EDUCATION AND TRAINING

SYLLABUS

FOR

GEOGRAPHY

STANDARD 7

Date of Implementation: January 1986

SYLLABUS FOR GEOGRAPHY

STANDARD 7

A. AIMS WITH SYLLABUS

1. A knowledge of Geography is an essential requirement for the person who wishes to establish himself in the world and to have an intelligent understanding of newspapers, radio broadcasts and daily events. Hence the constant emphasis in this syllabus on newspaper and radio based geography and on the greatest possible contact with reality. Geography must keep in step with newspaper headlines, political developments, international trade, the population explosion and other problems. The constant reference to atlases and maps, whenever necessary, cannot be over-emphasized for such an approach.
2. In addition to the stress on the rapidly-changing world, there must, in order to impress the pupil with the wonder of Creation, also be emphasis on the orderliness and regularity of nature as exemplified in the solar system, in the movements of the earth, in the succession of the seasons and in the relatively slow processes of weathering and erosion.
3. The pupil who has followed this course should be able to think and reason "geographically", and to have at his disposal an adequate basic knowledge and insight for future study of the subject in higher standards.
4. Pupils are expected to become familiar with maps. They should understand the essentials of political and physical maps, relating these to news items, and must get to know the South African 1:50 000 sheets of their own area.
5. The subject matter encourages development of the abilities and aptitudes of pupils. Many opportunities should be given for self-activity, independent study and pupil participation. To encourage pupils to assemble and classify facts, provision has been made for the independent study of topics of geographical interest. This is one method whereby the pupils can discover the inter-relationships of geographical phenomena.

B. GENERAL REMARKS ON SYLLABUS

1. Geography is the study of the relationship between man and his environment. It is essential to have a knowledge of the subject if one desires to adapt to the changing world one lives in and to have an intelligent grasp of daily occurrences.
2. MAN with his God-given ability, should always be the focal point of study, and the relationship between man and his environment should be emphasised.

3. The teacher should continually question his reasons for teaching the pupils a specific section of the syllabus. Above all, he must ensure that the pupils enjoy the study of Geography.
4. It is essential for the teacher in each standard to study the syllabus for the previous and the following standards in order to prevent repetition and overlapping and to determine the depth of the instruction.
5. The subject matter may be dealt with either systematically or thematically.
6. Assignments and written tasks which encourage the pupils to do reference work should be undertaken regularly in connection with various aspects of the syllabus; planned excursions for promoting observation are essential.

7. SOME USEFUL ADDRESSES

- 7.1 Government Printer
Private Bag X85
PRETORIA
0001
(For 1:50 000, 1:250 000 and 1:500 000 maps.
(A catalogue of all maps is available).
- 7.2 The Trigonometrical Survey Offices
P.O. Box 624
PRETORIA
0001
(For vertical aerial photographs)
- 7.3 The Director of Statistics
Private Bag X44
PRETORIA
0001
- 7.4 The Hydrographer
South African Navy
Maritime Headquarters
Youngsfield
P.O. KENWYN
CAPE
7764
(For (Nautical) charts)
- 7.5 The Weather
Private Bag X097
PRETORIA
0001
(For daily synoptic charts and other meteorological data)
- 7.6 The Principal Subject Adviser
Department of Education and Training
Educational Tours
Private Bag X212
PRETORIA
0001
- 7.7 The Planetarium
Yale Road
MILNER PARK
JOHANNESBURG
2001

C. EXPOSITION OF THE SYLLABUS CONTENT1. GENERAL GEOGRAPHIC TECHNIQUES (elementary)

Where possible, the emphasis should be on the physical and cultural phenomena of the LOCAL environment. Well-planned and meaningful field work should be undertaken whenever possible.

1.1 Photographs (horizontal, oblique and vertical photographs).
Recognition of typical topographical (physical and cultural) features. (8)

1.2 1:50 000 topographic maps of South Africa.
Revision and continuation of work done in Std 6. - Recognition of typical topographical features, e.g. slopes (steep and gentle), rivers, valleys, plains, waterfalls, watersheds and ravines. (8)

2. GEOMORPHOLOGY

Use South African examples where possible. Introduce the relationship between major land forms and the factors associated with their formation. (Actual processes involved should be left for the Senior Secondary Phase). Consider the influence which these land forms can have on human activities.

2.1 Basic structure of the earth (elementary).
Reference to the three layers, their state and approximate thicknesses. (1)

2.2 Composition and structure of the earth's crust.
Simple explanation of the sial (granitic material) and the sima (basaltic material). (2)

2.3 Rock types : origin characteristics and significance of igneous, sedimentary and metamorphic types, with examples (elementary). (4)

2.4 Major landforms of the earth resulting from internal and external forces.

2.4.1 Internal forces

A simple explanation of the causes and effects.
Show pictures and models of the following:-

2.4.1.1 Continental drift (1)

2.4.1.2 Folding (1)

2.4.1.3 Earthquakes (1)

2.4.1.4 Volcanism (1)

2.4.2 External forces

Recognition of simple landforms resulting from external forces.

2.4.2.1 Weathering and erosion.

Distinguish, in very simple terms-only,

between weathering and erosion. (7)

2.4.2.2 Major landforms resulting from the following forces of erosion and deposition.

(a) WATER

Examples: Rivers, dongas, ravines, canyons, rapids, waterfalls, deltas. Examples derived from neighbourhood visits, pictures, models, slides or films. If possible, excursions should be undertaken for study of such phenomena at first hand, on or a minor scale in a riverbed. Models should be made. (11)

(b) ICE

Examples : U-shaped valley (include fjords as examples), horn, cirque, arête. (4)

(c) SEA

Examples : Cliffs, sandbars, beaches. (2)

(d) WIND

Examples : Dunes, finger-rocks. (1)

2.4.2.3 Collections

Class collections of rock samples of minerals, metals, ores (if possible) and rocks of different kinds for class museum. No theories. The only aim is to allow pupils to learn from observation that there are rocks of different kinds.

3. REGIONAL GEOGRAPHY

Study the following MAJOR REGIONS:

These studies should be undertaken with the aid of maps and other visual aids.

Stress the relationship between climate, plant-life and human occupancy.

This approach should not favour simplistic determinism but should be an appraisal of man's choices from the opportunities provided.

Show the world distribution of these Major Regions.

3.1 Tropical Rain Forests: Zaire OR example of your own choice. (3)

3.2 Monsoon : Thailand OR example of your own choice. (5)

3.3 Cool Temperate West Coast : Paris Basin OR example of your own choice. (5)

3.4 Coniferous Forest : Canada OR example of your own choice. (5)

4. SETTLEMENT GEOGRAPHY

(7)

Field studies of the LOCAL area

As far as possible use South African examples. ONE field study from either rural settlement or urban settlement must be attempted. Field work will have to be undertaken on Saturday or during school holidays if pupils cannot do it on their own.

4.1 Field study on rural settlement

It is suggested that the following headings be used in this study, which is aimed at accentuating settlement:

Introduction

Where the farm is situated, who owns it, size and other items of general interest

Buildings on the farm

These include houses, sheds, chicken runs and other permanent structures

Labour

The number of people needed to run the farm, and whether they are employed full-time or on a general basis. The work done during a typical year

Factors affecting production

Climate, relief, availability of electricity, transport (e.g. for milk, which requires rapid transport) and other interesting points.

Details of production

Methods of production, machinery used, labour, harvesting, handling, marketing and other relevant details.

Problems

Pests, diseases, drought, labour shortage

Influence of the activity on settlement patterns in different areas

Sheep farms in the Karoo, for example, are larger; consequently, farmsteads will be scattered over large areas. Market-gardening, on the other hand, is intensive, and more dwelling units are found in a smaller area.

4.2 Field study on urban settlement

The following are suggested aspects of urban settlements for fieldwork:

Location

Location in relation to other urban settlements and lines of communication

Building types

Single-storeyed houses, double-storeyed houses, shops, schools, factories, flats, churches

Functional zones

Residential, commercial, industrial, educational, recreational - plot on a map

Statistics

Traffic and pedestrian counts: Spend a reasonable period of time at a street-intersection, counting the number and types of vehicles and pedestrians. Diagrammatically present the statistics obtained.

Sphere of influence of a town

Ask people where they come from. Plot the information on a map-sheet and demarcate the sphere of influence.

4.3 Land use, and function associated with rural and urban settlements**4.3.1 Rural settlement - land use**

Study each of the rural land use categories, but choose only one topic from category 4.3.1.1, 4.3.1.2 and 4.3.1.3

Category 4.3.1.1 : Extensive farming

- (a) Maize farm
- (b) Sheep farm
- (c) Cattle farm
- (d) Mixed farm
- (e) Sugar-growing farm
- (f) Wine farm
- (g) Citrus farm
- (h) Wheat farm
- (i) Tobacco farm

(2)

Category 4.3.1.2 : Industrial

Typical rural industries or occupations, such as pottery, weaving, handicrafts, thatching, quarries, lumbering and saw-milling

(2)

Category 4.3.1.3 : Intensive farming

Intensive farming on small holdings e.g. nurseries, market-gardens, fruit-farming or battery poultry-farming.

(2)

4.3.2 Urban settlement**4.3.2.1 Land use zones**

- (a) Residential zones: White, Black, Coloured and Indian

- (b) Central business districts
(Treated very simply)
- (c) Industrial zones : Heavy and light
industries (2)
- 4.3.2.2 Functions
- (a) Marketing
- (b) Manufacturing
- (c) Social
- (d) Others of importance (2)
- 4.4 Services and problems associated with rural and urban
settlements
- 4.4.1 Services, e.g. recreation, education, communication,
health and financial (3)
- 4.4.2 Problems: Social, organisation and environmental (2)
- 4.5 Reasons for the depopulation of rural areas and the de-
velopment of urban areas
- 4.5.1 Urban : Farming, mining, administration, industry,
trade and a combination of these factors (4)
- 4.5.2 Rural: Uncertain existence (owing to variability
of climate, declining soil fertility, excess of births
over deaths - leading to the sub-division of land),
mechanisation (requiring fewer people to cultivate
the land), social factors (attraction of the
cities) (3)
- TOTAL PERIODS 90

EVALUATION

1. A year mark of 50 in Geography is arrived at by totalling the marks obtained in at least six class tests and converting this gross total mark to count out of 50. (Each test, of 15 minutes duration, must count 25 marks).
2. This mark is then combined with an examination mark of 100, giving a final mark of 150.
3. In this examination short answer questions must be set on all sections of the syllabus (listed below) in order to cover as much of the syllabus as possible. The duration of this paper is one hour.

4. Allocation of marks	<u>Marks</u>
4.1 General Geographic Techniques	20
4.2 Geomorphology	30
4.3 Regional Geography	25
4.4 Settlement Geography: One question on each of Rural and Urban settlement	25
Total	<u>100</u>
Year mark	<u>50</u>
Grand Total	<u>150</u> marks

APPENDIX 6A

PRINCIPLES ON WHICH THE CURRICULUM IS BASED

1.1 The nature of Geography

Geography studies the relationship between man and his physio-cultural environment. As such it has many areas of overlap with other subjects in both the natural and the social fields, especially as far as learning contents are concerned. However, Geography has its own perspective on these learning contents. Therefore this subject curriculum provides for:

1.1.1 the use and emphasis of various viewpoints such as:

- * the man-environment relationship
- * the spatial perspective
- * the regional approach

1.1.2 a balance between Physical and Human Geography

1.1.3 continuous integration of practical aspects with the theoretical aspects

1.1.4 sufficient flexibility to allow for the changing nature of the subject

1.1.5 ample opportunities to emphasize, inter alia, the following basic principles of the subject:

- * a global image and holistic approach

It is of vital importance that the components of the curriculum should be viewed as parts of a greater unit and not as isolated compartments

- * spatial differentiation

A study of the spatial aspects of the environment which is characterized by continuous change in form and pattern

- * casual relationships

A study of the factors, reasons, functions and processes responsible for the changes

- * man-land relationship (especially the significance of issues for man)

1.2 General education of the pupil

Education is concerned with the development of the 'whole human being'. The curriculum should therefore:

1.2.1 help to achieve the following aims in the long term:

- * the development of intellectual skills and abilities of pupils to promote on-going education

- * the adjustment of pupils to a society that is undergoing rapid and far-reaching social, economic and political changes
- * the entering of a world-at-work that is becoming increasingly technologically orientated
- * the development of moral and emotional (affective) attributes of pupils to maintain themselves in a demanding world

1.2.2 be directed towards both a vocationally orientated and a university orientated approach to provide for three groups of pupils:

- * those who will receive no further instruction in the subject after the junior secondary phase
- * those who will receive no further instruction in the subject after the senior secondary phase
- * those who will continue with the study of Geography at a tertiary level

1.2.3 relate the junior secondary phase with the senior primary and secondary phases to bring about a progressive development of geographical insight, skills and abilities

2. AIMS AND OBJECTIVES

- * In lesson preparation teachers should bear in mind the higher abilities of comprehension, analysis, synthesis, evaluation and application
- * The affective domain (attitudes and values) should receive appropriate attention
- * This subject should be taught in such a way that pupils develop an eagerness for further study and individual inquiry
- * Teachers should be aware of the contribution Geography is making to the general education of the pupils. It is this awareness that gives direction to day-to-day teaching
- * Short-term objectives selected for a lesson should be closely correlated with the aims of the subject and the resources available
- * Objectives should be meaningful to teachers and pupils alike, and must be realistic and achievable. Learning objectives should therefore be formulated in terms of clearly defined verbs and should be measurable
- * Aims can be classified into a few main categories:

2.1 Observation

The way in which the environment is 'perceived' in relation to the 'actual' environment influences the pupil's concept of space (spatial conceptualization)

In order to heighten the pupils' perception of their environment, it is necessary for them to repeatedly:

- * measure and identify spatial characteristics and patterns such as distance, location, direction, height, depth, distributions and different intensities
- * recognize the world's place-to-place variety and the uniqueness of a place
- * consult audio-visual teaching media, source materials and other conveyors of information to get hold of factual information

2.2 Exposition of relationships

Pupils should be able to explain the observed spatial characteristics of the environment (differences, similarities and changes) in terms of particular functions and processes. A search for reasons and factors responsible for the changing reality exposes specific relationships and provides pupils with the necessary practice in interpretation, conceptualization and the stating of relationships

2.3 Capabilities

2.3.1 No list of capabilities can be complete. The following should, however, be kept in mind:

- * The importance attached to different capabilities should be related to the abilities and maturity of the pupils
- * The acquisition of capabilities should enable pupils to deal with the observed facts in an organised manner
- * Pupils should gain proficiency in the use of skills through repetition and application
- * Pupils should acquire the ability to study the spatial aspects of social and economic problems. Such studies provide pupils with opportunities to respond to situations in which problems could be solved and decisions can be made through critical, divergent and creative thinking

2.3.2 Geography makes a particular contribution to the following capabilities:

- * Oracy and literacy: to think logically, to write concisely and to speak with assurance and accuracy
- * Numeracy: facility with simple statistical methods, graphs and tables

- * Graphicacy: the ability to draw, read and interpret
- * Interpretation: of pictures, photographs and maps
- * Fieldwork techniques: using either the traditional (survey) or the scientific approach

2.4 Appraisal

- 2.4.1 Studies in Geography should promote and reinforce positive attitudes and values
- 2.4.2 Pupils need to develop a social awareness. This means that they are expected to:
- * recognize the interdependence of man
 - * acquire a tolerant attitude towards others with different social, economic and political circumstances
- 2.4.3 Pupils should develop environmental awareness and a commitment to the environment by developing a 'caring attitude'. This means that they should be able to -
- * recognize the need for conservation
 - * understand that the balance of nature is largely dependent on man's wise management of his environment
- 2.4.4 Pupils need to develop worthwhile attitudes towards learning such as: respect for evidence; a critical appraisal of reporting; a suspicion of simplistic explanations; and a willingness to engage in rational discussion
- 2.4.5 Pupils need to distinguish between central issues of importance and peripheral issues
- 2.4.6 Pupils should realize that the quality of life is influenced by the aesthetic aspects of man's environment as well as by an appreciation of the grandeur and wonder of Creation

2.5 Mastering the content

Practising of the above learning objectives should contribute to pupils mastering a fundamental body of factual and useful information

3. TEACHING GUIDELINES

3.1 Teaching approaches

Teachers should make every effort to create effective learning experiences for their pupils.

3.1.1 The holistic approach

- * The components of the course should be viewed as parts of a whole
- * Wherever possible, the relationship and interaction between components should be stressed

3.1.2 The descriptive versus the problem-solving approach

- * Although there is still place for traditional descriptive Geography, emphasis should be given to a more problem-orientated approach
- * Pupils should be trained in the scientific method of inquiry (statement of hypothesis, followed by the collection and classification of information, and finally, the testing of the hypothesis)
- * Pupils should gain insight into the process of decision-making by participation in exercises such as simulation games and role play

3.1.3 The Thematic approach should be emphasized

3.1.4 The inter-disciplinary approach

- * Concepts studied in Geography may overlap in with those of other subjects such as Biology, Science and Economics
- * Inter-disciplinary studies should form part of the broad teaching strategy
- * Notwithstanding the overlap with other subjects, studies should always be undertaken from a geographical perspective

3.2 Teaching aids and techniques

It is recommended that teachers should inter alia:

3.2.1 integrate the reading and analysis of photographs and maps with the relevant sections of the curriculum. This includes:

- * photographs (different types of aerial and ordinary photographs)
- * maps: such as wall, atlas, topographic maps of Southern Africa (particularly the 1 : 50 000 SA series) and municipal maps of the local area

3.2.2 ensure that pupils become competent in the use of various measuring instruments and other apparatus. Emphasis should be placed on the information gathered and not on the mechanism of the instruments

3.2.3 make use of diagrammatic representation of statistics

3.2.4 make use of physical models such as globes, tellurions, paper-maché/sand tray models

3.2.5 undertake well-planned and meaningful fieldwork

3.2.6 encourage individual and group research techniques

* Pupils should undertake short independent study topics throughout the year on work related to the requirements of the curriculum.

3.2.7 utilize the media centre

3.3 Differentiation

3.3.1 Most of the topics studied are common to all grades. However, pupils in different grades will not be expected to study these in the same depth. The approach in lower grade should be more simple, concrete and perceptible. More observational activities and less application should be done by these pupils

3.3.2 Teachers should not expect the same amount and quality of work from all pupils, even though they are in the same standard and grade. However, each pupil should be expected to work at the highest possible level of his own ability

3.4 Evaluation and Assessment

* There should be continuous assessment in all standards to determine pupil progress

* Appropriate assessment techniques should be used

* Evaluation should also be undertaken to determine the achievement of lesson objectives and the effectiveness of: lesson preparation, appropriate remedial measures and class management

4. EXAMINATION

4.1 Pupils in standard 8 and 9 must write a examination at the end of each year

4.2 A final public examination will be written at the end of standard 10

4.2.1 Although the examination will deal with the content of the std 10 syllabus, pupils will be expected to utilize knowledge gained on principles and concepts, as well as specific skills which were acquired during the preceding years

4.2.2 Details of this examination will be explained later on

5. LEARNING CONTENT FOR STANDARDS 8, 9 AND 10

The learning content and commentary are indicated columnwise on the following pages:

5.1 Column 1: Core syllabus content

In the first column the core syllabus content is indicated for the standard concerned to be covered in one year

5.2 Column 2: Detailed content

The second column should enable teachers and authors of textbooks to determine how concisely or elaborative the content should be explained and taught. The curriculum is not prescriptive as far as the detailed content is concerned, yet there is a need for greater uniformity regarding the factual information contained in the different textbooks

5.3 Column 3: Commentary

This column contains guidelines to assist the teacher in the planning of lessons and is therefore not prescriptive. The guidelines relate to the teaching techniques suggested in par. 3.2. From this it is clear that techniques such as mapwork, the use of instruments, models, statistical methods, fieldwork and the use of media are not study topics on their own. The purpose of these techniques is to initiate and to set in motion mental activities on the different levels of observation, interpretation and application. Pupils should master these techniques after many repetitions and continuous integration with the relevant learning contents.

5.4 A modular structure for the ordering of the core syllabus content for std 8 to 10

This structure is demonstrated in Table 1 on page 8.

AP PENDIX 6B

DRAFT CORE SYLLABUS FOR STANDARD 9 HG

CORE SYLLABUS CONTENT	DETAILED CONTENT	COMMENTARY
	<ul style="list-style-type: none"> * Cave formation, solution passages, cave systems, and depositional features * Importance to, and influence upon, human activities such as in agricultural, economic, transport, industrial, and social spheres 	
CLIMATOLOGY AND GEOMORPHOLOGY TOGETHER FORM A SECTION		
3. RURAL SETTLEMENT GEOGRAPHY		
3.1 Settlement geography and rural settlement	* Definitions; relationship between settlement and contributing factors	* The integrated inclusion of maps, aerial photographs, reference works, news media, audio-visual education media, statistics, and graphic techniques should characterise teaching
3.2 The basic function of rural settlements	* Food supply	
3.3 Site, situation, and the influencing factors	* Climactic factors; soil conditions; carrying capacity; available water; transport routes; contiguous marketing areas	* Meaningful field work should be undertaken

CORE SYLLABUS CONTENT	DETAILED CONTENT	COMMENTARY
3.4 Problems and strategies in developing areas	* Depopulation; under-utilization of soil; rural planning and resettlement measures; establishment of rural service centres; innovative development schemes	* Comparisons may be made with developmental strategies in other countries such as in desert areas in the USA; Israel, India, and Russia
3.5 Problems and strategies in developing areas	* Over-population; soil depletion; low yields resulting from traditional farming methods; training, experimentation, guidance, planning; agriculture-directed strategies; more effective provision of services; the "philosophy of basic needs"	
4. ECONOMIC GEOGRAPHY		
4.1 Field of study and perspective	* Man's role	* The integrated inclusion of statistics, quantitative techniques, graphic representations, atlases, maps, audio-visual education media, and reference works should characterise teaching
4.2 Economic concepts and criteria to determine levels of development	* Explanation of concepts Initiative and life-style	
4.3 The economic contribution made to a country's GNP in respect of:		* Continual reference should be made to the situation in the RSA, and where