

TR 87-27

A SURVEY OF THE CURRICULA FOR THE PRE-SERVICE EDUCATION  
OF SECONDARY SCHOOL GEOGRAPHY TEACHERS IN SOUTH  
AFRICA, WITH SPECIAL REFERENCE TO TRANSKEI

THESIS

Submitted in Partial Fulfilment of the  
Requirements for the Degree of

MASTER OF EDUCATION  
of Rhodes University

by

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January, 1987

ABSTRACT

Programmes designed for the pre-service education of secondary school geography teachers reflect the assumptions held by programme designers regarding the nature of education, teaching in general and geography teaching in particular. The general practice is that in universities, individual method lecturers design their programmes and in colleges within a department of education the programmes are centrally planned. Each programme focuses on a specific context. This, together with the autonomy enjoyed by university method lecturers in designing their courses, has resulted in the variations found in geography teacher education programmes. The evidence of this is found in the structure and duration of courses, the course content, the strategies used to educate teachers and the way in which the course is evaluated.

This thesis is an attempt to establish consensus and divergence in pre-service education programmes for secondary school geography teachers regarding their organisation, specific knowledge imparted to student teachers; skills, values and attitudes developed.

The pre-service education of secondary school geography teachers in South Africa is revealed in an analysis of views held by method lecturers, practising teachers in secondary schools, and student teachers and an analysis of course outlines, teaching practice assessment forms and geography method examination papers.

Conclusions are drawn and recommendations made for improving the initial education of secondary school geography teachers in Transkei.

**PREFACE**

This study originates from my experience as a geography method lecturer at the University of Transkei. My job involves (i) training secondary geography teachers in two programmes, namely, the Higher Diploma in Education and the Senior Secondary Teachers' Diploma; (ii) working closely with nine colleges affiliated to the University and training primary and secondary geography teachers. The latter involves holding workshops for geography method lecturers, moderating marks on teaching practice and examining the STD 3s and PTD 3s. When I first took up this post, seven years ago, I had to design the syllabi for the various courses. My sources of reference were my own training as a teacher at Fort Hare University, my experiences as a secondary school geography teacher in African rural and urban schools and information contained in university calendars.

My involvement in geography teacher education has made me aware of the lack of common standards and variations in the way in which teachers are educated. This is understandable, to some extent, because what each method lecturer does is a function of his/her experiences and innovativeness. Also, the contexts in which teacher education occur are different. However, there must be areas of consensus among geography method lecturers regarding what knowledge is essential for prospective secondary geography teachers, what skills are to be acquired and what attitudes are to be developed. The existence of a 'core' syllabus at the secondary level makes it possible for one to expect consensus among geography teacher educators regarding certain aspects.

ACKNOWLEDGEMENTS

I am grateful to Dr E A G Clark (Rhodes University, Education Department) for his guidance and expertise. His encouragement and willingness to spend time with me even when his schedule was full, is greatly appreciated.

I wish to thank the geography method lecturers for responding to my questionnaire and especially those whom I interviewed. My gratitude also goes to the secondary school geography teachers whom I met. I appreciate their willingness to share their opinions, their openness and for allowing me to visit their schools. I am grateful to the 1986 student teachers I met and interviewed. Their views about what should and should not happen in the education of teachers were of great benefit to this study.

Valuable assistance was also given to me by Professor Alan Penny, Professor Ray Tunmer and Professor Terence Marsh of the Rhodes University Education Department. I am grateful to my colleagues at the University of Transkei, who consistently enquired about the date on which this manuscript would be completed.

I am grateful to Mrs Jeannette Barnard for the typing of this manuscript.

I wish to thank Mrs B Clark for her hospitality and my in-laws for their patience and understanding when there were times that they expected to see me and I could not do so.

Finally, I wish to thank my husband, Lizile, for his help and encouragement and my children Thandokazi, Sakhile, Wela and Milisani for accepting the fact that there were times when they could not be with me because of my studies.

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## CHAPTER 1

## INTRODUCTION AND PROBLEM SETTING

## 1.1. INTRODUCTION

The success of any educational system is determined by the quality of its teachers. Teachers are generally held responsible for the quality of education in schools. Whenever the performance of students is unsatisfactory, the blame is often put on teachers. According to Lallez, "if children are poorly educated, the cause must be sought first of all in the educators themselves and their training" (1974, p. 15). How competent teachers are and how able they are to innovate, depends on the type of training they received. It is for this reason that teacher education, especially at the pre-service stage, is accorded a very special position in educational systems throughout the world.

Pre-service teacher education refers to the preparation that intending teachers receive before taking up teaching as a career. It is, as Lindop says, "a process during which a student teacher moves from a lay student subculture into a professional teacher subculture" (1985, p. 166). During this phase prospective teachers are socialised into the teaching profession (Simon, 1972; Behr, 1981). One assumption is that teaching as a profession has unique principles, skills and values and those intending to join it need to be introduced to these and helped to master them.

The question of how teachers should be trained has been a controversial issue amongst educationists for a long time. The controversy centres around the identification of what should constitute a programme for pre-service teacher education. How best to train teachers is a question whose answers are as many as there are teacher educators.

It is common practice amongst teacher educators to use the objectives model of curriculum planning (Graves, 1978). This insists on the specification of the knowledge, skills and values intended for prospective teachers. When drawing up a curriculum, teacher educators need to consider the national education policy, the society, the schools for which they are preparing teachers and the pupils. Furthermore, when teacher

educators design their curricula they are making decisions, whether consciously or unconsciously, about what constitutes good teaching and what are the attributes of a good teacher. It is clear from this that individual teacher educators will make different judgements about these and each programme will reflect the value judgements of its designers. This situation has contributed to the variety in teacher training programmes experienced throughout the world. However, since all these share a common goal, namely, that of converting a student to a professional teacher, one expects to find certain things common to all programmes.

Klaasen maintains that "despite the variations in teacher education programmes, basic goals and the general outlines of structure and content are shared by teacher education programmes around the world" (1984, p. 45).

It is always difficult to assess how successful a programme has been in preparing teachers. This is partly because the professional success of a teacher depends not only on his training but also on his personality. Personal attributes often matter as much as professional skills. One way of finding out how effective a programme has been is to observe examination results produced by its products when they start teaching.

In Transkei, for example, the failure rate in matriculation geography is very high. In 1984 it was 38,7 percent and in 1985 it was 40,2 percent. While it is true that the teacher and his training are one of the contributing factors, there may be other factors as well.

Transkei was granted independence by the Republic of South Africa in 1976. It is situated in the south-eastern part of the Republic of South Africa and is 41 100 square kilometers in size. Its population is estimated at three million and is growing at an estimated rate of 3,6 percent per annum (IMDS, 1982). The structure of the population is typical of all developing countries, with a preponderance of young people and relatively few adults. The population is predominantly rural. A high proportion of Transkei's labour force is migratory, finding employment in the Republic of South Africa. Education is closely linked to economic and social development. One of the purposes of schooling and every other activity associated with education is to contribute towards national development. The Transkei education system has a pyramid structure, with many pupils

at the primary level and fewer pupils who advance to the higher levels of education. The teacher-pupil ratio is high, standing at 1:52 in 1984 (IMDS, 1985). On attainment of independence, Transkei adopted the Cape syllabus for schools. The medium of instruction is English.

73 percent of secondary school geography teachers have matriculation. The percentage of graduate teachers is 27 percent. The university of Transkei and four colleges of education are responsible for teacher training. Table 1 shows the number of teachers produced in 1984 and 1985.

TABLE 1

SECONDARY SCHOOL GEOGRAPHY TEACHERS PRODUCED BY UNITRA AND THE COLLEGES OF EDUCATION

Year	Number of graduate teachers	Number of non-graduate teachers
1984	14	87
1985	8	81
Totals	<u>22</u>	<u>168</u>

These figures are significant when one considers that there are 1 654 secondary schools in Transkei offering geography from Standard Five to Standard Ten. The problem is not only that of teacher shortage but also the underqualification of those manning the secondary schools. There is generally a shortage of classrooms, sitting accommodation, library facilities and resources. It is common to find the majority of students in a class without textbooks and atlases. Since the majority of schools are in rural areas and the roads are bad, access to basic things like newspapers and materials for making teaching aids is sometimes impossible.

The situation in teacher training is also unsatisfactory. Before 1984 it was common for colleges to admit prospective secondary school geography teachers whose highest standard in geography was Standard Seven. From 1984 onwards students who passed matriculation geography with an E symbol were allowed to take geography as their teaching major. Since the results

at matriculation level are poor, this means that a small number of prospective geography teachers is admitted to the programme each year and this makes the problem of teacher supply difficult to solve. The majority of the colleges are in the same state as the schools with regard to lack of facilities and teaching materials.

The programme offered by the colleges is different from that of the university. The colleges offer a three-year integrated diploma which prepares teachers for Standards Five to Ten. The university offers two programmes, namely, the one-year post-graduate diploma in education and a three-year integrated diploma. Teachers from the latter teach Standards Eight to Ten, just like those coming from the post-graduate diploma in education.

The situation described above is not unique. Many African countries face a similar situation in teacher education. Some basic questions arise:

Is there consensus about pre-service teacher education?

Do pre-service teacher education programmes have to differ because the school context for which they are preparing teachers is different?

How are teachers trained in other countries for different school situations?

These are some of the questions which prompted this study.

## 1.2. BACKGROUND TO THE PROBLEM UNDER INVESTIGATION

The present provision of training for prospective secondary school geography teachers in South Africa<sup>1</sup> can be classified in various ways, namely:

- (a) **According to the type of institution.** The initial training of geography teachers for the secondary level occurs in universities and colleges of education.

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1. Throughout this study, South Africa refers to the Republic of South Africa, the homelands and independent national states.

- (b) **According to racial lines.** Teacher training, like many aspects of life in South Africa, is provided according to the different races. Various departments are responsible for the provision of teachers, for example, the Department of Coloured Affairs for Coloured teachers, the Department of Education and Training for African teachers outside independent homelands, Departments of Education in each independent homeland, the Department of National Education for Whites and the Department of Indian Affairs for Indian teachers.
- (c) **According to administrative regions.** This refers to the provinces and regions like the Cape, Natal, Orange Free State, Transvaal, Venda, Bophuthatswana, Ciskei and Transkei. Within one province there may be many teacher training institutions catering for the different races.

Because of this diversification, it is important to make the following observations:

- (a) All teacher training programmes aim at producing teachers who will be able to teach one or more school subjects and have had specific training in the teaching of geography at the secondary level.
- (b) The secondary schools for which teachers are prepared have a core syllabus, designed by the Joint Matriculation Board. The practice is that each province adapts this common core to suit "local needs and circumstances" (Behr, 1984). The existence of such a common core at this level implies that the curricula for the training of geography teachers should have a lot in common, whilst at the same time reflect differences based on localised adaptations of the common core.
- (c) In theory the secondary school phase begins with Standard Five as suggested in the De Lange Report (1981). This means that the school standards for which teachers are trained should be the same everywhere in South Africa.
- (d) South Africa has features of both First and Third World conditions. Literature on teacher education stresses that pre-service teacher education programmes should be made relevant to local conditions

and that both theory and practice should focus on the reality the teacher trainees will experience on completion of their studies (Hawes, 1978; Garner, 1979). One would expect initial teacher training programmes that prepare teachers for predominantly rural schools to differ from those preparing teachers for urban schools (Ferron, 1982)

### 1.3. AIMS OF THE STUDY

1. The purpose of this study is to identify the following:
  - (a) aims and objectives of pre-service education of secondary school geography teachers in institutions in South Africa.
  - (b) Specific knowledge, skills and attitudes regarded as essential for the teacher of geography.
  - (c) Methods used in the training of teachers.
  - (d) Similarities and differences in the structure and content of the training programmes. These include entrance requirements, the staffing policy in institutions responsible for educating teachers, time allocated for the method course, the organisation of teaching practice and evaluation procedures.
2. This study also seeks to establish whether or not geography teacher education programmes reflect the socio-economic differences between administrative units and especially the First and Third World dichotomy.
3. Specific proposals for the education of geography teachers at the secondary level in Transkei will be made.

### 2. RESEARCH METHODOLOGY

A variety of methods to collect data were employed:

- (a) Questionnaires were sent to geography method lecturers in all universities and colleges of education in South Africa training secondary school teachers.

- (b) Interviews were conducted with a limited number of method lecturers. The researcher tried as much as possible to cut across racial lines and to meet method lecturers in both advantaged and disadvantaged communities.
- (c) Interviews were held with students undergoing training.
- (d) Interviews were conducted with selected geography teachers currently teaching in schools.
- (e) Information was also obtained from course outlines, examination question papers and information sheets.

A detailed description of the research method is given in Chapter Three.

### 3. LIMITATIONS OF THE STUDY

Like many small-scale research studies of this nature, this study had many limitations, namely:

- (a) The return of questionnaires was not 100 per cent. Each case is unique and a 100 per cent return of questionnaires would have benefitted this investigation.
- (b) Time and costs made it impossible for the researcher to visit all the institutions. This is regrettable because it would have been of value to visit the method lecturers to get first-hand information.
- (c) This study does not attempt to cover all aspects of teacher education.

### 4. THE POTENTIAL SIGNIFICANCE OF THE STUDY

- (a) This study will furnish very useful information for those involved in the development of the teacher education curriculum for secondary school geography teachers in Transkei.
- (b) It is hoped that it will be of value to geography teacher educators in South Africa in so far as it highlights current practice in the area of pre-service teacher education.

- (c) It provides information to individual method lecturers about what others in the same position are doing.
- (d) It is further hoped that this study will raise a number of general questions regarding the education of secondary school geography teachers. This will encourage further research into the various aspects of teacher preparation.

#### 5. AN OVERVIEW OF CHAPTERS.

In this chapter an introduction and purpose of this study is made. Chapter 2 reviews modern approaches to pre-service teacher education and this is followed by a review of literature on the initial education of secondary school geography teachers in Chapter 3. The next chapter describes how data was collected. Data presentation and analysis follows in Chapter 5. The last chapter summarises the research findings and specific proposals for Transkei are made.

## CHAPTER 2

MODERN APPROACHES TO PRE-SERVICE EDUCATION OF  
SECONDARY SCHOOL TEACHERS

In this chapter a review of literature on the initial education of secondary school teachers is made. The literature survey is limited to the past ten years.

An attempt is made, where applicable, to draw comparisons between South Africa and other countries. This includes both technologically advanced and less technologically advanced countries since both would relate to the South African case.

### 2.1. GENERAL TRENDS IN THE PRE-SERVICE EDUCATION OF SECONDARY SCHOOL TEACHERS

The aims of pre-service teacher education are many and varied. They focus on the extent of a teacher's role in society and the nation as a whole. The initial education of teachers aims at helping student teachers develop the aptitudes, skills, competencies, behaviours and attitudes relevant to teacher-learning situations. Its task is to foster and develop the student teacher's personal abilities. It is important for student teachers to possess knowledge and skills in order to be able to effect changes in the educational system should the need arise. Hadley expresses this by saying:

"the purpose of training is not simply to fit students smoothly to the educational status quo, but to enable them to question, and if need be, change what they find."

(1982, p. 3)

Many countries offer two patterns of initial teacher education, the consecutive and the concurrent. The consecutive or end-on pattern refers to that programme into which a student moves after completing a degree. For example, a student might major in geography and one other subject and then take two method courses in the fourth year. This pattern of training is seen by some educationists as being too short, resulting in a superficial treatment of issues critical to effective classroom performance (Tibble, 1971; Hirst, 1980; Golby et al, 1982). Tibble is of the opinion that

"With the increasing complexity of a teacher's role, it is less likely that a mere one year course of training can convert a graduate into a professional teacher."

(1971, p. 46)

There are others who regard one year of teacher training as adequate since the student teacher is a graduate and has some basic skills obtained from his graduate training, which will help him/her as a teacher.

The concurrent pattern involves the integration of academic and professional courses in a three- or four-year programme. Unlike the consecutive programme where only the methodology in the main subject/s is offered, in the concurrent programme both content and method are dealt with. This programme is meant to be a way of ensuring commitment to the teaching profession from the very first year of study, rather than as an after-thought as the consecutive programme is accused of. It is, however, criticised for the same reason that it is incompatible with the postponement of a choice of career (Bone, 1980). An interesting study was undertaken by Brown in Britain to investigate the effect of both patterns of teacher training on teaching performance (Brown, 1982). Students from both programmes were required to teach the same range of units in specialist subjects. On the scale used by Brown the concurrent degree students scored higher marks than their counterparts in the consecutive programme. The reason given for this difference was that the concurrent degree students had had a longer period of training and thus a longer period of perfecting their teaching skills than students in the consecutive pattern. However, Brown is cautious about these findings and warns against taking them as conclusive. Bone (1980) maintains that although teacher educators seem to be inclined towards rating the concurrent pattern higher than the

consecutive in terms of teacher effectiveness, not enough research has been undertaken to support this.

## 2.2. ORGANISATION OF PRE-SERVICE TEACHER EDUCATION PROGRAMMES

From the literature on pre-service teacher education, the curriculum seems to be made up of the following areas:

- (a) **The academic study of the main subject/s.** Such a study is meant to contribute to the personal education of the student and helps him/her to acquire intellectual discipline. It offers the student an opportunity to get inside the discipline in order to develop the confidence in teaching it. Peters maintains that:

"If anything is to be regarded as specific preparation for teaching, priority must be given to a thorough grounding in something to teach."

(1971, p. 151)

The level at which the content is offered varies from programme to programme. In some colleges of education in South Africa, for example, matriculation geography is taught and in others, in addition to this, first-year university geography is taught. In the case of the consecutive programme, the academic study of geography is offered in the Arts or Science departments and may or may not have anything to do with the geography taught at school level.

- (b) **The study of professional courses.** The professional component of initial teacher education focuses on the study of Educational Theory, method courses and teaching practice. Educational Theory in South Africa includes Philosophy of Education, Sociology of Education, Psychology of Education, Educational Administration, Theory of Instruction and, in some cases, Education and Development. The study of Educational Theory offers prospective teachers an opportunity to reflect critically on basic issues related to the nature of their work. Sutherland states that "for anyone who is to be a teacher, systematic

thought about the purpose and principles of education is essential" (1985, p. 222). According to Simon

"If young teachers are to enter schools with a knowledge and grasp of current realities and poised to take initiative, they need a theoretical equipment they can deploy in various circumstances."

(1976, p. 27)

Educational Theory thus provides teacher trainees with knowledge about basic principles underlying educational practice and provides a foundation from which to judge the appropriateness of their actions. According to Clark, "the value of theory lies in its educative function, bringing about a gradual restructuring of the teacher's perception of complex issues" (1980, p. 23).

While some have high regard for Educational Theory, there are other educationists who are sceptical of its role in initial teacher preparation. These question the existence of such a theory, because, as Wilson maintains, "there is no set of principles which have been validated upon which such a theory can be based." He goes on to say that what is there is

"...a loose network of fashion, fantasy, political or social movements and general ideas about education, mixed with various research findings which may or may not be valid themselves, but which are certainly insufficient to support the kind of practical principles we need."

(1976, p. 116)

There are other educationists who acknowledge the existence of Educational Theory but criticise it for being remotely connected with being a teacher. They see it as being "irrelevant and out of touch with classroom realities" (Taylor and Miller, 1985, p. 116). Furthermore, experience shows that it is not always easy to relate theory to practice. It seems that the relevance of Educational Theory in pre-service teacher education lies in its applicability to classroom practice.

## (c) The Method course

The second component of professional studies involves the study of methods of teaching the area/s of specialisation the student teacher has chosen. The primary function of method courses is clearly expressed by Dow in his chapter heading "Methods: where the 'what' and the 'how' most readily meet" (1979, p. 117). Method courses focus on instructional techniques suitable for the teaching major/s. Megarry states:

"It is an essential requirement for professional teachers that they should have a wide repertoire of methods at their disposal and the competence to select the most appropriate methods for the task."

(1980, p. 241)

Method courses have been criticised for over-emphasising teaching techniques (Hirst, 1980). There is a call for an inclusion of theory in method courses. According to Simon, contemporary method lecturers "can no longer be satisfied with inculcating particular 'received' teaching techniques as techniques lacking any serious theoretical component." He goes on to say that method lecturers need to incorporate "psychological, sociological and even philosophical data for discussion in the course of preparing their students for teaching in a specific area" (1976, p. 32). Such an approach would definitely counter Morrison and McIntyre's criticism that method courses lack a theoretical foundation (1969). Hirst (1980) summarises the approach to method courses as having to focus on

- (a) "an understanding of the subject and its place in the secondary school curriculum." He claims that the course should focus on the philosophical foundations of the subject, its fundamental principles and methods of enquiry and a justification for teaching it.
- (b) "an understanding, skills and personal qualities necessary for teaching the subject", and
- (c) "an understanding, skills and personal qualities necessary to the exercise of forms of classroom discipline."

(d) Teaching Practice

Teaching is a practical activity and teacher training has traditionally provided students with practical experiences. Practice is necessary in the acquisition of teaching skills. This is provided by simulated situations in the institution in the form of microteaching and teaching practice in schools (Goad, 1984; White, 1984). The value of school practice is summed up by Taylor as

"...to give students opportunities to practice their skills, to achieve familiarity and understanding of the needs of children and the institutional environment of schools, and to relate the kinds of learning which they experience in the college or department to the realities of the classroom."  
(1978, p. 16)

Specific periods for actual classroom practice are usually set aside and the duration of these ranges from seven weeks to a whole semester. In South Africa the required minimum is seven weeks as stipulated by the Committee of Heads of Education.

In most teacher preparation programmes, the theoretical and practical components are usually treated as separate and discrete entities, with each one having its own criteria for evaluating success. Contemporary literature is dominated by ideas on how to fully integrate these two during training (Hoyle and Megarry, 1980; Golby, 1982). The need for this approach emanated from a realisation that teacher training programmes sometimes produce teachers who may be good in educational theory and not so good in classroom practice, and vice versa. In a study undertaken by Taylor and Miller (1982), in the United States of America, in an attempt was made to establish the relationship between performance in professional theoretical studies and teaching practice. The results showed a weak relationship between scores in the two areas. This may not be true of all cases, but the fact that these aspects were given different grades does call for concern.

In addition to all the courses mentioned above, a student teacher may be required to take one or two optional courses such as music education, educational technology, physical education, religious education and school librarianship.

It has been necessary to look at the general trends in pre-service

teacher education because a student training to be a geography teacher has many other learning experiences within the institution. The whole curriculum is generally overcrowded and this has implications for the time allocated for the method course.

### 2.3. NEW APPROACHES TO PRE-SERVICE TEACHER EDUCATION

There are a number of approaches to initial teacher education that can be identified. These are:

- (a) The conventional approach, whereby teacher educators impart knowledge about teaching and demonstrate teaching skills. More time is spent in the college. Twice or thrice the students go out to the schools for sessions of teaching practice. This approach to teacher training is sometimes referred to as the "in-college, out-in-the-schools approach" (Slater (1982)).
- (b) Competency-based teacher education. This approach started in the United States of America in the early seventies. It is based on an identification of basic teaching skills and competencies unique to the teaching profession. Aspiring teachers are then expected to reach a certain level of performance on each one of these before they can be certified. Attempts to define teaching skills and thereafter teach these to prospective teachers have been criticised as being too mechanical for a profession like teaching which demands more than just competencies. Borke and Shavelson maintain that

"Persons expected to change their behaviour on the basis of rules imposed by others are denied a portion of their freedom to think and act independently."

(1982, p. 222)

One feels that this criticism is justified in a situation where only the teaching skills identified by teacher educators are taught to student teachers. Otherwise, to condemn it outright would be tantamount to saying that there are no skills characteristic of the teaching profession.

- (c) The individualised or personalised approach. This is based on the

understanding that individual teacher trainees have natural abilities upon which teacher training must build. This introduces the long debated issue in educational circles of whether "teachers are born or made". On the question of building on naturally-endowed abilities, Lindop has this to say:

"Any professional development program, if it is to have educational value must make provision not only for adequate technical training but also for the development of self-directed professionals."

(1985, p. 165)

This approach to teacher education encourages student teachers to develop their own styles of competence. The development of personal qualities, of self-awareness and self-actualisation are thus seen as central to the formulation of relevant criteria for training teachers.

- (d) **Experientially- or field-based approach.** Emphasis here is on practical experience. Student teachers register at an institution but spend anything from one to two semesters in schools learning how to teach on-the-job. Although they attend courses at the institution from time to time, their training is seen as a joint venture between the institution and the schools (Dow, 1979).
- (e) **The humanistic approach.** This approach has been widely used in pre-service teacher education in countries like Britain, Australia and the United States of America as from the end of the seventies (Bone, 1980). The focus is on interpersonal relations in the teaching situation. The success of student teachers is seen as dependent upon their ability to interact successfully with pupils, other teachers and the rest of the personnel in the education system.
- (f) **The systems approach.** This approach incorporates some of the ideas mentioned in the approaches above. It is based on the precise specification of the learning experiences followed by the planning of training procedures and lastly, the measurement of the results of training (McBride, 1985). As outlined by McBride, this approach consists of seven integrated components:

- (i) **Selection and diagnosis.** This concerns early diagnosis of the qualities of the teacher trainees and their placement in programmes suited to their needs.
- (ii) **Programmed training.** After selection and diagnosis a programmed series of training experiences is designed.
- (iii) **Non-programmed training.** This is meant as an alternative to the programmed training above. The student teacher is exposed to experiences and teaching materials which will reveal his/her creativity and innovativeness.
- (iv) **Practice.** This includes both microteaching and teaching practice in schools.
- (v) **Assessment.** This involves both student teachers and supervisors and it takes place throughout the training programme. Immediate feedback helps determine the direction of training and to effect whatever changes are deemed necessary to produce the desired behaviour.
- (vi) **Systems revision.** This is a way of revising the training content in order to cater for the changing needs of prospective teachers.
- (vii) **Assignment and follow-up.** An attempt is made to maintain contact with the teacher trainee after the programme has come to an end. Such contact is of great importance in providing support to the novice teacher.

Some of the recent approaches to teacher education have not been tested widely and so their weaknesses are not yet apparent. It is important not to see these approaches as mutually exclusive. It is possible for a programme to combine one or more of these. It would be interesting to establish which one of these is widely used in South Africa.

In the past the training of teachers used to be done once, at the beginning of a teacher's career. After certification the new teacher was left on his/her own from then on and forever after. There is currently a realisation that teacher education is a continuous process divided into three parts, namely:

- (a) Initial teacher education whose role is seen as being limited to the preparation of a prospective teacher to cope with the challenges of his first years as a professional. Bone maintains that pre-service teacher education does not aim at producing a "complete teacher" but rather to provide the student teacher with survival skills in order to cope with the demands of his/her first teaching post.
- (b) Initial teacher education is followed by a period of induction. This is the period recognised by teacher educators as the most crucial time for the formation of attitudes towards teaching. The need for support and guidance during this period is important for sound professional development. According to Gibbon

"An induction programme is a wise investment, essentially because it provides the beginning teacher with what he needs most during his first year - a feeling of security and an opportunity to grow."

(1979, p. 42).

In many countries the induction of new teachers forms an integral part of teacher education. In South Africa also, the need to induct novice teachers in their new posts has been recognised as valuable, as suggested in the De Lange Report (1981).

- (c) In-service teacher education is a continuing means of renewing and reinforcing knowledge, professional commitment and the general competence of practising teachers.

To summarise, pre-service teacher education provides valuable service to intending teachers because it provides them with basic educational understanding and introduces them to the skills and attitudes necessary for professional teachers.

The two patterns of teacher education should continue to exist because they serve to meet different needs. The consecutive programmes produce teachers with a deeper understanding of geography, its principles and methods of enquiry. In places like Transkei, the concurrent pattern in colleges of education serves to meet the need of teacher supply in the rapid expansion of secondary education.

Theory and practice are essential in the training of geography teachers. Ideally, the two should be balanced and integrated. Educational theory should be classroom-based. The geography method course should be practically-oriented because in geography there are basic skills that a teacher must have, for example, how to use maps, transparencies, etc. Teaching practice is also very important in the education of geography teachers. Any form of practice, whether in the institution through microteaching and workshops on the preparation of teaching aids or practice in school, is valuable.

The conventional approach to teacher education is relevant to the education of geography teachers. The competency-based approach is also valuable since it emphasises the acquisition of skills. The individualised approach has its advantages also, since it stresses self-analysis and the identification of natural abilities on which training builds. The experientially based approach requires students who are capable of evaluating classroom situations critically. Its relevance is limited to the graduate student. The danger lies in a situation where the classrooms observed are not ideal and the experience itself might give wrong impressions about teaching.

In the humanistic approach, it is necessary to set up an environment for student-pupil interaction. It requires small groups. In big groups it can present problems. It will not be easy to use this model in Transkeian schools where the numbers in class are large.

In the next chapter, literature on pre-service education of geography teachers for the secondary level is reviewed.

## CHAPTER 3

THE PRE-SERVICE EDUCATION OF SECONDARY SCHOOL GEOGRAPHY  
TEACHERS : A LITERATURE REVIEW

In this section a review of literature on the initial education of secondary school geography teachers will be made. The review is divided into two parts:

- (i) Publications on the training of secondary school geography teachers; and
- (ii) Publications used in the training of geography teachers.

### 3.1. PUBLICATIONS ON THE TRAINING OF SECONDARY SCHOOL GEOGRAPHY TEACHERS

Little has been written on how to educate geography teachers for the secondary level. The investigator arranged the few articles available in chronological order to reveal changes over time. The search was mainly limited to articles written from 1950 to 1986. The approach to each article is to highlight the main ideas and approaches to geography teacher education.

- (a) Phillips R F, 'Teacher training and supply of information to teachers of geography', Geography, Vol. 36 No. 172, 1951, pp. 82-87.

This article is a report of a seminar on teaching geography for international understanding, organised by Unesco and held in Britain. One group of delegates looked into the training of geography teachers. The following recommendations were made:

- (i) Secondary school geography teachers should be graduates.
- (ii) Admission to the programme was to be determined by the performance of the intending teacher in an entrance examination and interview.
- (iii) The training course should provide student teachers with "a good cultural and philosophical education and a training in methods of teaching" (p. 86).
- (iv) The course ought to educate teachers for international understanding.

- (v) For professional growth, teachers in training should be encouraged to join professional societies.

It is interesting to note the concerns of post-war society at the time. The whole proposed course is inclined towards attitude development, for example, attitude towards international understanding. The need for student selection at the beginning of the course was stressed. The insistence that all geography teachers should have degrees, and the little attention given to the methodology aspect, indicates that knowledge of the subject matter was seen as all-important in teacher education. The author was not specific in explaining what the "current methods" were, how were they to be demonstrated and how attitudes were to be developed.

(b) Scarfe N V (1958), 'The education and training of teachers' in A Handbook of suggestions on the teaching of geography: Towards World Understanding.

According to Scarfe, there was a close relationship between a teacher's ability to teach and the education and training he/she received. He laid down the following aims and objectives for the method course:

- (i) To make student teachers aware of how geography can affect the attitudes of pupils towards other peoples and towards the need for world co-operation.
- (ii) To make student teachers understand the psychological characteristics of children, how they learn and how they acquire the desired attitudes. Observation of children and reading about them were to be encouraged.
- (iii) To provide the students with an opportunity to organise and undertake fieldwork so as to develop geographic thinking and be able to organise local studies with their pupils.
- (iv) To introduce prospective teachers to the various ways of collecting and using geographic information.

Scarfe, like Phillips, sees teaching practice as an essential component of pre-service teacher education. Method lecturers were to supervise the students and give demonstration lessons.

In this article, important suggestions for geography teacher training

were made, for example, the importance of knowing the educational value of the subject; teacher education to be involved in attitude development; knowledge about how children learn; the value of fieldwork, especially the involvement of students in organising field trips and the use of visual aids. Scarfe, like Phillips, was vague about methods.

- (c) Nicol I G, 'The teachers training college as a link between the schools and the university geography departments', Journal for Geography, Vol. 2, No. 6, 1966, pp. 41-49.

This is an interesting article on the South African approach to teacher training at that time. The author based his ideas on his experience as a method lecturer in the Johannesburg College of Education. He was training graduate teachers, the majority of whom came from universities in the Transvaal.

Nicol saw the duty of a method lecturer as:

- (i) "To provide guidance to students as to how to become effective geography teachers.
- (ii) To guide students towards critical thinking and originality.
- (iii) To help students learn how to assess the various teaching methods and to be able to demonstrate them.
- (iv) To encourage students to focus on explaining rather than imparting facts.
- (v) To emphasise the role of practical fieldwork in geography teaching."

The method course was allocated four periods per week arranged in this way:

The first period was a lecture given by the tutor on the teaching method to be taught. The next period was a discussion of the ideas emanating from the first period, with a focus on the teaching method's applicability in the classroom. The third and fourth periods were blocked together for discussions led by individual students. Each student was made to select a topic from the school geography syllabus showing which techniques would be suitable to teaching the topic. He had to suggest practical exercises and teaching aids. A chalkboard summary of the key ideas in the topic was to be drawn.

A panel of five students assessed the one giving the tutorial and, according to Nicol, students regarded this approach as very valuable. His part as their lecturer was to provide "guidance and moderation" (p. 45).

Nicol's comments on the academic background of the graduate students were that there were certain sections in the school geography syllabus which the students never studied in their undergraduate course. He maintained that since the majority of graduate students became teachers, it was necessary that all sections of the school geography course were included in the undergraduate course.

The whole training course took thirty-seven weeks, twenty-eight of which were spent in the college and nine were allocated to blocked teaching practice of three sessions. Nicol observed that in the beginning of the method course the students' attitude was that the course was unnecessary. However, this attitude changed after the first teaching practice session.

This article offers a detailed description of a geography method course. All aspects of the course were mentioned, including a detailed description of how the time allocated for the course was spent. The encouragement of originality and creativity on the part of the students is commendable. Students were made to conduct independent studies of the school geography syllabus and this meant that they were at all times made to think of the content they were to teach. The whole course had a lot of practical theory. There was less lecturing and more involvement of students. No mention is made of how the teaching skills were practised in the college. Even in the case of teaching aids, the students were required to "suggest" these rather than to prepare them.

(d) **'The Incorporated Association of Assistant Masters in Secondary Schools' (1967), 'The training of the geography master', in The Teaching of Geography in Secondary Schools.**

In this short article two aims of the geography method course were stated as "to learn the techniques which any good teacher must possess and to pursue geographical studies in some depth" (p. 263).

A greater part of this article discussed the qualities of a good geography teacher who should be able to arouse interest in pupils, make children think logically, be able to manipulate teaching aids and

portray scenes and events by vivid oral description. The teacher should have an in-depth knowledge of geography and its principles and he should always keep up to date with developments in the subject by attending conferences and affiliating to subject associations.

Valuable suggestions were made on teaching methods. The need for thorough lesson planning was stressed. The use of extracts and visual aids was seen as introducing variety in lesson presentation and arousing interest. The student teachers were to be encouraged "to see things from the child's point of view" (p. 264).

As far as possible, teaching practice was to make students acquire varied experience in terms of schools and the teaching of different ability levels. Demonstration lessons were advocated. Students were to be introduced gradually to classroom teaching by starting with small classes and, as they gained more experience, to take over whole classes.

The authors described the essential skills, attitudes and knowledge necessary for teachers-in-training. Once again, how to do this as a method lecturer, is not explicitly stated.

(e) Jarolimek J, 'The preparation of geography teachers', in Bacon (1970) Focus on Geography.

Jarolimek wrote about the geography teacher training programmes in the United States of America. Like Phillip, he emphasised the need for student screening before they were admitted to the course. The selection was to be based on personality variables. According to him, "a competently prepared teacher is the product of an interaction between personality and training variables" (p. 425).

Jarolimek regarded the academic study of geography as important in teacher education. He contrasted the content offered by colleges with the undergraduate geography course. He criticised the latter on the basis that novice teachers usually found it difficult to translate and convert knowledge gained in the geography department into forms suitable for secondary school pupils. According to him such teachers ended up relying on the textbook, the lecture method and dictated notes which they took at university.

Like Nicol, he called for more involvement of members of the geography department in teacher education. The under-graduate course in geography was to be "sensitive to the special needs" of future teachers. According to him, training a teacher should be a joint venture consisting of staff in the geography department, method lecturers and geography teachers in schools.

The method course should provide students with an opportunity to work with children. Tutorials were encouraged to enable each student to try out what had been taught. Planning and implementation strategies were to be incorporated in the method course.

Jarolimek encouraged continuing professional growth in student teachers. Although he covered a broad spectrum in the field of geography teacher education, he did not describe the skills to be acquired by prospective teachers.

(f) Graves N J, 'Changes in attitude towards the training of teachers of geography', Geography, Vol. No. 19, 1979, pp. 65-73.

This was a lecture delivered by Graves at the annual conference of the Geographical Association in 1977. This article will be discussed in more detail than the others because of its scholarship and depth with regard to geography teacher education and educational theory. It starts with an historical overview of teacher education in England and Wales. The two patterns of training were discussed.

Graves defined teacher training as "an initiation into the teacher's roles" (p. 77). It involves the development of skills on how to transmit knowledge and the development of new attitudes to teaching. It should be viewed as a continuous process.

#### **Aims of the method course.**

Graves maintains that the aims of the teacher training course should be discussed with student teachers. He then outlined the aims of the geography method course at the University of London Institute of Education. These were that students should

- (i) "have an understanding of the place and value of geography in school curricula;

- (ii) be capable of contributing to the planning of geography and combined study courses;
- (iii) have certain competence at basic management skills, like class organisation and class control;
- (iv) understand the principles of lesson planning and construction and have a certain competence at involving children in a variety of basic enquiry skills appropriate to their age and ability;
- (v) be aware of the part played by curriculum evaluation both during the process of curriculum development and at the end of a course;
- (vi) have an understanding of the needs and problems of continuing curriculum development in schools and be ready to experiment;
- (vii) have an understanding of how children think and learn;
- (viii) be aware of the need to face up to controversial issues in the classroom; and
- (ix) have the desire, enthusiasm and drive to continue their educational studies" (p. 78).

These statements of what the course intended to achieve are valuable. Graves realised that there were problems to be faced and these involved the many roles that a geography teacher had to fill as "a transmitter of knowledge and skills, an attitude changer, a manager of people, a selector and organiser of learning experiences for pupils and a 'practical psychologist' who can develop a co-operative spirit among his charges and yet make it possible for the occasional genius to be creative" (p. 77).

A pertinent question is how does one train a teacher who will successfully play all these roles? Another problem facing teacher education is the changing nature of geography and its effects on the school geography curriculum and teaching strategies.

#### **Teaching strategies.**

Graves suggested that teaching strategies taught to student teachers should be used by method lecturers. As far as possible the lecture method

should be used sparingly because of its unsuitability as a teaching method. Student teachers should be encouraged to participate in workshops involving the preparation of materials and the organisation of learning experiences. Groupwork in the institution was to be encouraged. Discussions on college or school experiences and the implications of learning theories for the teaching and learning of geography should be held. Graves maintained that teaching strategies and teaching styles should vary according to the pupils taught, the nature of the subject matter, the objectives to be achieved and the personality of the teacher.

#### **Teaching practice.**

Graves advocated for a gradual introduction of students to classroom teaching. He made the following suggestions on providing feedback on the student's progress:

- (i) The lecturer should sit in the student's lesson and monitor the behaviour of the student and the class. He should look at how the lesson has been prepared and presented, pupil involvement in the lesson and how the student evaluated the success of his lesson.
- (ii) The lecturer should use the interaction analysis approach whereby the particular behaviour of the student as he teaches a class is measured.
- (iii) The use of the videorecorder, after which the student teacher should discuss his performance with his tutor or peers. He cautioned against too much use of the video-recorder as this could adversely affect a weak student.
- (iv) The use of peer group teaching in simulations of classroom situations.

Graves concluded his article by outlining his conception of teaching which he saw as an experimental activity. He suggested that "teacher training activities must be looked upon as experimental so that the student teachers may look upon all teaching as teacher and students learning together" (p. 84).

This article offers valuable and innovatory ideas on the training of secondary school geography teachers. It covers aims, course content, teaching strategies and assessment procedures. The attitudes and skills necessary for future geography teachers to acquire are clearly stated. It would have been helpful if some idea had been given about the allocation of time for the different aspects of the course.

(g) Slater F and R Rask, 'Geography teacher education', European Journal of Teacher Education, Vol. 6, No. 2, 1983, pp. 183-189.

These two authors described a model developed and used at the London Institute of Education during the 1980-81 academic year. Its aim was to see how theory and practice could be related in geography teacher education.

Teacher education was seen as having both theoretical and practical aspects. Student teachers were seen to be primarily interested in the acquisition of teaching skills, and for theory to have meaning, its practical applicability ought to be made clear. Slater and Rask see theory as "a form and result of reflection upon experience" (p. 183). For students to better understand both theory and practice they need to have experience first. The authors maintained that:

"The difficulties and dissatisfactions with theoretical elements in teacher education courses arise because students lack the experience... which allows them to appreciate the reality of theoretical notions."

(p. 183)

They regard experience as occupying a central position in teacher education and that it should be used as "The seedbed from which both practical knowledge and theoretical understanding grow and intertwine" (p. 184).

The model they developed aimed at providing students with classroom experience on which theory about children and classroom management was to be based. It required co-operation between college lecturers and school teachers.

Small groups of eight to ten students were sent to a school where they met their lecturer and the school-based tutor. They worked in pairs and each

pair was given a small group of pupils to teach. The students were given a detailed lesson plan prepared by both tutors. It had an introduction, meant to motivate the pupils; several activities designed to make students apply the knowledge gained and a conclusion. Students were also supplied with resources useful to the lesson.

Class teaching was then followed by a tutorial where the lesson taught was discussed and evaluated. Comments were made on practical teaching skills and the students were made to reflect on theoretical matters. The tutorials were carefully planned to cater for progression, starting with immediate students' concerns, for example, the use of the chalkboard and designing worksheets. More theoretical topics like the role of language in geography teaching and methods of evaluation were dealt with last. The striking feature in this model is the involvement of the lecturer in the planning and preparation of lessons. Each day the lecturer and student plan and discuss the lesson to be presented on the following day.

Topics covered before the first teaching practice session were lesson planning, teaching techniques versus teaching strategies, the use of the chalkboard, video, slides and photographs, designing worksheets and the role of language in geography teaching. During the second semester the same procedure as in the first term was followed. Topics dealt with were the preparation of tasks for the less able and the more able, school tests and examinations. Then came the preparation for teaching practice. Curriculum theory, psychological and sociological influences on geography teaching were discussed as the situation arose. It seems that more theory was dealt with as the students gained more practical classroom experience.

The authors described the advantages of their experience-centred approach to teacher education. These were that experience indicated the need for developing practical skills. It built up a core of issues to be discussed and whose explanation came from theory. According to them "theory and practice merge in experience just as they both grow out of it" (p. 188). Students coming out of this programme had a satisfactory balance between the different fields of educational theory, between what was done in college and what was done in schools, between kinds of learning activities and between content and skills.

This model is a definite departure from the conventional methods of training

geography teachers referred to by Slater and Rask as the 'in-college, out-in-schools' pattern. There is a high involvement of students in determining the course of events in their training. Skills of observation and self-evaluation are encouraged. Since the whole programme depends on the students' analyses of classroom situations, it could benefit post-graduate students only, because they have training in critical and analytic thinking. It is practical and realistic and has proved that theory and practice can be integrated. The co-operation between schools and colleges, a strong recommendation in the articles discussed already, has been proved to work out well. With emphasis on experience first and theory later, one wonders what would happen when experience during teacher training proves to be different from the situation the new teacher will experience in his/her first teaching post.

#### (h) Some emergent themes on Geography teacher education

##### (i) Student selection.

Phillip (1951) and Jarolimek (1970) felt strongly about the need to select students for the training programme. The admission criteria suggested were the personality of the prospective teacher and his performance in an entrance examination. All writers advocated that secondary school geography teachers should be graduates.

##### (ii) The academic background of student teachers

If all secondary school geography teachers would be graduates, their understanding of the subject ought to be adequate. Nicol (1966) and Jarolimek (1970) expressed concern about the under-graduate geography course which did not cover all the topics in the school syllabus. A distinction can be made between college geography and university geography. Colleges of education teach the content at a level lower than that of universities. At whatever level the content is offered its importance lies in its educational value to the students and in making them teach with confidence.

##### (iii) Aims of the course

There is some consensus on the aims of the pre-service teacher education course. These can be divided into knowledge, skills and attitude develop-

ment. It is seen as essential for student teachers to know about the subject they are to teach, the place and educational value of geography, various teaching strategies, how children learn and their differences in ability.

Skills include teaching skills, e.g. questioning, the ability to arouse interest, and explaining; management skills and knowing how to develop attitudes in pupils. Students also need to know how to prepare audio-visual aids.

Student teachers were to be helped to develop favourable attitudes towards the teaching profession and professional growth.

(iv) **Teaching strategies**

These can be grouped into:

- (a) Approaches used by method lecturers. These included the lecture method, tutorials, workshops, discussions and fieldwork.
- (b) Teaching strategies taught to student teachers. These were - fieldwork - its value in geography teaching and how to organise it, teaching mixed ability classes, teaching the less able and the gifted and problem solving.

In the list provided by the writers there seems to be progression from 1950 to 1980 from methods that were teacher-oriented to those which involved the student in the learning process. Recent developments reveal the influence of psychology on the teaching of geography, for example, the streaming according to ability levels.

(v) **Teaching practice**

All writers see teaching practice as important in developing teaching skills. There is a suggestion that students should be introduced gradually to classroom teaching (Jarolimek, 1970; Graves, 1979; Slater and Rask, 1983). Method lecturers often gave demonstration lessons although in Graves' and Salter and Rask's articles no mention of these is made. When students go out on teaching practice, method lecturers should supervise and guide them. Graves offered four suggestions on how to help

students master teaching skills (see page 27 above). These were the monitoring of the students' progress through class observation and the use of the videotape. In the case of classroom behaviour, the focus should be on how the student teacher interacted with the pupils. Peer group teaching was another method that could be employed to help student teachers to acquire teaching skills.

(vi) **Teaching aids.**

The use of audiovisual aids in the teaching of geography was regarded as essential. In the 1950's audiovisual aids were relatively few and they have recently increased in number and become more complicated, for example, the use of computers.

(vii) **Course evaluation.**

In all the articles read, no mention was made on how the course should be evaluated.

### 3.2. LITERATURE USED IN THE TRAINING OF GEOGRAPHY TEACHERS

Books on teaching geography are generally written for teachers in the classroom, heads of departments and examiners, as well as students in training. Educators in university departments of education and teacher training colleges use these for organising their courses and for students' background reading. These books are usually treated as texts for the course and provide a source of activities. Some are used as handbooks due to their practical value. These are the focus for this section.

The investigator analysed thirty-two books spanning a period of sixty years. These were selected for their practical value. The aim was to find out which topics had enduring value, which were discarded and which were introduced later.

This analysis revealed a close connection between developments in academic geography and the teaching of geography at school level. These have implications for teacher training. It is interesting to note, for example, the pre-1960's conception of geography as a science that describes the earth and the central role played by descriptive regional studies in geography teaching at school level at that time. Method texts,

likewise, emphasised approaches to teaching regional studies.

The information collected from the method texts is summarised in Tables 2, 3, 4 and 5. Table 2 summarises the discussion on theory in method texts over 60 years. In 97 per cent of the texts written between 1926 and 1984, the topic on aims and objectives is given a prominent place. Although the nature of geography also appears from the beginning of the period surveyed, it is only mentioned in 52 per cent of the books. A discussion on the historical development of geography as a subject was seen as unnecessary. In the 1970s, method texts included learning theories as advanced by psychologists like Piaget, Gagné, Bruner, Ausubel and others. These led to discussions of conceptual learning and skill development. Curriculum development appears in the texts written in the 1970s, but the two South African method texts do not discuss this topic (Hurry, 1978; Möller, 1983).

Assessment and evaluation have always been an integral part of geography teaching. Many books have given detailed suggestions on how to assess and evaluate pupil progress.

Table 3 deals with the practical aspects of geography teaching. Lesson planning continued from 1926 to 1984. The same applies to the planning of workschemes, although these were specifically mentioned in 34 per cent of the books. Teaching units were emphasised during the seventies and many books written in the eighties have these. The designing of worksheets appears in the 1970s.

Table 4 illustrates teaching strategies/techniques mentioned in the method texts. Fieldwork, the oral lesson and the questioning techniques occur in almost all the books and are spread throughout this period. These are followed by the use of the textbook, models and projects. It is interesting to find less and less mention of regional studies in the late seventies and eighties. Games and simulations, the discovery approach and decision-making appear in texts of the 1970s, while the teaching of values and the issue-based approach are the most recent approaches.

Table 5 shows teaching aids used during this period. Maps appear in all the method books. Some of the aids used since the 1920's are the chalkboard, slides, charts, pictures, atlases, the geography room and the use of cartographic and weather instruments.

TABLE 2

THEORETICAL ASPECTS IN METHOD TEXTS 1926-1984

	1926-1959	1960-1969	1970-1979	1980 onwards
Aims and Objectives	*	*	*	*
Nature of geography	*	*	*	*
Historical development	*	*	*	*
Influence of psychology		*	*	*
Curriculum development			*	*
Assessment and evaluation	*	*	*	*
Language and geography teaching			*	*
	Fairgrieve, 1926	Garnet, 1960	Graves, 1971	Graves, 1980
	Holtz, 1929	Briault & Shave, 1960	Walford, 1973	Walford, 1981
	Incorp. Ass, 1946	Thomas, 1961	Bale et al, 1973	Graves, 1982
	Pells, 1946	Gopsill, 1962	Graves, 1973	Slater, 1982
	Incorp. Ass, 1952	Haggett & Chorley, 1965	Bailey, 1974	Möller, 1983
	Cons, 1955	Long & Roberson, 1966	Brouillette & Graves, 1974	Graves, 1984
	Scarfe, 1958	Wood, 1966	Dunlop, 1976	Fien et al, 1984
		Incorp. Ass, 1967	Hall, 1976	
		Biddle, 1968	Hurry, 1978	

TABLE 3

PLANNING AND ORGANISATION OF WORK : 1926 - 1984

	1926-1959	1960-1969	1970-1979	1980 onwards
Lessons	* Fairgrieve, 1926			
	* Holtz, 1929			
Schemes	* Incorp. Ass, 1946			
	* Pells, 1946			
Setting tests	* Incorp. Ass, 1952			
	* Cons, 1955			
Teaching units	* Scarfe, 1958			
	* Garnet, 1960			
Designing worksheets	* Briault & Shave, 1960			
	* Thomas, 1961			
	* Gopsill, 1962			
	* Haggett & Chorley, 1965			
	* Long & Roberson, 1966			
	* Wood, 1966			
	* Incorp. Ass, 1967			
	* Biddle, 1968			
	* Graves, 1971			
	* Walford, 1973			
	* Bale et al, 1973			
	* Graves, 1973			
	* Bailey, 1974			
	* Brouillette & Graves, 1974			
	* Dunlop, 1976			
	* Hall, 1976			
	* Hurry, 1978			
	* Graves, 1980			
	* Walford, 1981			
	* Graves, 1982			
	* Slater, 1982			
	* Möller, 1983			
	* Graves, 1984			
	* Fien et al, 1984			

TABLE 4

TEACHING TECHNIQUES : 1926-1984

	1926-1959	1960-1969	1970-1979	1980 onwards
Fairgrieve, 1926	*			
Holtz, 1929	*			
Incorp. Ass, 1946	*			
Pells, 1946	*			
Incorp. Ass, 1952	*			
Cons, 1955	*			
Scarfe, 1958	*			
Garnet, 1960	*	*		
Briault & Shave, 1960	*	*		
Thomas, 1961	*	*		
Gopsill, 1962	*	*		
Haggett & Chorley, 1965	*	*		
Long & Roberson, 1966	*	*		
Wood, 1966	*	*		
Incorp. Ass, 1967	*	*		
Biddle, 1968	*	*		
Graves, 1971	*	*	*	
Walford, 1973	*	*	*	
Bale et al, 1973	*	*	*	
Graves, 1973	*	*	*	
Bailey, 1974	*	*	*	
Brouillette & Graves, 1974	*	*	*	
Dunlop, 1976	*	*	*	
Hall, 1976	*	*	*	
Hurry, 1978	*	*	*	
Graves, 1980	*	*	*	*
Walford, 1981	*	*	*	*
Graves, 1982	*	*	*	*
Slater, 1982	*	*	*	*
Möller, 1983	*	*	*	*
Graves, 1984	*	*	*	*
Fien et al, 1984	*	*	*	*
Oral	*	*	*	*
Fieldwork	*	*	*	*
Questioning	*	*	*	*
Discussion	*	*	*	*
Use of textbook	*	*	*	*
Case studies	*	*	*	*
Projects	*	*	*	*
Regional approach	*	*	*	*
Decision making	*	*	*	*
Inquiry			*	*
Games/simulations			*	*
Programmed Learning			*	*
Issue-based			*	*

TABLE 5

## AUDIOVISUAL AIDS : 1926-1984

	1926-1959	1960-1969	1970-1979	1980 onwards
Fairgrieve, 1926	*			
Holtz, 1929	*			
Incorp. Ass, 1946	*			
Pells, 1946	*			
Incorp. Ass, 1952	*			
Cons, 1955	*			
Scarfe, 1958	*			
Garnet, 1960	*			
Briault & Shave, 1960	*			
Thomas, 1961	*			
Gopsill, 1962	*			
Haggett & Chorley, 1965	*			
Long & Roberson, 1966	*			
Wood, 1966	*			
Incorp. Ass, 1967	*			
Biddle, 1968	*			
Graves, 1971	*			
Walford, 1973	*			
Bale et al, 1973	*			
Graves, 1973	*			
Bailey, 1974	*			
Brouillette & Graves, 1974	*			
Dunlop, 1976	*			
Hall, 1976	*			
Hurry, 1978	*			
Graves, 1980	*			
Walford, 1981	*			
Graves, 1982	*			
Slater, 1982	*			
Möller, 1983	*			
Graves, 1984	*			
Fien et al, 1984	*			
37				
Diagrams/Pictures	*	*	*	*
Atlas	*	*	*	*
Globe	*	*	*	*
Cartographic/weather instruments	*	*	*	*
Relief models	*	*	*	*
Geography room	*	*	*	*
Geography library	*	*	*	*
Sample/case studies	*	*	*	*
Radio	*	*	*	*
Film	*	*	*	*
Filmstrip	*	*	*	*
Photographs air/satellite	*	*	*	*
Episcope	*	*	*	*
Tape recorder	*	*	*	*
Overhead projectors	*	*	*	*
Television	*	*	*	*
Computer	*	*	*	*

Later additions include the radio, films, filmstrips, the episcopes and photographs. The tape recorder and the overhead projector appeared in the sixties. The television and video recording was mentioned in many books written in the seventies. The latest innovation is the use of the computer (Walford, 1981).

In order to give a clear picture of the topics that method lecturers probably discussed in their courses, the investigator has grouped these books according to periods. One or two books reflecting the general trends characteristic of each period are discussed.

(a) 1926-1959.

**Fairgrieve J (1926), Geography in school.**

Fairgrieve was involved in teacher education and the teaching of geography at school level in Britain during the first half of this century. This book was intended for teachers in schools and for those undergoing training. His book was a basic text and was used as a handbook by geography method lecturers for many years.

Fairgrieve maintained that it was essential for geography teachers to know the educational value of their subject, because, "if a teacher is to make a success of his teaching he must have a belief that his work is worth doing" (1926, p. 20). Knowledge about stages in the mental development of children was regarded also as important to guide the teacher in planning his work. He should teach at any time "only what children at that stage can understand" (p. 306).

Geography was regarded as a science which describes the earth. Geography teaching was seen as aiming at training pupils "to imagine accurately the conditions of the great world stage and so help them to think sanely about political and social problems in the world around" (p. 18). Geography teaching centred around descriptions of the various regions of the world with the purpose of showing the unique character of each region. The pupils were to be taught the home region first and then "the rest of the world in decreasing detail". In order to help pupils "imagine accurately" the conditions of the world, geography teaching was to emphasise the use of visual aids, especially maps and outdoor teaching.

A chapter was devoted to the preparation of lessons and schemes of work. Eighty-one pages were devoted to teaching aids available at that time. The design and layout of the geography room was included. This book is a clear manual, has little educational theory and students could find it easy to understand.

(b) 1960-1969.

Gopsill G H (1962), 'The teaching of geography', Long M and Roberson B S (1966) Teaching Geography.

These two books were chosen to show the general trends in geography teaching in the 1960s. The authors stated specifically that their texts were written for student teachers and reflected views held by many geography teachers at the time.

The aims of teaching geography at secondary level were again emphasised. Student teachers needed to know the current development in geographic thought and were to develop observation, recording and analytic skills in their pupils. It was important for prospective teachers to know how to inspire and control a class.

Teachers needed to know how to help pupils discover "the richness and fascinating complexity of the world in which they live" (Long and Roberson, 1966, p. ii). The regional concept was still strong.

In both books the value of careful and thorough planning of lessons was emphasised. Gopsill laid down the following guiding principles to classroom practice:

- (i) The aim of the lesson should be made clear to pupils.
- (ii) The lesson should be presented in an interesting way.
- (iii) Pupils should be kept active and involved in the lesson.
- (iv) The teacher should structure his presentation such that individual differences in ability are catered for.
- (v) The teacher should focus the pupils' attention on the main ideas in the lesson.

Advice on lesson preparation was given in both books. Long and Roberson maintained that a lesson should have aims, an introduction, a presentation which should provide thought-provoking exercises for the class,

and a conclusion. The importance of timing in lesson presentation was stressed and the development of a chalkboard summary was regarded as important. This was the conventional approach in method texts at the time.

The following methods of teaching were cited: the oral lesson, with a variety of teaching aids, mapwork, fieldwork, sample studies and the use of the textbook. The growth of systematic studies at that time was shown by the three chapters written by Long and Roberson on mathematical geography, climate and landforms. Examinations were discussed in detail and so was the design and layout of the geography room.

Like Fairgrieve's book, these two books were ideally suited to teacher preparation because of the practical guidance given on classroom practice. They were written by geography teachers with a wide experience and insight into geography teaching at the secondary level.

(c) 1970-1979

In the latter half of the 1960's important developments took place in academic geography. These were an increasing emphasis on quantification, the scientific approach with its emphasis on the formulation and testing of hypotheses and the development of theoretical models. The impact of the so-called "new geography" on the teaching of geography at school level was reflected in the method texts written in the 1970s. Geography teaching emphasised the development of analytic techniques. There was a move away from teaching facts only to concept-teaching and skill development. With regard to regional geography, there was a shift in emphasis from stressing the uniqueness of each region to a search for patterns leading to generalisations.

**Bailey P (1974), Teaching Geography**

Bailey has extensive experience in both geography teaching at the secondary level and teacher education. He is the editor of Teaching Geography, a journal focusing on the teaching of geography at school level. Many method lecturers, secondary school teachers and student teachers find his book, Teaching Geography a valuable handbook.

Bailey regarded geography as being more concerned with ideas rather than facts. He examined the educational value of geography and then proceeded

to discuss the new developments in geographical methodology. He saw the "new geography" as "essentially a way of thinking rather than a body of knowledge" (p. 2). He outlined the new approaches to teaching geography based on the new geography as:

- (i) a stress on analysis, explanation and reasoning as opposed to sheer description;
- (ii) the dynamic nature of geographic processes and systems;
- (iii) the use of resource materials and fieldwork;
- (iv) the involvement of pupils in decision-making processes through simulations and games;
- (v) that teaching should revolve around hypothesis-formulation and testing; and
- (vi) that fieldwork and projects were to constitute an essential part of the course.

He then took each of the new techniques and showed how it could be used in the teaching of secondary school geography. He included a section on how to run a geography department.

The section on planning was detailed and step-by-step guidance to prospective teachers was given. He included models of syllabuses, course plans and lesson plans.

Teaching techniques mentioned, range from the oral lesson, the use of visual aids to team teaching. Creative thinking and the application of knowledge were emphasised. The change in teaching strategies characteristic of this period was expressed by Thomas (1978) who stated that "exposition methods of teaching are replaced by hypothetical or inferential methods in which the student applies his own intellect to the solution of specific problems" (p. 70).

Bailey discussed examinations and assessment in great detail. He stressed the value of in-service education in the professional development of a teacher. He discussed theoretical models and concept-based teaching, both new ideas at the time.

## (d) 1980 onwards

The first half of the 1980s saw the continuation of some ideals held in the 1970s regarding the teaching of geography and the emergence of new ones. During this period inquiry learning was emphasised, with increased attention given to values education, the understanding of fundamental geographic concepts and the application of educational theory to geography teaching. The geography taught at school level was influenced by developments in academic geography which entailed concern for social issues and environmental quality, the promotion of social justice and an emphasis on humanistic and Marxist analysis (Fien, 1984).

Slater F (1982), Learning through Geography, and Fien J et al, (1984) The Geography Teacher's Guide to the Classroom.

These books were chosen because they cater for the needs of experienced teachers as well as "students in colleges and universities preparing for a career teaching geography" (Fien, p. ix). In Fien et al, twenty-four geography teachers from Australia, New Zealand, England, Canada and the United States shared their views on what constitutes good geography teaching at school level.

In both books the aims and objectives of teaching geography are not explicitly stated but are incorporated in the planning of lessons and the determining of teaching techniques. The authors agreed on the view of teaching as a personal activity and as such was "as diverse an enterprise as there are geographers and geography teachers" (1984, p. xii).

In these two books the need for teachers to analyse their views of knowledge and of geography in particular, is stressed because "our views of knowledge largely determine our styles of teaching" (Hall, in Fien, 1984, p. 11).

The need for teachers to know learning theories and the role of language in learning geography was stressed. Knowledge about classroom management was also seen as vital. According to Storm (1979), as quoted by Slater:

"Discussions about teaching are dominated by considerations of content and methodology, with management aspects being apparently taboo."

And yet

"Lack of (class) control make(s) it difficult and perhaps impossible to introduce a range of materials or methods into a classroom."

(Slater, 1982, p. 106).

Teaching techniques recommended were those that develop understanding of generalisations and encourage decision-making skills. Emphasis in each lesson should be on understanding.

According to Slater

"Meaning and understanding define the process of tying little factual knots of information into bigger general knots so that geography begins to make sense, not as a heap of isolated facts but as a network of ideas and procedures."

(1982, p. 47)

Other teaching techniques mentioned were the use of the computer in the teaching and learning of geography. Mapwork still occupied an important part in the classroom.

The qualities of the geography teacher of the eighties were discussed. He needed to be open-minded, eager to experiment, innovate and introduce new teaching strategies (Slater, 1982). The qualities mentioned earlier were reaffirmed.

Fien, et al, and Slater have successfully illuminated current thinking in both geography and geography teaching at school level. Their two books are useful as a source of reference but the text may prove difficult for student teachers. They are a complete contrast to Hurry (1978), which is simple for student teachers to use, has many practical examples and very little educational theory. It is meant for the teaching of geography in the Southern African context where there are some schools with all the necessary equipment for teaching geography and others have only the chalkboard. There are step-by-step instructions on how to construct simple teaching aids from materials in the environment.

To conclude this section, it is important to show what ideas emerge from the analysis of literature on the education of geography teachers and the texts used by method lecturers.

The following topics seem to have an enduring value: the educational value of geography at the secondary level; the importance of planning schemes of work and single lessons; the use of visual illustrations in geography teaching, the value of maps and the geography room. In the case of audio-visual aids the student teachers are required to know how to use them and also how to prepare their own. All these aspects receive attention in Hurry (1978), used widely in South African institutions.

The state of geography teaching and geography teacher education have not been static. Many developments have taken place, including the expansion in audio-visual aids which have become more complex with time; greater emphasis on groupwork; workshops in the training institution where student teachers plan and prepare materials. In addition to this, another relatively new development has been the use of the video in teacher education. There is more emphasis on theoretical models, the understanding of concepts and insistence on student teachers knowing the stages of mental development. In the past, the latter used to be part of the general educational psychology course, but recently geography method texts include this important topic.

The next part of this study is devoted to establishing the practice in the pre-service education of geography teachers in South Africa.

## CHAPTER 4

## RESEARCH METHODOLOGY

Chapter One described the purpose of this study. Chapter Two looked at modern approaches to the pre-service education of secondary teachers. Chapter Three was a review of literature on the education of secondary school geography teachers. This chapter seeks to describe how data on pre-service teacher education of secondary school geography teachers in South Africa was collected. The actual presentation and analysis of data follows in Chapter 5.

The following data-gathering techniques were used:

- (a) A questionnaire sent to geography method lecturers.
- (b) interviews held with method lecturers, student teachers and geography teachers in schools.
- (c) An analysis of course outlines and examination papers.

(a) **The questionnaire.**

Questionnaires were posted to all fifty-three teacher training institutions specialising in secondary teacher education. The names and addresses of these were obtained from the Education Information Centre in Johannesburg. It was important to include all teacher training institutions because their programmes are different and, because they are few, sampling was unnecessary. Although Bogdan and Blikien (1982) maintain that questionnaires reflect the interests of those who construct them, the researcher identified and included topics that emerged from the review of literature on geography methodology. Among those included were the aims, the actual content of the course, teaching strategies, the organisation and assessment of teaching practice and course evaluation. The questionnaire is in Appendix A. A covering letter explaining the aim of this study and assuring the respondents of the confidentiality of their responses was included in the questionnaire. Respondents were asked to include their course outlines, past examination question papers and samples of information sheets given to student teachers. The course outlines served to supplement information in the questionnaire. The past examination question papers furnished

information on areas of emphasis in the course as a whole, especially the theoretical aspect. These, together with the information sheets, indicated the objectives of the course and methods used in the preparation of secondary school geography teachers.

Initially, a 39,6 per cent response was received. Because this research requires feedback from all teacher training institutions, the researcher sent follow-up letters and questionnaires to all those who did not respond to the initial request. This elicited a further 13,2 per cent response, resulting in a total of 52,8 per cent response to the questionnaire. Seventeen out of twenty-eight institutions sent their course outlines, fifteen sent their past examination question papers and five included samples of information sheets. All these provided valuable information on secondary geography teacher preparation in South Africa.

**(b) Interviews with geography method lecturers.**

Ideally, it would have been valuable if the investigator had visited all the institutions and interviewed all geography method lecturers. However, due to constraints of time and costs, the investigator could only visit five accessible institutions. Interviews were held with three university geography method lecturers and two lecturers in colleges of education. Although the researcher had specific topics to which she wanted the method lecturers to respond, interviews tended to be informal to allow for openness and flexibility. One such interview was tape-recorded with permission. In other cases the researcher took notes during the interview and these were written fully immediately after the interview had ended. In these interviews method lecturers expressed their opinions not only on what they regarded as essential in the pre-service training of geography teachers, but also why and how they handled their courses the way they did. They discussed problems they encountered and how they would like their course to be. The interview schedule is included in Appendix B.

**(c) Interviews with geography teachers-in-training.**

The decision to include student teachers in this research study was based on the assumption that since they were in the process of being trained, their own needs and experiences would throw more light on the process of teacher preparation. Student teachers in the HDE and STD programmes were interviewed in three universities and two colleges of education. It was

necessary to hold the interviews during the second semester of 1986 when students had been to schools in their first teaching practice session and had more insight into what was happening in the course. In colleges of education only third-year students were interviewed. In four institutions the students interviewed were by the arrangement of the method lecturer. In one institution the method lecturer invited the researcher to a 'brain-storming' session with all HDE students. The student teachers talked freely on their expectations of a teacher training course and made suggestions on what they would like to be included in a course like this. After the 'brain-storming' sessions, volunteers were invited for individual interviews. The response to this was good. Four student teachers were interviewed for an hour each. Two of these decided to be interviewed together. In all cases the interviewer had prepared questions in advance and the student teachers raised no objections to having their views tape-recorded. All the students were enthusiastic, free and confident. In the other four institutions it was impossible to tape the interviews but since the interviews were short, it was possible to recapture what was discussed and write full notes immediately after the interview. The interview schedule is in Appendix C.

**(d) Interviews with geography teachers in secondary schools.**

Nine teachers in five schools currently teaching geography at the secondary level were interviewed. The choice of who would be interviewed depended on the availability of the teachers and where the researcher was at the time. Five white teachers, one male and four females, were interviewed and four were black teachers, two males and two females. Eight of these teachers were interviewed in their schools and one was interviewed in a university which he was visiting when the researcher was there.

The interviewees were asked to reflect on their own training in terms of what happened, and the extent to which the course prepared them to teach geography when they started teaching. They were asked to share their views on what should happen in the training of geography teachers. Although there were questions prepared in advance, in most cases the interview covered other areas. The major reason for a structured interview schedule (see Appendix D) was the desire to present all respondents with the same stimuli so that they were responding to the same research instrument. Teachers were, in most cases, interviewed singly. There was

one instance where a group of four teachers in a school were interviewed together.

An advantage of these interviews lay in the fact that six of the teachers interviewed had their schools used by teacher training institutions for teaching practice purposes. The responses made were drawn from their own training and also their observations of student teachers when they took over their classes. Two such interviews were tape-recorded. In other cases the interviewer took notes which were written in full after the interview ended.

**(e) The analysis of course outlines, examination question papers and information sheets.**

An analysis of these provided valuable information for this investigation. The course outlines had information on what was happening in each programme and this information reinforced some of the ideas mentioned in the questionnaire. Failure of some method lecturers to submit their course outlines was a great handicap to this study. A sample of course outlines is included in Appendix E. Examination question papers revealed how the various aspects of the method course were evaluated. The information sheets had information on the tasks given to students and they revealed something of the style of teaching used by method lecturers. An example here is a case where a lecturer prepares notes on a topic and hands them out to students as against one who prepares a worksheet and lets students work through it. A sample of examination papers appears in Appendix G.

Care was at all times taken to ensure that this investigation adhered as closely as possible to the requirements of a scientific method. However, the methods used to collect data for this study had many in-built limitations. Nevertheless, it is hoped that this data will shed light on the existing conditions regarding the initial training of prospective secondary school geography teachers in South Africa.

## CHAPTER 5

## DATA PRESENTATION AND ANALYSIS

This chapter presents and analyses the data collected by this investigation. The questionnaire is considered first and, where applicable, data collected through interviews and course outlines is included. The intention is to highlight areas of consensus and divergence in South Africa in the initial education of geography teachers.

In South Africa there are three programmes available for the pre-service education of secondary school geography teachers. There is the one-year post-graduate diploma offered mainly by universities. This is known as the Higher Diploma in Education (HDE), Higher Education Diploma (HED), University Education Diploma (UED) or Diploma in Education (Dip.Ed.). The second programme is the four-year integrated degree course offered by certain universities, known as B.Paed. or B.A./B.Sc. Education. Another programme is the three-year integrated diploma offered by colleges of education and some universities. This is called the Secondary Teacher's Diploma (STD) or Senior Secondary Teacher's Diploma (SSTD). There are universities which offer two or three different programmes.

Various names are given to the geography teacher education course such as the 'Geography Method course', 'Curriculum Studies in Geography' and 'Subject Didactics in Geography'. Contrary to what Jardine (1983) maintains about the 'method course' as referring to teaching methods only, in these three courses both theoretical considerations and teaching methods are included.

It would appear from the data that some institutions regard the secondary level as extending from Standard Five to Standard Ten, while others take it to extend from Standard Six to Standard Ten. The four-phased structure of schooling suggested by the De Lange Report is not followed everywhere.

The full questionnaire is to be found in Appendix A. The first part deals with the staffing policy in institutions preparing secondary

school geography teachers. These are the findings:

### 5.1. ACADEMIC QUALIFICATIONS

The academic qualifications of geography method lecturers are summarised in Table 6 below:

TABLE 6  
ACADEMIC QUALIFICATIONS OF METHOD LECTURERS

<u>Qualification</u>	<u>Number of Lecturers</u>
B.A.	8
B.Sc.	1
B.A.Ed.	1
Hons. B.A.	12
B.Ed.	6
M.A.	2
M.Ed.	1
D.Ed.	1
Ph.D./D.Phil.	4

All method lecturers hold degrees. After the first degree some specialised in education, taking the B.Ed., M.Ed. and D.Ed. degrees, while others specialised in the academic study of geography, moving into Honours, Masters and Doctoral levels. The latter are in the majority. 21,4 percent of method lecturers hold post-graduate degrees in education as well as in geography.

### 5.2. PROFESSIONAL QUALIFICATIONS

92,9 percent of method lecturers had professional certificates. 50 percent held the one-year post-graduate diploma in education. 28 percent had the Secondary Teacher's Diploma. In all, 78 percent of the respondents were trained to teach geography at the secondary level. 7,14 percent were trained for the primary level. 10,7 percent had professional certificates obtained elsewhere and the researcher could not determine their level of specialisation.

There is no set procedure for the selection of teacher educators. From posts recently advertised for geography method lecturers it seems that the requirements are a degree, a teacher's certificate and preferably substantial teaching experience at the appropriate level.

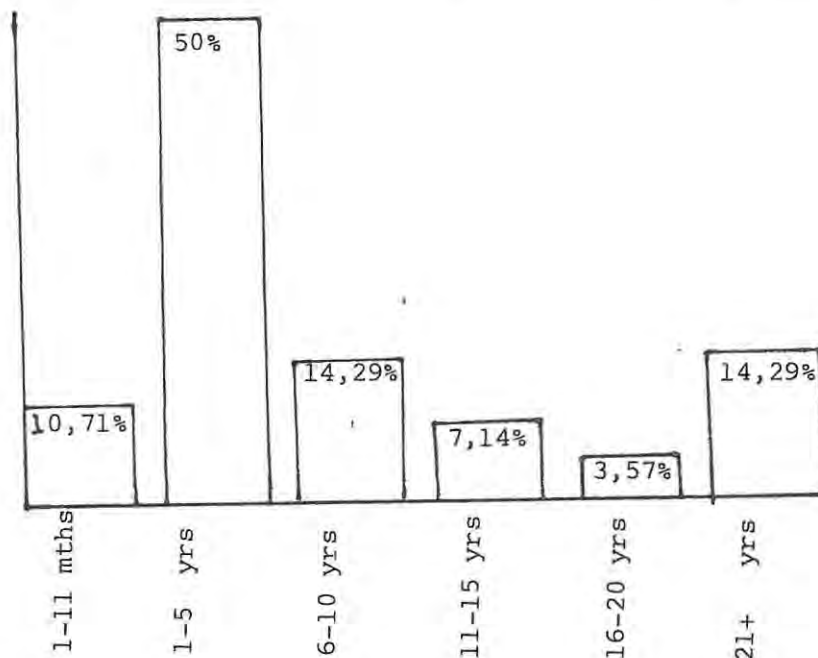
### 5.3. METHOD LECTURERS' TEACHING EXPERIENCE AT SECONDARY LEVEL

96,4 percent of these had taught geography at the secondary level. Out of the 78 percent who had teacher's certificates, only 3,57 percent had no secondary school teaching experience. Teaching experience is essential for method lecturers because it provides them with first-hand knowledge of the secondary school pupils, how they learn geography and the problems associated with geography teaching at this level. This knowledge is valuable in the preparation of teachers.

It was necessary to establish how long method lecturers had been involved in educating teachers because this would indicate how long it took them to acquire the knowledge and experience that had resulted in the programmes they designed. Figure 1 shows this.

FIGURE 1

#### EXPERIENCE IN TRAINING SECONDARY SCHOOL GEOGRAPHY TEACHERS



Geography method lecturers are generally full-time staff members of the training institution. In 7,14 percent of the institutions, secondary school teachers were employed on a part-time basis to offer the method course.

39,8 percent of the method lecturers taught the method course only and 60,7 percent taught other courses as well. In the consecutive pattern of teacher education it is rare that method lecturers offer their specialisation only unless they work on a part-time basis. In the concurrent pattern, where both content and method are offered, lecturers do not generally offer other courses. Among the 'other courses' listed were Philosophy of Education, Didactics, Guidance, Media Teaching, Lesson Analysis, Regional Geography, Mapwork in the Geography I course and English.

#### 5.4. ORGANISATION OF THE COURSE

In this section we look at all the activities intended to prepare prospective secondary geography teachers. The concern here is to establish how much time is allocated for the course, its aims and objectives, the course content, teaching strategies, instructional materials and course evaluation.

#### 5.5. TIME ALLOCATED FOR THE METHOD COURSE

The time allocated for the course differs from institution to institution. 57,1 percent of the institutions have student contact of more than five hours. All institutions following the concurrent programme fall in this category. The reason is probably because both content and method are offered. It is interesting to note that knowledge of the content is seen as more important in the colleges, with content having more periods than method. In one institution, for example, out of ten periods per week, seven were for the content and only three were for the method. 28,6 percent of the institutions allocated three to four hours per week for the method course. 14,3 per cent spent one to two hours per week. The two last-mentioned conditions seem to be prevalent in institutions offering the post-graduate teacher's diploma. One reason for this is that the university method course does not include content. 53,6 percent of all institutions worked on two periods blocked together giving anything from one-and-a-half to two hours of continuous work. This allows time for in-depth discussions, workshops and other practical student-oriented activities.

#### 5.6. AIMS OF THE METHOD COURSE

In any curriculum, the statement of aims and objectives reveals a lot about the course itself. One gets an indication of what knowledge, skills and values are regarded as essential for prospective geography teachers to acquire.

In the questionnaire, the investigator listed eight typical aims selected from the literature on the education of geography teachers (see Appendix A). Method lecturers were asked to rank these in order of importance. The ranking was as follows:

1. 'To develop teaching skills' (ranked first by 92,8 percent of respondents).
2. 'To develop a professional attitude towards geography teaching' (ranked second by 89,2 percent of respondents).
3. 'To provide teacher trainees with knowledge and skills necessary to interpret and analyse the school syllabus.
4. 'To expose prospective geography teachers to the various approaches in geography teaching'.
5. 'To provide teacher trainees with knowledge about the circumstances they will experience as teachers', was ranked fourth by 75 percent of the method lecturers.
6. 'To produce teachers who will be able to initiate changes in the geography curriculum at school level'. 50 percent of the method lecturers saw this as important and they ranked it fifth on the list.
7. 'To provide teacher trainees with skills to conduct research pertaining to the teaching of geography at school level'. This was ranked sixth in the list by 46,4 percent of the lecturers.
8. 'To expose teacher trainees to the philosophy of geographic education' was not seen as important by the method lecturers and was ranked lowest.

The respondents agreed that the geography teacher education course ought to be oriented towards the effectiveness of the teacher in the classroom (choices 1, 3 and 5 above). A geography teacher should be able to teach geography using a variety of approaches, have the correct attitude towards his work and be well acquainted with what is happening in schools. The method lecturers regarded these as essential. The ability to initiate changes in the curriculum at school level was not rated highly (choice 6 above). The reason may be that in South Africa, curriculum planning is centralised and teachers are not directly involved in the process of curriculum planning. In Britain, for example, student teachers are taught about curriculum planning (Graves, 1980). The ability to conduct school-based research was not seen as important (choice 7). The same applies to the provision of knowledge about the philosophy of the subject (choice 8). One reason for this could be the constraints of time. There are many courses offered by teacher training institutions and the time allocated to the method course may be inadequate. 45,4 percent of the university course outlines included these two topics, as against 5,8 percent of the colleges. Universities, especially those offering the post-graduate diploma in education, offer the method course only, and this means that they have more time to consider the philosophical foundations of the subject. On the other hand, colleges emphasise the knowledge of geography, helping student teachers to acquire basic teaching skills, and trying these out in practical classroom situations.

It was important to establish whether any differences existed between college and university ranking of course aims. The correlation coefficient was  $r_s = 0,92$  and this indicates a surprisingly high positive correlation.

Some of the aims listed in the questionnaire were also mentioned in the course outlines, with some additions. In the course outlines the course aims were expressed implicitly in terms of what knowledge, skills and attitudes were to be developed. Examples of course outlines from eleven institutions are included in Appendix E.

With regard to knowledge, student teachers were expected to know the subject matter they were to teach. In Appendix E(4) it is stated that "a mastery of the subject matter is essential for effective teaching." In the consecutive pattern of teacher education, subject knowledge is not included in the course outlines since, in theory, student teachers

enter the programme with a sound knowledge of geography. The student teachers are also expected to be familiar "with the structure of the South African syllabus, the textbook series used, the common approaches and the best modern practices" (Appendix E8). In addition to these, there were aims included to meet specific regional needs, for example, "to introduce the concept, aims and scope of environmental education" (Appendix E1) and "to promote a sense of social and community responsibility for, and to encourage active participation in the development of the country" (Appendix E2). In the latter, one gets an impression of what is considered to be the role of the geography teacher, namely that of being an agent of social change. Another role of the geography teacher is expressed in the statements about what is understood by education, teaching in general and geography teaching in particular. In Appendix E7 it is stated that "Die onderwyser...moet volwasse wees" and that "Die inhoud van die opleiding moet nie net alleen beroepsgerig wees nie, dit moet die adolessent volwassenheid laat betree."

One of the objectives of the training course was stated as "to help (student teachers) learn how to collect and construct simple teaching aids from locally available and inexpensive materials" (Appendix E10).

Amongst the skills mentioned in the course outlines are the following: the development of appropriate teaching skills, the ability to conduct independent study, skills in basic research techniques and the ability to evaluate critically the information collected from various sources (Appendix E2 ).

The development of professional attitudes is regarded as one of the essential aims in geography teacher education. In Appendix E9 the value of having the correct attitude is mentioned: "while... training as a teacher of geography is orientated towards equipping (the student) with fundamental principles and knowledge to enable him/her to cope with the school situation, in the final analysis, (the student's) attitude and the role (he) assume(s) are of primary significance for the successful teaching of geography." In most course outlines the specific attitudes to be developed are not clearly stated, perhaps because, unlike knowledge that can be imparted, attitudes are highly subjective and it is the student teacher who has to show his attitude towards geography teaching.

In addition to the questionnaire and course outlines, an attempt was made to ascertain the views of (a) practising teachers and (b) students-in-training. Geography teachers in schools see the aim of the geography teacher education course as "to provide student teachers with knowledge about lesson planning and how to focus the attention of the pupils on the main ideas of the lesson."

Some student teachers felt that the course should aim at making them function well as teachers in class and that it should provide them with knowledge about adolescents and how to handle them. In one case, the student teacher said that the course should show them "how to handle political issues in a geography class."

#### 5.7. THE COURSE CONTENT

The content of the geography teacher education course can be divided into the academic study of geography, topics covered in the method course and teaching practice.

##### (a) The academic study of geography

An in-depth study of geography is regarded as essential in the education of teachers. Prospective geography teachers ought to know geographic concepts, principles and methods of enquiry. In the consecutive pattern of teacher education the academic study of geography is not included since student teachers have majored in geography in their degrees. Secondary school geography teachers and student teachers interviewed regarded the under-graduate course in geography as adequate in preparing teachers to teach all the sections in the school geography syllabus. There was insistence that such a course should not specialise too much and that specialisation should be left for the Honours course. The value of studying geography is not only that students get to know geography, but also that they acquire certain academic skills and values which are necessary for teaching purposes.

In the concurrent pattern the academic study of geography is offered. There are differences regarding the level at which the content is offered. In the four-year integrated degree programme the level is that of a degree. In the case of colleges, 68,8 percent offer the secondary school geography content only and 32,8 percent offer school geography and

"university enrichment", explained in some cases as Course I Geography (Appendix E7).

The reason given by method lecturers for the teaching of secondary school geography content to student teachers was that the student teachers needed to have a firm grasp of the content they were to teach. This argument was valid during the time when students with Standard Eight geography were trained to teach at the secondary level. With the raising of standards for college entrance to Standard Ten and the requirement by some colleges that a student must have obtained an E-symbol at Higher Grade level or a D-symbol at Standard Grade level to be allowed to take geography as a teaching major, it is no longer clear why student teachers are made to repeat the content that they did and passed at matriculation level. At teacher education level it is necessary that prospective geography teachers should have knowledge of the subject that is wider and above that of the students they will be teaching.

**(b) Topics covered in the method course**

These can be grouped into those focusing on providing the student teachers with knowledge of the theoretical foundations of the discipline itself and those relating to the acquisition of practical teaching skills.

**Topics relating to the theoretical aspects of the course**

Teacher educators have increasingly called for an inclusion of psychological, sociological and philosophical theories in the preparation of students to teach specific areas (Hirst, 1980; Simon, 1976).

**(i) Philosophical foundations of the subject**

In the questionnaire this item was ranked lowest by method lecturers (see p. 63). In only 40,3 percent of the course outlines was this topic included and out of this, 16,6 percent were from the colleges. In the post-graduate diploma in education, method lecturers assume that student teachers already know about the nature, scope and field of geography. In those university programmes where this topic is included, the reasons might be that there is time available since no content is offered and also that a discussion of this topic is suitable to post-graduate students.

In colleges of education an opposite situation exists, namely that more time is devoted to learning the content and the students in them are weaker since most of them could not obtain matriculation exemption.

**(ii) The development of geography as a discipline**

This topic was also regarded as not essential by most method lecturers. It was listed in only 16 percent of the course outlines. The depth at which it is discussed varies from institution to institution, with some spending less time and others going into great details, e.g. Appendix E9.

**(iii) Aims and objectives of geographical education**

All geography method lecturers regarded the knowledge of the aims and objectives of teaching geography at the secondary level as essential for future teachers. In the course outlines this topic appears high up on the list with only one instance, Appendix E3, where it is discussed towards the end of the year.

**(iv) Psychology and geography learning**

The understanding of how pupils learn geography is increasingly becoming an integral part of teacher education programmes. This came about as a result of a shift in emphasis in teaching-learning situations from teacher-dominated classes to learner-centred activities. Geography educators are concerned with how children acquire geographic skills and an understanding of geographic concepts. Geography teachers need to know developmental and learning theories as propounded by psychologists such as Piaget, Gagné, Ausubel and others.

In geography teacher education programmes in South Africa this topic appeared mainly in university course outlines. In all cases it would appear that no in-depth study of learning theories was undertaken in the method course. Student teachers were expected to apply what they had learnt from the Educational Psychology course to geography teaching. They needed to know what geography subject matter was suitable for secondary school pupils, what methods of teaching were suitable for this group of pupils and perceptual problems common to secondary school pupils. In colleges of edu-

cation this topic was not mentioned, probably because of the over-emphasis on an understanding of geography content and the type of student admitted to these colleges.

**(v) Curriculum planning**

This topic appeared in 20 percent of the course outlines. It involves knowledge of how to design and develop a geography curriculum for the schools. In Appendix E1 this topic is discussed in detail. The reason for the low percentage of institutions discussing this topic might be the fact that in South Africa the curriculum is centrally developed. The teacher's task is mainly to interpret and analyse the school geography curriculum.

**Topics relating to the acquisition of practical teaching skills**

Concern here is with an understanding of theory and its application in practice. The student teachers are made to prepare teaching materials, e.g. transparencies, and to draw up lesson plans.

**(i) Planning and organisation of work**

Such planning involves the preparation of workschemes in terms of programmes for the whole year for the different levels of the secondary school. This appeared in 66,6 percent of the course outlines. It is important to note that in some institutions this topic is handled in a theoretical manner, with student teachers being informed about how to prepare a scheme of work for the year without actually preparing one. In Appendix E4, an alternative approach is offered.

The preparation of teaching units was mentioned in 20 percent of the course outlines and these were universities. This is an important part of the course because it makes student teachers aware of the topics in the school geography syllabus and they are made to think in terms of how to teach those themes. Appendices E6 and E8 show how this could be done.

The planning of individual lessons appeared in all the course outlines. This is the gist of pre-service teacher education, that student teachers should be able to plan and present lessons. The

sub-headings included in a typical lesson preparation are outlined in Appendix E4. From an analysis of teaching practice assessment forms (Appendix F) the key areas seem to be the following:

- Aims and objectives of the lesson
- The selection and preparation of teaching aids.
- The selection of teaching techniques suitable for the topic and the pupils.
- Lesson introduction.
- Lesson presentation.
- Involvement of pupils in the lesson.
- The summary of the lesson.
- Conclusion.

**(ii) Organising pupils' work**

Student teachers need to know how to organise written activities in class and for homework, giving assignments and individual or group research projects. This topic was mentioned in 34 percent of the course outlines and in other course outlines it was included under teaching techniques. It is also important for student teachers to know how to keep a record of pupils' work.

**Teaching strategies taught to student teachers**

In some course outlines a distinction is made between general and specific methods (Appendices E4 and E11). General methods are those that can be applied to the teaching of all school subjects, for example, inductive-deductive approaches, oral work, including questioning and discussion. Such teaching approaches are generally taught in the Principles of Teaching course and what geography method lecturers do is to discuss their application to the teaching of geography. Specific methods refer to those that are specific to the teaching of geography, e.g. mapwork, fieldwork and others. Another approach to teaching strategies is to focus on the 'new geography' and its implications for the teaching of geography at secondary level. The geography core syllabus introduced in 1985 has included the 'new approaches'.

Teaching strategies mentioned in the various course outlines are: the lecture method, question-and-answer, discussion, project/assignment, groupwork, the use of the textbook, fieldwork, mapwork, discovery methods, games and simulations, hypothesis testing, team teaching, the use of illustrations and the worksheet method.

Student teachers are expected to know all the teaching strategies available for the teaching of geography at secondary level and to be able to use these in practical classroom situations. They should be able to select the teaching techniques suitable for the subject matter to be taught and for the different secondary school levels.

One course outline states that geography method lecturers should show student teachers how "to apply each method to different aspects of the Standards Nine and Ten syllabi." Next to each section of the Standard Nine and Ten topics, a method/s which might be used has been listed. Demonstration lessons are thus one way of showing student teachers how each teaching strategy can be used (Appendix E4).

#### TEACHING AIDS

In the questionnaire the investigator listed twelve typical teaching aids and method lecturers were asked to indicate the extent to which they discussed these with their students.

Maps were discussed in all institutions, in detail, by 82,1 percent and briefly by 17,9 percent.

Photographs were discussed in detail by 50 percent of the lecturers, and briefly by 39,2 percent. They were not discussed at all by 10,8 percent.

Computers. 78,6 percent of the lecturers indicated that they never discussed this item and only 21,4 percent discussed it briefly. Not a single institution indicated that computers were discussed in detail in the course. This can be expected, since the use of the computer in geography teaching is a recent innovation (refer to Table 5) and is not widely used in schools.

Slides. In 17,8 percent of the responses it was stated that slides were discussed in detail; in 71,4 percent, briefly and in 10,8 percent, not at all.

Models were covered in detail by 53,6 percent, briefly by 42,8 percent and not at all by 3,6 percent.

Films. 25 percent of the respondents discussed films in detail; 57,1 percent, briefly and not at all by 17,9 percent. Many black institutions indicated that they did not discuss the use of films in geography teaching. This may be due to lack of money to purchase these and the film projector, and the knowledge that student teachers were not likely to use these in schools due to lack of electricity.

Overhead Projector. Like maps, a high percentage (78,6) of the respondents indicated that they discussed this item in detail and 21,4 percent discussed it briefly.

Charts. Again, this was discussed in detail by 75 percent; briefly by 21,4 percent and in one institution no response was given.

The Chalkboard. This was done in detail by 75 percent of the method lecturers; briefly by 17,8 percent and two method lecturers did not respond to this item.

The use of the textbook was discussed in detail by 64,3 percent; briefly by 32,1 percent and one method lecturer did not respond to this item.

The Globe. Not many lecturers discussed this item in detail and only 57,1 percent indicated that they did. 25 percent discussed it briefly; 10,7 percent not at all and 7,1 percent of the lecturers did not indicate their responses.

Filmstrips. Only 21,4 percent of the method lecturers discussed this item in detail. 46,4 percent discussed it briefly and 32,2 percent not at all. Filmstrips are no longer popular in the geography classroom.

It seems that method lecturers spend a lot of time discussing maps, photographs, models, charts, the overhead projector, the chalkboard and the globe. In most colleges, the overhead projector is not discussed in detail.

In item 4.13 the method lecturers were asked to indicate if student teachers were involved in the preparation of teaching aids. In 66,6 percent of black institutions student teachers prepare teaching aids as opposed to 57,1 percent of white institutions. In black institutions there are not sufficient funds to purchase commercial aids and in most

cases teachers would have to prepare charts for use in the geography classroom.

In item 4.14, method lecturers were required to indicate whether they discussed how to improvise. Improvisation refers to the ability of the teacher to prepare materials from locally available resources. As expected, a high percentage (80,9) of black institutions indicated that they helped their students learn how to improvise in difficult situations, as opposed to 42,8 percent of white institutions which did this. This indicates that geography teacher educators consider the reality that their students are likely to face in the schools on completion of their studies.

#### 5.8. TEACHING STRATEGIES USED BY METHOD LECTURERS

It is important, at this stage, to establish the strategies used by method lecturers to train secondary geography teachers.

In the questionnaire, method lecturers were asked to indicate which strategy they used very often, often, occasionally and never. A list of strategies were listed and the frequency at which each one was used is ranked below:

1. Lecture method.
2. Assignments.
3. Discussion and report back after teaching practice.
5. Use of printed material from a variety of sources.
6. Demonstration lessons.
7. Workshops (e.g. students prepare worksheets, transparencies, etc.), problem-solving (e.g. individuals/groups are given a problem to report on), use of a prescribed method textbook.
10. Preparation of teaching units, seminars.
12. Field excursions.
13. Peer teaching without a video camera.
14. Peer teaching with a video camera.
15. School-based research.

It is necessary to separate colleges from universities as this will indicate clearly which strategies are used for training graduate and non-graduate teachers. Table 7 shows the differences.

TABLE 7

## STRATEGIES USED BY METHOD LECTURERS IN COLLEGES AND UNIVERSITIES

<u>COLLEGES</u>	<u>UNIVERSITIES</u>
1. Lecture method	1. Use of printed material from a variety of sources.
2. Assignments	2. Discussion; lecture method.
3. Use of a prescribed method textbook; demonstration lessons; report back after teaching practice.	3. Report back after teaching practice.
6. Discussion.	4. Workshops (e.g. students prepare worksheets, transparencies, etc.).
7. Use of printed material from a variety of sources.	5. Seminars; assignments; preparation of teaching units.
8. Problem-solving (e.g. individuals given a problem to report on.	9. Problem-solving.
9. Preparation of teaching units.	10. Peer teaching with a camera; demonstration lesson.
10. Peer teaching without a camera.	11. Field excursion.
11. Field excursions.	12. School-based research.
12. Workshops (students prepare worksheets, etc.).	13. Use of a prescribed method textbook.
13. School-based research.	14. Peer teaching without a camera.
14. Peer teaching with a camera.	

It is clear that in colleges, strategies used very often are lecturer-centred, with the lecture method and demonstration lessons high up on the list. In universities, although lecturing occurs often, emphasis is on student activities, for example, students are given handouts to read for discussions and seminars. The use of a prescribed textbook dominates college courses, while this item is ranked second-lowest by universities. Respondents were asked to indicate which textbooks they used. Although in 68 percent of the universities the response was that students were given

handouts drawn from various sources, books mentioned were Hurry (1978); Moller (1983); Graves (1980); Bailey (1974); Gopsill (1962); Walford (1975) and Nicol (1980).

In both colleges of education and universities, report-back after teaching practice was done frequently. The preparation of worksheets and transparencies appears high on the list of university teaching strategies, while it is not popular in colleges. It is also important to note that micro-teaching takes place in all institutions but in the colleges it is often done without a camera, as opposed to university practice, where a camera is used. School-based research appears lowest in the ranking of both college and university method lecturers.

#### 5.9. TEACHING PRACTICE

Teaching practice, whether in simulated situations in the institution, or in actual classroom situations, is an important component of pre-service teacher education. Student teachers need to be acquainted with teaching as a skill to be developed. Teaching practice provides an opportunity for the various techniques and theories learnt to be tried out. In the institution, peer teaching is used and sometimes small groups of pupils from the schools are brought in

78,6 percent of the respondents used micro-teaching occasionally and 40,9 percent of these did it with a video camera, while the remainder did it without a camera. Student teachers interviewed regarded micro-teaching as the best way of helping teacher trainees to master teaching ability. They insisted on having it frequently throughout the year.

Teaching practice in the schools normally takes place in blocked sessions. Its duration differs from programme to programme. The post-graduate diploma in education has a minimum duration of seven weeks, standardised by the Committee of Heads of Education. In the questionnaire method lecturers were asked to rank items that lecturers usually looked for when assessing a student during teaching practice. Their ranking was as follows:

- (i) Knowledge of subject matter.
- (ii) Ability to communicate facts; ability to secure interest and response from the class.

- (iii) Confidence.
- (iv) Relationship with pupils.
- (v) Classroom management; the use of audio-visual aids.
- (vi) Use of maps.
- (vii) Use of voice.
- (viii) Neatness.

The teaching practice assessment forms (Appendix F) revealed more information and widened the scope of items looked for in a prospective geography teacher. Generally, the following items appeared in many of these:

- (a) Personal appearance - this entails how the student teacher projects his image as a professional. Items mentioned are 'neatness', 'groomed', 'flashy' (Appendix F2).
- (b) Personal characteristics cited as 'friendliness', 'a sense of humour', 'self-confidence', mannerisms' (Appendix F4), and a 'general ability to cope' (Appendix F3).
- (c) Lesson preparation - this usually involves looking at the notes that the student teacher prepared for the lesson. Method lecturers look for some evidence of careful preparation and the quality of the lesson plan. Included in the lesson notes are aims and objectives of the lesson, an indication of the method(s) to be used, how the lesson will be developed and teaching aids planned.
- (d) Lesson presentation - the lesson is divided into an introduction which covers the arousing of pupils' interest and linking the new lesson with previous ones, the content of the lesson and lesson conclusion. In the content part of the lesson, method lecturers ascertain the effectiveness of the lesson, pupil involvement and the use of illustrations. In the conclusion, an attempt is made to establish if the lesson objectives were achieved.

Other aspects mentioned in the assessment forms are chalkboard work, language usage, the use of the voice, classroom management and the student teacher's responsiveness to pupils' needs.

Out of eleven teaching practice assessment forms analysed, only one was specifically designed for the geography method course (Appendix F8). In the others, a general form meant for all the subjects was used. There was great diversity in the format of the forms. Some had too many details that had to be filled in during the lesson, e.g. Appendix F2, F19 and F11. Others had an open style format where the lecturer wrote his comments without having to fill in details prepared earlier (Appendix F5 and F6). In such a case the method lecturer had more time to observe the lesson.

Student teachers felt that method lecturers ought to visit their students as often as possible. They also felt that experienced geography teachers in the schools where they did their teaching practice should be involved in assessing the students. They suggested that more exposure to the schools was necessary, even if this involved informal visits in between blocked teaching practice sessions. On the other hand, school teachers felt that this was not possible as "there is a syllabus to be finished and student teachers cause a lot of disruption."

#### 5.10. COURSE EVALUATION

In the questionnaire method lecturers were asked to indicate sources of information on which they based their evaluation of student teachers. Five items were listed and of these three were ticked by 80,1 percent of the respondents. These were the final examination, observation of students during teaching practice and grades on papers and other written work.

The general trend in the evaluation of the geography method course was the use of the yearmark, end of the year examinations and teaching practice (all three given separate scores). 65 percent of the method lecturers indicated that they gave the same weighting on the yearmark and the final examination.

Some student teachers and secondary school geography teachers expressed dissatisfaction with the practice of writing an examination at the end of the year. Such examinations were seen as "a farce and tested theory only." They maintained that teaching is a practical activity and thus course evaluation should be based on what the student teacher can do in

a practical situation. Examples given were: student teachers were to be evaluated on what they did during the year, e.g. the transparencies and worksheets they prepared and their performance in micro-teaching and teaching practice in schools. This is a good idea but for purposes of standards and certification one doubts the efficacy of such an idea.

Secondary school teachers felt that the method examinations were easy and one did not need to study hard to pass. An analysis of question papers could be of help in this regard (see Appendix G). It is true that the final examinations tend to emphasise theory to the detriment of testing practical skills. In some cases, however, in the examinations, student teachers are required to prepare teaching units (Appendix G6), individual lessons, set questions and draw up memoranda (Appendix G10).

In summary, geography method lecturers in South Africa concur on a number of issues regarding the preparation of secondary geography teachers. These issues are aims and objectives (see page 54), specific knowledge essential for prospective teachers to have (see page 54), specific skills to be acquired and the development of professional attitudes towards teaching and geography teaching in particular. All programmes include theory and practice. The problem that seems to affect all programmes is that of balancing theory and practice.

Divergencies exist in the strategies used to prepare teachers. Some programmes are practically-oriented with a lot of practice provided for student teachers in the form of the preparation of units of work and involvement in workshops. Others are theory-oriented with a lot of lecturing, and practical work is confined to the preparation of lessons and a few teaching aids, especially the drawing of charts. Differences also exist between university and college training. Universities are ahead of the colleges in incorporating the new developments in geography and in teaching strategies suitable for the teaching of geography at the secondary level.

The following chapter offers proposals for improving the quality of the pre-service education of secondary geography teachers in Transkei.

## CHAPTER 6

### CONCLUSION AND RECOMMENDATIONS

In the preceding chapter the investigator surveyed tendencies in the pre-service education of secondary geography teachers with a focus on South Africa. This final chapter offers recommendations towards the improvement of secondary geography teacher education in Transkei.

#### **Some preliminary considerations**

The joint responsibility of producing secondary geography teachers shared by colleges and universities has still to continue in order to solve the problem of teacher supply. Since the bulk of teachers come from the colleges, any improvements necessary in teacher education in Transkei should be college-based.

The practice of admitting students with a Senior Certificate or Matriculation Exemption should be continued. The insistence on the attainment of an E-symbol (HG) and a D-symbol (SG) in Standard Ten geography has to be reviewed if the problem of lack of qualified geography teachers is to be solved. It is my contention that a student who has done geography up to Standard Ten can, with proper training by a qualified teaching staff in an institution with all the necessary facilities, become a good secondary geography teacher. This leads us to the staffing policy in teacher training institutions.

As in institutions everywhere, geography teacher educators in Transkei should have degrees, professional qualifications and experience in teaching geography at the secondary level. In addition to this, they need to know the conditions of Transkeian secondary schools.

#### **Aims and objectives**

A pre-service geography teacher education course in Transkei should

- (a) introduce student teachers to the fundamental principles underlying effective geography teaching at the secondary level;
- (b) acquaint the prospective teachers with a sound theoretical back-

ground on which to base their interpretation of classroom situations and general educational issues;

- (c) supply student teachers with knowledge about the various strategies that could be employed in teaching geography at the secondary level;
- (d) help student teachers develop their self-concepts. Having gone through a system of schooling where creativity was discouraged, the student teachers should be helped to develop confidence in themselves and their abilities;
- (e) produce teachers who understand their role in society and who can, through their area of specialisation, help towards improving the condition of the communities which they serve;
- (f) produce teachers who are resourceful and know how to improvise;
- (g) encourage a sense of professionalism in the prospective teachers.

#### **Specific knowledge essential for student teachers**

- (a) Prospective secondary geography teachers need to have a sound knowledge of geography. In the non-graduate teacher education programmes it is necessary that the geography content taught be above that of the secondary school level.
- (b) They need to know the school geography syllabus.
- (c) They need to understand how secondary school pupils learn geographic concepts. This means understanding the implications of learning theories for the teaching of geography at this level.
- (d) Student teachers should have knowledge of the variety of teaching strategies and audio-visual aids suitable for geography teaching.

#### **Specific skills to be developed**

- (a) The student teachers should be able to plan and present lessons.
- (b) The student teachers should be able to prepare teaching material from locally available resources.
- (c) They should develop the ability to cope in difficult situations. This is relevant to Transkeian student teachers as most of them teach under difficult conditions. For example, they have to teach in remote schools which are not easily accessible, where a few

students in a class have the textbook and where there are no duplicating or library facilities.

- (d) It is also necessary to develop enquiry skills.
- (e) Communication skills need to be emphasised in a geography teacher education programme. This includes oracy, writing skills and graphicacy.
- (g) The ability to interact with pupils and colleagues is also necessary.

#### **Attitudes to be developed**

Student teachers need to develop commitment to professional growth. Such an attitude will make them thirst for knowledge. They need to keep abreast of innovations in geography teaching.

#### **Teaching strategies to be used**

The teacher educators should practice the teaching strategies they advocate to their students. Any theory taught in the course should be school-based. Student teachers need to be provided with ample opportunity to prepare materials. The approach to teaching aids should be to make them aware of the range that is available and they should be able to use them. Although some of the complicated audio-visual aids may not be available in Transkeian schools, it is important that student teachers should be aware of their existence. As much as possible there should be more workshop activities and less lectures. Each student teacher must be able to prepare simple aids and worksheets. The university course can practise this quite easily since student numbers are low.

Students need to be acquainted with actual classroom teaching. This means that the conventional model of teacher education, where students spend some time in the institution and then go out on teaching practice, has a place in Transkei geography teacher education. The competency-based model is particularly relevant because there are specific skills that geography teachers should acquire, for example, how to use maps and how to conduct fieldwork.

### Organisation of teaching practice

Teaching practice is important in the education of secondary geography teachers in Transkei. Before student teachers go out on teaching practice they need to have practice in the institution. Micro-teaching becomes an important activity in this regard. Peer group teaching should be frequent and as much as possible be spread throughout the year. The student teachers need to be introduced gradually to class teaching, starting with small groups and progressing to large groups, until finally, when they have confidence and expertise, they teach whole classes.

Practising teachers in schools should, as much as possible, be involved in teacher education. The close co-operation needed between school teachers and method lecturers will widen the knowledge base of the student teacher. The much-needed exposure to the real situation advocated by student teachers in this study would be possible. Another method of exposing student teachers to classroom situations would be to re-introduce home teaching. This was the practice whereby at the beginning of the year the prospective teachers taught in the schools in their neighbourhood, for purposes of observing what the experienced teachers do.

It is also important that during teaching practice the student teachers should be made to spend the whole day at the school. This would make them aware of the varied responsibilities of a teacher.

Geography method lecturers should adopt an attitude of helping a student teacher master teaching ability rather than passing or failing a student during teaching practice. An assessment form which has more space for the method lecturer's comments is more valuable than the one with a long list of attributes to be assessed and a mark given at the end.

### Course evaluation

Evaluation in geography method courses should include both practical and theoretical aspects. The practical work which the student teacher did during the course of the year in the way of preparing teaching units, worksheets, transparencies, etc., should be considered in course evaluation. Theory has also got to be evaluated. In the examinations at the end of the year the questions should test theoretical understanding on the topics listed on page 57 of this thesis and also the students' ability to plan and prepare specific items.

In conclusion, the quality of pre-service geography teacher education for the secondary level in Transkei needs a lot of improvement. The geography teacher education programmes should incorporate recent trends in teacher education generally. There is a need for improvement within the institutions and an introduction of a programme of induction of new teachers. This will call for more involvement of experienced teachers in the schools in teacher education. Furthermore, there is a need for well-organised teacher support services. The novice teacher needs to be made aware that he is a member of a group and must be provided with guidance and assistance. This is important for professional growth.

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## APPENDIX A

QUESTIONNAIRE TO GEOGRAPHY TEACHER EDUCATORS IN  
TEACHER TRAINING COLLEGES AND UNIVERSITIES

by Mrs C P Mniki, Faculty of Education, University  
of Transkei, Private Bag X5092, Umtata

This is a survey to investigate what takes place in the pre-service training of secondary school geography teachers. Your answers to all questions will assist us in making meaningful suggestions for the improvement of training secondary school geography teachers in Transkei. Your assistance and co-operation in this regard is highly appreciated. All information will be treated as confidential. The completed questionnaire should be posted to:

Mrs C P Mniki  
Faculty of Education  
University of Transkei  
Private Bag X5092  
UMTATA

An addressed, postage-paid envelope is enclosed for this purpose.

Thank you once more for your co-operation.

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## BACKGROUND INFORMATION

1. Name of College/University: .....
2. Tick the correct box:
- 2.1. Your academic qualifications

Matriculation	
B.A.	
B.Sc.	
B. Paed	
B.A./B.Sc. Education	
Honours B.A./B Sc.	
B. Ed.	
M.A./M Sc.	
M. Ed.	
D. Ed./Ph. D.	
Other (specify)	

2.2. Your professional qualification:

T3	T4	LPTC	HPTC	JSTC
SSTD	PTD	STD	HDE	HED
HED	Dip.Ed	B.Paed	B.A.Ed	B.Sc Ed
B.Ed	OTHER (specify):			

2.3. How long have you been involved in the training of geography teachers?

1 - 11 months	
1 - 5 years	
6 - 10 years	
11 - 15 years	
16 - 20 years	
21+	

2.4. Name of teacher training course(s) offered by your college/university and length of method course in years:

Name of course(s)	Duration of method course
SSTD	
STD	
B.A./B.Sc. Ed.	
UED/HDE/HED	
Dip. Ed.	

2.5. Number of content hours per week:

1 - 2 hours/week	
3 - 4 hours/week	
5+ hours/week	

2.6. Are some periods blocked?

Yes	
No	

2.7. Are there any other courses you teach in the college/university?

Yes	
No	

- 2.8. If yes to 2.7. above list the courses:

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- 2.9. Have you ever taught at secondary school level?

Yes	
No	

- 2.10. Do you do the content of geography?

Yes	
No	

- 2.11. If yes to 2.10 above, at what level is this done? (e.g. University content, Secondary school content)

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#### COURSE AIMS

2. Below are some of the aims for the programme of training geography teachers, indicate the importance you place on each by circling the number that best expresses your rating.

Level of importance : 1 Not important  
 2 Less important  
 3 Important  
 4 Very important  
 5 Extremely important

	Level of importance				
	Low				High
	1	2	3	4	5
2.1. To expose teacher trainees to the philosophy of geographical education	1	2	3	4	5
2.2. To develop a professional attitude towards geography teaching	1	2	3	4	5
2.3. To provide teacher trainees with knowledge and skills necessary to interpret and analyse the school syllabus	1	2	3	4	5

	Level of importance				
	Low				High
2.4. To expose prospective geography teachers to the various approaches in the teaching of geographh	1	2	3	4	5
2.5. To develop teaching skills	1	2	3	4	5
2.6. To provide teacher trainees with knowledge about the circumstances they will experience as teachers	1	2	3	3	5
2.7. To produce teachers who will be able to initiate changes in the geography curriculum at school level	1	2	3	4	5
2.8. To provide teacher trainees with skills to conduct research pertaining to the teaching of geography at school level	1	2	3	4	5

#### TEACHING TECHNIQUES

- 3(a) Below is a list of some of the teaching techniques commonly used by geography teacher educators. Please indicate your use of them by putting a tick in the correct block.

	Very often	Often	Occasionally	Never
3.1. Lecture method				
3.2. Seminars (i.e. students take turns to lead a seminar on a topic)				
3.3. Discussion on a particular teaching problem				
3.4. Assignments				
3.5. School-based research				
3.6. Use of printed material from a variety of sources.				
3.7. Problem solving (e.g. individuals/groups are given a problem to report on)				
3.8. Use of prescribed geography method textbook				
3.9. Preparation for teaching units				
3.10. Peer teaching with a video camera				
3.11. Peer teaching without a video camera				

	Very often	Often	Occasionally	Never
3.12. Field excursions				
3.13. Report back on teaching practice				
3.14. Workshops (e.g. students prepare worksheets, transparencies, etc.)				
3.15. Demonstration lessons				
3.16. Other (please specify)				

- (b) Which textbook(s) have you used in the past three years?

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#### TEACHING AIDS

- 4(a) By putting a tick in the correct block, indicate what teaching aids do you do in detail, briefly and not at all.

	In detail	Briefly	Not at all
4.1. Maps			
4.2. Photographs			
4.3. Computers			
4.4. Slides			
4.5. Models			
4.6. Films			
4.7. Overhead projector			
4.8. Charts			
4.9. Chalkboard			
4.10. Textbook			
4.11. Globe			
4.12. Filmstrips			
(b) 4.13. Student teachers preparing teaching aids			
4.14. How to improvise using what is available			

**TEACHING PRACTICE**

5. Some of the things that tutors look for when assessing students during teaching practice are listed below. Rate these in order of priority by writing 1 to the most important, then proceed to the least important.

- 5.1. Knowledge of subject matter
- 5.2. Confidence
- 5.3. Neatness
- 5.4. Use of voice
- 5.5. Ability to communicate facts
- 5.6. Use of maps
- 5.7. Classroom management
- 5.8. Relationship with class
- 5.9. Use of audio-visual aids
- 5.10. Ability to secure interest and responses from the class


**EVALUATION**

- 6(a) Indicate by means of a tick the sources of information you use as bases for the evaluation of your student's progress:

- 6.1. The student's participation in class discussions
- 6.2. Grades on papers and other written assignments
- 6.3. Scores on the final examination
- 6.4. Observing students teach
- 6.5. Ratings by peers

- (b) What is the weighting between:

- (i) Course work
- (ii) Teaching Practice
- (iii) End of year examination
- (iv) Your own general assessment of the student

APPENDIX B

## INTERVIEW SCHEDULE : GEOGRAPHY METHOD LECTURERS

1. Personal information : experience in geography teacher education, secondary school teaching experience.
2. What programmes for geography teacher education are offered by your institution? How long are they? What are the requirements for admission?
3. What type of secondary school geography teacher are you aiming at producing?
4. What specific knowledge do you regard as essential for prospective teachers of geography? How do you select this information?
5. What specific teaching skills are necessary for them to acquire? How do you help them to acquire these?
6. Are there any specific values and attitudes necessary for prospective geography teachers to develop? Specify them. How do you make them develop these?
7. What strategies do you use to educate geography teachers?
8. How is teaching practice organised by your institution? Do you use a separate assessment form? What criteria do you use to assess a student teacher during teaching practice.
9. How are geography teachers in your neighbourhood involved in teacher preparation? Are there any changes you would like to see in this area?
10. What methods of evaluation do you use for purposes of certification?
11. Do you do any follow-up of your students once they leave the institution.

12. Are there any problems you encounter in your job?
13. How do you integrate what you do with what your colleagues are doing in Educational Psychology, Principles of Teaching and Educational Technology, for example?
14. Are there any changes you would like to implement in your programme?

APPENDIX C

## INTERVIEW SCHEDULE : 1986 STUDENT TEACHERS

1. On entry to this course, what were your expectations?
2. You are now almost halfway through the course, do you feel that your expectations were met?
3. What specific knowledge about geography teaching at the secondary level do student teachers need? What approaches should be used to impart this knowledge?
4. Of what value are theoretical topics like aims and objectives of geographical education in the training course?
5. What particular knowledge and skills did you feel you needed during your first teaching practice session?
6. Did you find the degree course in geography adequate in enabling you to handle the school geography course?
7. How should practical teaching skills be developed in pre-service geography teacher education?
8. Would you say that the ten weeks of teaching practice provides enough exposure to the schools?
9. On teaching practice assessment, what feedback ought to be given to student teachers and how?
10. Do you feel that experienced secondary school geography teachers should be involved in teacher education? How can this be done?
11. How should the method course as a whole be evaluated?
12. Are there any other issues you would like to discuss with me?

APPENDIX D

## INTERVIEW SCHEDULE : SECONDARY SCHOOL GEOGRAPHY TEACHERS

## BACKGROUND INFORMATION FOR INTERVIEW WITH EXPERIENCED GEOGRAPHY TEACHERS

This is an attempt to establish the best way to train secondary school geography teachers. As an experienced geography teacher your views are very important for me. I would like to discuss the following questions with you. Please feel free to develop your answers along the lines you feel to be relevant.

1. What specific knowledge of geography do future geography teachers need? Which university courses in geography were most useful to you? What courses ought students to study in order to be prepared to teach the present syllabus?
2. What skills ought geography teachers to acquire before leaving the training institution?
3. What attitudes to geography teaching should be developed?
4. Would you say that the ten weeks of teaching practice provides enough exposure of student teachers to the schools? Ought they to have more time in the classrooms in a training year? Less time? How adequately do you find student teachers have been prepared? Where are they most deficient, in knowledge or skills? What could be done to help them in the training institution or the school?
5. What do you see as the role of school teachers in the training of geography teachers?
6. When you started teaching, which areas did you find you were inadequately trained to handle?
7. Which teaching strategies in geography have you found useful?
8. How long should a teacher training course for secondary school geography teachers be?

9. Of what value are theoretical topics like the aims and objectives of geographical education in the training course?
10. How should the method course as a whole be evaluated?

Are there other issues you would like to discuss with me?

APPENDIX E : EXAMPLES OF COURSE OUTLINES<sup>1.</sup>APPENDIX E1  
UNIVERSITY COURSE OUTLINE

## COURSE OUTLINE : GEOGRAPHICAL AND ENVIRONMENTAL EDUCATION

- AIMS:
- (i) to consider current and recent developments in content, method and philosophy of geography and to examine these in relation to curriculum change;
  - (ii) to consider, in the light of educational theory, a variety of teaching procedures and the implications of changes in the nature of geography for teaching at various levels;
  - (iii) to introduce the concept, aims and scope of environmental education;

## ORGANISATION

Lectures, seminars and practicals form part of the course. Students will be required to write essays of c.3000 words (some for presentation in seminars), undertake practical work, contribute to the design and evaluation of teaching materials and the discussion of problems in geographical and environmental education. An individual research project (c.5000 words) on an approved topic is also required.

## TOPICS

1. INTRODUCTION
2. THE SCOPE OF GEOGRAPHICAL EDUCATION
  - (i) Developments in academic and school geography (2).
  - (ii) Research into geographical education problems and techniques (2).
  - (iii) Aims and objectives in geographical education (2).
  - (iv) Psychology and geographical education (2).
  - (v) Perception and perceptual problems (2).
  - (vi) Language and geographical education (2).

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1. The designation of the institution is not revealed, to preserve the confidentiality pledged in a covering letter sent out with the questionnaire.

3. CURRICULUM DESIGN AND DEVELOPMENT IN GEOGRAPHICAL EDUCATION
  - (i) Designing the geography curriculum (2).
  - (ii) Evaluation of the geography curriculum (3).
  - (iii) Curriculum integration (3).
  
4. METHODS AND APPROACHES IN GEOGRAPHICAL EDUCATION
  - (i) Discovery methods and group work (2).
  - (ii) Fieldwork and project-work (2).
  - (iii) Gaming and simulations (2).
  - (iv) Models and systems approaches (2).
  - (v) Audio-visual approaches (2).
  - (vi) Assessment and testing (2).
  - (vii) The Geography Room and running a Department (2).
  
5. ENVIRONMENT EDUCATION
  - (i) Concept, definition and development of Environmental Education.
  - (ii) The development and practice of Environmental Education in Southern Africa.
  - (iii) Measurement and Evaluation in Environmental Education. (3)
  
6. PLANNING GEOGRAPHICAL AND ENVIRONMENTAL EDUCATION
  - (i) The role of geographical and environmental education - Bophuthatswana (2),
  - (ii) Problems and prospects (2).

#### **GENERAL READING**

1. Graves N J (1977) Geography in Education, Heineman.
2. Marsden W E (1976) Evaluating the Geography Curriculum, Oliver and Boyd.

## APPENDIX E2

## UNIVERSITY DIPLOMA IN EDUCATION (SECONDARY)

## GEOGRAPHY

## 1. AIMS

- 1.1. To prepare students to teach in a dynamic and meaningful way at a secondary school.
- 1.2. To promote a sense of social and community responsibility for, and to encourage active participation in the development of the country.
- 1.3. To encourage a continuing interest in geography.

## 2. OBJECTIVES

- 2.1. To promote an interest in the subject of geography and its application.
- 2.2. To lay the foundations of the subject and the principles upon which it is based in terms of concepts, knowledge, skills and attitudes.
- 2.3. To develop skills and methods required for the successful teaching of geography.
- 2.4. To give students an appreciation of the holistic perspective of the subject.
- 2.5. To develop skills in basic research techniques.
- 2.6. To create an awareness of the role of geographical and environmental education in the development of the country.

## CONTENT

YEAR ONE : SEMESTER 1

## 3. INTRODUCTION TO GEOGRAPHY

- 3.1. Geography: nature, scope and fields of study.
- 3.2. Approaches to the study of Geography
  - 3.2.1. Regional

- 3.2.2. Systematic
- 3.2.3. Systems Analysis
- 3.2.4. Behavioural
- 3.2.5. The 'radical' Geographers

N.B. Special reference should be made to Physical Geography.

- 3.3. Geography and geographical education: the position, role, relevance, and importance of geography in education.

#### 4. THE TEACHING OF GEOGRAPHY

##### 4.1. Lesson preparation

- 4.1.1. Preparing schemes of work
- 4.1.2. Planning units of work
- 4.1.3. Designs of lesson plan and lesson format
- 4.1.4. Objectives (all domains)
- 4.1.5. Preparation and use of teaching aids

##### 4.2. Developing teaching strategies

- 4.2.1. Worksheet method
- 4.2.2. Role playing, gaming and simulation
- 4.2.3. Project work
- 4.2.4. Hypothesis testing
- 4.2.5. Working with the Atlas
- 4.2.6. Team-teaching
- 4.2.7. Individual and group work
- 4.2.8. Using audio-visual equipment
- 4.2.9. Field work organisation
- 4.2.10. Using annotated diagrams

##### 4.3. Post-presentation of lesson stage

- 4.3.1. Testing and evaluation procedures
- 4.3.2. Test design techniques
- 4.3.3. Analysis of test/examination results
- 4.3.4. Remedial work
- 4.3.5. Re-testing techniques

#### 5. EVALUATION

One three-hour paper will be set for each semester.

## APPENDIX E3

## A UNIVERSITY COURSE OUTLINE

1. The following is an outline of the proposed course of study:  
(Please note that this is subject to change)

Mondays

23 Feb	Introductory lecture : syllabus, textbooks, general matters.
2 March	Planning a section of work
9 March	Audio-Visual Aids and Presentation
16 March	The Worksheet/Homework
23 March	Map and Photograph Interpretation in schools
30 March	Differentiated Education and the Gifted Child; Topical Geography
6 April	Public Holiday
13 April - 4 May	No lectures due to Practice Teaching
11 May	Field Studies
18 May	Field Study (Practical) - please note that these will take place AWAY from the University and ALL students are expected to attend.
25 May	Field Study (Practical)
1 June - 13 July	No lectures due to Examinations and Vacation
20 July	Teaching Matriculation/Senior Certificate classes
27 July	Teaching the Synoptic Chart and associated sections
3 August - 17 August	No lectures due to Practice Teaching
24 August	Regional Geography
31 August	Integrated Geography
7 Sept	Vacation
14 Sept	Projects and their evaluation
28 Sept	Simulation Games
5 October	Why teach Geography?
12 October	Concluding lecture

(Many of the above sessions will include practical exercises.)

2. Two assignments must be presented during the year. **THESE ARE DP REQUIREMENTS.**
- A. Detailed lesson notes for a series of lessons to cover any

part of the Senior Course. The material should be sufficient for AT LEAST ONE WEEK'S lessons for particular class. Maps, slides, overhead transparencies, textbook page references, etc. MUST accompany the assignment. (N.B. Map and Photographic interpretation exercises are excluded from this.)

B. EITHER

- (i) Draw up suitable material for a class undertaking a Field Study in the Cape Peninsula area. Include notes for the teacher, instructions and worksheets for the pupils, a copy of any maps/photographs/etc. to which pupils might be expected to refer; the expected answers to questions, etc.

OR

- (ii) Draw up at least 10 different worksheets on Map and Photograph interpretation. Each worksheet must refer to a different 1:50 000 sheet and its relevant photograph and the following spheres must be covered equally over the 10 worksheets - (e.g. not all urban exercises or all geomorphology, etc.) :
- Geomorphology; Rural Settlement Geography; Urban Geography; Economic Geography.
- Answers to all questions must be provided.

## APPENDIX E4

## A COLLEGE COURSE OUTLINE

## SECONDARY TEACHERS' DIPLOMA (WITH DEGREE COURSES)

## SYLLABUS FOR GEOGRAPHY

## A. AIM

The aim of this course is to provide teachers with the necessary knowledge of content and method to enable them to teach Geography in Standards 6 to 10.

## B. INTRODUCTION

1. This syllabus covers content and method for Geography for the three-year Secondary Teachers' Diploma (with degree course).

2. Since a mastery of the subject matter is essential for effective teaching, a comprehensive study of the syllabuses for Standards 8 to 10 Higher Grade is necessary.

Effective methods of teaching must be carefully studied, integrated with content and applied in teaching situations. Student teachers are required to undertake independent study of certain parts of the syllabus.

3. This syllabus specifies time allocation for the guidance of lecturers.

4. Lecturers should use their own initiative in the integration of method and content. It is essential that student teachers be given numerous examples of integrations and that they be encouraged to experiment with new ones.

5. Although the syllabuses are set forth separately, lecturers may treat aspects that recur, e.g. General Geographic Techniques, as a theme.

## C. CONTENT

II. SYLLABUS FOR SECOND YEAR1. METHODS OF TEACHING (12 periods)

The following methods of teaching Geography must be dealt with. Students must be shown how to apply each method to different aspects of the syllabus for

Standard 8. Wherever possible, pupil involvement and activity should be emphasised.

### 1.1. General methods

- 1.1.1. From the known to the unknown
- 1.1.2. Deductive - the whole to the parts
- 1.1.3. Inductive - the parts to the whole
- 1.1.4. Systematic (topical or thematical approach)
- 1.1.5. Regional approach

### 1.2. Specific methods

- 1.2.1. Observation
- 1.2.2. Questions-and answer
- 1.2.3. Demonstration and simple experiments
- 1.2.4. Project/assignment (integrate with the library)
- 1.2.5. Group work
- 1.2.6. Field work
- 1.2.7. Textbook
- 1.2.8. Simulation and games
- 1.2.9. Newspaper Geography

## 2. PREPARATION AND PLANNING (7 periods)

### 2.1. Annual preparation

The drawing up of schemes of work or work programmes.

### 2.2. Practical work

- 2.2.1. Lecturer to draw up a model scheme of work for one term from the syllabus for Standard 8
- 2.2.2. Student teachers to draw up a model scheme of work for one term for a standard not covered by the lecturer.
- 2.2.3. Lecturer must issue copies of the departmental work programmes for Standard 8

2.3. Daily preparationThe Geography Lesson

- 2.3.1. Routine information
- 2.3.2. Topic .
- 2.3.3. Aim of the lesson
- 2.3.4. Method
- 2.3.5. The use of aids
- 2.3.6. Pupil involvement
- 2.3.7. How to present the topic as a reality
- 2.3.8. Presentation
  - (i) Introduction
  - (ii) Steps and lesson notes
  - (iii) Ending of the lesson
- 2.3.9. Application

2.4. Record of work

According to instructions prescribed in Teachers' Workbook ET. 42(b).

3. PRACTICAL WORK (6 periods)

Students must use the topics below in preparing three lessons for Standard 8. Use the format referred to in paragraph 2. A variety of teaching methods should be used.

- 1. Aerial photographs: recognition of phenomena and comparisons with 1 : 50 000 topographic map.
- 2. Population movements and factors responsible for them.
- 3. Earthquakes.

4. TEACHING AIDS (13 periods)

- 4.1. Specimens: Agricultural products, soil types.
- 4.2. Chalkboard: Chalkboard summary.
- 4.3. Models: the requirements for, and the making of sand, paper, glass, cardboard and plaster-of-Paris models of volcanic landforms (e.g. aa butte, block mountains, a volcano and a rift valley), glass model of an approaching front.
- 4.4. Pictures/photographs/diagrams (Students to collect and make).
- 4.5. Atlases.
- 4.6. Maps: Each student to draw sketch maps of locality.

- 4.7. Text and reference books (requirements for and the use of)
- 4.8. Radio (practical use of).
- 4.9. Tape recorder (practical use of)
- 4.10. Climatological instruments: Each student to make simple climatological instruments.
- 4.11. Films/filmstrips/slides.
- 4.12. Overhead projector
- 4.13. Episcopes/epidiascopes.

The use of the above teaching aids in specific lessons should be demonstrated in class. Students should also be given an opportunity to plan and teach lessons from the syllabus of Standard 8, using the above teaching aids where available.

5. NOTE-TAKING AND NOTE-MAKING IN GEOGRAPHY (11 periods)

- 5.1. Aims of notes
- 5.2. Various types of notes
  - 5.2.1. Their advantages and disadvantages
  - 5.2.2. Which notes, to whom (standard) and when
- 5.3. Systems of numbering and setting out of notes.
- 5.4. Practical application of the various types of notes, e.g. the conversion of telegram style notes to full sentences, etc. (Correct numbering must be stressed).

## APPENDIX E5

## A UNIVERSITY COURSE OUTLINE

## FACULTY OF EDUCATION

## PLAN OF WORK

## WEEK ENDING

1	28.2.86	(a)	Aims and objectives of a teacher of Geography in secondary schools.
		(b)	The role of a Geography teacher.
2	7.3.86		The role of a Geography teacher.
3	14.3.86		Learning situation in Geography
		(a)	Factors affecting learning
		(b)	Space perception in pupils
4	21.3.86	(c)	Class, group and individual learning and organisation
		(d)	Classroom practice
5	26.3.86		Types of Geography lesson and practice in presentation
		(a)	Lesson plans and objectives
6	4.4.86		Specific teaching methods
		(a)	Maps and mapwork
		(b)	Atlas use
7	11.4.86		Specific teaching methods (cont.)
		(c)	Weather charts and climate statistics
		(d)	Other wall charts and pictures
	12.4.86		Fieldwork excursion to Riet River
8	18.4.86		Teaching Practice
9	15.4.86		Teaching Practice
10	2.5.86		Teaching Practice
11	7.5.86		Field work
		(a)	Role in school and in geography
		(b)	Design of field studies
12	16.5.86		Field work (cont.)
			Design of field studies
13	23.5.86		Field work (cont.)
			Practical help in organisation

## WEEK ENDING

14	3.5.86	Types of Geography lesson and practice in presentation (cont.) (b) Activity lessons
15	6.6.86	Specific Teaching Methods (cont.) (e) Overhead Projector (f) Slides and filmstrips
16	13.6.86	Specific Teaching Methods (cont.) (g) Films and taped material
17	18.7.86	Geography classroom (a) Function and equipment to favour the learning situation
18	15.7.86	Geography Classroom (cont.) (b) Teacher's requirements (c) Pupils' requirements
19	1.8.86	Specific teaching methods (Prelude to Teaching Practice)
20	8.8.86	Teaching Practice
21.	15.8.86	Teaching Practice
22	22.8.86	Teaching Practice
23	29.8.86	Teaching Practice
24	5.9.86	Assessment (a) Purpose and necessity (b) Reliability and validity
25	19.9.86	Assessment (cont.) (c) Types of Tests (d) Level of questioning (e) Design of test and exam papers
26.	26.9.86	The Geography syllabus (a) Analysis of contents (b) Consideration within school curriculum
27.	3.10.86	The Geography syllabus (cont.) (c) Alternative syllabi (d) Advantages and disadvantages of a rigid syllabus (e) Organisation of sections of work within the syllabus

## WEEK ENDING

28	9.10.86	Resource materials
		(a) Types
		(b) Suppliers and addresses
29.	17.19.86	REVISION

## APPENDIX E6

## A UNIVERSITY COURSE OUTLINE

## HDE GEOGRAPHY METHOD

The 1985 course consisted of 18 lectures which covered the following topics:

New Geography Syllabus

Use of Atlases in the classroom

Diagrams in Geography Teaching

Experiential learning (Geography Games and Simulations)

Geography homework

How to help pupils who find it difficult to learn Geography

Setting and marking of tests and examinations

Structured questions - how to set them

Fieldtrips

Teaching climatology

Teaching urban studies

Teaching human geography

Teaching regional geography

Geomorphology

)  
)  
)  
)  
)

- new approaches

- lesson introductions

- variations in teaching techniques

Two-hour final examination

Two assignments (coursework counts for 25%)

## APPENDIX E7

## A UNIVERSITY COURSE OUTLINE

## HOOFSTUK EEN

DIE TAAK EN DIE TERREIN VAN VAKDIDAKTIEK AARDRYKSKUNDE EN DIE VERBAND  
MET PRAKTIESE ONDERWYSKUNDE

## 1.1. Inleiding

Die opleiding van onderwysers vind plaas binne die raamwerk wat die volgende determinante stel:

1. Die fundamentele verantwoordelikheid van 'n onderwyser is pedagogies van aard en dit berus op die feit dat die opvoeding gerig is op die volwassene wat die kind moet word. Daarom is die hele veld van die Opvoedkunde 'n vereiste en is 'n kennis van die deeldisiplines noodsaaklik. (Onderskei tussen die deeldisiplines).
2. 'n Studie van die Opvoedkunde alleen kan nie as basis vir effektiewe onderrig dien nie. 'n Verdere vereiste is 'n deeglike kennis van een of meer vakwetenskap(pe) - bv. Aardrykskunde en nog 'n vakwetenskap.
3. Die onderwyser moet egter nie net alleen ken nie, hy moet ook kan. Hy moet weet hoe om sy kennis oor te dra, hoe om die werklikheid aan die leerlinge te ontsluit. (Algemene beginsels wat hier geld raak die Praktiese Onderwyskunde; die besondere beginsels wat eie aan die vak is raak die vakdidaktiek).
4. Die onderwyser wat sy pedagogiese taak met sukses wil verrig, moet volwasse wees. Die inhoud van die opleiding moet nie net alleen beroepsgerig wees nie, dit moet die adolessent volwassenheid laat betree.
5. Die tersiêre vorming as wetenskaplike vorming het ook ten doel om die hele mens te vorm tot 'n bewuste deelname aan die volle lewe. Vakke met 'n algemene vormingswaarde behoort dus in die leergange ingesluit te wees.
6. Volwassenheid is alleen 'n moontlikheid as daar sprake van inhoude is. Laasgenoemde hou altoos verband met 'n bepaalde kultuur binne 'n bepaalde gemeenskap en kan nooit van die lewens- en wêreldbeskoulike ontknoppel word nie.

Die struktuur van onderwysersopleiding weerspieël die volgende vier aspekte:

1. Die beroepsteoretiese aspek waar die studie van Opvoedkunde (in sy deeldisiplines) as hoofinhoud van die opleiding gesien word.

2. Die beroepspraktiese aspek nl. vakdidaktiek as weg van die in-die-praktyk stel van teoretiese insigte in die onderwyshandeling.
3. Die leerinhoudelike aspek, dit wil se, 'n studie van die vakwetenskappe.
4. Die persoonlike oriënterende aspek, deur middel van vakke wat basiese oriënteringsmoontlikhede bied.

Die algemeenhede wat in die Praktiese Onderwyskunde geld word in die vakdidaktieke vakgerig ingekleur. Dit verg 'n herinterpretasie in vakverband van die kennis, vaardighede, insigte en houdings wat in die Praktiese Onderwyskunde opgedoen is, sodat die onderwysstudent 'n begrip sal kry van hoe die vak in die skool gehanteer moet word. Besondere vakdidaktiese inhoud en die vaardighede wat daarmee saamgaan moet deur die student byeengebring en inge oefen word. Dit sal die onderwysstudent se beweeglikheid in die latere praktyk binne vakverband bewerkstellig.

Die terrein waarop in die vakdidaktiek Aardrykskunde beweeg word, sluit veral die volgende in: Lesgeepraktyk, die skep van leerervarings, kurrikulering, sillabusse en werkskemas, evaluering en eksamenpraktyke, sowel as die implimentering van media wat self vervaardig moet word, indien dit andersins nie beskikbaar is nie.

APPENDIX E8(i)

A UNIVERSITY COURSE OUTLINE

DEPARTMENT OF EDUCATION

GEOGRAPHY METHOD

COURSE AIMS

NOT an academic course

BUT

1. To help your professional growth as a teacher of geography by
  - (a) developing appropriate teaching skills;
  - (b) developing awareness of alternative choices in teaching strategies and coming to see which are most appropriate for particular topics and pupils, AND which are best suited to YOU;
  - (c) familiarity with the structure of the South African syllabus, the textbook series used, the common approaches and the best modern practices;
  - (d) awareness of some of the main issues of debate in the field of geography in secondary education.
  
2. To relate to some general educational issues raised in other parts of the HDE course, and to help you to begin to work out your own ideas on the contribution geography can make to the general education of the pupil.

SOME METHODS USED

1. Activities;
2. Information sheets for all topics to reduce lecturing and note-taking, and provide a basis for activities and discussion;
3. Discussion methods:
  - (a) general;
  - (b) small groups working on specific tasks and reporting back to other groups; problem centred groups;

- (c) assigned topics or pairs or individuals to report on;
- (d) seminars on a theme.

#### **THEORETICAL BACKGROUND**

The content and approach of school geography: an analysis of the Provincial syllabus at the Primary, Junior Secondary and Senior Secondary stages.

The 1985 syllabus changes.

Aims and objectives in the teaching of geography. Behavioural objectives.

The nature of geography

The 'new geography': competing traditions and basic concepts.

Recent developments in geography and the schools.

The relationship between school geography and university geography.

The development of geographical thinking in children.

Geography and values; bias; attitudes to other nationalities and ethnic groups.

Approaches to the geography of development.

#### **THE 'CORE SYLLABUS' IN SOUTH AFRICAN SECONDARY SCHOOLS**

Discussions and practical work relating to some of the following topics selected from the provincial syllabuses:

- (a) Map reading and interpretation
- (b) Climatology and weather study.
- (c) Geomorphology.
- (d) Natural regions.
- (e) Economic development and approaches to the geography of examples of technologically advanced countries.
- (f) Economic development and approaches to the geography of examples of less advanced countries.
- (g) Rural settlement.
- (h) Urban settlement
- (i) Population geography

- (j) South Africa
- (k) The regional geography of Africa
- (l) The geography of regions outside Africa

## APPENDIX E8(ii)

## A UNIVERSITY COURSE OUTLINE

## DEPARTMENT OF EDUCATION

## GEOGRAPHY SECONDARY METHOD COURSE

## A. TEACHING SKILLS

The nature of geographical teaching: an analysis of roles

The preparation of teaching units

Teaching approaches: Instructional and discovery methods  
 Regional and topic approaches  
 Case studies (sample studies); new approaches to regional geography  
 Projects  
 Working with groups  
 Individualising geography  
 Catering for a range of ability in the class  
 Geographical games and simulations  
 Discussion methods  
 The transformation of data  
 Practical work

Oral work : The role of exposition  
 The nature of geographical questioning and discussion  
 Pupils' questions

Organising the pupils: work : Exercises  
 Assignments  
 Notes  
 Individual research

Audio-visual Aids : Blackboard  
 Overhead projector  
 Film strips and slides  
 Posters and charts  
 Photographs  
 Tape-recorder  
 Films  
 Radio and television broadcasts  
 Multi-media packs

- Using maps : Wall maps  
Topographic maps  
Atlases  
Pupils' maps
- School textbooks : The various textbook series currently in use in South Africa  
Critical assessment of selected texts  
Use in the classroom

The teacher's  
Courses

- Field Studies and local geography : Objectives  
Methods for an urban environment  
Methods for a rural environment

Marking and examinations. Objective tests. Class tests.

The teacher's records. Schemes of work.

New developments in teaching methods.

## APPENDIX 9

## A COLLEGE COURSE OUTLINE

## 1. INTRODUCTION

Geography is firmly entrenched in the curriculum of almost every school. The status which the subject enjoys is a strong indication of the value of geography in regard to a complete education. The quality of the geography taught will no doubt be largely dependent on the dedication, skill, initiative and foresight of the teachers. Hence, while your training as a teacher of geography is orientated towards equipping you with the fundamental principles and knowledge to enable you to cope with the school situation, in the final analysis, your attitude and the role you assume are of primary significance for the successful teaching of geography.

## 2. OBJECTIVES OF THE COURSE

1. To extend the work done in the first year.
2. To provide you with the necessary knowledge in regard to basic geographical concepts and principles so that you can:
  - 2.1. teach with confidence in the Senior Primary/Junior Secondary classes;
  - 2.2. promulgate the creative application of geographical knowledge amongst the children you will eventually teach.
3. To arouse in you a keenness to teach the subject.
4. To acquaint you with specific and general approaches/methodology in regard to the teaching of geography with special reference to:
  - 4.1. new trends in geography teaching;
  - 4.2. pupil involvement in the teaching of geography;
  - 4.3. use of various audio-visual material as an integral part of the lessons taught;
  - 4.4. evaluation and testing in geography;

## METHOD

1. Geography as a school subject
  - 1.1. Early geography teaching.

- 1.2. Geography in school 1800-1880.
- 1.3. Breakthrough in the conception of school geography (1180-1900).
- 1.4. The consolidation of geographical education in schools (1900-1965).
2. Geography in the structure of knowledge
  - 2.1. Knowledge and its classification.
  - 2.2. "Forms" of knowledge.
  - 2.3. "Fields" of knowledge.
  - 2.4. The place of geography in the structure of knowledge.
  - 2.5. Implications for the teaching of geography.
3. Curriculum integration in geography
  - 3.1. Integration in practice.
  - 3.2. Theoretical distinctions
    - 3.2.1. Pre-disciplinary enquiry
    - 3.2.2. Combined Studies
    - 3.2.3. Inter-disciplinary enquiry
    - 3.2.4. Problems in the structuring of an inter-disciplinary framework.
4. Case/Sample studies
  - 4.1. Definition and examples of case studies
  - 4.2. Reasons for acceptance as method of teaching in modern geography.
  - 4.3. Collection of material for case studies.
  - 4.4. Criteria for choice.
  - 4.5. The use of a case study in the teaching of geography.
5. Systems analysis
6. The use of models in the teaching of geography
7. Simulation and games
  - 7.1. Types of games
  - 7.2. The role of games in the teaching of geography
8. Behavioural geography
9. Assessment geography
  - 9.1. Summative and formative assessment.

- 9.2. Multiple choice questions.
  - 9.2.1. The structure of multiple choice items
  - 9.2.2. Principles of writing multiple choice items
  - 9.2.3. Advantages and disadvantages of the use of multiple choice items.
- 10. The geography room
  - 10.1. The need for a specialist room.
  - 10.2. Planning and equipping a geography room.
  - 10.3. Conversion of a classroom into a geography room.
- 11. Techniques in the teaching of contours
- 12. Techniques in the teaching of topographical mapwork (Std. 6).
- 13. Demonstration Lessons: SP Syllabus - Std. 3.  
JS Syllabus - Std. 6.

#### ASSIGNMENTS

##### Assignment 1

Due date: 20 February 1985

"Continental Drift, now embracing crustal separation and ocean floor spreading and renewal, is known to be in operation at the present time. And geophysicists have not only been won over by the testimony of palaeomagnetism, but they are leading the way with the concept of plate tectonics." (Holmes)

Discuss the above statement with special reference to palaeomagnetic data and the concept of plate tectonics.

##### Assignment 2

Due date: 12 April 1985

From a geological point of view weathering is an essential preliminary to erosion, transportation and deposition and is thus a precursor to the formation of new sedimentary rock.

- 2.1. Explain the processes operating in rock disintegration and decomposition; and
- 2.2. Explain the role that weathering plays in the rock cycle.

Assignment 3Due date: 14 May 1985

Critically evaluate some of the criticisms expressed about the simulation technique specifically in relation to its use in the teaching of geography.

Assignment 4Due date: 14 August 1985

Explain how multiple choice items can test the following intellectual abilities:

Recall

Comprehension

Higher level abilities (application and problem solving).

## APPENDIX E10

## TRAINING COLLEGE SYLLABUS FOR GEOGRAPHY : STD

## A. 1. OBJECTIVES

- 1.1. To train student teachers to teach geography in the junior and secondary schools.
- 1.2. To enrich them academically so that they are confident in handling geography in these standards.
- 1.3. To help student teachers learn how to help pupils acquire competency and skill in the use and interpretation of maps and other basic aids.
- 1.4. To enable them to plan and present lessons in geography.
- 1.5. To help them learn how to collect and construct simple teaching aids from locally available and inexpensive materials.
- 1.6. To provide the student teachers with expertise that will enable them to vary their methods of teaching and to utilize a variety of evaluation methods, including self-evaluation.

## B. 2. METHODOLOGY

- 2.1. The place of geography in the school curriculum.
- 2.2. Aims and objectives in the teaching of geography.
- 2.3. Past and present trends in the teaching of geography.
  - 2.3.1. The school syllabus
    - 2.3.1.1. Basic principles taken into account in compiling the syllabus.
    - 2.3.1.2. Critical study of the syllabus for secondary school geography.
    - 2.3.1.3. Drawing up of schemes and records of work.
    - 2.3.1.4. Planning of single lessons, units of work.

3. **METHODS AND ORGANISATION**

- 3.1. Application of the principles of general didactics to the teaching of geography.
- 3.2. Methods specific to and particular to the teaching of geography at secondary level.
- 3.3. Difficulties encountered in the teaching of geography with special reference to mapwork, practical work, weather charts, note making, assignments.
- 3.4. Follow-up of practice teaching.

4. **TEACHING AIDS**

5. **EVALUATION**

Tests and examinations with reference to geography

Continuous assessment

Marking

How to do remedial work

**N.B.** STD I and STD II will be internally examined. For STD III two question papers will be set, one on the content and the other one on methodology. Each of these papers will be of 2 hours duration and will be out of 200 marks.

TIME ALLOTMENT

Suggested guidelines 8-35 minute sessions per week.

## APPENDIX 11

## A UNIVERSITY COURSE OUTLINE

COURSE : Curriculum Studies - Geography

LEVEL : HDE/SSTD III

A. OBJECTIVES

At the end of the course the teacher trainee should be able to:

- (i) organise and present lessons in geography;
- (ii) help students develop an attitude of mind and mode of thought characteristic of the subject;
- (iii) help the students to acquire competency and skill in the use and interpretation of maps and other basic aids;
- (iv) collect and construct simple teaching aids;
- (v) evaluate the results of his/her teaching.

B. CONTENT

1. Geography as a school subject

- 1.1. The nature, scope and field of geography.
- 1.2. Its place and role in the overall curriculum of the secondary school.
- 1.3. Past and present approaches to the study of geography, e.g. traditional approach; systematic approach; systems analysis, behavioural approach, etc.

2. Syllabus construction

- 2.1. Principles underlying syllabus construction in geography.
- 2.2. Critical study of the Transkei Senior Secondary geography syllabus. Comparison with syllabuses in Education Departments in South Africa and Overseas (Britain and America).
- 2.3. Preparing schemes of work.
- 2.4. Planning units of work, single lessons.
- 2.5. Follow-up of Teaching Practice.

### 3. Techniques in the teaching of geography

3.1. The application of the principles of general didactics to the teaching of geography; questioning technique, discussion method, note-making, use of the textbook, etc.

3.2. Methods specific to the teaching of geography. Emphasis on how to help students understand the basic geographical concepts and the development of skills.

Concepts - e.g. location, distribution, relationships, associations, movement, change, etc. in space.

Skills - map interpretation - 1 : 50 000, aerial photos, satellite photos, orthomaps, use of the globe.

3.2.1. Outdoor lessons

3.2.2. Fieldwork

3.2.3. Practical work and simple experiments

3.2.4. Projects and assignments

3.2.5. Simulation modelling

3.2.6. Games

3.2.7. Perceptual and conceptual problems in learning geography

3.2.8. News geography

3.2.9. The geography room

3-2-10. Teaching regional geography

### 4. Evaluation

4.1. Continuous assessment

4.2. Evaluation techniques

4.3. Diagnosis of students' weaknesses and how to do remedial work.

### 5. Teaching aids

Where obtainable and how to use them.

### 6. The geography teacher

- local subject board
- subject committees
- geography associations/societies
- conferences

C. EVALUATION

Students will be required to:

- (a) write 3 assignments and 3 tests
- (b) produce a teaching kit, and
- (c) write the final examination of one 3-hour paper at the end of the year.

D. REFERENCES

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- 4. Long M and                    1972, Teaching geography. London, Heinemann.  
Robertson
- 5. UNESCO                      Source book for geography teaching
- 6. Walford R                      1975, New direction in geography teaching.  
London, Longman.

APPENDICES F1 - F11

EXAMPLES OF TEACHING PRACTICE ASSESSMENT FORMS

# EVALUATION OF STUDENT — TEACHER

STUDENT NAME ..... SCHOOL .....

STUDENT NUMBER ..... CLASS.....

SUPERVISOR NUMBER ..... SUBJECT .....

CIRCUIT ..... DATE .....

		0	1	2	3	4	5
<b>A. Lesson Preparation and Planning</b>	1. Written Plan or Stated format.						
	2. Statement of Objectives.						
	3. Research, accuracy, appropriate level						
	4. Planning: questions, examples, timing.						
<b>B. Content</b>	1. Introduction: clarity, coherence.						
	2. Logical development: progression, exposition.						
	3. Imaginative format: variation.						
	4. Explanation/resolution of problems.						
	5. Conclusion: Summary Recapitulation.						
<b>C. Methods and Aids</b>	1. Skill in presentation of methods and aids.						
	2. Pupil participation, involvement.						
	3. Teacher's responsiveness to pupil's needs.						
	4. Relevant use of textbooks and notebooks.						
	5. Black-board work.						
<b>D. Manner of the Teacher</b>	1. Language: appropriate to level/lesson.						
	2. Presentation of self and use of voice.						
<b>E. Classroom Organisation, Discipline</b>	1. Punctuality – arrival, start, conclusion.						
	2. Control – movement, activity, attention.						
	3. Achievement of stated objectives.						
	4. Monitoring standards of pupils' work.						

**General Comments and Suggestions**

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.....

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**Lesson Assessment**

0	1	2	3	4	5
Totally Unsatisfactory Fail	Very Weak Fail	Weak Pass	Satisfactory Average	Good Credit	Excellent Distinction

Signature of Supervisor: .....

..... COLLEGE OF EDUCATION  
**TEACHING PRACTICE: LESSON EVALUATION**

<b>**Final mark</b>

Student ..... Date .....  
 Course ..... No. of pupils .....  
 School ..... Standard .....

SUBJECT							* Circle the mark awarded for each particular criterion and write the total of each section opposite the relevant heading.
TOPIC							
LANGUAGE MEDIUM							
CRITERIA	*EVALUATION					TOT	REMARKS
<b>1. PERSONALITY AND APPEARANCE</b>							
1.1 Appearance: Groomed? Neat/Untidy? Flashy?	****	4	3	2	1	0	****
1.2 Bearing: Self-confidence; movement; mannerisms; facial expression; animated/dull; spontaneous/tense	****	4	3	2	1	0	****
1.3 Teaching style: Attitude towards pupils; enthusiasm; motivating ability; gaining pupils' attention	9	8	6	4	2	1	****
1.4 Delivery and language usage: Quality of voice; articulation; clarity; fluency and correctness of language	9	8	6	4	2	1	****
<b>2. LESSON PREPARATION</b>							
2.1 Teaching aims/objectives: Meaningful? Clear? Relevant? Adequate?	****	4	3	2	1	0	****
2.2 Method(s): Appropriate? Correct? Original? Is it appropriate to the particular subject and topic?	****	4	3	2	1	0	****
2.3 Lesson design: Quality of lesson scheme/notes—layout; system; sufficiency; neatness	****	4	3	2	1	0	****
2.4 Teaching aids/materials: Suitability; relevancy; adequacy; originality; trouble taken	5	4	3	2	1	0	****
2.5 Choice of subject matter: Scope/quantity; correctness; arrangement/logical sequence; relevancy to aims/topic	19	16	12	8	4	2	****
<b>3. PRESENTATION OF THE LESSON</b>							
<b>3.1 Introduction</b>							
(a) Creating relationships/desirable atmosphere; effecting motivation and inclination to learning	9	8	6	4	2	1	****
(b) Actualisation of pre-knowledge: Recalling relevant pre-knowledge, linking it to new matter	9	8	6	4	2	1	****
(c) Posing the problem: Were pupils led to observe the problems of new matter in the context of pre-knowledge?	9	8	6	4	2	1	****
<b>3.2 Exposition of the new subject matter</b>							
(a) Mastery of subject matter: Has student mastered content? Has it been presented logically and clearly?	14	12	9	6	3	1	****
(b) Teaching strategy:							****
° Questions: Clear? Well-aimed? Properly timed and spaced? Reaction to pupils' questions/answers	9	8	6	4	2	1	****
° Chalkboard work: Neatness; legibility; lay-out; effectiveness; used throughout; sufficient	9	8	6	4	2	1	****
° Other teaching aids: Effectivity; synchronisation; integration	5	4	3	2	1	0	****
° Methods/techniques: Suitability; meaningfulness; effectiveness; success	5	4	3	2	1	0	****
(c) Communication and pupil involvement: Class involvement; individualisation; activity; explanation of concepts	9	8	6	4	2	1	****
<b>3.3 Conclusion</b>							
(a) Actualisation of content: Opportunity of gaining insight/productive thinking; schematising of insights	5	4	3	2	1	0	****
(b) Gaining of objectives: Have aims/objectives been achieved?	5	4	3	2	1	0	****
(c) Functionalising: Integration of pre-knowledge and new matter; application of new knowledge; mastery	9	8	6	4	2	1	****
3.4 <b>Class control:</b> Quality of guidance/control; spontaneous reaction encouraged? (Disregard discipline)	9	8	6	4	2	1	****
3.5 <b>Time allocation:</b> Realistic for each part of lesson? Steady pace? Time spent profitably throughout?	9	8	6	4	2	1	****
3.6 <b>Didactic flexibility:</b> Continuous evaluation? Accommodation of circumstances; reaction to pupils	9	8	6	4	2	1	****
Adjudicator:	** The final mark is obtained by dividing this total by two →						

APPENDIX F3

TEACHING PRACTICE LESSON EVALUATION

\_\_\_\_\_ College of Education

Student \_\_\_\_\_ Course \_\_\_\_\_

School \_\_\_\_\_ Standard \_\_\_\_\_

No of pupils \_\_\_\_\_ Subject \_\_\_\_\_ Topic \_\_\_\_\_

Date \_\_\_\_\_

		<u>Score</u>
1.	<u>Introduction</u>	0 1 2 3 4 5 6 7 8 9 10 _____
2.	<u>Development</u>	
	2.1. Content	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 _____
	2.2. Teaching Strategy	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 _____
	2.3. Pupil Involvement	0 1 2 3 4 5 6 7 8 9 10 (11 12 13 14 15)* _____
3.	<u>Conclusion</u>	
	3.1. Closure	0 1 2 3 4 5 (6 7 8 9 10)* _____
	3.2. Gaining of objectives	0 1 2 3 4 5 6 7 8 9 10 _____
4.	<u>General</u>	
	4.1. Personality	0 1 2 3 4 5 6 7 8 9 10 _____
	4.2. Teaching Aids	0 1 2 3 4 5 (6 7 8 9 10)* _____
	4.3. Timing	0 1 2 3 4 5 _____
	4.4. Lesson Plan	0 1 2 3 4 5 (6 7 8 9 10)* _____
Total		_____

\* Use the optional extra five marks in any two places, as preferred. Delete in the other two.

Comments

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

NOTES:

1. Introduction Creating a relationship; stimulation; impact. Relevance to subject. Establishing the point of the lesson in terms of pre-knowledge and needs.
2. Development
  - 2.1. Content. Relevance; logic; structure. How substantial was it? How well had the student mastered it?
  - 2.2. Strategy. How appropriate were the methods? How well handled? How well were questions used (frequency, technique, management)? Emphasis of key points. Communication. Flexibility.
  - 2.3. Pupil involvement. How active were the pupils in relation to what was possible or appropriate? Individual participation. What level of interest was maintained? Were the pupils learning?
3. Conclusion
  - 3.1. Closure. Summary; emphasis or review of key points or weaknesses. Application of new knowledge. Testing.
  - 3.2. Gaining of objectives. The evaluator's opinion of how successfully the student achieved what he set out to do.
4. General
  - 4.1. Personality. Presence (bearing, appearance, authority; enthusiasm; purposefulness). Language proficiency. Attitude to pupils. General ability to cope.
  - 4.2. Teaching aids. Applicability; quality; handling; impact. (Be flexible; classroom furniture can be used as an aid; so can a pupil or the teacher himself.)
  - 4.3. Timing. Overall apportioning of time. Pace. Profitably use of time.
  - 4.4. Lesson plan. The written scheme: adequacy; layout. Evidence of careful preparation.

Comment

This should be detailed and specific. It should focus on whatever most needs improvement.

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Student ..... P.O.D. ..... Skool: ..... Datum: .....  
 Les: ..... P.T.D..... School: ..... Date: .....  
 Lesson: ..... St. ....  
 Std .....

**OPMERKINGS/REMARKS:**

1. Persoonlike eienskappe (bv. voorkoms, vriendelikheid, humorsin):  
 Personal characteristics (e.g. appearance, friendliness, sense of humour): .....
2. Beplanning en voorbereiding van les (bv. deeglikheid, kennis van leerstof, lesaantekeninge):  
 Planning and preparation of lesson (e.g. thoroughness, knowledge of subject matter, lesson notes): .....
3. Aanbieding (bv. voordrag, vaardigheid in oordra van kennis, optrede, geesdrif, vermoë om belangstelling te wek en te behou):  
 Presentation (e.g. delivery, ability to communicate knowledge, attitude, zeal, ability to create interest and maintain it): .....
4. Doeltreffendheid van onderwysmetodes (bv. resultate behaal, doelstellings bereik):  
 Success of teaching methods (e.g. results reached, aims achieved): .....
5. Taalgebruik en -aanpassing:  
 Use and adaptation of language: .....
6. Klasbeheer (bv. samewerking en dissipline):  
 Class control (e.g. co-operation and discipline): .....
7. Klaskameratmosfeer en -organisasie:  
 Classroom atmosphere and organisation: .....
8. Gebruik van leermiddele (skryfbord en ander):  
 Application of teaching aids (blackboard and others): .....
9. Toepassing en kontrole van leerstof (bv. ondervraging van leerlinge, toetsing, die uitvoering van werkopdragte):  
 Application and control of subject matter (e.g. questioning of pupils, testing, carrying out of assignments): .....
10. Evaluering van die les: **A** Uitstekend (80%+) **B** Baie goed (70 — 79%) **C** Goed (60 — 69%) **D** Bevredigend (50 — 59%) **E** Druip (49% —)  
 Evaluation of the lesson: **A** Excellent (80%+) **B** Very good (70 — 79%) **C** Good (60 — 69%) **D** Satisfactory (50 — 59%) **E** Fail (49% —)

Verdere opmerkings:  
 Further comments: .....

.....

.....

.....

.....

.....

Dosent/Lecturer: .....  
 Klasonderwyser/Class Teacher: .....

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FACULTY OF EDUCATION  
LESSON OBSERVATION REPORT

SUBJECT: .....CLASS:.....

STUDENT: .....

SCHOOL: ..... DATE: ..... TIME: .....

---

(1) STUDENT'S GOOD POINTS

(II) POINTS FOR FUTURE ATTENTION

(III) GENERAL REMARKS

TUTOR'S SIGNATURE: .....

DEPARTMENT OF EDUCATION  
REPORT ON LESSON

Student's Name \_\_\_\_\_

School \_\_\_\_\_ Standard or Form \_\_\_\_\_

Date of lesson \_\_\_\_\_ Subject \_\_\_\_\_

---

It is suggested that the following points might be borne in mind in compiling this report: (a) voice, language and general bearing; (b) adequacy of lesson preparation and file; (c) use of illustrative material and apparatus, including blackboard and variety in lesson presentation; (d) efficacy of teaching methods; (e) general class management and flexibility in control; (f) pupils' learning; (g) general success of lesson and extent of class participation.

-----  
Tutor

APPENDIX F7

FAKULTEIT OPVOEDKUNDE

PRAKTIESE ONDERWYS : LESEVALUERING

STUDENT: (Mnr/Mev/Mej .....REG.NR: .....  
 SKOOL: .....DATUM: .....  
 VAK: ..... 

A	B	C	D	E
---	---	---	---	---

1. OPTREDE:       Versorgdheid  
                   Motivering  
                   Inspirasie                                     

--	--	--	--

  
                   Gesagshandhawing  
                   Selfvertroue

2. ONTWERP:       Beginsituasie, doelformulering,  
                   seleksie en ordeningvan leerin-  
                   houde, (elementare)., strategie,  
                   werksvorme en onderwysvaardighede,     

--	--	--	--

  
                   leergeleenthede, media

3. ANNBIEDING: (Lesverloopsmomente)  
                   Wek-en-rig  
                   Onderrig  
                   Begeleiding                                     

--	--	--	--

  
                   Evaluering

4. ONDERWYSKUNDIGE EVALUERING:  
                   Strukturering van lesgebeure  
                   Didaktiese soepelheid  
                   Vakkennis  
                   Leereffek (fundamentale)

OPMERKINGS: .....

SKRIF EN BORDWERK: .....

TAALVAARDIGHEID: .....

DOSENT: ..... LESPUNT: .....%

GEOGRAPHY METHOD TEACHING PRACTICE REPORT

(This subject report is supplementary to the general departmental report)

TEACHERS NAME:

SCHOOL:

DATE OF LESSON:

STD:

TOPIC:

PREPARATION

BALANCE AND  
CLEAR SEQUENCE OF STEPS

RELATION TO PREVIOUS LESSONS:

CONTENT: Level of interest  
Level of difficulty  
Grasp of content

VOICE: General  
Exposition  
Questioning  
Fluency

AV AIDS Blackboard  
Overhead Projector  
Other

USE OF BR/GRP  
MAPS : Textbook  
Atlases  
Wall maps  
Other

CLASS ACTIV- Recording 'notes'  
ITIES: Textbook study  
Worksheets and other tasks  
Group work  
General class participation

RELATIONSHIP  
WITH CLASS:

OTHER COMMENTS  
ON THE LESSON

NOTE: See overleaf for any general or specific suggestions. Please feel free to come and discuss them with me later.



## APPENDIX F10

FACULTY OF EDUCATION  
STUDENT TEACHING ASSESSMENT

Name of Student \_\_\_\_\_  
 School \_\_\_\_\_ Subject \_\_\_\_\_ Date \_\_\_\_\_  
 Title of Lesson \_\_\_\_\_

I.	INTRODUCTION: clarity, coherence	
II.	PREPARATION OF LESSON: Notes, apparatus and/or Teaching aids	
III.	PRESENTATION OF LESSON: Command of subject matter Clarity of exposition Use of chalkboard and/or other teaching aids Use of questioning Timing Organization of pupils' activities	
IV.	SPEECH: Use of voice and language	
V.	RELATIONSHIP WITH PUPILS:	
VI.	CONCLUSION: Summary Recapitulation	
VII.	GENERAL COMMENTS:	
VIII.	MARK FOR LESSON:	
XI.	TUTOR'S SIGNATURE	

NOTE: A EXCELLENT 75 - 100 D WEAK 50 - 59  
 B GOOD 65 - 74 E VERY WEAK 45 - 49  
 C SATISFACTORY 60 - 64 F TOTALLY UNSATISFACTORY 40 - 44

: FACULTY OF EDUCATION.

: STUDENTS CRITICISM LESSONS.

NAME: ..... COURSE: ..... CLASS: ..... DATE: .....

SCHOOL: ..... TOPIC: ..... MARK: .....

REMARKS

	-	-	0	+	+
1. Preparation (as shown in lesson plan)					
a) Objective clearly stated .....					
b) Content indicated .....					
c) Development planned .....					
d) Suitable methods shown .....					
e) Closure planned .....					
f) Worthwhile Post Lesson Reviews written					
2. Presentation of actual lesson					
a) Attention gained .....					
b) Content of lesson effectively presented					
c) Instruction/Explanations clear .....					
d) Blackboard/Other aids used effectively					
e) Pupil participation was solicited ...					
f) Questioning technique was effective					
g) Praise and encouragement used .....					
h) Knowledge of subject matter was adequate					
i) Attention was held .....					
j) Teaching Aid effective .....					
k) Closure was effective .....					
l) Lesson objective was achieved .....					
3. General					
a) Suitable classroom organization was used .....					
b) Control was satisfactory .....					
c) A pleasant learning atmosphere was maintained .....					

REMARKS

AT THIS STAGE OF YOUR TRAINING THIS LESSON WAS

0 indicates agreement with the statement

++ indicates very strong agreement  
 -- indicates very strong disagreement

GOOD	SATISFACTORY	WEAK	A FAILURE
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..... LECTURER.

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## APPENDIX G : EXAMPLES OF EXAMINATION PAPERS

APPENDIX G 1 (i)

SCHOOL OF EDUCATION : DEPARTMENT OF GEOGRAPHY  
GEOGRAPHY AND EDUCATION

Time : 3 hours  
Total marks : 100

---

INSTRUCTIONS TO CANDIDATES

ANSWER FOUR QUESTIONS

---

QUESTION 1

In devising a geography syllabus for a school, would you prefer to start with:

- (a) objectives
- (b) subject content
- (c) concepts and generalisations?

Defend your choice and give reasons. (25)

QUESTION 2

Explain the approaches which can be used to organise a school geography curriculum. Which could be most suitable for high schools in Bophuthatswana? Given reasons for your selection. (25)

QUESTION 3

"First you must understand how children think." (Taylor, 1968). What aspects of pupils' thinking are relevant to the teaching of geography? (25)

QUESTION 4

For a standard of your choice, discuss the role of theoretical models in the teaching of geography. (25)

QUESTION 5

Assess how far it is possible 'to bring reality into the classroom' in Bophuthatswana schools. (25)

QUESTION 6

What changes would you like to see implemented in the teaching of geography in Bophuthatswana schools? What is the best way of bringing about such changes? (25)

QUESTION 7

- (a) Distinguish between 'evaluation' and 'assessment'.
- (b) What assessment procedures do you believe are suitable to test geographical concepts at the Standard nine level? (25)

APPENDIX G 1 (ii)

SCHOOL OF EDUCATION : DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL STUDIES  
GEOG 406 : GEOGRAPHICAL AND ENVIRONMENTAL EDUCATION

Time : 3 hours  
Total marks : 200

---

INSTRUCTIONS TO CANDIDATES

Answer FOUR questions in all  
Answer ONE question from EACH section and ONE other question  
Each section must be answered in a separate booklet

---

SECTION A

Answer at least ONE question from this section

Question One

Attempt an assessment of the role of language in the teaching and learning of geography in the secondary school.

Question Two

'Geography teachers should have some knowledge of the psychology of perception'.  
Comment on this statement.

Question Three

What problems do you associate with the teaching of either geomorphology or settlement geography at the secondary school level? What solutions can you offer?

Question four

How may evaluation and assessment be planned and implemented so as to aid the development of a geography syllabus?

SECTION B

Answer at least ONE question from this section

Question Five

You are invited by the Regional School Geography Committee (Molopo Branch) to address teachers on "Fieldwork in Geography Teaching". The length of your address is forty minutes. Give an outline of the different aspects you would include in your lecture and then elaborate briefly on each of these aspects.

Question Six

Consider briefly the recent developments in Academic Geography and then discuss the implications of the "New Geography" for School Geography in Bophuthatswana.

Question Seven

What do you consider to be the major areas of responsibility for the Head of Department (Geography) at the Secondary School level in Bophuthatswana? In an essay elaborate on your answer.

Question Eight

"In Geography teaching the main dangers lie in teachers giving the impression, perhaps unwittingly, that other peoples in the world should be judged according to values which derive from the society from which the teacher comes." (Graves, 1977)

In the light of this quotation, would you regard value (affective) objectives valid objectives educationally or are they indoctrinatory? Explain your answer.

SECTION C

Answer at least ONE question from this section

Question NineEITHER

'Environmental education in Southern Africa has not yet reached the level of importance attached to it both internationally and in many other countries of the world.'

Discuss the possible reasons for this state of affairs and consider how the situation might change during the 1980's.

OR

'One way of looking at environmental education is to see it merely as a blending of the philosophy of holism with an idealistic vision of the future.'

Critically analyse this assertion.

Question Ten

Assume you are an educational planner whose duty it is to consider the merits of introducing environmental education into the school curriculum of Bophuthatswana. Develop an argument either for or against the incorporation of environmental education in the curriculum.

APPENDIX G I (iii)

SCHOOL OF EDUCATION : DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL STUDIES  
GEOG 406 - GEOGRAPHICAL AND ENVIRONMENTAL EDUCATION

Time : 3 hours  
Total marks : 200

---

INSTRUCTIONS TO CANDIDATES

Answer FOUR questions in all  
Answer ONE question from EACH section and ONE other question  
Each section must be answered in a separate booklet

---

SECTION A

Answer at least ONE question from this section

Question One

'The use of the terms youth, maturity and old age to describe both landscapes and rivers are no longer valid.'

Discuss and suggest alternative strategies for the teaching of geomorphology in the secondary school.

Question Two

Discuss ONE aspect of geographic learning on which the psychology of perception throws some light.

Question Three

'Geography teachers have long appreciated their responsibilities where the teaching of written English is concerned. They are now beginning to appreciate the importance of the spoken word in discussion in the learning of the subject.'

Discuss.

Question Four

Outline those attitudes and values you regard as important in the teaching and learning of geography in the secondary school. Indicate how you would develop these in the classroom.

SECTION B

Answer at least ONE question from this section

Question Five

"Games and Simulations are...seen as a way of opening up a situation

for pupils so that further learning may take place as a result..." (Walford, 1973).

Explain briefly the advantages associated with Gaming and Simulation and with the aid of appropriate examples state how you propose to integrate Games and Simulation in your teaching programme.

#### Question Six

"If instruction is to be efficient, then the instructor must know clearly what is to be achieved." (Graves, 1977).

Do you agree with the above quotation? Discuss your viewpoint.

#### Question Seven

You are appointed Examiner for the Standard 7 Geography Examinations in one of the Education Circuits.

In an essay outline the major considerations you would take into account in setting the examination paper.

#### Question Eight

Audio-visual approaches to Geography teaching rank second only to reality-based Geography teaching.

Do you agree? Discuss your viewpoint.

### SECTION C

#### Question Nine

##### EITHER

"It is clear that different people mean different things by environmental education and also that some of those who use it are not really certain what they mean." (Council for Environmental Education, United Kingdom, 1970).

By tracing the post-1970 evolution of the concept of environmental education, on an international scale, determine to what extent this statement still holds true in 1983.

##### OR

"During the past few years increasing attention has been drawn to the relationship between environmental education and the economic and social circumstances of the third world. This awareness has been embodied in the term realconserve."

By referring, inter alia, to the work of Tolba and O'Riordan, discuss the relevance of this approach to Southern Africa in general.

Question Ten

"Undoubtedly the plurality of environmental education is both its strength and its weakness; but many questions concerning its definition and its curriculum objectives have to be answered if progress is to be made towards devising coherent and relevant programmes encompassing all age groups and ability levels." (Wheeler, 1975).

Discuss this statement.

APPENDIX G 2

V455/84 (i)

GEOGRAPHY (FIRST PAPER) METHOD

S.T.D.

NOVEMBER 1984

Time : 2 hours

Marks : 150

SECTION A (40 minutes - 50 marks)

INSTRUCTIONS

Section A consists of two questions. One ONE question must be answered. Your answer should not be longer than two pages in length. Both questions are of equal value.

Use a first examination answer book for Section A.

Write your examination number on the book. Do it now.

The first examination answer book must be handed in after 40 minutes.

Question 1

Explain how the following teaching aids can and should be used in Geography to convey the study content meaningfully and to stimulate the pupils.

- (a) Films (12)  
 (b) Overhead projector (13)

2 x 25 = 50

Question 2

Discuss evaluation under the following headings.

- (a) Aims of evaluation. ( 3)  
 (b) Objective short questions - give examples of the various types. ( 8)  
 (c) Comprehension questions - give examples of the various types. ( 3)  
 (d) Insight questions - give examples of the various types. ( 3)  
 (e) Essay-type questions:  
     (i) Criteria ( 2)  
     (ii) Marking ( 3)  
     (iii) Types ( 3)

2 x 25 = 50

Hand in your first examination answer book.

SECTION B 1 and B 2 (80 minutes - 100 marks in all.)

V455/84 N (i)  
METHODINSTRUCTIONS

Use a second examination book for sections B1 and B2.

Write your examination number on book number two. Do it now.

All questions from Section B1, e.g. 3a, 3b and 3c must be answered.

From Section B2 only one question must be answered and candidates may use standard school textbooks for Std 9 and 10 in the examination room.

Notebooks and notes may not be taken into the examination room.

## SECTION B 1

Question 3a

Write the numbers 1-10 in your examination book and after each number state whether the corresponding statement is TRUE or FALSE.

1. One general aim in the teaching of Geography is precision in all statements.
2. A good way to keep pupils meaningfully occupied on a bus trip is to let them complete a questionnaire.
3. The chalkboard is the most versatile of all aids.
4. Geography is the study of the relationship that exists between man and his environment.
5. The most appropriate method for teaching the use of weather instruments is the lecture method.
6. Calendar pictures can be used in Geography for revision purposes.
7. The disadvantage of a test-matrix is that a variety of questions cannot be used.
8. Good evaluation techniques should supply information about differences in individual abilities.
9. During inspections the teacher will receive the credit or take the blame for the work done in his subject.
10. Application questions do not require the rearranging of facts. (10)

Question 3b

Answer the following multiple choice questions by writing down only the letter of the word or phrase (i.e. a or b or c or d) which fits the introductory sentence opposite the number of the question:

1. When he prepares a lesson the teacher should keep the following in mind:
  - a. To present all the lessons in the same way.
  - b. To remain a student and read extensively.
  - c. To present as many facts as possible.
  - d. To present a minimum of facts.

2. The value of group activity is that the...
  - a. pupil is given the opportunity to express what he has learnt;
  - b. pupil learns to rely on his teacher;
  - c. pupil is provided with leisure time and therefore enjoys the subject;
  - d. teacher has more time to do his preparation.
  
3. When a scheme of work is being drawn up it is important...
  - a. to make use of one textbook only;
  - b. not to expand on the syllabus by giving more detail;
  - c. that there is at least one topic for every period;
  - d. to consider available content matter found in the library.
  
4. The most important factor to consider when presenting a lesson is to...
  - a. make use of the overhead projector;
  - b. limit the subject matter;
  - c. know the foreknowledge of the pupils;
  - d. make a summary on the chalkboard.
  
5. The best way to involve the pupils in a lesson is to...
  - a. read to them from the class textbook;
  - b. let them write summaries from the chalkboard;
  - c. conduct a class discussion;
  - d. give a library assignment.
  
6. One of the best audio-visual aids is the...
  - a. radio;
  - b. tape recorder;
  - c. television;
  - d. overhead projector;
  
7. To determine a pupil's knowledge about the relationship that exists between pressure and wind the.....method should be used.
  - a. question-and answer;
  - b. demonstration;
  - c. lecture;
  - d. project.
  
8. Creating a Geography atmosphere does NOT require the...
  - a. enthusiasm of the teacher;
  - b. teacher's familiarity with pupils;
  - c. involvement of the pupil;
  - d. display of pictures.

9. Essay-type-questions have the advantage that...
- a greater range of work is covered;
  - they can be marked more objectively;
  - the pupil is required to exercise greater self-expression;
  - less time is required to mark them.
10. The most important factor in connection with fieldwork is...
- the opportunities it offers to the pupils;
  - proper planning;
  - the practical study of natural phenomena;
  - detailed instructions given to the pupils in advance.

Question 3c

List five features found in a typical Geography classroom. (5)

25x2 = 50

## SECTION B 2

Answer any ONE of the following two questions.

Question 4

The following is an excerpt from a standard ten examination paper. Use the questions to compile a memorandum, clearly indicating the mark allocation for each question.

- "(i) Briefly discuss the mature stage of a thunderstorm (9)
- (ii) Discuss the formation of hail in cumulusnimbus clouds (thunderstorm)" (16)
- (25)
- 2x25 = 50

OR

Question 5

Prepare a lesson of 30 minutes duration for a standard 9 class on the following theme:

"The stages in the development of a thunderstorm".

Use the following headings:

- Lesson aim  
Learning aim  
Cause of the lesson and application  
Teaching aids (25)
- 2x25 = 50
- TOTAL 150

APPENDIX G 3 (i)

DEGREE/DIPLOMA EXAMINATIONS : OCTOBER/NOVEMBER 1985

Time : 3 hours

Marks : 130  
Subminimum : 35%

SUBJECT : GEOGRAPHY METHOD

THIS PAPER CONSISTS OF 6 PAGES

OTHER INSTRUCTIONS TO CANDIDATES

Answer both questions in Section A, One question from Section B,  
One question from Section C and One other question from either  
Section B or Section C

This is an open book examination

SECTION AQUESTION ONE

Using the topographic map provided

- (i) Design a Senior Certificate level map question worth 30 marks, to be incorporated in the mark (pre-lim) examination. (10)
  - (ii) Provide your marking memorandum and mark allocation. (15)
  - (iii) In terms of your objectives support the design of your question ( 5)
- (30)

ORQUESTION TWO

Using the pair of air photographs provided

- (i) Design a structured exercise to introduce a Form I class to the reading of air photographs. (12)
  - (ii) Explain your design in terms of your objectives. (10)
  - (iii) List the expected answers. ( 8)
- (30)

SECTION B

Choose TWO of the following and discuss their relevance to educational objectives and teaching strategies.

- Classroom "climate"
- Classroom design
- Geography as a science (20)

QUESTION FOUR

Differentiate between the members of these pairs and discuss their importance in the teaching of geography in secondary schools.

Aims and objectives

Reliability and validity in testing

Curriculum and syllabus

(20)

QUESTION FIVE

- (i) Consider yourself appointed to a school lacking in all but the basics, such as blackboard and chalk. The pupils have sufficient textbooks and atlases to share one between three. Elaborate on the types of practical work you can introduce immediately to enable the pupils to realise that geography requires more than rote learnt repetition and writing.
- (ii) What would be the first "aid" you would buy when the budget allowed? Justify your choice.

(20)

QUESTION SIX

Geography is considered to be a 'difficult' school subject.

- (i) Discuss the reasons for this view among African pupils whereas in many white schools it is considered as an easy option.
- (ii) Consider strategies for overcoming this resistance to the subject and
- (iii) Assess your own particular role in changing these attitudes.

(10)

( 5)

( 5)

(20)

SECTION A

QUESTION ONE

Refer to the map of Queenstown.

- a) List all the lines of communication shown on this map. (5)
  - b) Compare the urban layout of the suburbs of Westbourne to that shown by the area around the clinic, situated to the south of Westbourne. (10)
  - c) Describe the site of Queenstown. (5)
  - d) At a scale of 1:50 000, calculate the distance from the centre of the Hexagon to the top of Bowker's Kop. (5)
- (25)

OR

Study the photograph provided.

- a) List all the geographical facts you can extract from the photo. Show your reasoning. (10)
  - b) Set an exercise for Form 4 pupils to test the photo reading skills. Give your marking memorandum and mark allocation. (15)
- (25)

QUESTION TWO

All these questions refer to the attached synoptic chart.

- a) Two high pressure systems appearing on this map are considered to be the major influences on South African weather. Name these two pressure systems. (2)
- b) EITHER
  - (i) Make a sketch of the weather system in the block marked "A" as it would appear on the blackboard during a lesson on such weather systems. Show:
    - 1. General wind patterns about this system.
    - 2. Air mass characteristics (a) temperature  
(b) pressure trends.
    - 3. Likely zones of precipitation. (10)

OR

- (ii) Draw a cross-section of the weather systems in the block marked "A" from B to C as it would appear on the blackboard during a lesson on such weather systems. Show:
  - 1. Warm front.
  - 2. Cold front.
  - 3. Air mass characteristics (a) temperature  
(b) pressure.
  - 4. Likely zones of precipitation. (10)

QUESTION TWO

- c) Complete the following table in order to describe the weather that will be experienced at "D" (37°S x 33°E) as the weather system passes overhead.

TIME	PRESSURE	TEMPERATURE	WIND DIRECTION
0 hours	1016 mb	warm	north west
2 hours		becoming cooler	
4 hours	1014 mb		
6 hours		becoming cold	west
8 hours		cold	
10 hours	1016 mb		south west

(8)

- d) Your lesson objective is to teach your students about station models on a synoptic chart. Draw up a lesson summary as it would appear on the blackboard for the students to copy into their notebooks. (10)

(30)

SECTION BQUESTION THREE

- a) Differentiate between reliability and validity as applied to evaluation in geography.
- b) "Evaluation is more than mere testing." Amplify on this topic with specific reference to secondary school geography and to the skills you expect the pupils to develop.

QUESTION FOUR

Explain what is encompassed by the term "classroom climate" and show how successful geography teaching may be promoted or diminished by external factors. Include classroom design, the extra-school situation and availability of resources as aspects of your answer.

QUESTION FIVE

Geography lessons may be of many types, of which fieldwork is one and not necessarily the most important. Discuss.

SECTION CQUESTION SIX

In the choice of teaching resources cost is a major factor. Choose a section of work from the Std 10 geography syllabus which will take about four lessons to teach.

For each of these lessons show what resources are available to you at no, or very little, cost and how you would use them.

QUESTION SEVEN

Outline the procedure that you will follow in order to plan, carry out and evaluate the results of a field-trip to the coast with a group of Std 6 pupils.

QUESTION EIGHT

Using a lesson on tropical cyclones as a basis, show how you would arrange the material on your blackboard so that it would act as a lesson summary for the pupils to take down into their notebooks.

Map of Queenstown, synoptic weather map and photograph over the page.

E N D  
\*\*\*\*\*

APPENDIX G 4EXAMINATIONS : NOVEMBER 19 84SUBJECT, COURSE AND CODE: H D E : GEOGRAPHY METHOD : EDEM6GEYPAPER: PDURATION: 2 HOURS.TOTAL MARKS: 75

---

STUDENTS ARE REQUESTED, IN THEIR OWN INTERESTS, TO WRITE LEGIBLY.

---

PLEASE NOTE: THIS QUESTION PAPER CONSISTS OF TWO PAGES.  
PLEASE SEE THAT YOU HAVE THEM BOTH.

---

ANSWER THREE QUESTIONS.

1. Geography is generally referred to as a content or learning subject. How can you, as a geography teacher, help a pupil who complains he has difficulty in learning.
2. "Geography games and simulations are very useful teaching tools in the hands of an experienced teacher." Discuss this statement.
3. Many school children express a lack of interest in regional geography. Suggest an explanation for this and then discuss a number of teaching techniques you could use in order to make your teaching of regional geography interesting.
4. Structured questions, which not only incorporate both data stimulus and data response ideas, but also sub-questions which are basically factual recall, provide teachers with perhaps the most meaningful method of assessment today. Critically examine this premise, bearing in mind the objectives on which the structured question is based.

5. Regional/.....

SUBJECT AND COURSE:- H D E : GEOGRAPHY METHOD : EDEM6GEY .....

PAPER:- ...P....

---

5. Regional geography should be seen as a means of incorporating some of the important concepts and principles of physical and human geography, into a more meaningful study of a region. By either referring to a specific region, or in a general sense, describe how you would go about fulfilling these aims whilst maintaining the interest of the pupil.
6. It has been said that the map provides the student of geography with one of the most important tools used in the study of his environment. Explain how the teacher is able to use topographical maps in developing basic mapwork skills as well as an ability to interpret the detailed features shown.
7. Fieldwork in urban areas is beneficial only if the objectives of the outing are based on syllabus requirements, and the pupils' work is rigidly organized in order to derive the maximum benefit from the exercise.  
Discuss this statement.

APPENDIX G 5

NOVEMBER 1984

KURSUS:

TYD : 3 uur

VRAESTEL: VAKDIDAKTIEK AARDRYKSKUNDE

PUNTE : 150

BEANTWOORD AL DIE VRAEVRAAG 1

Gee 'n kritiese bespreking van Boden se siening dat "school geography uses a number of organising frameworks to describe where things are and to explain how they are locationally related." (20)

VRAAG 2

Watter aktiwiteite kan in Aardrykskunde-onderrig aangewend word om effektiewe leer te laat realiseer? (2)

VRAAG 3

Wat is na u mening:

- (a) Die waarde van streeksaardrykskunde (5)
- (b) Die funksie van die vakonderwyser met betrekking tot streeksaardrykskunde. (15)
- (c) Die waarde van gesimuleerde spele (simulation games) in die aanbieding van Aardrykskunde (10)

VRAAG 4

Gee 'n volledige uiteensetting hoe u hitte-eilande aan 'n standaard 10 klas (hoërgraad) sal verduidelik, sodat die samehang tussen die komponente van 'n les (lesdoelwit, beginsituasie, lesverloopsmomente en dergelike meer) duidelik na vore sal kom. (20)

VRAAG 5

- (a) Verduidelik wat die verskil tussen meting en evaluering is.
- (b) Verwys na die volgende aspekte wat ter sprake kom wanneer die opsteltipe vraag as 'n evalueringsvorm in 'n Aardrykskunde toers/eksamen ingesluit word:
  - (i) Oorwegings en wenke by die samestelling van die opsteltipevraag. (10)
  - (ii) Die voor- en nadele van die opsteltipe vraag. (10)

VRAAG 6

Skryf kort aantekeninge oor die volgende (20-25 reëls):

- (a) Riglyne aan die hand waaraan 'n sillabus opgestel moet word. (10)
- (b) Bou en gebruik van modelle in Aardrykskunde. (10)
- (c) Riglyne by die opstel van vraestelle en memorandum. (10)

APPENDIX G 6 (ii)

DEPARTMENT OF EDUCATION

EXAMINATIONS : NOVEMBER 1978HIGHER DIPLOMA IN EDUCATION (POST-GRADUATE) SECONDARY  
HIGHER DIPLOMA IN EDUCATION, SECONDARYHDE (PG) SEC.  
HDE SEC.  
GEOGRAPHY  
METHODGEOGRAPHY METHOD  
\*\*\*\*\*Time:  $2\frac{1}{2}$  hours  
(for questions 1,3 & 4)ANSWER ALL FOUR QUESTIONS

All questions carry equal marks. Provincial syllabuses may be used.  
Question 2 is to be written in your own time and handed in to Dr Clark  
within a week of this examination.

1. Either

- (a) Discuss the relevance of the 'New Geography' of the 1970's for the teaching of geography in secondary schools.

Or

- (b) "The survival of geography depends upon geographers putting up a convincing educational case for their subject. Hence the importance of the first two questions: what are the special contributions which geography can make to the school curriculum? And how have these contributions been affected by recent developments in the subject?"

(Editorial, Teaching Geography, 1978.)

What are your answers to these two important questions.

2. Either

Prepare outline lesson notes for TWO lessons (35 minutes) to teach the topic covered by the textbook extract provided. Your outline notes should include:

- (a) objectives, including behavioural objectives if appropriate;
- 
- (b) brief outline of oral work (exposition, questioning and discussion);
- 
- (c) specific tasks for the pupils;
- 
- (d) any visual aids or other illustrative material you know of and think would be useful;
- 
- (e) specimen test questions, including examples of open-ended and objective test items.

Question 2. Or/.....

## Question 2 (contd.)

2. Or

Prepare a scheme of work for a period of at least a term for a major section of the Geography syllabus of a particular standard in any secondary school. This question is designed for candidates who have a particular post in mind for next year, and is intended to help them to plan their teaching, but other candidates may submit schemes.

The following guidelines are suggested:

(a) objectives; (b) time allocation of topics or teaching units; (c) examples of pupils' tasks; (d) methods of assessment, including specimen examination questions; (e) textbooks, teaching aids and equipment required.

Guidance can be obtained from Bailey, Teaching Geography, (1974), chapter V, Planning the Programme, which will be available in the Education Department library.

3. Either

(a) What principles ought the teacher to observe to avoid bias and the reinforcing of stereotypes when teaching the geography of countries outside South Africa.

Or

(b) "When planning a teaching programme one ought to be more concerned with ensuring the learning of skills and concepts rather than facts."

Discuss in relation to teaching a major section of the South African syllabus, e.g. geomorphology.

Or

(c) "Many geography teachers have for a long time been unhappy about the rapidly increasing body of facts they feel obliged to teach, the sterile and unstimulating nature of the learning asked of pupils, and the naive and trivial explaining involved." (R Beddis).

Choose a major section of the senior secondary syllabus, e.g. geomorphology, and discuss what approaches you would use to avoid the pitfalls mentioned by Beddis.

4. Examine the advantages and disadvantages of FOUR of the following techniques and approaches, with special reference to teaching Geography in a secondary school:

(a) Teacher slides or cine films or teacher prepared maps for the overhead projector or tape recordings.

(b) Geographical games or problem centred discussion techniques or case studies.

(c) Fieldwork in the CBD or farm visits or coastal field work or visits to urban industrial areas.

(d) Individualised instruction or individual projects or hypothesis testing or searching reality.

=====

## EDUCATION DEPARTMENT : HIGHER EDUCATION DIPLOMA

GEOGRAPHY METHOD EXAMINATIONANSWER ALL FOUR QUESTIONSTIME: 3 hours

All questions carry equal marks. Provincial syllabuses may be used.

- - - - -

1. "Geography faces challenge in two directions at once. There is the need to identify conceptual bases and to find an internal consistency ... and to reconsider its value as a whole in relation to the changing school curriculum" (Bale, 1973).  
Discuss this point of view.
  
  2. Prepare outline lesson notes for one lesson (35 minutes) to teach the topic covered by the textbook extract provided. Your outline notes should include:
    - (a) brief outline of oral work (exposition, questioning and discussion);
    - (b) specific tasks for the pupils;
    - (c) any visual aids or other illustrative material you know of and think would be useful;
    - (d) specimen test questions, including examples of open-ended and objective test items.
  
  3. Examine the advantages and disadvantages of four of the following techniques and approaches, with special reference to teaching Geography in a secondary school:
    - (a) film strips or cine films or teacher prepared maps and diagrams for the overhead projector;
    - (b) geographical games or multi-media kits or individualised instruction;
    - (c) coastal field work or hypothesis testing in the field or shopping and central place study in the field;
    - (d) projects or problem centred discussion groups or work card and work sheet approaches.
  
  4. "Many geography teachers have for a long time been unhappy about the rapidly increasing body of facts they felt obliged to teach, the sterile and unstimulating nature of the learning asked of pupils, and the naive and trivial explaining involved." (R. Beddis).  
Choose a major section of the senior secondary school syllabus, e.g. geomorphology, and discuss what approaches you would use to avoid the pitfalls mentioned by Beddis.
- - - - -

APPENDIX G 6 (iii)EDUCATION DEPARTMENTEXAMINATIONS : NOVEMBER 1986

HDE(PG)SEC

HDE(SEC)GEOGRAPHY METHODNovember 1986

HIGHER DIPLOMA IN EDUCATION (POST GRADUATE) SECONDARY  
 HIGHER DIPLOMA IN EDUCATION (SECONDARY)

GEOGRAPHY METHOD

Time : 3 Hours

ANSWER ALL THREE QUESTIONS

---

All questions carry equal marks. Provincial syllabuses may be used

---

1. Your examination booklet contains two complete extracts from Std 6 and Std 8 textbooks on 'water in the atmosphere'. Assume that you are beginning to prepare separate teaching units for this topic for the two standards and answer the following questions (credit will be given for taking note of the differing levels of ability and maturity between the two standards).
  - (a) Choose one of the two standards and give a brief outline of your teaching objectives, teaching strategy, steps, and proposed timing for this teaching unit.
  - (b) You plan to use an overhead transparency of Fig. 3.27 (orographic rain) from the Standard VI textbook, p. 64, to explain orographic rain.
    - (i) which aspects of the textbook account (pp. 63-64) do you think would pose the most difficulty for the pupils? Explain your answer.
    - (ii) Make a list of the basic points you would try to make about orographic rain, and the questions you would ask the class.
  - (c) Devise three questions on rain as part of a worksheet on 'water in the atmosphere' for Standard VIII, including at least one question of their home town (Grahamstown climatic statistics are provided in the examination booklet).
  
2. Your examination booklet contains an extract on 'Rich and poor, a divided world', from a Standard IX textbook.
  - (a) What teaching strategies would you employ to generate group and class discussion, when teaching this section?
  - (b) In your experience, do you think Standard IX pupils are at the right stage of cognitive development to handle concepts such as 'communist world' and 'third world' (p. 235)? What strategies ought the teacher to use in order to assist their understanding?

- (c) (i) To what extent are values involved in teaching the topic, 'Rich and poor : a divided world'?.
- (ii) How successful is the textbook extract in avoiding bias and stereotyping?
- (iii) Would you be able to avoid bias in teaching this topic? Suggest procedures a teacher might follow to attempt to avoid bias in teaching this topic.
- (d) How would you organise EITHER a project OR independent study on one of the developing or developed countries studied in Standard IX? (A contents page from the textbook is attached.)

3. Karen Harrison was being challenged.

'What good does geography do kids, anyway?' queried Allan Smythe, the science master. 'Teaching where places are and how people live around the world doesn't help them understand the real nature of the environment, or the technological changes which are taking place these days.'

'Well,' countered Karen, 'you should visit my classes sometime. You seem to have a pretty narrow view of what geography is. You need to consider what education aims to do in the first place, and then look at how geography, and every other school subject for that matter, contributes to this. What the subject teaches certainly is important, but how it is taught is important, too, if aims set for education are to be met'. (Brian Maye).

How will you teach a major section of the South African syllabus, e.g. geomorphology, climatology, etc., in order to meet some of your general aims in teaching geography?

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APPENDIX G 8

EDUCATION DIPLOMA : THIRD YEAR

GEOGRAPHY

JUNE 1985

TIME : 2 HOURS

MARKS : 100

INSTRUCTION TO CANDIDATE

1. Answer THREE questions.
2. Choose TWO from Section A.
3. Choose ONE from Section B.

SECTION A : CONTENTQUESTION ONE

- 1.1 Discuss critically any two natural factors that are responsible for the spatial distribution of population over the earth's surface. (25)
- 1.2 Explain the following population concepts:
  - 1.2.1 population potential (5)
  - 1.2.2 Lorenz Curve. (5)

/35/

QUESTION TWO

- 2.1 Explain the characteristics and significance of age pyramids in the representation of the age structure of a population. (25)
- 2.2 Discuss the importance of population structure to demographers, planners and economists. (10)

/35/

QUESTION THREE

- 3.1 Discuss the factors that influence the location and form of rural settlements. Quote apt examples wherever possible. (25)
- 3.2 Briefly discuss the various patterns of rural settlement. (10)

/35/

JS GEOGRAPHYSECTION B : METHODQUESTION ONE

"The new geography is essentially a way of thinking rather than a body of knowledge."

Discuss the validity of this statement.

/30/

QUESTION TWO

"The traditional field trip approach as well as the field research approach both have a place in geography teaching."

Differentiate between the traditional field trip and field research stressing the different procedures involved.

/30/

QUESTION THREE

"No school subject can be isolated from the library and it is virtually unthinkable that pupils would not use the services of a well equipped school library".

In the light of the above statement, discuss how a geography teacher in the secondary school can integrate syllabus topics with the library.

/30/

APPENDIX G 9

SECONDARY TEACHERS' DIPLOMA EXAMINATIONS : NOVEMBER/DECEMBER 1984

## GEOGRAPHY METHOD : PAPER 2

INSTRUCTIONS TO CANDIDATES

1. ANSWER FIVE QUESTIONS
2. NUMBER YOUR ANSWERS CAREFULLY
3. CREDIT WILL BE GIVEN FOR NEAT AND LOGICAL ANSWERS, ESPECIALLY TO THOSE DRAWING FROM YOUR PERSONAL EXPERIENCE DURING TEACHING PRACTICE.

QUESTION 1

Write an essay to justify the place of geography in the secondary school curriculum. (40)

QUESTION 2

- (a) "Geography is concerned essentially with visible phenomena and describes the earth's surface in its real and present aspects." (Unesco, 1965)
- Comment on this statement and explain its implications in a classroom situation. (20)
- (b) The following are some of the basic concepts in geography. Explain how you could emphasise these in your teaching of geography. Use examples.
- (i) location
- (ii) spatial relationships. (20)
- (40)

QUESTION 3

- (a) Show the difference in meaning between a teacher-dominated and a student-centred lesson. (10)
- (b) Explain briefly why it is always important to have a separate geography room in the school. (10)
- (c) (i) Mention 5 criteria you would apply to choose a suitable textbook for your class. (5)
- (ii) Describe the methods by means of which the textbook can be used effectively in the teaching of geography at secondary school level. (15)
- (40)

QUESTION 4

- (a) What is the value of taking students out on a field excursion in geography? (10)
- (b) Give an account of the various activities that students can be engaged in during a field trip. (15)
- (c) You are introducing orthophoto maps to Standard 10 students. Describe the steps you would take to help them learn how to interpret and analyse information shown on such a map (15)
- (40)

QUESTION 5

Write short notes on any FOUR of the following

- (i) The use of models in the teaching of geography.
- (ii) The value of assignments in geography teaching.
- (iii) How to help geography students overcome the language problem.
- (iv) Projects in geography teaching.
- (v) Things to consider when drawing simple sketches on the chalkboard. (40)

QUESTION 6

- (a) Below you have a diagram showing the structure of the population of Botswana. You want to test whether or not your students have acquired these skills: synthesis, analysis, extrapolation, evaluation interpretation, translation, memory, etc. From the questions asked based on the diagram state which skill is being tested.

- (i) What type of a diagram is this?
  - (ii) What percentage are children between 10 and 14 years of age?
  - (iii) Describe the population structure of Botswana.
  - (iv) Would the effect of having more children than adults benefit the economy of Botswana?
  - (v) Give a reason for having too many children in Botswana. (10)
- (b) Using the passage below set the following:
- (i) an essay-type question. (2)
  - (ii) 1 multiple choice question. (2)
  - (iii) 1 completion type question (2)
  - (iv) 1 true/false type question (1)
  - (v) 1 matching type question (2)
  - (vi) 1 structured-essay type question (1)

Limestone consists mostly of a mineral called calcite. The ground water in limestone contains a lot of dissolved calcite. When this water seeps into caves, small drops hang from the ceilings. Some of the water in the droplets evaporates and a thin film of calcite is left on the cave roof. Another droplet deposits a second film over the first, and so on. Gradually, the deposits grow down to form long, icicle-like features called stalactites. They are fragile. If they grow too long, they snap off. Some drops of water fall on the floor of the cave. These drops may deposit similar thin films of calcite, which grow upwards into pillars called stalagmites. Some stalactites and stalagmites meet up to form solid columns of calcite. When these columns occur in groups, they may look like organ pipes.

- (c) Draw up a marking memorandum for the questions you set from (ii) to (v) above. (10)
  - (d) Imagine that you have given a test to Standard 8 students from which you noted that 50% of the class passed the test and some sections were done very well by the whole class but there were others that a few students did very badly. Describe the steps you would take to deal with this situation. (10)
- (40)

DEPARTMENT OF GEOGRAPHY  
STD 111

PAPER 11 METHOD

TIME : 1 HR  
TOTAL : 100

SECTION A : OBJECTIVE QUESTIONS : 50

ANSWER THE FOLLOWING QUESTIONS ON THE ANSWER SHEET PROVIDED BY CROSSING OUT THE LETTER OF THE CORRECT ANSWER.

1. In teaching Geography the most common incorrect aim is to
  - (a) help the pupils understand certain phenomena in man's environment.
  - (b) obtain knowledge of strange lands.
  - (c) develop the pupils' ability to see relationships between features on the earth's surface.
  - (d) understand how man relates to his environment. (2)
  
2. When preparing your daily lessons
  - (a) plan them from the pupils' point of view.
  - (b) write down facts directly from the textbook.
  - (c) plan what you think you know best.
  - (d) detail what will save you time. (2)
  
3. A successful teacher in Geography is the one who
  - (a) does not let the pupils believe he is ignorant about some of the facts.
  - (b) is a good actor and narrator.
  - (c) exercises strict discipline.
  - (d) relates what is taught in the classroom with realities outside. (2)
  
4. In Geography the most preferred method of teaching is the
  - (a) lecture method.
  - (b) note-taking method.
  - (c) direct observation method.
  - (d) reading round the class method. (2)
  
5. The value of notes is that
  - (a) pupils are prepared for the examinations.
  - (b) pupils learn to organize facts logically and systematically.
  - (c) they force the pupils to memorize the work the way the teacher sees it.
  - (d) the teacher's work is made easy. (2)
  
6. A well set test will
  - (a) have only difficult questions.
  - (b) be easy for all the pupils to pass.
  - (c) be objective and reliable with results that can be evaluated.
  - (d) test the ability of the pupils to memorize work done. (2)
  
7. The teacher should provide for pupil activity in the classroom because
  - (a) all play and no work makes the pupils dull.
  - (b) the teacher will then have time to rest while the pupils are occupied.
  - (c) the pupils become less dependent on the teacher.
  - (d) the pupils learn best when they are given opportunities to express what they have learnt. (2)

8. The best scheme of work is the one that
- indicates how the teacher proposes covering the syllabus in the time available.
  - enables the teacher to complete the syllabus within the shortest time possible.
  - consists of regular tests spread throughout the year.
  - summarises the syllabus in broad outline. (2)
9. Revision work must be aimed at making pupils
- memorise the worked-out answers to probable examination questions.
  - gain deeper insight into the completed work.
  - recount the facts without looking at the book.
  - stay at school before the examinations. (2)
10. A written test must for purposes of remedial work be followed by
- punishment of all the pupils who have failed it.
  - repetition of all the lessons on which it was based.
  - revision of the test and discussion of the memorandum.
  - division of bright and dull pupils. (2)
11. The method which is most outdated in Geography-teaching is the (a) narrative method (b) question- and answer method (c) project method (d) fieldwork method. (2)
12. The ideal way to introduce aerial photographs to your standard 6 pupils would be to compare an aerial photograph with (a) an atlas map of the same area (b) a 1:50 000 map of the same area (c) another photograph of the same area (d) a homemade model of the same area. (2)
13. In teaching direction, one of the following methods is not applicable. (a) Treasure hunt (b) Orientating a map with a compass (c) Using compass directions on the ground (d) Referring to place A's position as being to the right of place B on a map. (2)
14. An important point to consider when handing out homework in Geography is to (a) give enough to keep the pupils off the streets (b) give only as much homework as they can complete before the end of the class period (c) give so much homework that the pupil also has time for homework in the other subjects (d) give no homework since you are expected to teach the pupils during school hours only. (2)
15. When using a textbook, never (a) let the pupils turn their books upside down while you are talking (b) read for the whole period from the textbook (c) let the pupils underline important parts in the book (d) let the pupils use their books when doing assignments. (2)
16. When he prepares a lesson the teacher should keep the following in mind:
- To present all the lessons in the same way.
  - To remain a student and read extensively.
  - To present as many facts as possible. (2)
  - To present a minimum of facts.
17. The value of group activity is that the .....
- pupil is given the opportunity to express what he has learnt;
  - pupil learns to rely on his teacher;
  - pupil is provided with leisure time and therefore enjoys the subject; (2)
  - teacher has more time to do his preparation.

18. When a scheme of work is being drawn up it is important .....
- to make use of one textbook only;
  - not to expand on the syllabus by giving more detail;
  - that there is at least one topic for every period
  - to consider available content matter found in the library.
- (2)
19. The most important factor to consider when presenting a lesson is to .....
- make use of the overhead projector;
  - limit the subject matter;
  - know the foreknowledge of the pupils;
  - make a summary on the chalkboard.
- (2)
20. The best way to involve the pupils in a lesson is to .....
- read to them from the class textbook;
  - let them write summaries from the chalkboard;
  - conduct a class discussion;
  - give a library assignment.
- (2)
21. One of the best audio-visual aids is the .....
- radio
  - tape recorder
  - television
  - overhead projector.
- (2)
22. To determine a pupil's knowledge about the relationship that exists between pressure and wind the ..... method should be used
- question-and-answer
  - demonstration
  - lecture
  - project.
- (2)
23. Creating a Geography atmosphere does not require the .....
- enthusiasm of the teacher;
  - teacher's familiarity with pupils;
  - involvement of the pupil;
  - display of pictures.
- (2)

24. Essay-type-questions have the advantage that .....
- a greater range of work is covered;
  - they can be marked more objectively;
  - the pupil is required to exercise greater self-expression;
  - less time is required to mark them. (2)

25. The most important factor in connection with fieldwork is .....
- the opportunities it offers to the pupils;
  - proper planning;
  - the practical study of natural phenomena;
  - detailed instructions given to the pupils in advance. (2)

$$25 \times 2 = 50$$

SECTION B : LONGER QUESTIONS : 50

ANSWER THE FOLLOWING QUESTIONS ON THE FOLIO PAPER PROVIDED

26. Give three general aims of teaching geography (3)
27. State one way in which the teacher can keep pupils meaningfully occupied on a bus trip (2)
28. What is the teacher's most versatile teaching aid ? (2)
29. What would the most appropriate method be for teaching the use of weather instruments ? (2)
30. Describe seven skills which would be put into practice by the pupils while on a field excursion (14)
31. Discuss evaluation under the following headings:
- The aims of evaluation (6)
  - The types of questions - give examples of each (12)
  - Setting a balanced question paper (4)
32. Briefly explain what is meant by teaching pupils to think 'holistically'. (5)

Total 100

APPENDIX G 10

SECONDARY TEACHERS' DIPLOMA EXAMINATIONS : NOVEMBER 1986

FACULTY OF EDUCATION : GEOGRAPHY METHOD : PAPER 2

Time : 3 hours

Marks : 200

INSTRUCTIONS TO CANDIDATES

1. Answer FIVE questions
2. Number your answers exactly as the questions are numbered.
3. Credit will be given for neat and logical answers, especially to those drawing from your experience during Teaching Practice.

QUESTION 1

Discuss briefly the "new approaches" to geography teaching at secondary school level, with special reference to the following:

- (a) Understanding of geographic concepts;
- (b) Skill development. (40)

QUESTION 2

In the light of your experience during Teaching Practice comment on

- (a) The availability and use of teaching aids in geography teaching in the schools where you taught. If the situation is not favourable what do you suggest could be done to improve it?
- (b) Problems associated with the use of English as a medium of instruction for teaching geography. What plans do you have on tackling this problem when you start teaching next year? (40)

QUESTION 3

- (a) The use of audio-visual aids in geography teaching ranks second only to reality-based geography teaching.  
Discuss this statement, indicating clearly the value of each one of these in the teaching of geography at secondary school level. (25)
  - (b) Explain why it is always important for the geography teacher to let the students handle the meteorological instruments themselves when taking recordings or measurements, e.g. temperature. (15)
- (40)

QUESTION 4

With regard to geography teaching in secondary school, discuss the value of each of the following:

- (a) the textbook
- (b) practical exercises
- (c) games
- (d) atlases
- (e) models. (40)

QUESTION 5

You have been provided with T.E. 25, a syllabus extract on geomorphology (Std 8) and climatology (Std 9). The material you are provided with is meant for a fortnight. Take ONE topic only and then

- (a) Draw up a scheme for teaching this topic. Use the T.E. 25 sheet provided. (20)
  - (b) List your objectives for teaching the topic. (10)
  - (c) Specify teaching aids that you would need to prepare for teaching this topic. (10)
- (40)

QUESTION 6

Indicate clearly how you would help secondary school students acquire the following skills or abilities:

- (a) note-making
- (b) recording geographic data during an excursion
- (c) analysis of geographical data
- (d) application of geographical knowledge (40)

QUESTION 7

Geography test and examination papers are usually criticised for largely evaluating the ability to recall facts and a superficial understanding of these.

- (a) What harm do you think is caused by evaluation that emphasises recall of facts? (10)
- (b) How would you set your papers such that they do not "largely" evaluate recall of facts? (10)
- (c) Below are samples of questions taken from past examination papers. Indicate which of the following mental abilities you think the teacher was trying to test in each question: recall; comprehension; application; analysis; synthesis and evaluation.

- (i) Give an outline of each of the 3 stages of the evolution of landscapes.
  - (ii) Describe briefly the pattern(s) of rural settlements found in your environment.
  - (iii) Explain the factors that possibly account for the pattern(s) you identified in (ii) above.
  - (iv) Write an essay on the factors that contribute to the limited commercial agricultural production in the Republic of Transkei.
  - (v) Calculate the scale of the vertical air photograph provided.
  - (vi) The line on a map which joins all points with the same amount of rainfall is called.....
  - (vii) Name 4 large or primary population clusters of the world.
  - (viii) Explain the meaning of Adiabatic temperature lapse rate.
  - (ix) If you were a sugar farmer state two adjustments you would probably have to make on your farm in response to the change in the world sugar price from 1975/76 to 1978/79.
  - (x) With the aid of a diagram, explain how relief rain is formed. (20)
- (40)

#### SYLLABUS EXTRACTS

##### 5.1.3. GEOMORPHOLOGY STD 8

Revision of rock types is recommended

- (a) Weathering and erosion
- (b) Internal forces and resultant landforms
  - (i) Continental drift and plate tectonics (elementary)
  - (ii) Folding and faulting
  - (iii) Earthquakes
  - (iv) Vulcanism

##### 5.2.2. CLIMATOLOGY STD 9

Synoptic weather charts, satellite images, relevant recording instruments and quantitative techniques should be used where appropriate.

- (a) Atmospheric pressure  
Definition, measurement and representation.

- (b) Relationship between pressure and wind
- (c) General circulation of the atmosphere.  
Primary, secondary and tertiary circulations.
- (d) Causes of uplift.
- (e) Thunderstorms and tornadoes.  
General description; consequences  
Should be studied on a global scale.