DEVELOPMENT OF A PROFESSIONAL STUDIES PROGRAMME
FOR CAPE TOWN TEACHERS' COLLEGE
WITH PARTICULAR EMPHASIS ON THE PROBLEM
OF INTEGRATING ASPECTS OF THEORY AND PRACTICE

A dissertation
presented in partial fulfilment
of the requirements for the degree of

MASTER OF EDUCATION

by

SHEILA MOORCROFT
B.A.Hons. (1959) Rhodes
B.Ed. (1967) U.C.T.
U.E.O. (1960) Rhodes
DIPLOMA IN SPECIAL EDUCATION:
Clinical and Remedial (1973) U.C.T.

September 1985
The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.
DEVELOPMENT OF A PROFESSIONAL STUDIES PROGRAMME
FOR CAPE TOWN TEACHERS' COLLEGE
WITH PARTICULAR EMPHASIS ON THE PROBLEM
OF INTEGRATING ASPECTS OF THEORY AND PRACTICE

TABLE OF CONTENTS

PREFACE 1

SECTION I

CHAPTER ONE : THE CONTEXT 4

CHAPTER TWO : PROFESSIONAL STUDIES AND THE COLLEGE 16
 The identification of problems 16
 1. The components and their interrelatedness 16
 2. The search for an agreed basis 17
 3. School experience problems 18

CHAPTER THREE : MEETING THE CHALLENGES 25
 The solutions proposed 28

SECTION II

CHAPTER FOUR : SEARCHING THE LITERATURE 40
 1. Perspectives on Teacher Education 40
 2. Professional Studies components and their interrelatedness 43
SECTION III

CHAPTER FIVE: 1. Principles underlying the Goal Model for Professional Studies 71
2. The conceptual basis 72

CHAPTER SIX: Proposals for the Professional Studies Course 78

CHAPTER SEVEN: Critical appraisal of changes in the School Experience Programme 96

SECTION IV

EPILOGUE 103
At a time when existing social and educational structures are rightly open to question and debate, the White colleges cannot escape the same scrutiny and evaluation. Such criticism must address not only the morality of separate provision for student teachers of different races, but must also raise questions concerning the preservation of the undergraduate route to the teaching profession and the justification for the teacher education offered at institutions such as the Cape Town Teachers' College (hereafter referred to as the College).

This dissertation outlines the steps by which an enquiry which began as a modest attempt to give greater coherence to the components of the teacher education course developed into a deeper search to reconcile educational theory, subject knowledge and professional skills in the Professional Studies programme. Although many necessary and well-received changes were effected, there was a growing consciousness of the eclectic and piecemeal nature of such innovations. While most lecturers were united in their rejection of Christian National Education (CNE) as an underlying philosophy, there was need for an agreed matrix or core of assumptions about the nature and purpose of educational enterprise to give conceptual coherence and meaningful structure to the College task. Such a perspective was required to.
provide this basis and yet to retain sufficient width to preserve the rich diversity of opinion and outlook which are themselves enriching to an institution.

The writer has undertaken a literature survey of the paradigms underlying various approaches to teacher education, and believes that the 'enquiry perspective' identified by Zeichner (1983) offers a valuable heuristic device for organizing discussion. His emphasis upon the need to reflect upon the connections between the classroom and the wider educational, social, economic and political conditions that impinge upon and shape classroom practice, and his insistence upon open-mindedness, responsibility and whole-heartedness as qualities to be developed by the reflective teacher seem particularly appropriate to the needs of the present time.

Some suggestions have been extracted from the literature covering the development of the professional components in teacher education in England and Wales which seem relevant to the needs of the Professional Studies programme at the College. These must be seen against the background of the adoption of the 'enquiry perspective' referred to above, but within the limits imposed by statutory demands on the course.

The final section of this dissertation draws attention to issues related to the Professional Studies programme to which the College should be giving thought in preparation for anticipated new opportunities of equipping teachers to educate all the children of this country.
Sincere thanks are extended to Associate-Professor Milton Krause for his helpful advice, guidance and unfailing patience as supervisor of this dissertation. Many lecturers at the Cape Town Teachers' College have contributed useful perspectives and much encouragement. Mrs Indi Farmer, in typing the manuscript, has accommodated many changes with unfailing cheerfulness. The writer records her indebtedness to all these colleagues, while affirming that she alone is responsible for whatever shortcomings there may be in the dissertation itself.
THE CONTEXT

Institutional aspects of control and administration in the College have wide implications for the design and functioning of the Professional Studies Programme. They are also a powerful reflection of the philosophy and ideology of the College as an educational institution in South Africa. A brief survey of the salient features of the College administration and functioning will be followed by a critical assessment of the possibility of developing a professionally relevant and defensible teacher training programme within such a context at this critical time in the history of this country.

CAPE TOWN TEACHERS' COLLEGE

The Cape Town Teachers' College is an institution provided and funded by the Cape Provincial Administration (C.P.A.) to train White men and women teachers for the Junior and Senior Primary phases of White Primary Schools. (These courses represent the first three, and next four years of compulsory formal schooling respectively.)

In accordance with the provisions of the National Education Policy Act (No. 39 of 1969 : Section 1.1 (3)) whereby the training of White persons for Pre-Primary and Primary Schools should take place in close collaboration with a university, a memorandum of agreement was entered
into between the Council of the University of Cape Town and the Cape Provincial Administration. The influence of the University is brought to bear on the College through its representatives on the College Council and Senate, and through the powers vested in it in terms of the agreement; chief of these is the monitoring of academic standards. The University also exercises influence through debate in both Council and Senate and in its representation on sub-committees and delegations.

The C.P.A. has nominated representatives on the Council, but its command of the financial purse-strings places it in a position of such power that it has little need of spokesmen. It provides physical amenities, subsidizes expenses and pays salaries. In the context of safeguarding the interests of children within its schools it retains the right of compiling teacher training syllabuses for this, and similar Colleges (in consultation with university and college representatives) and of laying down certain criteria which must be met by those nominated for appointments at colleges.

**COURSES OFFERED**

The College offers a four year concurrent Higher Diploma in Education for either the Junior or Senior Primary phases of the school. Its diplomates are equipped specifically for the needs of children within these areas of the school. For the purposes of this paper, the investigation will refer to the provision of a Professional Studies programme for the Higher Diploma in Education for Senior Primary students.

College courses are accredited by the University of Cape Town but
within the structural framework laid down by the committee of Heads of Education and published as *Criteria for the Evaluation of South African Qualifications for Employment in Education.* (Interdepartmental Advisory Committee on the Qualifications and Training of Teachers. I.A.C.O. 1979). The University exercises the right to serve as external examiners for final College examinations, but exerts greater influence through the informal discussions of problems and common interests on a one-to-one basis throughout the year.

**ENTRY QUALIFICATIONS**

Entry is restricted by Provincial Ordinance to white South African citizens. Until January 1985 men were excluded on grounds of sex, but after a long struggle waged by various interested professional bodies and the College Council, and with the support of a petition from the white community of Cape Town, bureaucratic sanction was given to admit men students for a trial period of three years.

The minimum entrance qualification required is the Cape Senior Certificate (or equivalent) in which both official languages are offered on the Higher Grade (with one or both as first language) and an additional Higher Grade pass in a subject selected from a specified list of classroom related subjects.

**SELECTION PROCEDURE**

Initial application is made to the Cape Provincial Education Department's Selection Committee by means of the submission of an application for selection and/or financial assistance (Form E.50).
Confidential information on the candidate's suitability as perceived by the appropriate school superintendent in an interview, a report from the teacher psychologist, a rating by the Principal on criteria deemed relevant by those responsible for the compilation of the instrument, a medical report and the inclusion of final Std. IX and mid-year Std. X examination results constitute the basis on which the Selection Committee sifts its applicants. The number selected by this body each year is based on demographic projections of the number of white Primary School teachers who will be needed four years hence. The criteria are believed by the Provincial authorities to discriminate in terms of the overall merit of the applicants, and one may infer that they are also seen as holding predictive power in terms of teacher suitability and competence.

Each White college in the Cape is granted a quota of students annually, and it may only select its students from those who have been 'approved' by the Selection Committee and who have sought admission to Cape Town Teachers' College. No candidate may be admitted who has not been selected in this way, regardless of whether he/she is prepared to pay his/her way, and regardless of whether there are facilities available.

**IMPLICATIONS FOR THE COLLEGE**

**Lack of Autonomy**

One of the most striking features is the lack of autonomy of this tertiary institution. The restraints within which it functions could give credence to the cynical view that it is an extended high school offering Standards Eleven to Fourteen. Frustrating though these constraints may be at an administrative level, it is the restriction
of autonomy at an academic level that is the most problematic.

In the matter of who shall teach, for instance, the College Council may make nominations for vacant posts, but these require confirmation by the C.P.A. An excellent candidate in terms of the College's needs may be disqualified on grounds other than those of academic and professional fitness for the task. The Department stipulates, for instance, that in order to qualify for permanent appointment, the candidate should be a white South African citizen, have had a minimum period of experience in white state-aided schools within the Republic, should hold bilingual qualification in English and Afrikaans, and, until fairly recently, had to be single in the case of a woman (but not of a man).

The above example serves to illustrate the power ratio in the triadic relationship described, the different perceptions of priorities in educational matters exercised by each, and the parochial, stultifying effects in the long term on an institution committed to employing home-grown products.

In addressing the question of who may be taught, the College's lack of autonomy is further illustrated by the Departmental Selection process. All representations to permit the College to select its own candidates have fallen on deaf ears. In this respect, Departmental Colleges have less autonomy than schools.

With regard to wider issues, the ideological commitment to the principle of white teachers for white pupils has led the C.P.A. into their present dilemma of fearing the production of too many white teachers in the light of a declining white birth rate. An attendant
problem is the fate of the half-empty white colleges, of which there are no fewer than eight under the administration of the C.P.A. It would seem only charitable to assume that their being permitted to continue to function so wastefully in terms of provision and personnel (albeit that two are being converted to Colleges of Further Education with responsibility in the main for In-Service and correspondence courses) can only be in preparation for long overdue rationalization.

For those who hold no allegiance to the narrow view of education propounded by Christian National Education exponents, a more logical and challenging alternative would seem to lie in opening the colleges to those capable of benefiting from them regardless of race. It is the writer's belief that if such an opportunity were offered to the Cape Town Teachers' College the consensus of professional and public opinion would favour such a step. The folly of being unprepared when such an opportunity offered would be exceeded only by the crime of not accepting the challenge. Instead of finding itself in a reactive situation to such an eventuality, the College should be engaged in pre-active preparation.

It is in the area of what may be taught that the College has derived the greatest benefit from its association with the University. In one-to-one discussion and in consultations with external examiners new perspectives have emerged and new approaches tried. It is to the credit of the individuals concerned that mutual respect and openness characterize most contacts, allowing issues to be debated frankly and without defensiveness. It may be argued that the possibility to venture and to experiment has always been available, but the support and stimulation of discussing new ventures with a supportive opposite
number has goaded lecturers to exercise the degree of freedom which is theirs. It is in this sphere that C.P.A. Departmental structures are least pervasive, and where the University has played a leading role in supporting change. While applauding these ventures a salutary warning against too much rejoicing in higher academic standards at the expense of the professional commitment of the College is provided by the experiences of colleges in England and Wales in the 1960's and early 1970's. This is perhaps particularly true of cases where external examiners are drawn from outside the University's Education Faculty.

Discrimination

A second significant feature of the college context is evidence of educational decisions based on discriminatory practice. Overt discrimination has already been identified in appointments where factors other than merit may operate, and in selection procedures, where race, nationality and sometimes marital status or sex disqualify a candidate. Whether overtly or covertly, such discriminatory practice has influenced every aspect of the College.

Just as significant, but less obvious, are other practices with regard to selection which militate against the inclusion of certain groups and individuals.

Although committed to the principle of mother tongue instruction in the Primary Schools, the Provincial Education Department's demographic projections are used with the sole purpose of determining the total number of white teachers needed in the future, without regard to the numbers required by each language group. This contention that
'merit' (as perceived by ratings on the E.50 instrument) should be the only criterion regardless of the needs of groups militates against the selection of English-speaking candidates for reasons which will be discussed hereafter.

It is commonly believed that the English are more concerned with well-remunerated business and professional enterprises than with so-called vocational or community-serving careers which are less financially rewarding, and that this accounts for their alleged reluctance to enter teaching if they have the ability to do better for themselves. This simplistic caricature does not take account of other factors which may be nearer the truth. Rejection of the ideological basis of state-funded education and an unwillingness to become part of the institutionalized process which perpetuates the system may deter young people of both language groups, but the cultural and social ethos of the English reinforces the preponderance of this view in their community.

Of those who are sufficiently strong-willed, independent in their thinking, and are able to perceive entry into the system as a personal challenge to contribute to its change, it is doubtful whether many survive the instruments and process of selection. The writer believes that if the personalities who pass through its filter have characteristics in common, then in general one may identify those who have been conformers, the 'ideal' pupils who were well-regarded by those in authority, who 'gave no trouble', and whose academic results reflect success in meeting the demands of a largely content-based examination. Without detracting from the personal qualities of warmth, gentleness and concern for children which are manifest the products of
this selection system, one wonders whether a selection process which placed a higher premium on evidence of a critical and independent mind, breadth of vision and personal autonomy, and a measure of emotional and mental toughness would not be a salutary innovation.

Cape Town Teachers' College has always valued the contribution made to the corporate life of the institution by those of its students who are Afrikaans-speaking, but who find themselves at home in the fairly broad and tolerant ethos of the College. A regrettable feature of contraction in numbers is the loss of the Afrikaans First Language course, and with its demise, the Afrikaans home language students. With their loss the College is poorer to an extent greater than their numbers would suggest.

Lack of Consultation

A third feature of College life is the fact that it often finds itself expected to accommodate changes without having been granted the opportunity to make a professional contribution to the discussions concerning the practicality or desirability of such change. The transfer of the College's voluntarily undertaken responsibility for Teletuition to another College without consultation with the College Council, and the proposed merger of this institution with Barkly House Teachers' College provide two examples of this kind of action. In the latter case, although the move was termed 'rationalization' the incorporation of two unlike and highly specialized institutions without loss of staff (other than a Rector) and with the maintenance of the same facilities and courses could hardly be conceptualized as rationalization. This type of decision-making, for which no professionally supported argument was sought or given, reflects the
often apparently high-handed and bureaucratic functioning of the C.P.A.

Few could have a greater professional interest and contribution to make to the Departmental Selection for Teacher Training than the institutions themselves, yet it was only in 1983 that a token representation of one member was granted to them on this body.

THE CASE FOR THE COLLEGE

In view of its lack of academic freedom, the discriminatory practices to which it is party, and its perceived subservience to the dictates of its master but not its mentor, the C.P.A., its existence in its present form in the guise of a tertiary institution cannot be justified. It has some redeeming features, but their impact is vitiated by the stranglehold of bureaucracy, and much that it would view as exciting and innovatory would be regarded as subversive from the opposing and alienating perspective of officialdom.

And yet all is not gloom and darkness, for the potential exists for the College to make a real contribution in the field of Primary Teacher Education. Its human 'capital' lies in the expertise of its staff and their readiness to approach new problems, not as bearers of the answers, but as collaborators with any who may join them in seeking for solutions.

It would appear reasonable to hope that when the role of the colleges and their future is debated in the corridors of power, that not only will representation be heard from the Colleges, but that they will be
able to contribute in some way to the debate. For those who cannot or will not adapt to new circumstances, closure is the only rational argument, but for others exciting possibilities could be offered. Possibly a strong plea could be made by Cape Town Teachers' College for a status more in line with that of the Technicons, and with a commensurate increase in autonomy.

Some would suggest that Teachers' Colleges have outlived their usefulness, and that they should be phased out to make provision for an entirely graduate profession. Such a view is blinkered, for only in countries where the benefit of education has been available to all who can profit from it would it be possible to contemplate such a step, eg. the United Kingdom. Approval of such a move at this time in this country would serve only to widen the disparity of provision which exists for different racial groups. However, a fertile area for further negotiation and discussion with the University is that of recognition of work done at College towards credit for the Bachelor of Primary Education and even Bachelor of Education degrees for those capable of benefiting from further study of this kind. It has long been a sadness in the College that no reciprocity exists in this respect with the University of Cape Town, whereas the University of Stellenbosch is prepared to grant two years credit towards the Bachelor of Primary Education to the holder of a three year diploma at the College.

From another perspective, an important distinction can be made between the purpose of a university, which is concerned with the life of the intellect and with building up a community of scholars and students engaged in the task of seeking truth, and the unique character of a
college of education, where one of the objectives is to develop the qualities of mind associated with a university, but in which both students and staff are bound by a distinctive professional commitment. All academic study at a college should be considered within a professional frame of reference, and not pursued for intrinsic reasons alone. In this context, then, the role of the professional component in drawing together and integrating all aspects of the college course becomes particularly important.
CHAPTER TWO

PROFESSIONAL STUDIES AND THE COLLEGES

THE IDENTIFICATION OF PROBLEMS

This chapter traces the stages by which consciousness was raised of the shortcomings of the professional component of the Senior course. These developments fall, historically, into three distinct phases.

PROFESSIONAL STUDIES COMPONENTS AND THEIR INTERRELATEDNESS

At a Senate meeting on 14 August 1980, a suggestion was made that a Senate sub-committee should be appointed with the purpose of ordering the College's many isolated activities, excursions and visits into a meaningful structure related to the Professional Studies programme. This would promote conceptual links with relevant parts of the course and there would be a strengthening of the structure and coherence of the teacher education programme as a whole. A sub-committee consisting of College, University and S.A.T.A. representation was duly appointed for this task.

In August 1982, on the initiative of a lecturer who voiced misgivings shared by many colleagues, a meeting of interested parties was called to discuss problems related to the Education, General Methodology and Subject Methodology courses. At this meeting and subsequent ones the following areas of concern were identified:

* General Methodology formed a component of the Education
course: by comparison with the time allocated to subject study the provision for this component on the time-table was disproportionately small. Over three years the average time for General Methodology was 2.5% of available lecture time, or half an hour per week. Subject study (without subject method) accounted for 50% of the time, or ten hours per week. (Diagram I, p. 81a)

* There was little general awareness on the part of Subject Methodology lecturers of what was being done in Education and General Methodology, and still less provision to co-ordinate Education and General Methodology meaningfully.

* Discussion revealed misconceptions about courses, lack of awareness of parallel content amongst lecturers of related courses, discontinuities, unplanned repetitions and even stark conflict. Each lecturer dealt independently with central issues of methodology and related these to the particular needs of the subject without reference to the General Methodology course.

Several workshops were arranged to grapple with these problems and to structure the General Methodology course in such a way that it linked coherently with the Education course. It was hoped that subject lecturers in charge of Methodology would then familiarize themselves with the General Course and link this subject method to it.

THE SEARCH FOR A BROAD CONCEPTUAL BASIS FOR TEACHER EDUCATION

A recurrent theme at College Departmental, Executive and sub-committee meetings has been the need to identify a broadly-based conceptual framework for Teacher Education. This should be sufficiently wide to accommodate a diversity of viewpoints, for exposure to these is valuable in itself as part of the experience of the teacher in the search for his own professional position. It should, however, be sufficiently defined to give direction and coherence to the course as a whole. The enormity of the task has resulted in this problem sinking to the bottom of the basket after periodic airings.
SCHOOL EXPERIENCE

The need to challenge and re-structure College policy in this respect has formed part of an ongoing process of change over the last four years. Lecturers and students were sharply critical of many features of the enterprise, and although more diplomatic and less forthright in their observations, it became evident that School Principals and staff had good reason for reservations of their own. The problems identified will be dealt with in these three categories.

The Lecturers' Perspective

The following concerns have been derived from staff meetings, discussion groups and written submissions from lecturers:

* Concern was expressed about the rigidity with which existing practices had become enshrined without a coherent and professionally defensible rationale to support them.

* The tendency to regard teaching practice as an interlude in the important business of teaching one's subject, and its isolation from both the academic and the methodological components of College theory was viewed with concern.

* The need for a graded and sequential approach to learning how to teach was emphasized, particularly in connection with the type of assistance given to students in planning their lessons. It was felt that greater responsibility should be assumed by third and fourth year students with regard to the content and structuring of their lessons. The underlying
purpose of consultation about lessons should be to assist the student to establish her independence as soon as possible.

* There was need to look critically at the factors which separated the College from meaningful collaboration with the schools. It was considered important to explore means of bridging the gap.

* Subject lecturers should be able to see the implications of their methodology in the classroom setting, and they should be open to constructive criticism and revision of their approaches. Conversely, they should have the opportunity of seeing theory put to the test and vindicated in the classroom.

Organisation and Structure

* A strong case was made for one extended period of practice in the schools for each year group in place of the two blocks of two weeks each.

* Most lecturers were sharply critical of the malpractices to which the 'criticism lesson' gave rise. Because the College operated on a carefully structured rota which enabled four different lecturers to see every second and third year student, students knew who would be visiting them and for which lesson. This involved an upheaval of the school's programme as lecturers called on their whistle-stop tours, and gave rise to a considerable degree of impression management with the collaboration of all concerned. Such a
system neither offered hope of continuity, nor time for the
supervisor to establish any rapport with the student or
understanding of the classroom situation.

* Some lecturers urged that greater care should be taken in
placing students in schools which were appropriate in terms
of their level of development and personal needs.

* Neglect of first year students by lecturers in order to
meet the needs of the more senior students was not
defensible in terms of the significance of students' first encounters
with classrooms.

Supervision and evaluation

* The many roles that supervisors should be playing were all
subservient to that of evaluator. This resulted in a
preoccupation with the evaluative function and had the
effect of inhibiting effective dialogue between supervisors
and students on other important issues.

* The lecturer was not able to discuss the lesson with the
class teacher, since tradition decreed that she should leave
the room to see whether the student could maintain order on
her own. As a result, all three participants were the
poorer for not being able to share and discuss their
perceptions.

* Time scheduling was such that there were to be no gaps
between the lecturers' visits from one student to another.
What discussions there were took place hastily in the
corridor as the lecturer hurried to the next class, or in a brief conference before the lecturer left the school.

* Completion of written reports and assessment schedules was a distraction on occasion and hindered the development or application of any other assessment devices.

* Because of the haste and stress under which they were compiled, written assessments tended to deal in generalizations or pick out the minutiae.

* Need to explore the whole concept of evaluation was indicated. Some questioned the need for any judgment beyond 'pass' or 'fail', whereas others argued the case for a more confident allocation of numeric or symbolic rating.

The Students' Perception

On their return to College from School Experience in August 1982, all second and third year students were given a period of one and a half hours in which to write individual reports on their perception of all aspects of the School Experience programme as they had perceived it. These could be submitted anonymously though few exercised this option. The co-ordinator analyzed the reports, and found that there was considerable agreement in identifying key issues. The five most frequently occurring criticisms are listed below:

* Students wished the experience to be as 'real' as possible. While the schools encouraged them in this respect, College policy on staff visits and criticism lessons militated
against the achievement of this end. Criticism lessons were castigated as 'artificial', 'unfair', 'a farce' and 'dishonest'. Some students pointed out that the College had little understanding of the disruption and dislocation the lecturers' visits caused nor of the effect upon the children.

* Third year students were particularly critical of the arrangements and college requirements concerning consultation time, i.e. the week preceding block teaching. They wrote of their frustration when lecturers, faced with helping four or five students teaching the same lesson in the same standard in different schools, interviewed them in a group and outlined the lesson for them. So intense was the pressure on lecturers who were required to sign the lesson notes of every student for each lesson to be taught that this survival technique resulted in a sterile and self-defeating practice. Students asked to be 'allowed to make their own mistakes', 'teach their own lessons', and 'be given freedom to try their own ideas'. Students also complained of the time that was wasted when they had to wait for lecturers who had run late on appointments.

* The evaluative procedure was eyed with distrust. Students felt that some lecturers were impressed by gimmicks and window dressing in the form of a great number of visual aids. These sometimes served to disguise incompetence or inability to handle the deeper structures of the lesson. Some wrote of their need to manipulate a situation to satisfy the known idiosyncrasies of a lecturer, or of
'humouring' the lecturer by taking into account his/her known likes and dislikes - this had become part of the folklore of the College. Students urged that the criteria to be used in evaluating their lessons should be made explicit, and that the relative weighting of different components be revealed. If a global impression were used as the basis, some asked whether this could be anything other than subjective. Concern was expressed as to whether cognisance was being taken of the differing degrees of difficulty in widely diverse situations.

A plea was made for really constructive criticism of lessons. Some lecturers were perceived as unhelpful as they gave no real guidance and took refuge in platitudes. Students were concerned that written comments shielded them from unpleasant truths as revealed by their actual teaching marks, and asked that written reports should be more indicative of the mark awarded.

* Students felt 'different' from the teachers since the College's definition of appropriate professional dress differed from that currently acceptable in some schools. They asked that they should be permitted to conform to the code which applied to the staff of the school in which they were teaching.

The School's Perspective

The co-operating schools were very helpful to the College and accommodated the requests made of them most generously. From formal meetings where feedback from their perspective was sought,
informal discussions and general matters raised under the appropriate heading on the confidential assessment forms returned to the College at the end of teaching practice, the following concerns were identified most frequently:

* Concern about some students' lack of background knowledge beyond the narrow confines of the text book.

* Concern about poor spelling and language usage.

* The difficulty experienced by many students in pitching their lessons at an appropriate level.

* The neglect of reinforcement and consolidation.

* Difficulties with class management.

* Poor voice control and speech production.

* The necessity to be acquainted with strategies for meeting the needs of exceptional children in the classroom.

* The need to show proficiency in at least one of the optional subjects such as Art, Music, Needlework and Physical Education.
CHAPTER THREE

MEETING THE CHALLENGES

IDENTIFICATION OF PROFESSIONAL STUDIES COMPONENTS AND THEIR INTERRELATEDNESS

In retrospect, the meeting of the small Senate sub-committee set up to identify and relate the many activities and course components that would fit comfortably within the conceptual framework of the Professional Studies component, marked the beginning of some fascinating developments at College.

The Sub-committee noted that Education and General Methodology were combined under the Education umbrella, and that responsibility for lecturing in this area was entrusted to a single lecturer for the three year duration of the course. Education was not offered as a subject at fourth year level. Subject study and subject methodology were similarly linked, and with the exception of the languages, were the sole responsibility of the subject lecturers concerned. While applauding the greater freedom being exercised in curriculum compilation, there appeared to be little effort on the part of the subject method lecturers to relate what they were doing to the work being covered in the General Methodology course by the Education lecturer. Tiresome repetitiveness was still a feature of such fragmentation. This important issue received greater attention from 1982.
The new appointee to the Education post, in consultation with his external examiner, broke free from the last vestiges of the 'mother hen and mush' tradition, and made an attempt to identify themes or foci as a basis for integrating the four education disciplines within the course. The following broad outline is presently in operation, but it is in the process of review and refinement. (See Appendix A)

Year One : The personal dimension of teaching.
This covers the teacher and child and the focus is upon human relationships with self-concept as a starting point.

Year Two : The child dimension.
Here the focus is upon concepts such as intelligence, motivation, learning, developmental theories and their implications for methodology.

Year Three : The social dimension
This explores questions such as curriculum, equality, the school and role theory.

Year Four : The values dimension
Among issues discussed are human values in modern education, major systems of educational philosophy, and conflicting ideologies in education. (Fisher, 1985)

General Methodology remains coupled with the Education Course, and as yet there has been no increase in time provision made on the time-table. Over the three years that Education/General Methodology is a compulsory subject, only 12.5% of the total lecturing time is allocated to this subject.

Each subject lecturer is now aware of the scope and design of the Education course, and is acquainted with the appropriate points at
which each will be handled. In practice, however, the extent to which this kind of co-operation is really functioning is open to doubt, partly because of the over-crowded nature of the Education programme, and partly as a result of the neglect in co-ordinating General and Subject Methodology. Further, it appears that little progress has been made in integrating Subject Methodology meaningfully with General Methodology because of poor planning and lack of consultation.

In tackling the problem of the many isolated but professionally enriching activities, the sub-committee made a survey of the visits, visitors and excursions over the previous year, and called for further suggestions from colleagues and students. These were seen to fall into four fairly large groups, with considerable overlapping and linking among them. One group which related directly to academic subjects and were useful for enlarging on a particular area were easily identified. A second group developed an entity of their own as Outdoor Education. As the name suggested, it encouraged interest in environmental/ecological matters. Beginning with the city and urban areas, it moved outwards to rural areas and agriculture, then examines industrial growth before turning to wilderness areas. Recent activities have included a three-day study visit to de Hoop, which was organized and arranged largely by the students themselves as an appropriate alternative at College level to School in the Wilds. A third cluster of disparate but educationally valuable activities was grouped together as the Enrichment programme. Students have the choice on two separate days of each year to visit educational institutions such as Oasis, Vista Nova, the Eros school, etc., or of going to Koeberg Nuclear plant, Steenbras Dam, Klein Plasie in
Worcester, the meteorological station at D.F. Malan and others. The final group includes lectures and activities which may be grouped together as relating to personal growth. It may be argued that the personal dimension of a Primary School teacher is particularly significant, and this justification lay behind a proposal that these and related topics should form the basis of the first year General Methods course. Although not implemented in this context, much of the spirit of the programme finds expression in the Orientation Week designed for first years, and related topics have also been covered in the introductory programme for other students at the beginning of each academic year. The process of renewal and revision continues and there is presently negotiation under way to regroup the Outdoor Education activities under a more comprehensive ecological umbrella.

THE SEARCH FOR A BROAD CONCEPTUAL BASIS FOR TEACHER EDUCATION

Very little progress has been made in finding an explicit agreed basis from which to proceed. Although some suggestions have been offered, these have generally been too closely linked with a particular perspective to accommodate the great variety of thought and approach represented in the College.

TEACHING

In response to the many problems identified, some fairly radical changes have been made in a piecemeal fashion. The College has been fortunate in that there has been a growing awareness that this area is not the preserve of the co-ordinator, but the responsibility of all who are involved in the Teacher Education programme. Further, a lack,
of defensiveness as well as an innovatory spirit and willingness to
tolerate a measure of uncertainty has eased the management of change.
Though spear-headed by individuals, there has been much constructive
debate from many quarters.

LECTURERS' PERSPECTIVE

As a result of the changes discussed below, the structure of the
school experience programme has become more flexible and responsive to
need.

Lacking an explicit conceptual framework for the course as a whole,
the lecturers decided to tackle the problem of an agreed basis from
another perspective. At a staff meeting each lecturer was asked to
identify priorities which should be served by the school experience
programme. The following five items were the most frequent in a
tally of responses:

* The development of greater understanding of children.
* The provision of as realistic an experience of teaching as possible.
* The building up of confidence through the experience of success.
* The opportunity to try out educational theory in practical situations, and to profit from mistakes.
* The entry into appropriate professional relationships with school teachers and parents.

A similar survey of students' priorities yielded a very close
correspondence with those of the staff, except that the need to
acquire confidence was the most frequently occurring item, and concern
about initiation into administrative chores and procedures replaced the last point made by lecturers.

From 1985 the weekly teaching by third year students in the Demonstration Room has been replaced by school-based experience organized in teaching subject groups. Growing awareness of the need to link the students' knowledge of academic subjects with appropriate teaching expertise in that area has resulted in the appropriate special subject/method lecturers being allocated to various schools for one morning of each week. The class teacher suggests a topic for the group to handle, and is invited to join the lecturer and students in discussing the structuring of a series of lessons, the strategies to be employed, possible areas of difficulty and activities to be used. Each lesson then becomes the responsibility of one of the group (lecturer and teacher included) or a shared or team-teaching approach within the group. There is opportunity to experiment and opportunity at the end of each session to examine critically what has been achieved with the view to preparing the way for the next week's lesson. After the appropriate period of residence at a school has expired (generally six weeks to two months) the students regroup and accompany another of their special subject/method lecturers to another school. It is possible to accommodate four residencies of this sort for third year students. Because of the numbers involved this system has not been extended to second year students, for whom the weekly demonstration room teaching remains the standard procedure.

In response to a need felt by lecturers to renew their own experience in the schools (and which is enjoying attention in the literature eg. Gore, 1981; DES, 1984) the Principals of schools used for the School
Experience programme were asked to permit resident lecturers to teach, and were invited to call on them to replace teachers who were ill. In some cases the experiment was regarded as very beneficial by lecturers, but the idea has not developed any further in this form because of fairly strong and persuasive criticism. Some students were resentful of the fact that lecturers' teaching coincided with their own lessons, and they were deprived of their supervisor during this time. Others saw lecturers competing with them for the extra opportunities to teach. It was reported that some teachers felt threatened by the lecturer teaching in the context of School Experience, when the advantage of adequate time to prepare a single lesson made the lecturer's performance show up the teacher's lessons in the eyes of the student.

An interesting development has been that of private arrangements being made between lecturers and the Principals of schools (sanctioned by the School Superintendent) whereby the lecturers assume responsibility for a particular subject for a class for a period of six months or a year. This has proved very beneficial to those who have been able to accommodate it in their time-tables.

There has been a growing awareness of the College's responsibility to contribute to the continuing education of in-service teachers. One way in which this dialogue has been opened has been by means of the College booklet 'Colleague', a modest and privately circulated biennial publication dealing with issues of significance in the Primary School. Another opportunity for an interchange of ideas and collaborative venture is provided by the revision of the School Experience programme to accommodate resident lecturers in each school.
From 1985 brief biographies of each of these lecturers and indications of their particular interests and competencies have been posted to the relevant schools, together with all the other School Experience correspondence. The Principal is acquainted with the lecturer's particular interest in certain aspects of the school, and with the lecturer's desire to learn what he/she can. The lecturer's services are offered for seminars or Professional Growth meetings of the staff if the school wishes to use the person in this way. It is also hoped to develop this means of contact to provide the schools with greater insight into approaches being tried at the College, and to secure for the College the reaction of teachers to such ideas. In turn, lecturers and students are asked to submit the names of teachers whom they found particularly helpful or stimulating to the co-ordinator of the School Experience programme. It is hoped to involve many of these more actively in the College programme.

Increasing use is being made of the Principals and appropriate members of staff of school in an advisory capacity to the College Executive in planning and developing courses. As examples one may quote the valuable assistance given by male Principals on issues of importance in meeting the educational needs of men students in what has been a predominantly women's institution, or the advice given in planning an extension of the extra-curricular programme. In all these ways efforts are being made to bridge the gap between College and School, though much lies ahead.

In the context of drawing on available resources and perspectives, reference must be made to the increasing contribution being made by the students themselves in reminding decision-makers of their needs.
At present the following approaches are open to students in connection with the professional component of their training:

* Direct access to the co-ordinator of the school experience programme, who interviews each student on receipt of the school's confidential report.

* Written representation by means of the report submitted by each student to the co-ordinator, in which problems, questions or dissatisfaction may be expressed.

* Representations to the S.R.C. who debate issues and decide upon referral to the College Executive Committee.

ORGANISATION AND STRUCTURE

All year groups have a month in schools for the School Experience programme at the beginning of the third term. Although there are disadvantages, these are outweighed by the benefits of continuity, better acquaintance with class and teacher, and the opportunity to gain in experience and confidence in the same setting. From the school's point of view it appears to be less disruptive.

A tutor system was introduced for first year students in 1981 which was aimed at assisting those students who might be experiencing difficulties in achieving the transition from school to college. It was intended to provide the student with a counsellor if needed, and placed particular responsibility on the tutor for the student's school experience. Each lecturer assumes responsibility in this capacity for about four first year students, and the degree of contact is determined by the student. In some cases it is nominal, whereas in others the tutor has served an important role as a focus and guide for a bewildered
student. The purpose is to make the student independent as quickly as possible. The tutor assumes responsibility for visiting tutees (who are placed at the lecturer's school of residency or fairly nearby) at least three times in the schools, not with the purpose of formal assessment, but to keep a watching brief and to show an interest in the student's progress.

Contraction in numbers has assisted meaningful change in the first year programme. This group in particular has benefited from greater access to lecturers which smaller groups permit. Three goals have been envisaged for them. It is hoped that the School Experience programme will confirm students in their choice of career, or cause those who are having doubts to make better-informed decisions for withdrawing from the course. The particular importance of observation in learning about teaching and the sequencing of the introduction to teaching through encounters of increasing difficulty constitute the remaining two goals, and will be addressed in the discussion which follows.

In order to guide the student's observation a booklet was compiled directing the focus of salient aspects of classroom life and points of interest from a Subject Method viewpoint. (See Appendix B). Though valuable, it was somewhat lengthy and so wide in its scope that students seemed to lose direction. It has been replaced this year by a task which seeks to relate the theme of values dealt with in Education to the classroom experience of the student by means of an ethnographic approach. (See Appendix C). It is hoped that this will challenge the student to observe more critically against the focus of a value
In order to present a graded and sequential approach over the four years, the number and complexity of lessons taught is gradually increased for students in subsequent years of their training. This is accompanied by a corresponding reduction in the amount of assistance offered at the lesson planning stage.

From 1985 third year students have been required to teach, as part of their quota of lessons, a series of nine lessons reflecting a grasp of a minimum of three different teaching models and spanning at least three subject areas. (See Appendix D). Accompanying the lessons must be a document justifying the choice of model in each case, a clear indication of the major theorist of the model used and the main thrust of his ideas, and an evaluation of the usefulness of each of the models. Finally, feedback is required regarding the effectiveness of the lessons in the form of peer evaluation, resident lecturer evaluation and pupil response.

The fourth year teaching programme remains a neglected area. Students are not visited by lecturers, but are sent to schools with the request that they should serve an internship for a teacher and should assume as many of the teaching and administrative duties as the co-operating teacher can delegate. This is an area which requires re-structuring, particularly since the students' interest in subject study at this level makes them reluctant to return to the classroom.
Attention is being given to the placement of students in schools with greater cognizance being taken of their specific needs, but the organizational issues involved make this a complicated matter.

SUPERVISION AND EVALUATION

The 'criticism lesson', which was a lesson carefully prepared for assessment by a particular lecturer at an appointed time during School Experience, has been abolished. Students supply the lecturer, who has been drafted to a particular school for a residency of two weeks, with their weekly time-tables, and the lecturer is free to allocate her/his time most appropriately. This flexibility has many positive aspects apart from countering the negative features of criticism lessons. The lecturer has time to establish rapport with the students and the classes, time to listen to the student before she teaches and time to give her attention afterwards. There is also time to include the class teacher in discussions. Under this system lecturers have even had the unusual experience of being invited by students to return to their classrooms, for certainly much of the stress is removed.

Because the lecturer is based at the school for the whole day, there is opportunity to prepare for post-teaching conferences with the students, and time to tailor these to the specific purposes agreed upon by student and lecturer before the lesson.

Because of the changed function of supervision from an evaluative to a
formative and supporting role, lecturers have experienced the need to examine some of the other dimensions embodied in the task. The Supervisor Development Programme compiled by Sydney University (Turney, 1982b) has been used for seminars and the tapes have been made available for lecturers to view at their convenience. There is a growing awareness of the need to explore this area of teacher education further.

The problems of evaluation have not been resolved and are ones on which opinions remain divided. Some favour a pass/fail categorization and others feel that it is possible to be more specific. The need to comply with C.P.A. Departmental requirements for the allocation of grades of pass has determined the College's retention of an eight symbol range. It is hoped that when consensus on this matter is reached after thorough exploration of all alternatives that appropriate representation will be made to the Senate to set in motion the negotiation necessary to bring about change at C.P.A. level, if this is deemed necessary.

STUDENTS' PERSPECTIVE

It will be observed that in meeting the concerns of lecturers many of the issues raised by the students have been met. There have been frank discussions with students concerning the difficulties of evaluation, be it global or piece-meal. The College has made use of the University of Cape Town schedule for evaluating lessons with appropriate modifications, but the approach within these parameters remains global. Attempts have been made to direct the students' attention to the more significant area of self-evaluation, and some
work has been done in negotiating symbols with the aid of the co-operating teacher and student involved. It is obvious that an uneasiness accompanies this whole question which is not yet satisfactorily addressed.

Of apparently little significance from the vantage point of loftier matters, but of great importance to student morale has been the negotiated agreement that students take their cue regarding dress from the code of the school to which they are attached.

SCHOOLS' PERSPECTIVE

The weaknesses perceived by schools in the students' teaching are focussed upon after each School Experience session. Appropriate remediation is recommended and often provided for those students with voice projection and speech problems. These areas of concern are of great importance to the College in that they provide feedback from those actively involved in the classroom.

In the selection of third and fourth year subject specializations the needs of the schools and their perception of problem areas is drawn to the attention of students. The College Executive is currently devising a wide programme of non-statutory activities from which students will be required to select at least one during each year of the course. These will cover many interests, ranging from the teaching of chess and folk-dancing to mountaineering and the coaching of different school games. Successful completion of each will be rewarded with the College's recognition of merit in that field and will be valuable to the student in making application to schools for a
post. The assistance of school Principals in identifying appropriate activities and in their willingness to offer opportunities for practical experience is greatly appreciated.
A survey of available literature has been undertaken to obtain guidance and insight from developments elsewhere which may be applicable at Cape Town Teachers' College in meeting the problems to be addressed through the Professional Studies programme. An overview of these findings is presented in three broad sections.

Perspectives on Teacher Education:

* The search for a broad conceptual basis.
* Professional Studies components and their interrelatedness.
* Current developments in School Experience programmes.

**PERSPECTIVES ON TEACHER EDUCATION:**

**THE SEARCH FOR A BROAD, CONCEPTUAL BASIS**

This aspect of the literature survey was undertaken to try to find a model of teacher education which would be sufficiently wide to accommodate the valuable and enriching perspectives of a large number of individuals, yet sufficiently definitive to provide a matrix of assumptions about the nature and purposes of teaching teachers, and their education, to give shape to specific forms of practice in teacher education which would still be generally acceptable.
Three useful surveys of teacher education models have been made by scholars such as Zeichner (1983), Hartnett and Naish (1980), and Perlberg, Kremer and Lewis (1979).

Zeichner identifies four paradigms of teacher education which encompass the major recent traditions; namely the behaviouristic, traditional craft, personalistic and enquiry-oriented. Borrowing the terminology 'received' and 'reflective' from Eggleston (1977), he classifies the approaches according to whether curriculum knowledge is received as non-negotiable or socially constructed with the active participation of the prospective teachers; and at the same time he explores a second dimension of 'problematic' or 'certain' which refers to the degree to which a system of teacher education views the institutional form and social context of schooling as problematic. He provides a helpful diagram which presents this classification visually:

```
Problematic

Enquiry-oriented

Received

Enquiry-oriented

Reflective

Behaviouristic

Personalistic

Traditional Craft

Certain
```
Zeichner compares and contrasts each, and finally proposes the enquiry-oriented approach as that which stands the test of rational scrutiny.

Hartnett and Naish (1980) offer a similar typology of teacher education perspectives, labelling these as technological, craft, ideological and critical. They distinguish each on grounds of the answers provided to three categories of questions:

* Educational questions concerning the moral dimension of aims, purposes and clients' interests, and the empirical complexity of explaining human behaviour.

* Epistemological issues such as the theoretical and practical knowledge base of each, and

* The arguments advanced for professional legitimization.

Hartnett and Naish (1980) believe that the critical perspective, which has a great deal in common with Zeichner's enquiry model,

"...would appear to offer a sounder basis for genuine legitimation than pseudo-knowledge and ideology, than what might turn out, on examination, to be pseudo-technology; and than craft knowledge with its scotoma and conservative tendencies. This is because it alone would appear fully to acknowledge the moral and empirical complexities inseparable from educational issues. It is neither system serving nor a defender of the status quo in that it raises critical questions about the nature of the system, its goals, its status, its distribution of power and resources." (p.269)
Perlberg, Kremer and Lewis (1979) identify four major movements which they describe as progressive, academic; personalistic and competency models. They present a spirited argument in defence of a competency-based approach to teacher education.

For reasons which will be defended later in this dissertation, the approach identified by Zeichner (1983) as enquiry-oriented, and which has features in common with Hartnett and Naish's (1980) critical model, approximates most closely to the position which the writer believes could serve the College best as it seeks to move away from the traditional craft perspective which has dominated it for so long.

PROFESSIONAL STUDIES COMPONENTS AND THEIR INTERRELATEDNESS

The term 'Professional Study' has acquired a confusing range of uses in the literature of teacher education. Alexander (1984, p.133) identifies the main usages of the term as

"... narrow (that part of the course concerned with the teaching of one's subject(s) - 'curriculum' studies/'method'); broad (that part of the course other than subject study - 'education', plus 'curriculum'/'method' plus school experience); and comprehensive (the whole course)."

For the purposes of this discussion the broad sense of the term will be used in viewing the growth of the professional component in teacher education.
A survey of the development of professional study in England and Wales reveals a movement which has accelerated towards integration as a focal point during the last decade. This applies not only to academic integration, but also to welding relationships within courses, between schools and institutions and between lecturers and teachers. The steps by which this reconciliation between theory and practice has been attempted occupy much of the literature.

Professional Studies as a term related to that part of the Teacher Education programme devoted to the development of the teacher's curriculum-related knowledge and skills grew from the earlier term 'curriculum courses' and developed a life and shape of their own. From a position in which they had to be satisfied with

"... what remain after the conceptually more coherent and politically more powerful areas like the main subject and Education theory have carved up the time-table and assessment procedures between them."

(Alexander, 1984, p.137)

Professional Studies emerged into a position of some prominence by the early 1980's in England and Wales. Recent developments within the B.Ed. degree in that country indicate a reconceptualization of the professional component from a perspective of Subject Studies rather than Professional Studies. This development could weaken the concept of Professional Studies particularly in relation to the needs of Primary School teachers and the whole curriculum problem which is attendant on the class teaching system. It emphasizes the needs not yet addressed in that country to reconceptualize Primary School
professional training.

Of fundamental significance to the whole question of Professional Studies and underlying the debate is the theory/practice dilemma in Teacher Education. A brief survey of the historic origins of this issue in England and Wales provides an interesting perspective against which to consider possible developments in this College.

**THE THEORY/PRACTICE DILEMMA**

Prior to the introduction of the Robbins' style B.Ed. in 1964 (Lynch, 1979), Education, Curriculum Studies and teaching practice were semi-autonomous and quite separate components of Teacher Education courses. As the four disciplines of education assumed greater importance in courses, and as colleges strove to establish their credentials and academic standing, the professional utility of courses was overlooked, contributing still further to the gulf between theory and practice. Curriculum courses were not part of the universities' assessment schemes in accrediting courses.

Despite some attempts to relate theory to practice in the early 1970's by identifying themes as the basis for integrating or 'meshing' education courses with practice, it became clear that educational study had acquired intellectual preoccupations in which the needs of teachers played little part. The dichotomy between 'pure' educational studies on one hand and applied professional studies on the other made it obvious that there was little of direct relevance to
practice to be derived from the former.

The dominant view of theory during this time was that it constituted propositional knowledge about educational issues which was subject to validation by the same methodology as the social sciences and in the positivistic tradition. Theory was 'given' and had to be applied in the same way as medicine or engineering derived and applied their theory. The falseness of this analogy lay in believing that teaching was analogous to these professions. Depending as it does on the questionable status of social science as a quasi-science in this tradition, and concerning the infinite variability of human beings who are influenced by the value dimension which pervades all human action, it is little wonder that it is less susceptible to treatment in this research tradition. Increasingly it became clear that hope of isolating a body of knowledge within this mould had not been fulfilled.

"There is no clear idea in the literature of any respectable, solidly based, and demonstratively informative theory at all: some moderately plausible pictures are given of this, but only at the highest level of generalization; nowhere is it shown, either that any reputable theory exists, or that such theory is clearly of value to practising teachers."

(Wilson, 1975, p.115)
(see also McIntyre, 1980, p.296)

In reaction to the realization that teaching appears to be minimally amenable to scientific investigation there arose a movement to discredit formal theory and to look to direct experience as a source of learning about teaching. Lortie's (1975) often-quoted statement
was used in support of this attitude.

"Teachers say that their principal teacher has been experience - they learnt to teach through trial and error in the classroom." (p. 79)

Such advocates of school-centred training recommended that the responsibility for teachers' professional training should be taken from educational institutions and entrusted to those practitioners in the schools able to assist them. The common view was that theory would then arise from the practice it sought to explain, and that by being made to think deeply about what he was doing and the underlying assumptions, the student would achieve a higher level of understanding and translate this into classroom activity.

Critics of this view countered by suggesting that although there is much to commend being able to examine one's own practice critically, it needs to be conceptualized in terms that permit common sharing of meanings, and in ways that encourage analysis and reference to the experience of others. Timely warnings were also issued that indicated that such an approach could regress to an apprenticeship model of teaching.

Writers such as MacNamara and Desforges (1978) argued that since educational research had apparently so little to offer, and since much successful practice emanated from teachers, an attempt should be made to codify this craft knowledge and to use it as a basis for initial teacher education. Commendable though this goal appears to have been, teachers' inability to explain this thinking in terms deeper
than 'tips for teachers' led to disappointment in the effectiveness of this approach.

At a more superficial level, there were many who looked to an increase in time in the schools as the solution to the problem of acquiring appropriate skills. Stones (1984) described this as the practice of

"installing student teachers in classrooms in the hope that they will catch the ability to teach through exposure to possible carriers of the condition." (p.133)

Wilson (1975) makes the telling observation that

"... the point is that the experience may be bad: that is, instead of making the person more aware, competent and so on, it may make him less so ..." (p.132)

He indicates that while educational theory has not yet yielded any positive conclusions, it would be disastrous to feel that the answer lies in

"... the severance of the practical skills from any serious and sustained considerations of a more general kind: in particular, from questions about what the teacher is trying to do at various times and in various situations." (p.123)

Most of the responses to the theory-practice problem which have been considered thus far have had one point in common - the replacement of one sort of given theory by another. Alexander (1984, p.145) indicates that the core of an alternative notion to solving the problem lies in viewing theory as an intellectual process rather than as propositional knowledge. Central to this view is McIntyre's
(1980) perception that

"The core of teacher education should involve students' gradual introduction to effective and detailed debate between practising teachers and those engaged in research and teaching from various perspectives." (p.296)

Learning to teach should be a continual process of hypothesis testing framed by detailed analysis of the values and constraints fundamental to teaching. Naish and Hartnett (1975) put it in this way:

"The application of theory to practice is the bringing to bear of critical intelligence upon practical tasks rather than the implementing of good advice." (p.14)

Alexander (1984) claims that

"This view of the student teacher, not as the recipient of recipe theory but as the active agent in the construction of his or her own professional theory, complements the 'teacher as researcher' and school based Inset principles invoked by Stenhouse and others as an alternative basis for subsequent professional development to 'going on a course'." (p.146)

**THE GROWTH OF CURRICULUM/PROFESSIONAL STUDIES**

A contrasted and simultaneous movement to the academicization of teacher education in England and Wales is that in pursuit of professional relevance. A brief survey of the factors which led to the enhanced status of Professional Studies will be attempted.

In spite of the separation and fragmentation of practical and
theoretical components in teacher education, a benefit for practice was derived from greater academic interest in theorizing about practice. The Council for National Academic Awards (C.N.A.A.) validation of teaching courses led initially to emphasis of content rather than process, but opened the way for greater course coherence and dialogue with schools by entrusting colleges with the responsibility for designing, evaluating, examining and administering courses.

The James Report (DES 1972a) did little for improving the status of curriculum courses by relegating professional concerns of teacher education to the second cycle, but the C.N.A.A.'s Committee for Education emphasized the need to establish parity for professional preparation by issuing the transbinary guidelines (UGL/CNAA, 1973) stating that the new B.Ed.

"will need to equip students with the professional skills of a teacher through courses that encompass the intellectual demands of a good undergraduate course." (para. 19)

The increasing use of techniques such as micro-teaching, interaction analysis, the use of video-recordings, simulation and role play, and the demands that they made for greater provision of time on the time-table contributed to increasing the significance of Professional Studies.

The reservation of up to 2/7 of the available places in Colleges for in-service teacher training administered a further stimulus to match
academic courses with justifiable professionally-oriented studies. Thematic approaches to Educational Studies and the problem-solving approaches to curriculum theory all contributed to greater attention being paid to classroom education as the grounding for such studies.

Finally, not least amongst the factors which have turned attention upon Professional Studies has been the increasing concern expressed by Her Majesty's Inspectors (H.M.I.) criticisms of the lack of curriculum expertise revealed by Primary School teachers in particular. (DES 1983)

THE GROWTH OF PEDAGOGY

Writers such as Wragg (1984), Stones (1984) and Smith (1980) believe that the neglect of pedagogy, or the process aspect of teaching, which they describe as putting up to scrutiny the theory derived from many sources, accounts for the particularly intractable nature of the theory/practice dichotomy. They have mounted a growing criticism of attempts at encyclopaedic coverage of education theory in response to anxious striving after academic respectability in College syllabuses. Such knowledge is often acquired by means of transmission methods which do not encourage an active and enquiry-oriented stance about theories and their applicability. Stones (1981) points out that

"Conventionally this trend involves a rapid gallop through the gurus. As the year advances Piaget gives way to Bruner, Bruner to Bernstein. One asks the question 'If Eysenck comes, can Freud be far behind?'" (p.217)
Stones believes that a fairly substantial body of knowledge about human learning is available, and that systematic attempts should be made to apply this theory to practical teaching activities. The areas which he identifies as particularly significant for teachers are those of problem-solving, concept formation and motor skill learning.

Stones emphasizes the need to identify skills that are general and fundamental to the teaching of any subject, and which are criterial to any learning. The acquisition of such an underlying grasp of principles he describes as knowledge of the deep structures of teaching ability, and the various methods of teaching employed are seen as surface activities.

Although he applauds the skills approach to teacher education as an important development he views the ad hoc selection of unrelated teaching skills as a crucial weakness. Basic to the acquisition of key structures are the following skills:

* Understanding of key issues and the planning involved.
* Ability to appraise these in protocol material or actual practice.
* Application in practice.

Building on available learning theory, he has constructed broad schedules as heuristic guides which encapsulate key aspects which seem to hold promise of enhancing student teaching and pupil learning. These include Steps for Evaluation of Problem Solving (STEPS): Steps
for Teacher's Use of Reinforcement (STUR); and Steps for Teaching of Concepts (STOC).

He emphasizes the need to interrogate Psychology in an experimental and investigatory collaboration between teacher, student and lecturer. Such joint grappling with problems should displace the ad hoc, ex cathedra, tips for teachers approach to practice. An approach of this kind holds no allegiance to any particular philosophical or psychological school of thought. The overall aim is seen as co-operating with students in their learning how best to optimize learning, and hinges on a value system which is committed to respecting the autonomy of both student teacher and pupil, and supporting them in attaining this end.

DEVELOPMENTS IN SCHOOL EXPERIENCE PROGRAMMES

Although the literature of teacher education indicates that great value is placed on school experience by both students and the profession (Peck and Tucker 1973), and although there is much evidence of the perceived weaknesses of the existing programmes (Turney, 1982b), this very important aspect of teacher education has yielded surprisingly little by way of attempted solutions. Evans (1983) quotes Stones, who observed that some colleges "bestow institutional approval on the schism between educations practice and theory" by their neglect of this whole issue.

In the face of the negative response from institutions it is hardly
surprising that the apprenticeship view of the practicum has continued to flourish, and that for the most part it justifies Stones' (1984) criticism of being

"... atheoretical, poorly conceptualized, idiosyncratic and of doubtful efficacy." (p.2)

IS FIELD EXPERIENCE ALONE THE ANSWER?

Both Zeichner (1980) and Tabachnik (1980) draw attention to the problems associated with the view that simply being in the field automatically results in an improvement in teaching. The danger that this kind of experience will merely socialize prospective teachers into established patterns of school practice are pointed out by Salzillo and van Fleet (1977), and Berger and Luckman (1966) indicate the limiting potential of such an approach.

"Institutions, by the very fact of their existence, control human conduct by setting up predefined patterns of conduct which control it in one direction as against the many other directions which would theoretically be possible." (p.59)

ARE SCHOOLS TOTALLY COERCIVE?

Writers such as Lacey (1977) view the schools as totally coercive, and believe that schools see student teachers as empty vessels to be filled with the values, customs and practices of the profession.

In attempting to weigh up the evidence and settle the contradiction between those supporting the benefits of greater field-based education
and its critics, McDonald (1977), Zeichner and Tabachnick (1981), Fuller and Brown (1975) and Peck and Tucker (1973) indicate that a complicated set of positive and negative factors are at work.

Attention has been diverted instead to attempts to identify 'what lies out there'. Amongst the themes that have emerged have been the influence of the classroom teacher, the classroom's ecological environment, and the conservative influence of the school's bureaucracy. Friebus (1977) makes reference to some of these pressures which would cause the student to conform; Kermes and Jacko (1977) write of the power of the supervising teacher, Doyle (1977) refers to the impact of the classroom ecology, while Hoy and Rees (1977) emphasize the influence of bureaucracy and its effect.

Lortie (1975) sees the students' 'apprenticeship of observation' as the key factor in determining why the training constitution has little apparent lasting influence on student teachers, a view in which he is supported by Petty and Hogben. (1980)

THE COLLEGE RESPONSIBILITY

Giroux (1980) and Popkewitz et al (1979) see some institutions playing a legitimizing role in this type of socialization, and Bartholomew (1976) makes the point that although the College may well use liberal phrases and affirm slogans about education, in fact their own methods are often just as conservative as those of the schools they criticize. Their own practice often rests on a limited and narrow range of available instructional techniques. (Raths and Katz, 1982). Stones
(1984) confirms this argument and refers to the special irony inherent in a situation where

"Staff inducting student teachers into the principles and practice of teaching by depending in the main on verbal transmission declare by their actions either lack of faith in their expositions on the subject of human learning, or ignorance of a pedagogy that can help to enhance those kinds of learning that are typically human." (p.5)

Bartholomew (1976) argues further that institutions encourage students to develop their own individual styles of teaching and to experiment with methods, but then send them out with the contradictory injunction to fit smoothly into the ongoing practices of the schools. Roger and Schuttenberg (1979) take this further and challenge educational institutions to put their own houses in order.

Perhaps the most significant implication of this discussion may be summarized simply as the need to focus on the quality of teaching practice, and the need to view students as active agents in their own professional development and not passive recipients of the values of others.

SURVIVAL CONCERNS

Another question addressed in current literature is the extent to which initial teacher education should be concerned with the dominant survival-oriented concerns of student teachers.

"The thought even occurs to us that only survival
training should be offered during pre-service education and that all of the sophisticated substance of professional education ought to be offered during the in-service years."
(Fuller, Parson and Watkins, 1982, p.46-47)

Writers such as Gibson (1976) and Zeichner and Teitelbaum (1982) argue that this separation of teaching from its ethical, political and moral roots develops 'utilitarian teaching perspectives' and encourages the user of a successful (meaning quiet and orderly) technique to value it as an end in itself and not as a means to a specific purpose. They also make the point that there is a tendency to regard survival techniques as the upper and outer limits of what is possible, and that although addressing concerns which are currently of great relevance to students, the comfort of immediate proficiency may be gained at the expense of encouraging the student to become more thoughtful and alert about practice. Perhaps most importantly it should be argued that teaching, as an essentially normative process, should aim not so much at integrating student teachers into the schools as at preparing them to deal critically with the reality they find. It is this purpose that the College should seek to address.

THE AIMS OF SCHOOL EXPERIENCE

Writing from another perspective of teacher education in Australia, Turney (1977) observes that

"It seems astonishing that very few Australian teacher institutions have constructed, made known and consistently applied a comprehensive, meaningful and realistically attainable range of objectives specific to student teaching practice."
(p.139)
This observation is almost certainly true of this country as well, for although difficult to achieve, such clarity is certainly very important. Haigh and Katterns (1984) echo this in their attempt to establish a unifying set of principles upon which a professional studies component may be based.

THE ROLE OF SCHOOLS

The results of the survey undertaken by Yates (1981) revealed some significant statistics. Only 18% of co-operating teachers interviewed felt that they understood what was expected of them, and only 24% felt that the colleges valued their opinions. Further, while 56% of the co-operating teachers saw the need for greater communication with the institutions, only 24% of the college lecturers felt the need to draw closer to the schools.

The call for close, meaningful and co-operative relationships has been given further significance in England and Wales by the DES 1983 Government White Paper and DES Circular 3/84 (April 1984) quoted by Proctor (1984). Amongst issues raised concerning the collaborative partnership between schools and institutions are those of involving teachers in advising on the planning and operation of courses at colleges; seeking their assistance in selecting students; involving them in the teaching of appropriate elements of professional and educational studies; and involving lecturers in renewing their teaching experience in schools.
TIMING AND DURATION

Turney reports that investigations in Australia have yielded no significant results concerning the comparative efficacy of 5, 8 or 16 week long blocks of school experience. Yates (1981) reveals that most of the three and four year B.Ed. courses which he surveyed allocated an average of 86 school days to teaching, a figure closely approximated by the Cape Town Teachers' College programme. Yates reports that the average number of visits by supervisors to students was one every seven days, and that this worked out at an hour and thirty-eight minutes per visit, travelling time and discussion included. Bowman (1979) reveals that the position in the USA is very similar, where the visits and formalities associated with them average 100 minutes per student.

Wragg (1983, p.193) makes the interesting point that his research revealed the significance of first encounters in teaching, and recommends that students should not be given the traditional day to settle in, but that observation of their first encounters can yield valuable information for students.

A GRADED AND DEVELOPMENTAL APPROACH

Turney indicates that haphazard, undifferentiated and global approaches to school experience are anxiety-producing and militate against the achievement of goals. Harrington and Sacks (1984) have presented a graded series of activities to foster positive growth in
the student, and recommend strategies of supportive supervision which will encourage students to take risks and attempt to solve problems in a graded series of encounters with teaching. Some of these will be referred to in Chapter Six.

SUPERVISION

The literature on supervision reveals that it takes many forms according to the priorities of those who exercise this function.

Cohn (1981) compares the salient features of clinical supervision, with its emphasis on the improvement of instruction and the need for acceptance of objective criticism, with ego-counselling approaches, in which the emphasis is on the personal responsibility of the teacher and the need of the supervisor to be aware of what is happening psychologically to the novice. He then explains the characteristics of situational supervision which attempts to link campus and school work by requiring the student to interpret rather than 'apply' theory, and emphasizes the role of the supervisor as one of instructor rather than assessor.

Zeichner (1982) employs a similar categorization in differentiating between different types of supervision as Technical-Instrumental, Personal Growth-centred and Critical Supervision. The first two correspond very closely with the clinical and ego-counselling approaches outlined above, while critical supervision entails a much broader view in terms of wider perspectives on teaching and involves
self-scrutiny.

Stones (1984) draws attention to the fact that most supervisory practices reflect the passive role to which an apprenticeship model of acquiring teaching proficiency commits them. Many of the problems reported by college supervisors are explicable in the light of this observation. Lipton and Lesser (1978) report on the conflict-producing features of the triadic relationship between college supervisor, co-operating teacher and student, and Emans (1983) describes the sensitivities which arise when college supervisors criticize students who are modelling themselves on teachers. From this perspective intervention constitutes interference with guidance between master and apprentice, and gives rise to problems.

The logical progression in this argument for those who can see no solution to it is to question the place of the college supervisor in the schools. Amongst those who advocate the transfer of this responsibility is Bowman (1979) who describes the existing structure as "a drain on resources" (p.30) and states that

"... since, according to some evidence, the supervisor does not have a significant role in the development of student teachers, the most sensible plan would be to stop supervising." (p.30)

Kilgore (1979) views the process as 'outmoded' while Thies-Spinthall (1980) describes it as 'iatrogenic' (designed to promote growth yet providing the opposite). Others such as Zimpher, de Voss and Nott (1980) acknowledge weaknesses and the need for reconsideration, while Emans (1983) considers that college supervisors should leave the
students to co-operating teachers and concentrate on curriculum
development and in-service training in the school.

Stones' (1984) strikes a more hopeful note in arguing that progress
lies in systematic study and experimentation, and describes the need
to introduce supervisor training for both college and school personnel
in a way which is analogous to the approach he advocates for teacher
training. Such an approach calls for a different relationship
between student, teacher and supervisor, and sees no place for ex
cathedra solutions on the part of supervisors. He urges instead that
the roles of subject specialist, pedagogical monitor and practical
teaching supervisor should come together in this activity. Together
with Cohn (1981) he pleads for a changed approach in which the school
is seen as a social laboratory, equally open to scrutiny and
challenge, and no longer viewed as a model to which the student must
accommodate.

Stones (1984) acknowledges the attempts of Turney and others (1982 a &
b) to develop comprehensive research-based guidelines to supervisor
development, and the work of Mosher and Purpel (1972) in terms of
identifying 'models' of supervision. However, he feels that

"... it is more appropriate to conceive of
supervision as comprehending the key aspects of
all the models in a unitary approach." (p.22)

Stones (1979) has compiled a useful Guide for Enhancing Supervision
(G.E.S.) which is a heuristic device attempting to provide a guide to
action, and drawing together notions from the theory of learning and
teaching as well as ideas about clinical supervision used by Goldhammer (1977) and others. It is intended as a focusing device to be used against the background of the pedagogy already described.

EVALUATION

Few subjects in teacher evaluation have been written about more frequently than teaching evaluation, and yet singularly little progress has been made in this field in the last decade.

The 'gatekeeper' function of teaching evaluation appears to have eclipsed all others and to have truncated the task of supervision (Zaret, 1984), and Stones (1984) confirms that there appears to be greater interest "in grading students than in their growth". (Stones, 1984, p.15)

There is considerable complacency about 'knowing a good teacher when one sees one' without being able to explicate the criteria on which competence is judged, and with still less interest in the validity of these criteria. Little wonder that Hore (1971) and others have found that irrelevant factors influence the marks allocated to some students. Turney (1982a, p.28) refers to research which indicates that students working in 'difficult' schools tend to get lower ratings.

On analyzing the schedules of institutions which claim to have devised analytic schedules which work well (Povey, 1975) the criteria used
will generally be found to relate to transmission methods of teaching, and refer to a fairly narrow range of competencies on which such agreement is possible. Stones (1984) asserts that

"In fact, consensus is reached essentially by judging the question of criteria of competent teaching; pooled prejudices produce spurious agreement." (p.16)

Musella (1970) argues that the rating of students is a function of the perceptual-cognitive view of the rater.

Regardless of the formal criteria accepted and used, one must rely on the raters perceptual-cognitive view of the rates, of the criteria, and of the relationship between the two." (p.17)

He recommends a reduction in the degree of authority entrusted to the supervisor of teaching practice, and a greater role for the student teacher in self-evaluation and joint evaluation with the supervisor.

The conflict inherent in the combined roles of guide and assessor results in the role of evaluator predominating, and the possibility for meaningful discussion, experimentation and growth recedes as the student resorts to impression management.

The survey undertaken by Yates (1981) revealed that students saw college supervisors' key role as that of assessment, but they found supervisors less helpful than teachers and felt that the teachers' assessments were more valid. Stones (1984) suggests that the seemingly drastic step of giving up the whole exercise of allocating symbols and marks in favour of the many benefits which will accrue
from its abolition causes

"... influential bodies to fall about in hilarious incredulity." (Stones, 1984, p.17)

He suggests that reluctance to surrender a power relationship may well play a part in supporting the retention of evaluation.

There is growing support for a view which stresses formative evaluation with its corresponding emphasis on growth and development, analysis and self-monitoring.

Kremer and Ben-Peretz (1984) justify self-evaluation in terms of society's demand for accountability, the profession's emphasis on the development of the autonomous teacher, and psychology's emphasis on personal relevance, fulfilment and growth. Dow (1979) has indicated that

"By abandoning competitive assessment we encourage self-assessment and came more readily to be accepted as colleagues whose prime concern was to foster self-knowledge and greater professional mastery." (p.153)

Such approaches foster a spirit of enquiry and assist further growth, whereas summative evaluation of teaching views student abilities as end states and implies a relinquishing of further responsibility and interest in growth.

THE MANAGEMENT OF CHANGE

Until fairly recently little thought was given to the nature and management of change in educational institutions. One of the features of rationalization of colleges in both England and Australia over the last fifteen years has been the loss of autocratic power by
institutional heads and the increasingly democratic and collegial styles of internal democratic governance. Such shifts in the balance of power have focused attention on the need to secure the effective involvement and co-operation of participants in order to bring about change.

From the available literature the writer of this dissertation has selected four authors whose perspectives on change seemed to have particular relevance for the College at this time. Hopkins (1984, p.37) describes three useful ways of thinking about change in institutions. These are:

- accidental change as a result of the institutions need to react to unanticipated events, eg. an unexpected drop in numbers;
- purposive change which is pro-active in nature, and
- innovative change in which ideas are generally 'imported' or in which the adoption of an already developed idea is implied. The challenge to this College is to anticipate and prepare itself pro-actively for the changes which are imminent.

Swanson (1983, p.26) discusses four common myths about change. The first is the myth that change must begin with a common goal. He points out that it is seldom that everyone sets out with a common goal, and that part of the task of bringing about change involves the raising of consciousness. Conflict and crisis can be associated with the process, and, although uncomfortable and often unpleasant, can reflect important facets of growth.

A second myth is that all must plan together for lasting change. He indicates that to involve too many in the initial stages is to invite too many conflicting interests, and suggests that a sounder approach
lies in drawing on a limited number of people who represent as wide a range of opinion as possible. Such a group will contain its own system of checks and balances, and will help to eliminate the negativism and resentment which might have been experienced from those who were reluctant to be involved. The value of this suggestion has been borne out at the College, where small but highly motivated groups have done valuable preparatory work in bringing about change.

Thirdly, the belief that the Dean or Rector must initiate or actively support change is viewed as a myth. Certainly, in a highly bureaucratic 'top down' organization where all change is regarded as linear and as initiated by an authority figure the possibility of achieving change in any other way becomes proportionately more difficult, but given a reasonably flexible and democratic institution those who wait for change from above misunderstand the nature of forward-moving institutions and their dimensions. One of the interesting facets of the changes achieved thus far at the College has been the frequency with which the incentive for change has come from the ranks of lecturers or students and gathered momentum. Associated with this observation is the need to re-state the obvious injunction that the receiving environment cannot be ignored, for no matter how good the proposals they may be rejected if they are not appropriately timed or if the necessary preparation has not been attempted.

Nisbett (1975) emphasizes this in describing the four waves of difficulty each innovation must survive:

* Acceptance of an increase in work load for all concerned.
* Loss in confidence and an increase in activity.
A period of confusion, during which the innovation is isolated by outside colleagues and expected to die of its own infections. He refers to the lethal seeking of support that inability to tolerate uncertainty and criticism can generate. Adelman and Alexander (1982, p.155) refer to the same phenomenon in writing of the confusion which can arise when loyalty to the task in hand becomes confused with personal loyalty.

Having cheered the prospective innovator with the above picture of the perils awaiting, Nisbett (1975) concludes with the fourth 'wave'; the news that having survived the first three obstacles one may expect a rapid backlash from more widely organized hostile groups in society.

Thus far the College has been fortunate in that an innovatory and open climate exists within the institution, and its colleagues in the schools and students have received the changes introduced well, but the warning is heeded as the College seeks to go beyond the reforms on which there was virtual consensus.

The fourth myth identified by Swanson (1983) refers to the idea that successful implementation of change requires acceptance by all and uniform activity. He points out that there are always those who do not go along with change, and indicates that 80% of the results may generally be expected from only 20% of the applied resources and effort.

A significant area related to change management is that of evaluation and the techniques employed to achieve this in an institution. Adelman and Alexander (1982, p.7) offer useful explanations of the terms associated with institutional evaluation.

* Validation is seen as the appraisal of the quality and feasibility of course proposals by either internal or external agents, while
* **Assessment** is used to refer to the appraisal of student performance on courses, usually with relation to learning outcomes.

* **Evaluation** refers to the appraisal of course organisation and the teaching/learning processes in action, and is generally provided by means of student feedback.

The need for self-evaluation of institutions has become particularly important to those without a long tradition of autonomy, and is an area to which this College should give thought in terms of its desired institutional growth in this direction. At present it may be argued that it benefits from the measure of course validation derived from its association with the university, but this function is exercised only on an individual subject basis through external examiners, not all of whom are drawn from the University Department of Education. There is need for the course to be both validated and evaluated as a whole, and not in piece-meal fashion, for then the organic relationship of one part to another and the respective weighting given to different components will become apparent. The writer believes that both functions should be attempted by the College as it prepares itself for the day when it will enjoy a more independent status.

The writer believes that the flexibility permitted by external examiners in interpreting the Criteria for the Evaluation of Teaching Qualifications and the implementation of these has been both salutary and beneficial. However, while the College has assumed greater responsibility for curriculum structures on a subject basis within these broad parameters, there has been a corresponding diffusion, overlapping and loss of coherence when the course is viewed as a whole. One of the purposes of this dissertation is to draw together
these many interrelated elements into a meaningful whole, but this
marks only a beginning and not an end state. It behoves the College
to explore the work done in other colleges in terms of
self-evaluation, and to establish the necessary structures or
mechanisms for this to become part of institutional life. Up to this
point, student evaluation of the courses offered is the only procedure
in use for this purpose, and the information yielded remains the
private knowledge of the lecturers concerned.
The writer makes no apology for addressing issues which at first sight might appear extraneous to a Professional Studies programme viewed from a narrow perspective. Without greater administrative and academic autonomy the College will continue to tread the mill of the Cape Provincial Administration (C.P.A.) bureaucracy in decision-taking and to engage in a desperate search for influential friends in fighting its battles. Without greater freedom in deciding who shall teach it will continue to be staffed by re-processed High School teachers when an infusion of new minds and fresh perspectives could invigorate its mental life. Without the right to exercise its own professional responsibility in selecting those students who may benefit from what it has to offer without regard to ideological strictures it will continue to suffer the shame of having to tell prospective students that they are packaged in the 'wrong' colour. Until the College is given C.P.A. sanction to be accountable for what it teaches in terms of its own perception of professional responsibility, it will continue to spread the thick butter of such refinements as 'Giftedness' or 'cerebral dominance' on the White slice of bread, and its attempts to share the crumbs of its feast with others will continue to carry an aura of stealth.

It is difficult to contemplate the survival of the present dispensation in the White colleges of the Cape Province.
continuing to use all the means at its disposal to press for change
the challenge lies in formulating alternatives which are defensible in
terms which go beyond the injustices and limitations of the present.
The task of the College is to prepare itself in all the ways possible
with well-considered and practical alternatives in the pursuit of a
more just society.

Against this wider perspective the writer will identify principles and
practices which she believes should form the basis for continuing
discussion of the three questions already identified, ie.

* A conceptual model of teacher education appropriate to these
circumstances.

* The professional component, and more particularly, Professional Studies in Teacher Education. (Chapter VI)

* Particular reference to the practical teaching component of the Professional Studies programme. (Chapter VII)

A CONCEPTUAL BASIS FOR TEACHER EDUCATION

In order to emphasize the most important aspects of this approach, an
attempt will be made to answer the three questions posed by Hartnett
and Naish (1980) as a crucial in identifying different perspectives.
The first question focuses on the nature of education and its aims and
purposes; the second on the extent and nature of the knowledge
teachers can call on to assist them in their work, and the third on
the professional legitimation of teaching.

AN ENQUIRY-ORIENTED APPROACH

The Enquiry-oriented approach emphasizes the moral and empirical
complexity of educational practice, and the importance of realizing how little is known. It makes explicit the complex moral issues with which educational goals, experiences and institutional practices are concerned. It encourages a disposition to critical enquiry before making decisions involving values and beliefs. As Zeichner (1983) indicates:

"... the enquiry-oriented approach fosters a problematic attitude on the part of teachers towards existing institutional arrangements, ..." (p.7)

as opposed to equipping them to slip into the schools as they now exist as smoothly as possible.

Such an approach does not take for granted what children's interests are, for to do so is to make the mistake of pre-determining the future in the guise of preparing for it by circumscribing both individual and social possibilities in order to conform to those which are currently foreseen and endorsed. Awareness of the fact that in bringing up and educating the young we are forming the future as well as fitting children to play their part in it (Bailey, 1983, p.10) should help teachers to be wary of simplistic views such as the "needs of industry" (Jonathon, 1983, p.3) approach to education. Similarly, slogans for teacher training such as the need for "relevance" and "awareness of the needs of student teachers" which have much to defend them at face value, must not be accepted without critical examination of the descriptive meaning implied by such terms. Teacher education must also equip student teachers to make thoughtful judgments about what is relevant and useful.

Because teaching is seen as an activity occurring in an uncertain,
complex environment, there can be no absolutes and no 'right' answers. Just as it is not possible to specify all the teaching situations, so it is not possible to identify all the teacher and pupil variables which help to determine the appropriateness of various approaches, nor the necessary skills and methods in a way that will ensure effective teaching. Taylor (1983) puts it very neatly:

"There is no single prescription for a programme of teacher education or for the institutionalized and organizational framework within which such a programme is likely to be effective. We are not dealing with an activity in which there is 'one best way'. Many of the decisions involve values and beliefs not susceptible to scientific exploration ..... but the theories we use to generate, to explain and to legitimate our practices can still be discriminated according to their rationality, elegance, inconclusiveness, predictive capacity, clarity, degree of 'fit' and numerous other criteria. What they cannot do is to give an answer which can or should be universally applied and to which any rational education should accede..." (p.44)

The enquiry-perspective looks to a view of the student teacher, not as the recipient of recipe knowledge, but as the agent in constructing his/her own professional theory. This accords with Stenhouse's (1975) view of the teacher as a researcher, and places priority on the teacher developing an attitude of enquiry about teaching and its context. The need for the teacher to be able to analyze what he is doing in terms of the children, school and society and the need to be an active agent in his own preparation and development as a teacher is fundamental to this approach. The teacher's behaviour is thus guided by reason-based thoughts, judgments and decisions.

Such a view implies that participant observation and action research have key roles to play in increasing the teacher's understanding of existing patterns of activity and in helping him/her to make better
informed decisions in planning further steps (McIntyre, 1980, p.300). The need to see teaching as a form of investigation and experimentation into his/her practice is emphasized by writers such as Hargreaves and Goly (1983), Stones (1981) and Biott (1983).

In discussing the epistemology of this perspective, Hartnett and Naish (1980) indicate that this reflects

"... the importance of a disinterested assessment of the extent, nature and relevance of available knowledge; of undertaking innovations whose nature and extent do not ignore the limitations of current knowledge, of looking for, admitting, and learning from mistakes; and of research whose promotion and use is independent of the interests of those who occupy positions of power within the educational system." (p.268)

Because of the questionable status of the Social Sciences as quasi-science, because of the infinite complexity, variability and unpredictability of human minds and interactions, and because of the value dimension which pervades all educational action, any attempt to view teaching as an applied science is untenable.

The enquiry perspective may be associated with the movement away from educational theory perceived as 'given' theory or propositional knowledge which has to be applied, towards a notion of theory as intellectual process (Alexander, 1984), where the task of theory is seen as

"... evoking judgment rather than rote obedience. The application of theory to practice is the bringing to bear of critical intelligence upon practical tasks rather than the implementing of good advice."

(Naish and Hartnett, 1975, p.14)
McIntyre (1980, p. 298) describes this shift as one from "a content heavy approach to a more communal, interactive style". Educational theory from this perspective should incorporate an introduction in a non-prescriptive manner to speculative theory, the findings of empirical research, and the craft knowledge of teachers. Students should be encouraged to approach practice with the idea of testing these hypotheses within an analysis of the values implied and with due awareness of the practical constraints fundamental to teaching.

The emphasis on enquiry about teaching and the contexts in which teaching is embedded does not imply that technical skills in teaching are unimportant. They are highly valued, but only as far as they are able to bring about desired ends, and not as an end in themselves. Stones' (1984) approach to skills as comprising a matrix of interlocking actions which form a heuristic guide to practice seems to accord well with the spirit of an enquiry approach.

From this perspective professional status is derived from both intellectual expertise based on the critical and reflective consideration of educational problems and the attainment of practical competencies.

"Thus teachers are seen not as technicians and servants of the powerful, nor as master craftsmen with students attached to them, nor as idealogues, but as a group of people who, both because of their engagement with practice and because of their intellectual expertise, are particularly qualified to offer ways of looking at and of analyzing educational issues and to offer an informed commentary on, and critique of, current policies and practices." (Hartnett and Naish, 1980, p. 269)

Closely linked with the consideration of legitimation are the related issues of autonomy and accountability. From the enquiry perspective
teachers should be capable of being autonomous decision-makers, guided in their professional decisions by the exercise of reason, heeding the concerns and needs of their pupils and taking into account relevant knowledge and research.

As far as accountability is concerned, Bailey (1983) has indicated that the bi-polarity of attachment of the word 'accountable' gives rise to ambiguity in considering this issue. One can be responsible or accountable for something and/or to somebody. The view taken in this perspective is that teachers should indeed be accountable, but for the task derived from their own professional knowledge and education, rather than to someone. A teacher can only be accountable for a task to the extent to which he is autonomous. In brief then, the argument is that the teacher should be accountable to his own informed conception of the role of educator which he occupies, and that the only way in which he is accountable beyond this is

(a) in justifying and explaining to parents pupils and employees what he is doing and why;

(b) in showing that that which is being attempted is being achieved;

(c) in seeking professional consensus with his colleagues and in maintaining reasonable co-operation with them.

Finally, Berlak and Berlak (1981) summarize the basic tenets of this approach to education by saying:

"The proper role of the formal education of teachers is to help persons develop their capabilities to see their classroom behaviour in the perspective of culture and time, from the point of view of contemporary and historic others, thereby clarifying for themselves and others the alternatives for action. The structural features of institutions for the education of teachers, including staffing policies, selection of knowledge, arrangements of learning environments and the pedagogical strategies of the instructors, are means to this end." (p.252)
PROPOSALS FOR A PROFESSIONAL STUDIES PROGRAMME
AT CAPE TOWN TEACHERS' COLLEGE:
APPLYING THE PRINCIPLES

It seems appropriate to begin such a task with an explicit statement of the principles which have been influential in determining the proposals set out in this paper. In a sense this chapter incorporates elements of a 'position paper' in terms of the developments that have already taken place at the College, but it also envisages new perspectives and structures. The conceptual framework being presented is not a creed or final statement. It is hoped that it will serve as a focus for further discussion, development and refinement in the continuing process of evaluation and change to which any teacher education programme should be subject; in this spirit it is offered for the perusal and comment of colleagues and students.

The rationale underlying this conceptualization of Professional Studies is embedded in much of the discussion in earlier parts of this dissertation, but the most important aspects are summarized below. This perspective takes the view that

* teachers are competent participants in both the quest for knowledge of the subject matter which they teach and the continuing process of acquiring professional competence. Their practice is characterized by rational decision-making based on
their professional appraisal of the many alternatives possible at different times and in varying situations. (Borko and Shavelson, 1982). They are professionally accountable for their actions in direct proportion to the degree of autonomy which they are permitted to exercise. (Bailey, 1983)

* The teaching/learning process is a highly complex activity (O'Shea, 1984) which should be purposeful, rational, enquiry-oriented and reason-based.

* Children are active participants in their own education. Their future is unknown and they can best be prepared for the part that they will need to play in forming it, both personally and in the wider social context, by encouraging the development of critical enquiry and personal autonomy through all the means available.

* Knowledge is not absolute, but open to on-going challenge and question in the pursuit of truth.

* The value basis on which this approach has been based falls broadly into the Western European ethic of respect for persons, freedom and justice. Although constrained from implementing this fully in practice because of the unhappy divisiveness characteristic of this country at present, the writer is aware that when multi-cultural education becomes a reality, negotiation on the values to be incorporated on the lines of rationality, functionality and universality suggested by Lynch (1983, p.17) will become imperative.
With regard to teacher education itself, frequent reference has been made in this paper to the need for holistic conceptualization and the meaningful integration of its many components. Such a framework should convey the interrelatedness of the parts, mutually strengthened in such a way that the whole becomes more than the sum of its constituent parts. Within this unitary and integrated perception of teacher education it is possible to cluster a group of generally isolated theoretical and practical subjects around the cornerstone of General Methodology and to group them all together meaningfully as Professional Studies.

THE AIMS OF PROFESSIONAL STUDIES

The Professional Studies programme has the following aims:

* To introduce students to the practical implications of various theoretical viewpoints through non-transmissive and enquiry-oriented approaches to General Methodology. The student is thus involved in the critical formulation of theory.

* To test the areas of learning theory that offer hope for formulating guiding structures in teaching.

* To gain insight into the particular approaches helpful in addressing different subject areas.

* To learn to observe carefully, and to associate observation with the need to question.

* To gain skill in participant observation activities, and to undertake action research.

* To use opportunities to visit a wide variety of educational institutions to broaden perception of the educational task.

* To gain experience in the employment of simulation and role playing activities, 'in basket' techniques, Micro-teaching and Interactional Analysis techniques, but against a well-formulated justification for their use.

* To gain skill in communication techniques and skills.
* To learn to communicate with children through activities not directly related to the curriculum.

* To acquire professional competencies such as skill in writing on the board, the ability to make and operate Audio-visual Aids, competence in library skills, etc.

* To understand the role of Bible Education in relation to the secular work of the school.

* To put the theoretical ideas gained from many sources to practical test in classrooms during weekly teaching and block practice (School Experience).

(The writer acknowledges the assistance of Krause and Mastroyanis (1981) in this compilation of aims.)

THE EXISTING COURSE STRUCTURE

Diagram 1 (page 81a) indicates the existing alignment of subjects and average proportionate time allocated to each in the curriculum over three years.

At first sight one is struck by the seemingly disproportionate time allocated to subject studies by contrast with the professional component, but it must be remembered that this is a concurrent course. Although time-tabled as contact hours, considerable flexibility is used by lecturers in determining whether the time shall be used for lecturing or engagement in reading or research towards assignments or seminars. In view of the criticism of Primary School teachers' lack of competence in the Subject Methodology required in class teaching in the United Kingdom, it would be a pity if this College were to fall into the trap of seeking to eliminate subjects from the curriculum rather than giving attention to the possibility of modular restructuring.
Diagrammatic Representation of Courses

Diagram 1

Subject Study: 62 1/2%

D.E. Senior Course (Existing Distribution)

- Subject Study: 50%
- Subject Method: +12 1/2%

Professional: 12 1/2%

- General Method
  - Professional Auxiliaries
    - Education
    - Teaching

Scripture: 6%

Special Subjects: 5%

Extra-Curricular: 10%

Extra-Curricular Activities
It will be noted further that General Methodology is embedded in the Educational course, and while the juxtaposition of Education Studies and Methodology under the umbrella of Education may be salutary as a reminder of the relationship which should exist between them, in practice the unrealistically small allocation of time to this vital component as a whole results in the neglect of Method. By comparison with the three year B.Ed. in England in 1979, where between 20% and 40% of lecture time was allocated to Educational Studies, (Alexander, 1984, p.134), the approximate allocation of 10% in the D.E. Senior Course in this province appears very meagre. And what may be said in defence of making General Methodology the Cinderella of the course with an allocation of approximately 2.5% of the contact time?

The linking of responsibility for both the academic and related method component of Subject Study may also be perceived as a strength of the course structure, as it emphasizes the need for subject study at College to be integral to the capacity to teach it. From this perspective the central professional challenge of Subject Study is to grasp the underlying concepts, constructs and procedures which characterize a subject, and to attempt to reconcile these with the most effective ways of teaching it. This in no way detracts from the depth at which a subject may be approached, but this must always be with due regard for professional relevance. The danger for the College lies in the eagerness to match the standards of excellence in subject study at a university without corresponding concern for the ability to reconcile it with its psychological and pedagogical dimensions.
PROPOSED AMENDMENTS TO DIPLOMA IN EDUCATION COURSE
REALIGNING THE PROFESSIONAL STUDIES COMPONENTS

Reference has already been made to the value of the link between Educational Studies and General Methodology, but the organizational (not conceptual) separation of these two subjects, and the forging of a new alliance between General Methodology and Subject Method as part of the Professional Studies component would seem to offer certain advantages.

Lengthening the number of contact hours is always the first move in any attempt to enhance the status of a subject, but in this case the inequality of provision for General Methodology becomes apparent from inspecting the diagram no. 1 (page 81a). However, rather than add extra hours to a course already making provision for over 20 contact hours a week, a sounder expedient would lie in re-distributing time from the subject studies allocation. If each subject lecturer would agree to forego one of the the subject/subject method periods in each year group, between 2-3 hours would be made available on a weekly basis for Professional Studies. Few would begrudge Education the extra lecture gained per week as a result of transferring General Methodology to form the basis of the newly-constituted Professional Studies course.

A further possibility would be to ask those lecturers who had contributed in this way to the Professional Studies 'pool' to assume responsibility, together with the Education lecturer, for planning and
administering this programme. A small committee or single co-ordinator might well be the vehicle for necessary negotiations and administrative planning, but part of the value of the course would lie in the co-operative nature of the enterprise and the necessity for all involved to give earnest attention to the questions raised.

Among the advantages which might accrue from such an approach would be greater awareness on the part of staff and students of the central importance of this component of teacher education; greater insight into the nature of the practice of subjects in a school setting; a sincere attempt to break away from transmission teaching in the testing of theory; and the extension of the programme to include in-service teachers to contribute to or to question what is being done. Certainly the elimination of duplication and repetition would be achieved, and subject lecturers could pursue or challenge particular aspects of the course in relation to their special subjects in their Subject Methodology time.

Reference to diagram 2 (p.82a) indicates visually the attempt to achieve a closer integration between the Method courses, professional ancillaries, skills and Bible Education, extra-curricular activities and teaching component under the banner of Professional Studies. An explanation of how each of the subjects constituting the programme is linked with the General Methodology course and its relationship with other components will be attempted.

GENERAL METHODOLOGY

In keeping with the enquiry approach advocated as a conceptual
framework for the course as a whole, Stones' approach to pedagogy as a starting point for the Professional Studies component would seem to offer valuable heuristic guides which would need to be validated empirically. Certainly it offers a refreshing attempt to break free of transmission modes of teaching methods which have done little to solve the theory/practice dichotomy in teacher education.

Hartnett and Naish (1980) have criticized Stones' approach and argue that

"... his psychology is that of the technician who may be morally indifferent to the nature of the enterprise in which he is engaged..." (p.262)

because he does not teach enquiry skills in relation to the social and educational contexts in which teaching is embedded. While it is true that Stones' enquiry approach is not at the deeper level of reflectivity which

"... incorporates the consideration of moral and ethical criteria, such as justice and equity into the account of educational thought above practical action."

(Van Manen, 1977)

the writer believes that against the wider approach outlined for the course as a whole, and bearing Hartnett and Naish's (1980) caveat in mind, the approach Stones (1984) suggests still has much to commend it.

SUBJECT METHODOLOGY

Subject Methodology enables subject lecturers to draw particular problems presented by a subject to the attention of the students.
INTEGRATION OF THEORY AND PRACTICE
For instance, the questions of bias or the emotive use of language are issues real to the teaching of History but barely given thought in Mathematics. By retaining the link between the study of a subject and its methodology, and by linking both to General Methodology in the way proposed, the course begins to assume a conceptual coherence not previously recognised.

PROFESSIONAL ANCILLARY SUBJECTS

The following statutory ancillary subjects are included:

- Audio-visual Aids
- School Librarianship
- Speech and Communication
- Chalkboard Writing
- Bible Education
- Elective units
- Non-statutory areas:
  - Enrichment, Outdoor Education, Personal Growth
  - Simulations, 'in basket' techniques and micro-teaching
  - Observation and Action Research

Audio-visual Aids

The Audio-Visual Aids programme seeks to make students aware of the many audio-visual possibilities available in support of teaching. The spirit is practical rather than theoretical, and the student is required to produce a multi-media package of aids. This includes transparencies ranging from simple hand-traced and coloured examples to those in which the outline was prepared by using a Thermofax copier.
and coloured with self-adhesive film or stippling. Posters, slide tapes with a matching cassette tape commentary, and a floppy disc prepared on the BBC Micro presenting an educational programme suitable for children of a specified class and subject area, complete the programme. Practical workshops follow in which students develop the required skills and confidence to apply these. (Opie, 1985).

Commendable though such technical competence may be, much of the value is lost if thought is not given to the appropriate selection and use of such aids against the educational purpose to be served in each case, and the specific needs of each teaching situation. The broad links of such a course with Educational Studies, and more specifically with Methodology from the critical perspective of putting ideas to the test is clearly discernible.

Such a programme reflects the privileged position enjoyed by White Schools with their access to the latest technological aids, and is in sharp contrast with the paucity of provision in many Black and so-called Coloured Schools. Greater attention to improvisation and the need to consider practical alternatives will need to enjoy greater attention pending a more equitable distribution of resources.

School Librarianship

Students who did not acquire basic library skills at school are acquainted with the appropriate techniques, and provided with a broad outline of the procedures involved in running a school library. In addition, criteria for the selection of books for children and ways of nurturing interest in books and conveying library skills to children
Apart from the useful skills aspect, it relates closely to the whole family of subjects included in Professional Studies. It raises questions such as the philosophical basis of an institution and enquiry about how values are reflected in policy-governing matters such as how much is spent proportionately on books, who controls selection, what restrictions govern such selection, etc. The implications go far beyond the skills involved and touch on fundamental educational questions, all of which are necessary areas for scrutiny in terms of the enquiry approach proposed.

An area to which the College should be giving attention is that of preparing students to teach in schools where library facilities are virtually non-existent. Strategies for coping, available resources which can be tapped through the initiative of the classroom teacher and survival techniques pending the closing of the gap in provision are all relevant issues.

**Speech and Communication**

Although occupying a paltry allocation of time, Speech and Communication carries an importance often overlooked. Clarity in speech and voice projection are traditionally seized upon as constituting the heart of such courses, but increasing attention is now being paid to non-verbal communication, body language and listening skills as equally important areas for attention. Wragg's (1982) references to the importance of first contacts between teachers and pupils touches on another approach to the question of
communication. One may with justice argue for the centrality of such skills to be recognized in teacher education, and for an acknowledgement of the dependence of every area of the curriculum on effective communication.

**Chalkboard Writing and Techniques**

Opinion varies between those institutions who view the need for tertiary students to acquire such basic skills with embarrassment and a measure of condescension, and others for whom it has become tantamount to a statement of faith. While sound practice probably lies between the two, the importance would seem to hinge upon the purpose for which such proficiency is acquired, and its relationship to appropriate use to enhance the teaching/learning process.

Further, the subject carries the responsibility of assisting Primary School children with the technical skills of setting down their thoughts in writing, and provides them with another medium through which to communicate their thoughts.

Such a course links very closely with the whole concept of Professional Studies, and particularly with aspects dealing with children whose development is atypical, or who reveal learning disabilities. Realization of the key role careful observation can play in identifying perceptual-motor and other problems in young children adds to its importance as part of the Professional Studies network.
Bible Education

A clear distinction is drawn between Bible Education in schools and Sunday School teaching. The College vantage point is that Bible stories in schools should be presented without denominational bias and interpretation, and that the teaching of doctrine is the preserve of the churches. The major focus is on making Bible Education vivid and real, and to avoid drawing the morals which children can arrive at for themselves where appropriate.

The course is directed at

* making the individual aware of his/her own religious perspective (so that he/she does not impose it on the pupils inadvertently);
* engaging in Biblical Studies, impressing on the students the need for detailed, accurate knowledge (from the Bible and widely accepted academic commentaries and reference books) of the Bible stories they present in the classroom;
* providing a broad sweep of Biblical history, and a grasp of how the Judaeo-Christian concept of God developed;
* providing detailed information of the geography of Bible lands;
* studying the social customs of the people in Biblical times.

(Timm, 1985)

Because numbers are so small it has not been possible to organize an alternate course for Jewish students, but those who wish to be dissociated from the course above, and any other student wishing to be excluded on grounds of conscience, has the right to exercise the conscience clause. Should the College be permitted to include students of other racial and cultural groups, provision will need to be made to accommodate additional religious perspectives.
The particular problems of teaching Bible Education relate not only to Subject Methodology but to the deeper issues of the schools' responsibility or otherwise for the spiritual component of a child's development. The way in which the subject is handled reflects the underlying ethos of an educational institution when it represents a consensual agreement in approach. Where the approach taken is at variance with this there will need to be further critical discussion and awareness, not only of the discord, but the philosophical basis from which it stems. The inclusion of Bible Education in Professional Studies is appropriate in terms of the issues it raises.

**Elective units**

Art, Music, Physical Education, Needlework and Woodwork constitute the five possible electives offered presently at the College. From this list the student is required to select two. Important though they may be for their intrinsic value to the student teacher, their professional justification for inclusion in the course lies in the opportunity which they provide for communicating with children affectively, and for aiding the psychomotor development of the Primary School pupil. The crucial relationship between harmonious physical development and increasing fine-motor co-ordination relates directly to the acquisition of writing and reading skills, while the sense of rhythm and sequence engendered by music may also have a direct bearing on the ease with which children learn to read and write. The significance of available learning theory with respect to the acquisition of such competencies provide a further link with Professional Studies, and an opportunity to interrogate the theory.
It is indeed unfortunate that the possibility of offering Xhosa in this group has not been taken up by the College for reasons of staffing. It is the writer's view that priority should be given to the introduction of this subject as an indication of recognition of the language spoken by the majority of people in the Cape Province, and in preparation for the time when there may well be another connotation to the word 'bilingual'.

Enrichment, Outdoor Education and Personal Growth

Valuable though the grouping of these activities under the categorization described may be, there is still an uneasiness that the maximum benefit is not being derived from the professional perspective of teacher education. Lengthy reports and completion of questionnaires detract from the students' appreciation of the experience as a whole when they become lost in detail, but there are other ways of handling visits to enhance the educative value. In terms of Professional relevance, the writer believes that adequate preparation should be given in indicating key problems or areas of significance, and in asking students to address these and others perceived as relevant in the light of their experiences in a written report, or discussion, in the 'debriefing' session following their return. Such an approach changes the nature of a visit from an interesting interlude to one in which conceptual links and associations are made with many parts of the teacher education programme in the course of inquiring into what they have seen.
Simulations, 'in basket' techniques and Micro-teaching

Use is made in Language Courses and in Educational Studies of simulation techniques in order to assist students in gaining confidence in stress-related situations such as interviews with School Committees for teaching posts and discussion of children's scholastic problems with parents. The difficulty in such simulations lies in their contrived nature of the situation.

The writer believes that greater promise lies in the identification of critical elements in lessons, particularly those given in weekly study practice in schools, and of group discussion of possible alternatives for action within that situation.

Micro-teaching is used with first year students as part of the preparation for School Experience programme, to which an hour is allocated each week. Its use has been largely in line with that advocated by Stanton (1978) in building the confidence of the young teacher by focusing upon the teaching in a non-threatening and limited situation. In conjunction with video-taping the lesson for replay, it provides the student with the opportunity to gain confidence from the realization that he did not look as nervous as he felt, and that his problems and concerns were shared by others. Valuable though this may be in terms of the acquisition of a positive self-concept for students, the writer shares Stones' (1984) anxiety about the apparently random and ad hoc selection of skills that are indicated in many programmes, and the fact they they are unrelated to any pedagogical system. It is proposed that Micro-teaching should be retained for first year students in the Cape Town Teachers' College course, but that instead of random skills, attention should be given to acquiring those identified by Stones as the deep structures of
teaching ability, and to relating the procedures which he offers as heuristic guides to Micro-teaching.

**Observation and Action Research**

The purpose of school experience may legitimately be redefined as one which includes both experience of teaching and of enquiry. The first year student spends a substantial amount of time in observation, the value of which lies in the insights it yields. Realization of the connection between daily practice in the classroom and the complex issues of schooling and society make the student less willing to over-simplify issues. The task of making an ethnographic survey of the classroom with a focus on the identification of the values which underlie practice is thus not regarded as an addition to, but a vital part of the experience itself. (Gitlin and Teitelbaum, 1983). It is hoped that this early participation in ethnographic study will help the student to see the significance of what he himself is doing (Zahorek, 1970), and to become aware of the factors influencing his decisions.

The need to extend this innovation to other year groups might well take the form of observation of a particular child for a fixed period in order to sensitize the student to the classroom life of each individual pupil, and to determine how long the child is actually 'on task' for that time. Amongst insights that such an exercise might provide would be awareness that classroom management techniques should not be viewed simply as a repressive set of whole class teaching techniques. Zahorek (1970) gives valuable pointers to the use of such techniques.
School Experience

From the enquiry perspective adopted for the Professional Studies programme in particular and the course in general, the importance of weekly study teaching sessions and the period of extended School Experience can be seen in a new light. No longer expected to 'catch' teaching from exposure, and no longer required to model themselves on the pattern of the class teacher, there is hope that a more sensible approach to the whole enterprise will see a joint collaboration in testing theory derived from many sources against the reality of the classroom as it is. The incorporation of insights drawn from many sources offer a greater possibility of meaningful solutions to the problems of practice.
CHAPTER SEVEN

CRITICAL REFLECTIONS ON CHANGES ACHIEVED
IN THE SCHOOL EXPERIENCE PROGRAMME

THE COLLEGE ROLE

The changes described in the School Experience programme at Cape Town Teachers' College have marked a responsiveness to the needs identified but have not addressed sufficiently the underlying problem of breaking with a tradition-craft and apprenticeship model. To a considerable degree the College continues to legitimize a view which accepts the educational and social context as given, and to assign too passive a role to its students. It is hoped that the adoption of an enquiry-oriented approach in Professional Studies will soon make its influence felt in the classroom action of students.

The College has been fortunate in escaping the folly of a 'survival concerns' approach to its students, (a view which is criticized in the literature review section of this dissertation) but it has contributed little to the work on induction of new teachers and in-service training of teachers with respect to teaching skills. Valuable though the contribution of the College has been in the field of voluntary provision of in-service education for teachers wishing to improve their qualifications through teletuition courses, it is significant that so deeply ingrained is the transmission model of teaching that the written examination in the method component was
regarded as sufficient proof of competence in the teaching thereof. A summative evaluation in the form of an overall 'mark' supplied by an inspector was for administrative tidiness rather than as evidence of pedagogical competence.

Although the aims identified by the College workshop for School Experience are worthy in themselves, and correspond closely with similar priorities undertaken in surveys in Australia (Turney, 1982a), they provoke a feeling of uneasiness. They stem from a view of the school and society as given, and support a way of thinking which envisages the student adapting and accommodating to the way things are in schools. Such stereotypes of societies and schools need to be shaken off, and cognizance taken of the necessity to see the teaching enterprise against the wider social, economic and political considerations which impinge on education. School experience should help students to make thoughtful judgments about what is relevant and useful against a wider scrutiny and challenge of the school.

Because of the fortunate position of this College in being able to call upon the hospitality of over eighty schools within fairly easy reach of the campus it has been possible to accommodate students in a way that has served their convenience rather than their needs. An area which should be explored urgently is that of seeking admission to so-called Coloured and Black schools for the purpose of gaining insight and experience into a wider view of education and provision for a broader spectrum of needs. This would indeed be a first step in the College's acknowledgment of the seriousness of its commitment to the goal of multi-cultural education.
Despite efforts being made by resident lecturers to collaborate with students and co-operating teachers in joint investigations and experimentation in teaching methods, much needs to be done to clarify the role which the College perceives the schools fulfilling, and in encouraging the schools to contribute to critical debate of the issues at stake.

Using the four areas of teacher participation outlined in the DES (1983) document as a guide, it is interesting to notice how far some of these already form part of Cape Town Teachers' College structures.

* Reference has already been made to consultations with Principals in planning extension courses, and in guiding the College concerning male students, but this consultation could be developed further into more formal structures.

* While the College would welcome professional representation of schools' personnel on a selection board to review applications and interview prospective students, the quota system and Cape Provincial Administration (C.P.A.) pre-selections leave few 'survivors' to discuss beyond those who will constitute the quota.

* In calling upon teachers from the schools to assist with appropriate lectures, the co-operation and services of those invited is given freely, but much could be done in terms of giving such teachers a role more closely related to that of
lecturer. In this way they would be included in the planning and understand the underlying philosophy of the College better. (Stones, 1983).

Finally, while efforts are being made by individual lecturers to renew their experience within the schools, an even more important role seems to lie in the collaborative area of joining with student and co-operating teacher in putting theoretical propositions to the test of practice. Gore's (1981) assertion that

"They (teacher educators) must demonstrate their authenticity in terms of their competence to teach; and they must also demonstrate the competence of their pedagogical knowledge in applied practice." (p.38)

may not be met in respect of the first requirement he lays down, but in their contribution to finding new theoretical perspectives to explore they will certainly display the second.

**TIMING AND DURATION OF SCHOOL EXPERIENCE**

In terms of Wragg's findings (1983, p.193) concerning the crucial importance of the first few days of each year for establishing the relationship between teacher and class and the ethos of the classroom, an attempt should be made to permit third and fourth year students to spend at least a few days in schools at the beginning of the year to observe the 'settling down' process objectively.

**SUPERVISION**

Reference has already been made to attempts recorded in the literature
to develop facets of supervision other than evaluation. Although the attempts of Goldhammer (1977) and Turney (1982 a & b) are valuable re-appraisals of the situation, little progress in moving away from the 'cloning' activity implicit in apprenticeship styles of supervision will be made until the emphasis falls instead on viewing supervision as a co-operative attack on teaching problems. From this perspective the College supervisor does not enter the school with answers in hand and proceed to evaluate a student's performance against supposedly shared criteria, but is able to co-operate with the student in making a joint attack on a teaching problem. That evaluation will need to be re-examined is implicit in this approach and will be dealt with later in the paper. In the light of this approach views such as those of Bowman (1979) who argues that the College supervisor is redundant are patently untenable. In the act of supervising teaching, pedagogical theory, practice and the main subject come together.

What of the role of the co-operating teacher? By the same token, this approach will call for strengthened links between College and school supervisors, and joint workshops in which perceptions may be shared and tested. (Boothroyd, 1979). Here, too, and understanding of the College's role in the joint venture of submitting teaching theory to practical trial could provide a valuable starting point for a shared venture. Two factors are a pre-requisite to the fair trial of such of such an approach:

* The selection of a group of teachers willing to expend the time and effort that such an enterprise would need, and

* the establishment of a measure of continuity over a given period.
In fairness one may ask whether such a scheme envisages any recompense for teachers who already have little time to acquire supervisory skills because of the full demands made on their time. (Goldhammer, 1977). Certainly there will be the professional satisfaction of having extended personal horizons, but something more is called for. Although schemes similar to the Scottish 'regent' system and teacher-tutor programmes in the United Kingdom have been proposed at Cape Provincial Administration level in this province, the implementation of this idea has long been delayed by the financial recession. A scheme whereby those co-operating teachers were granted credit towards a Further Diploma in Education Course for School Supervisors along the lines of the newly instituted course for School Administrators at Denneoord College would be likely to gain enthusiastic and well-motivated support from suitable applicants.

Interesting alternatives which might be debated could be ventures such as that currently being undertaken at Wellington College, where fourth year students have assumed full responsibility for the classes of teachers released for a stipulated period to accompany College lecturers on their rounds. While applauding the initiative, the writer is concerned that such an approach retains the 'coach tour' nature of supervision and stresses consensus on evaluative procedures rather than the fostering of collaborative enquiry and growth aspects of teacher supervision. Another alternative might well be the drafting of fourth year students to work alongside co-operating teacher, lecturer and student in acquiring supervisory skills in preparation for the time when the senior student will herself be called upon to assist others.
EVALUATION

The writer shares the opinion of those who would lay greater emphasis on formative rather than summative evaluation, and who do not fear that the relinquishing of 'marks' would lead to lower standards or a betrayal of the gatekeeper function of the profession. (Dow, 1979, p.156). Over the last five years, there has been a failure rate in final teaching evaluation of less than 1% at Cape Town Teachers' College, and thus the retention of evaluation for this purpose cannot be justified.

Certainly the alternative emphasis upon self-evaluation and the need to establish the habit of reflecting, evaluating and commenting upon his own work offers a more constructive approach to the whole issue. That impression management would be eliminated and greater candour result in discussions between student and supervisor would be worthy achievements in themselves, particularly if they were coupled with the detraumatization of teaching practice as a whole. Joint collaboration in solving problems and improving practice would be a far more profitable enterprise than seeking spurious agreement on exact marks to be allocated. Such 'marks' seem incongruous in the context of turmoil which has beset education in South Africa at the present time.
A crucial debate on issues concerning the future of this country is currently being conducted in many quarters. Politicians dispense 'wisdom' of assorted brands from party platforms. Armchair critics, safely ensconced in the detachment and privilege of their private bastions, proffer solutions.

Meanwhile in the stark reality of the 'townships' and on the campuses of various educational institutions, angry confrontations between students and police add bloodshed and assault to the anguish of the country. In the midst of the unrest, increasing attention has been focused on the societal and economic injustices as well as alienation processes which are reflected in the different educational structures established for Black and 'Coloured' people. Many young people, representing different cultural groups, have found common ground in spearheading an attack on a system of education which collaborates in institutionalizing discrimination. Based on a philosophy unacceptable to many, it is seen to perpetuate the inferior status and opportunity conferred on its 'beneficiaries'. An emphasis on useful skills and practical concerns is seen as determining the future for many instead of providing them with the opportunities to contribute to the shape and form of the society to which they will belong.

As the country endures the convulsions which wrack it on its slow
movement to social, educational and political reform, there are many who see the establishment of a truly multi-cultural society as a desired social, political and economic goal. Part of the proposed political reforms undertaken will lead to the dissolution of the Provincial Councils and the regionalization of administrative functions previously entrusted to this body. Should the Colleges remain under the jurisdiction of these regional councils it may well result in greater participation in decision-making for the Colleges which survive. Such a development may well result in securing the transformation of the College from a mode of operation determined largely by the rules of bureaucracy to one in which the institution will be able to take greater responsibility and to act on its own initiative and professional insights.

Against such a background the maintenance of an exclusive system of teacher education for White Primary School teachers must surely be viewed as anachronistic if not immoral. Critical examination of all the factors would point logically to the opening of this College to student teachers of any race able to benefit from the tuition offered. Change of this nature will bring new challenges, new opportunities for growth and new problems. Certainly there will be difficulties, but in seeking to address these, one hopes that the College will not perpetuate the arrogant mistakes of the past in presenting solutions without consultation with the participants and the representatives of the communities involved. Such dialogue and engagement in joint discussions lies at the root of any sound basis for reform whether it be at national or local level.
The writer of this dissertation believes that the conceptual basis for teacher education proposed in the 'enquiry model' outline has the virtue of being sufficiently open to provide a useful framework for accommodating discussion and negotiation of the kind outlined above. Where it has seemed appropriate, the writer has intimated the areas which will need re-examination and fresh insights should the College's function be extended to include students of all races.

In conclusion, the need for the College to begin to prepare pro-actively for such change by self-evaluation, discussion, observation and research is a task which should enjoy the highest priority.


The school as a social system
Teacher leadership and the classroom community
Parent counselling
Chance and school organisation
Perspectives of an organisation or "How not to lose your way".
FIRST YEAR METHOD COURSE (DIDACTICS)

In order to integrate this course, the following topics are given. Subject lecturers may look to the Didactics and the Educational Studies courses for themes related directly or indirectly to their courses. It may even be advantageous to build into the Didactics course an input from the various subjects. If each course designer could sort out at which point the themes mentioned in the Didactics course slots in with his/her course, it would be possible to build into this Didactics course related themes, eg.

Under "Some classroom problems": This could be handled

Firstly, in a general way

Secondly: Science needs special mention because of the practicalities involved.

Thirdly: Physical Education where lots of movement by the children, using apparatus.

Fourthly: Junior Primary and younger children during special activities, handwork and art.

FIRST YEAR COURSE DIDACTICS

a) The presentation of a model of teaching, based upon the axiom:

1. Change is the only absolute in Education and all education is the management of change.


b) The Management Dimension

1. Classroom management as related to Teaching.


3. Special needs for some children.
4. Some problems in the classroom: practicalities - Subjects.
5. Organisational aspects of management.
6. The personal dimension of management.

c) Modes of Teaching
1. Inductive and deductive sequencing.
   Contrasting the two modes.
   How do these relate to the Subject Methods
2. The expository mode - Subject Methods
3. The enquiry mode - Subject Methods
4. The Demonstration mode - Subject Methods
5. The activity mode - Subject Methods

DIDACTICS FOR SECOND YEAR SENIOR PRIMARY
1.
   1.1 Teaching the class
       Advantages and disadvantages.
   1.2 Teaching children in groups. The management of groups in the classroom. Individuals in groups.

2. Questioning strategies
   2.1 Levels of questions - refer to the Taxonomy (E.S. 1-5)
   2.2 Questions that focus on the teaching process.
   2.3 Questions that focus on the learning process.
   2.4 Questions for specific purposes.
   2.5 Pupil questions: handling pupil responses to questions.
   2.6 Developing skills in questioning.

3. Teacher strategies for cognitive learning
   3.1 The nature of concepts and generalisations.
3.2 Teaching and learning concepts and generalisations.
3.3 Concept development: skills for teachers.
3.4 Developing generalisations: skills for teachers.

4. Teacher strategies for affective learning
4.1 Learning and feeling - thinking and willing
4.2 Krathwehl's Taxonomy: Receiving Organisation
     Responding Characterisation
     Valuing
4.3 Moral Education and Didactics
     Kohlberg's stages of moral development.

THIRD YEAR SENIOR PRIMARY DIDACTICS
1. Integrated studies - an approach.
2. Evaluation and assessment
   A Taxonomy and Testing/Testing as part of Learning.
3. Language in Education
   Instructions
   Written communication
   Oral communication
   Other forms of communication
   Contrasting methods - related to role perception.
4. Interviews: Simulations/Role play.
5. A synthesis of Teaching Method.
6. Decisions teachers make in the classroom.
7. How to: Fill in a register
   Record cards
   Mark books
   Report cards
   Records of work
   Evaluate children's work
   Comply with "red tape" and live!
CAPE TOWN TEACHERS' COLLEGE
INTRODUCTION
All DE 1 students are required to complete their questionnaires on foolscap during the July/August teaching practice and to hand them in to their tutors by the end of the first week of lectures.

Aim of Questionnaire:
It is the intention of the College that you should observe school organization and administration, classroom procedures, techniques and methods of teaching, etc., keeping an eye open for details so that the teaching practice observation period becomes as meaningful an experience as possible.
Your observations are not intended to take the form of a critical analysis of the school or of the personalities of the teachers concerned. The idea is that you should benefit from being in a primary school situation where you will come into contact with experienced teachers who will share ideas with you when the opportunity presents itself.

Format of Questionnaire:
The Questionnaire is in the form of a booklet and is divided into various sections. After a short introduction there is a general section with questions placed under specific headings. This is followed by guidelines on specific subjects, while another section deals with observation of some of the special subjects.
The Questionnaire ends with a section which requires the student to draw conclusions from and to make assessments of her experiences during the observation period.
In addition to the answers to the questionnaires students will be required to submit their weekly time-tables which will reveal what and when they observed/taught during their stay at the school.
A. GENERAL:

1. SCHOOL ADMINISTRATION AND ORGANIZATION

1.1 Is the school a Provincial (State) or private institution?

1.2 How many pupils are registered at the school?

1.3 What is the sex / are the sexes of the pupils?

1.4 Into how many classes are they divided?

1.5 Make a simple diagram to illustrate the school hierarchy, e.g., Headmaster; Deputy Head; Vice-Principal; Head of Department etc.

1.6 Draw a simple plan of the school and the playgrounds.

1.7 Does the school have a School Hall? What purpose does it serve?

1.8 How old is the School?

1.9 What community does it serve?

1.10 Is the school easily accessible by public transport?

1.11 How do most pupils get to school?

1.12 Is the policy of the school one of streaming? If your answer is in the affirmative, comment on the method used to achieve streaming.

1.13 Does the school follow subject teaching or class teaching in the higher primary standards?

1.14 Comment on the advantages of the system you observed.
2. **CLASSROOM ORGANIZATION**

With the aid of sketches and diagrams write a brief description of the classroom in which you observed most lessons. Note the following aspects and comment on the effect they had on class organization, opportunity for creative work, discipline, effective teaching etc.

2.1 Size of room in relation to number in class.
2.2 Arrangement of desks and furniture.
2.3 Pinboard space.
2.4 Size and position of chalkboard.
2.5 Availability of audio-visual equipment.
2.6 Space for a reading corner / nature table, etc.
2.7 Temperature of classroom and general aspects.
2.8 Position of door during teaching, - pros and cons.
2.9 Influence of external noise on classroom activities, e.g., traffic, construction works, etc.
2.10 How has the teacher made the room attractive, generally?
3. GENERAL CLASSROOM PROCEDURES

Write a brief description of general classroom procedures as you observed them. The following are some guidelines.

3.1 How monitors are appointed and how duties are allocated.

3.2 Teacher / pupil interaction - what sort of questions do they ask? How are their problems dealt with?

3.3 How does the teacher cope with enrichment programmes for the brighter children?

3.4 How are slow learners catered for?

3.5 How are visual / hearing problems catered for?

3.6 How is the class home work controlled? e.g., recorded in diaries, how checked.

3.7 What methods are used to teach? e.g., group teaching.

3.8 How are difficult situations resolved? e.g., tale bearing, stealing, hyperactivity.

3.9 Comment on an example where the teacher showed particular understanding.

3.10 Cloakroom routines.
4. PHYSICAL ENVIRONMENT - PLAYGROUND

Comment on the playground activities in the school as you observed them. The following may provide you with some ideas:

4.1 Do the children remain chiefly in their class groups, or do they mix with older/big children. Comment on any exceptions to the general pattern.

4.2 Are the children lively and active during break, or do they spend breaks sitting quietly in small groups?

4.3 Is there any noticeable difference in the behaviour of the boys and girls of different age groups?

4.4 Are any pupils solitary during break?

4.5 What is the most striking contrast between a primary school playground and a high school playground at break?
5. **EXTRA-MURAL PROGRAMME**

5.1 List the extra-mural activities offered by the School.

5.2 Did you involve yourself in any of these activities? Elaborate your answer giving specific details.

5.3 What value do you think an extra-mural programme plays in the development of a child?

5.4 What was the children's favourite extra-mural activity?
B. LANGUAGES :

1. ENGLISH

Questions to guide First Years in their observation of English at the school at which they are billeted for Practice Teaching.

1.1 How many periods a week are given to English on the timetable? How are they divided into areas of English? e.g., Oral work, spelling etc.

1.2 How is reading taught?
What class readers are being used?

1.3 Is there any group teaching? What are the problems attached to this system?
How has the teacher adapted the system to his / her particular situation?

1.4 What is the most effective method the teacher has found of:
- teaching spelling
- marking compositions
- teaching grammar (The teacher could specify areas here.)

1.5 Find out from the pupils what they are reading privately.

1.6 Is Speech and/or Drama taught to the class?
If so, is it taught by -
(a) the class teacher?
(b) a qualified teacher on the staff?
(c) a qualified outside teacher?
2. AFRIKAANS TWEEDE TAAL

SENIOR EN JUNIOR

Slegs as u as student bereid is om by die klasonderwyseres te leer, sal u hierdie vrae kan beantwoord. (Gebruik folio vir die doel - Naam van student regs; skool en standerd, links.)

2.1 SENIOR

Mondeling

2.1.1 Watter onderwerpe is gedek in die tyd wat u in die klas was?
2.1.2 Wat word as stimulering gebruik?
2.1.3 Watter metodes gebruik die onderwyseres om die kinders aan die praat te kry?
2.1.4 Vorm die mondeling deel van 'n groter eenheid (in tema) of staan dit alleen?

Gedigte

2.1.5 Watter gedigte is in die tyd behandeld?
2.1.6 Maak 'n afskrif van die gedigte wat in die tyd gebruik is en wat nog behandeld gaan word.

Skriftelike Stelwerk

2.1.7 Watter onderwerpe is aan die klas gegee?
2.1.8 Moes hulle dit eers in hul klaswerkboeke skryf of nie?
2.1.9 Skryf hulle dit tuis of in die klas?
2.1.10 Wat was die lengte van die skryftakies?
2.1.11 Watter nasienskema gebruik die onderwyseres? Kry voorbeeld.
2.1.12 Ken sy punte of simbole toe of word slegs n opmerking geskryf?
2.1.13 Was daar mondelinge voorbereiding vir die les?

Lees

2.1.14 Watter leesboek gebruik die klas?
2.1.15 Lees die klas in groepe, stil of hardop?
2.1.16 Word punte toegeken vir lees?
2.1.17 Watter leesboekies en tydskrifte (Afrikaans) is in die leeshoekie?
2.1.18 Watter stelsel word gevolg vir die lees van biblioteekboeke?
Taalleer

2.1.19 Word leesstukke as 'n vertrekpunt gebruik?

2.1.20 Handboeke:

1. Watter handboek(e) word gebruik?
   Naam:

2. Word dit as onderrigmiddel gebruik?
   JA/NEE.
   Indien antwoord JA is —
   2.1 Hoe word dit gebruik?
   2.2 Hoeveel keer per week word dit gebruik?

3. Word dit as toetsmiddel (terugvoering van taalmateriaal) gebruik? JA/NEE
   Indien antwoord JA is —
   3.1 Hoe word dit gebruik?
   3.2 Hoeveel keer per week word dit gebruik?

2.1.21 Word die antwoorde van die taalsoefeninge eers mondeling gedoen?

2.1.22 Is die taalleerkomponent deel van 'n groter eenheid (tema) of staan dit alleen?

2.1.23 Word 'n handboek gebruik of voorsien die onderwyseres self die leesstuk?
   Die vrae wat gestel word: Sluit dit met Wie/Wat/Waar —
   vrae in of word ander soorte vrae op 'n hoër vlak ook gevra

2.1.24 Word die sluitingstegniek (Cloze) gebruik?

2.1.25 Word taalspeletjies gebruik? Kry voorbeelde.

2.1.26 Word liedjies gebruik? Kry voorbeelde.

2.1.27 Wat word gebruik om 'n element van genot in te sluit?
C. ACADEMIC SUBJECTS:

1. MATHEMATICS - Comment on the following:

1.1 Use of apparatus, Games, Puzzle Corners etc.

1.2 Use of S.I.

1.3 How is mental arithmetic taught?

1.4 How are multiplication tables taught and consolidated?
C. ACADEMIC SUBJECTS:

2. PHYSICAL SCIENCE - Comment on the following:

2.1 The organization and use of the "Science Room" or Laboratory.

2.2 Use of the Mobile Demonstration Unit.

2.3 First Aid Outfit - Fire Extinguishing Equipment Safety Measures.

2.4 Demonstration techniques.

2.5 Worksheets and pupils' practical book (Busy Book).

2.6 Scheme of Work for General Science (Physical Science and Biology).

*2.7 Inventory for General Science.

*Only when freely available.
Students watching Biology lessons are advised to note the following:

3.1 How does the teacher capture the class imagination when she introduces the subject?

3.2 How is interest maintained during the course of the lesson?

3.3 What visual aids are used in the lesson?

3.4 What problems do you think the teacher had to solve to prepare for this lesson?

3.5 To what degree is the class involved in the lesson? What techniques does the teacher employ?

3.6 Does the teacher make special provision for gifted children in the class? How does the teacher handle this aspect?

3.7 What type of application exercise is given to the class to consolidate the learning?

3.8 Finally, what was the "actual" message of this lesson?
GUIDELINES FOR SENIOR PRIMARY FIRST YEAR STUDENTS:

4. HISTORY

1. INTEREST / MOTIVATION

1.1 What techniques / styles of teaching were most effective in making pupils interested in the lesson?

1.2 If the teacher felt that interest / involvement was flagging at any point, how was interest regained?

1.3 Describe any pupil activity methods used (e.g. finding out for themselves, drawing their own conclusions, using source material, simulation games etc.) N.B. Variation of method.

1.4 Note the importance of linking new knowledge to previous experience.

2. PRESENTATION

2.1 TEACHING AIDS AND METHODS

2.1.1 All past events occurred in a place at some point in time. Note techniques used to establish this. N.B. Maps and time - times.

2.1.2 If maps and time - times were used:

2.1.2.1 Did children seem to understand clearly what they represented?

2.1.2.2 Did they help to clarify the lesson? If so, in what way/s?

2.1.3 Which teaching aids seem particularly effective? Try to give a reason for their effectiveness.

2.1.4 STORY-TELLING: Note importance of drama, use of voice, eye to eye contact, sense of empathy evoked (how did it feel to be there?)
3. **TEXT-BOOK**

3.1 Is a text-book used?
3.2 In what ways can a text-book be useful in teaching history?
3.3 Are the contents of the text-book questioned?

4. **CHALKBOARD AND NOTES**

4.1 How does the teacher build up a summary on the board?
4.2 Are the children given notes?
   If so, what form do they take?

5. **QUESTIONS**

5.1 How does the teacher distribute questions?
5.2 How does the teacher involve the whole class during questioning?
5.3 How does he/she handle pupils unable to answer a question?

6. **CONSOLIDATION AND APPLICATION**

Describe any particularly effective ways you have seen of consolidating information and/or of applying it.

7. **GENERAL**

Comment on any other aspects of teaching and classroom management that particularly impressed you (e.g. preservation of discipline and order).
D. SPECIAL SUBJECTS:

1. ART

First year teaching practice observation.

1.1 The student must note how the different teachers of Art (if there is more than one) develop -

1.1.1 contact with the class;
1.1.2 hold their interest;
1.1.3 increase perception / awareness of self, environment, the senses etc.
1.1.4 use the language of Art to give a means of expression to the child;
1.1.5 deals with the physical aspect of the art room which can be very messy etc.
1.1.6 controls the class that is allowed more freedom of movement and noise.

1.2 Each student must make notes on the art lesson observed to bring back for discussion at College (noting the following - )

1.2.1 The Art aim
1.2.2 The topic
1.2.3 The inspirational source
1.2.4 The children's response
1.2.5 Any comments made to the student by the teacher
1.2.6 The student's personal response
2. MUSIC

CLASS-SINGING

INFORMATION TO DISCOVER

2.1 Where do class-singing lessons take place? Draw a simple plan showing the relative positions of:

PIANO / CHALKBOARD / CHILDREN

2.2 How many periods of class-music are given each week? What other musical activities are included?

e.g., PERCUSSION BAND / RHYTHMICS / RECORDER / CREATIVE WORK / CHOIR etc.

Is music confined to structured periods? Is music integrated with other classroom activities?

2.3 Who gives the class-music lessons? (Class teacher/specialist etc.)

How many children receive individual lessons (Piano, Guitar etc.)

i) at school
ii) privately

2.4 What song books are used?

2.5 (Seniors only). In which standard are Rounds, Descants and part-songs introduced?

OBSERVATION OF A LESSON

2.6 List the songs you heard the children sing. Indicate whether they were accompanied or unaccompanied. If accompanied, state what instrument was used.

2.7 Observe and note the method used in teaching songs -

i) WORDS AND MUSIC (chalkboard; wall
ii) WORDS ONLY ) using (chart: O/H projector
iii) BY ROTE (imitation) (OR individual books/ copies.

2.8 LISTEN TO THE SINGING – especially with regard to:
singing in tune / quality of tone / clarity of diction / dynamic contrast (loud and soft) / starting together etc. Notice changes in children’s position – sitting and standing. Were any breathing exercises and/or voice exercises given?
2. M U S I C (Contd.)

2.9 Observe and note the work done related to the teaching of rhythm and pitch:

(a) Ear-training and teaching of concepts in sound etc. e.g., the clapping of rhythms; imitation of sounds such as "sch - me" etc.

(b) Sight-singing (reading of music) - which of the following were tackled? -

- RHYTHM only / PITCH only / RHYTHM AND PITCH COMBINED.

Was one of the "FUN WITH NOTES" series of books used?

(c) Note the use made of (French time names for rhythm (Tonic sol-fa for pitch.

(d) Did the children sing on their own, or only with the teacher's help (either by singing or by playing the piano?)

(e) Describe any apparatus or interesting chalkboard work used.

2.10 How do the children react to their class-music lessons?

What are their musical interests outside school?

Make a list of instruments that the children handle regularly.

- e.g. Drums; tambourines; triangles etc.

- xylophones; glockenspiel etc.

**JUNIOR ONLY** Is there a music corner?
3. PHYSICAL EDUCATION

3.1 GENERAL
3.1.1. Which sections of the General Programme did you observe?
3.1.2. Were they presented indoors or outdoors?
3.1.3. How large / small were the classes?

3.2 MOVEMENT DEVELOPMENT
3.2.1. Overall control of their bodies - briefly explain.
3.2.2. Is their skill in performance quite constant?
3.2.3. How good is their judgement with regard to the use of the surrounding space?
3.2.4. Are they able to learn a large variety of activities in a short time?
3.2.5. Do they have good large muscle group co-ordination?
3.2.6. Are they showing signs of developing control over their small muscle groups?
3.2.7. How good is their ability to balance?

3.3 PHYSICAL DEVELOPMENT
3.3.1. Are the children in proportion with regard to height, weight, length of arms and legs?
3.3.2. How many of the pupils would you regard as overweight?
3.3.3. Does this (overweight) impair or hinder the physical or motor performance of the individual concerned?
3.3.4. Were there any signs of weak posture? e.g., flat feet, rounded shoulders, knock knees etc.
3.3.5. Is their muscle strength keeping pace with their increase in height at this age?
3.3.6. Are they particularly supple at this age?
3.3.7. Do they tire easily i.e. endurance?

Contd ......
3. PHYSICAL EDUCATION (Contd):

3.4 AFFECTIVE DEVELOPMENT

3.4.1 Does the child compare herself to others?
3.4.2 Is she very dependent on being accepted by the group?
3.4.3 How independent are they?
3.4.4 Does she enjoy a challenge?
3.4.5 Is she afraid of losing?
3.4.6 Do the children enjoy experimenting?
3.4.7 Did certain children exhibit signs of -
   3.4.7.1 leadership
   3.4.7.2 self-control
   3.4.7.3 creative ability
3.4.8 Have they got the ability to concentrate?
3.4.9 Are the pupils with weak motor ability rejected by the group?
3.4.10 Are they still interested in fantasy?
3.4.11 Do they enjoy moving and playing?
4. NEEDLEWORK

Observe and comment on -

4.1 Arrangement of class
4.2 Lighting of room.
4.3 Care of needlework equipment and tools.
4.4 How needlework is stored.
4.5 Do pupils enjoy needlework?
4.6 Note any good ideas in class organization, e.g., anything special on pin-board etc.
E. SELF ASSESSMENT AND CONCLUSIONS

1. How do you feel about your choice of a career? Do you have any doubts about your choice?

2. Are there things you wish you had known before embarking on a teaching career or on teaching practice?

3. In what ways did you find that your school experience differed from your idea of what it would be like?

4. What was the highlight of this teaching experience?

5. What suggestions would you make that could improve the practice teaching observation period?
VALUES AND THE TEACHER
================================

The problems and conflicts so widespread in our technological society make it plain that unless the children in Primary School are equipped with some tools for making their way through the confusion in values we shall leave them with little.

The speed and the complexity of our society indicate that children need to learn how to analyse moral issues and how to arrive at moral judgments. They need to find direction and meaning in their lives: They need to learn to deal constructively with the value conflicts they encounter.

This print of work is designed to help you focus upon values and their place in your becoming a teacher.

You must have:

Handouts

(a) Values - what are they?
(b) Human values in modern Education.
(c) Terminal values and Instrumental values with instructions.
(d) Instructions for observation and Project for Teaching Experience.
(e) Natural Laws and Values.
THE SELF AND VALUES

Some questions and thoughts about Values - based upon Handout from "Education Society and Change".

Although this article was written for American teachers it seems as if, to a large extent, most of what can be applied to American Society can apply to ours as well.

Values Exist Position

1. a. Can you possibly identify any other sources of values other than those listed on Page 242 which to some extent influence schools in South Africa?

b. Do you feel Inlow's list of care values are the dominant ones in Western Civilization? Would you question any of these?

c. Can you see any difference between "care" values and "operational" values, or "major value orientations"? If there are any differences what are they?

2. When you read Lynd's work on ideals and their contradiction each time you see "America" read South Africa. It makes interesting reading in today's climate of "change".

a. Can you identify those values which create a notion of progress and change as opposed to those that provoke resistance to change? Where do you stand in terms of these values - do you favour the values that speak to change - or, those that act as stabilisers and resisters to change?

b. Can you pick up values intuitively?

c. Do you think the 10 values listed by the National Education Society (p.24) can readily be transferred to South African schools and teachers?

Values are Gone position

1. a. Do you think that the traditional value system has collapsed?

b. Antiwar, anticonscription, antipollution, antiracist, antipoverty, anti-hypocrisy, anti-police brutality. These are all negative in essence and yet they address themselves to some values we hold. Can you take these negative values and place next to each one a positive value which supports the same issue?

c. Read carefully the paragraph on p.250/251. Do you agree with this view of educational institutions. Did 1976 not perhaps contradict this statement? If it did, why was this so different in South Africa?

d. To what extent can you identify with the self-actualization model? Is it realistic?

e. Study William Stanbey's position, p.252-253, carefully and compare it with the view of education stated earlier p.250/251. What is your reaction to these two standpoints on the functions of education in society today?
2. a. The danger of Neoconservatism is pointed out on page 254 second paragraph, starting with "The danger is that....."

Do you think this author is accurate in his observation? Can you detect any weakness in this argument?

b. Can you as a teacher, work within a framework in which "values are gone"?

VALUES ARE CHANGING

1. a. What would you give as the main reason why society resists change to its value system?

b. Can emergent values and traditional values live side-by-side without too much conflict?

c. Can you detect any emergent values within yourself and your friends? Do these necessarily conflict with your previously held values? How do you cope with this problem?

d. Do you think it important to have values clarified? How can this process of value clarification help toward your becoming the teacher you want to become?

M. FISHER
TERMINAL AND INSTRUMENTAL VALUES (Handout C)

1. Arrange each set of values in order of importance to you as guiding principles in your life.

2. Discuss in your groups the meaning of terminal and instrumental value.

3. Which of these values would you seek to promote as a teacher will they conform to your ranking?

4. What are the predominant values being advocated through the various activities found in the school where you have been placed? Try to list them in order of importance of emphasis and the activity the value is associated with.

PROJECT

5. Can you relate any of the values promoted in the school where you are to the list of Natural laws (Handout C).

6. Can achievement and success be classified as values?
   - If not - why not?
   - If they can - how do teachers use these two values to:
     (a) motivate children?
     (b) discipline children?
     (c) evaluate children?

   By using these two values do children receive assistance in their learning or can these values act as a hindrance?

7. You must keep a log book reflecting your actions (lessons) and observations: In this log book you can reflect the school day and how you respond to the effects the activities have on the staff, the pupils and yourself.

   Mere annotation of events is not sufficient - the events flow from a value base. Your task is to locate this value base upon which action is based. You will need to read these handouts carefully prior to teaching experience.

8. What values are promoted by the teaching of the various subjects in the time-table. Look at Content, Method and Method of Evaluation.

DUE DATE:

If you have any difficulty please contact me. Try to make this project a pleasant research experience where you explore the dynamics of society and your response to its value position.

M R FISHER
NOTE FOR ALL STUDENTS

This project is designed to take the place of one of your examination papers at the end of the year. This research project is part of your year's assessment and will count 50% of the total marks for Education. Do not allow this course work to be neglected. If the standard of work is too low, I may be obliged to retain the papers at the end of the year and reduce the weighting of this project. As we wish to move away from a purely theoretical evaluation, this is your opportunity to come to grips with the practicality of your task as teacher.

PART A

Draw up a series of 9 lessons to be presented during teaching experience in July/August: these lessons should cover at least 3-4 different types of lessons from 3-4 different subject areas.

Each group of lessons must reflect your grasp of the three different teaching models and especially the "mission" or "goals" for which these lessons are intended.

PART B

Accompanying your lessons must be a document answering the following questions:

1. Why you chose to use the models in the subject area you assigned it to?

2. A clear indication of the major theorist of the models you used and the main thrust of his ideas.

3. Your own evaluation of the usefulness of the models and their value in the classroom.

PART C

This will consist of whatever feedback you can acquire as to the effectiveness of your lessons. It can take the form of peer evaluation: resident teacher evaluation; pupil responses and your own personal response to the process.

The finished project must contain all three aspects.

This task is to assist you to develop your own personal repertoire of teaching models. You will need to select your theorists first and start reading NOW. Once you have done this and have achieved some perspective of the theorists you can then start to plan the sorts of lessons you will want to teach, adapting them later to the local needs as you find these in the schools.

You must include a bibliography to indicate your sources. Part B should not be longer than 3000 words. If you have difficulties please don't wait till the last minute. Start early!
## The Information Processing Family of Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Major Theorist</th>
<th>Mission or Goals for Which Most Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inductive Thinking Model</td>
<td>Hilda Taba</td>
<td>Designed primarily for development of inductive mental processes and academic reasoning or theory building, but these capacities are useful for personal and social goals as well.</td>
</tr>
<tr>
<td>Inquiry Training Model</td>
<td>Richard Suchman</td>
<td>Designed to teach the research system of a discipline, but also expected to have effects in other domains (sociological methods may be taught in order to increase social understanding and social problem-solving).</td>
</tr>
<tr>
<td>Science Inquiry Model</td>
<td>Joseph J. Schwab</td>
<td>Designed primarily to develop inductive reasoning, but also for concept development and analysis.</td>
</tr>
<tr>
<td></td>
<td>(also much of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Curriculum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reform Movement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of the 1960s)</td>
<td></td>
</tr>
<tr>
<td>Concept Attainment Model</td>
<td>Jerome Bruner</td>
<td>Designed primarily to develop inductive reasoning, but also for concept development and analysis.</td>
</tr>
<tr>
<td>Developmental Model</td>
<td>Jean Piaget</td>
<td>Designed to increase general intellectual development, especially logical reasoning, but can be applied to social and moral development as well (see Kohlberg, 1966).</td>
</tr>
<tr>
<td></td>
<td>Irving Sigel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Edmund Sullivan</td>
<td></td>
</tr>
<tr>
<td>Advance Organizer Model</td>
<td>David Ausubel</td>
<td>Designed to increase the efficiency of information processing capacities to meaningfully absorb and relate bodies of knowledge.</td>
</tr>
<tr>
<td>Model</td>
<td>Major Theorist</td>
<td>Mission or Goals for Which Most Applicable</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Group Investigation Model</td>
<td>Herbert Thelen</td>
<td>Development of skills for participation in democratic social process through combined emphasis on interpersonal (group) skills and academic-inquiry skills. Aspects of personal development are important outgrowths of this model.</td>
</tr>
<tr>
<td>Classroom Meeting Model</td>
<td>John Dewey</td>
<td>Development of self-understanding and responsibility to oneself and one's social group.</td>
</tr>
<tr>
<td>Social Inquiry Model</td>
<td>William Glasser</td>
<td>Social problem-solving, primarily through academic inquiry and logical reasoning.</td>
</tr>
<tr>
<td>Laboratory Method Model</td>
<td>Byron Massialas</td>
<td>Social problem-solving, primarily through academic inquiry and logical reasoning.</td>
</tr>
<tr>
<td>Jurisprudential Model</td>
<td>National Training</td>
<td>Development of interpersonal and group skills and, through this, personal awareness and flexibility.</td>
</tr>
<tr>
<td>Role Playing Model</td>
<td>Donald Oliver</td>
<td>Designed primarily to teach the jurisprudential frame of reference as a way of thinking about and resolving social issues.</td>
</tr>
<tr>
<td>Social Simulation Model</td>
<td>James P. Shaver</td>
<td>Designed to induce students to inquire into personal and social values, with their own behaviour and values becoming the source of their inquiry.</td>
</tr>
<tr>
<td></td>
<td>Fannie Shaftel</td>
<td>Designed to help students experience various social processes and realities and to examine their own reactions to them.</td>
</tr>
<tr>
<td></td>
<td>George Shaftel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sarene Boocock</td>
<td></td>
</tr>
</tbody>
</table>
# The Personal Family of Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Major Theorist</th>
<th>Mission or Goals for Which Most Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nondirective Model</td>
<td>Carl Rogers</td>
<td>Emphasis on building the capacity for personal development in terms of self-awareness, understanding, autonomy and self-concept.</td>
</tr>
<tr>
<td>Awareness Training Model</td>
<td>Fritz Perls</td>
<td>Increasing one's capacity for self-exploration and self-awareness. Much emphasis on development of interpersonal awareness and understanding, as well as body and sensory awareness.</td>
</tr>
<tr>
<td>Synectics Model</td>
<td>William Gordon</td>
<td>Personal development of creativity and creative problem-solving.</td>
</tr>
<tr>
<td>Conceptual Systems Model</td>
<td>David Hunt</td>
<td>Designed to increase personal complexity and flexibility.</td>
</tr>
</tbody>
</table>
# Lesson Evaluation

**CAPE TOWN TEACHERS' COLLEGE**

## Lesson Evaluation

### Assessment Scale
- **7. Very good (75 - 100%)**
- **6. Good (65 - 74%)**
- **5. Above average (60 - 64%)**
- **4. Average (55 - 59%)**
- **3. Below average (50 - 54%)**
- **2. Failure (40 - 49%)**
- **1. Exceedingly weak (0 - 39%)**

<table>
<thead>
<tr>
<th>NAME</th>
<th>SCHOOL</th>
<th>DATE</th>
<th>LEKTURER</th>
</tr>
</thead>
</table>

## 1. Preparation and Planning

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Lecturer's Comments</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choice of Lesson Content</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suitability of material</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of difficulty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy of information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope of lesson</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other comment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lesson Planning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarity of aims</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence of planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure of content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selection of aids</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation techniques</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision for consolidation and revision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other comment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 2. Presentation of Lessons

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Lecturer's Comments</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teaching Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introducing topic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questioning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explaining</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consolidating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focussing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Lesson Evaluation

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>LECTURER'S COMMENTS</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TEACHING SKILLS (continued)</strong></td>
<td>Assessing progress of student understanding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conclusion of lesson</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use of chalkboard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use of audio-visual aids</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other comment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HANDLING OF PUPILS</strong></td>
<td>Use of discipline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Classroom management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Response to pupils' questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use of pupils' contributions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other comment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>COMMUNICATION SKILLS</strong></td>
<td><strong>USE OF VOICE:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voice quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pitch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modulation and variation of tone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Projection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>SPEECH:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tempo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Language competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amount of talking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sensitivity in listening</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eye contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Awareness of children's language usage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other comment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Lesson Evaluation

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>LECTURER'S COMMENTS</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CREATIVITY AND IMAGINATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of limited resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Original use of media</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unusual approaches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptability to class size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other comment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CLASSROOM ETHOS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation techniques</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enthusiasm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshness of approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human warmth and friendliness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gaining and holding pupils' attention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact with individual pupils</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and class as a whole</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other comment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>APPEARANCE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neatness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-confidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body language</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other comment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GENERAL COMMENT:**

---

Cape Town Teachers' College acknowledges its indebtedness to U.C.T. Education Department.
SHEILA MOORCROFT

Course work papers:

Course work paper 1 : The nature of teaching

Course work paper 2 : Contrasting approaches to research in teaching

THE NATURE OF TEACHING

The 'knowledge explosion', intensely accelerated through the development of the computer, is fast making change the primal experience of life.

"Man will not live all his life in the world in which he was born, and no-one will die in the world in which he worked in his maturity ... in this new culture it will be the child, and not the parent and grandparent that represents what is to come.

(Mead, 1975, p.214)

The implications of change extend to every aspect of human life, not least to teaching itself. It offers a challenge to each teacher to re-examine the alternatives open, not with the idea of arriving at a once-and-for-all answer, but at an answer in terms of today, ready and open to tomorrow's revision. Each individual who does not seek to be spared the pain of thinking for himself will reach a different answer to the question "What is teaching?" and these will reflect the particular philosophical, psychological and/or sociological orientations of the teacher, either explicitly stated or implied. This paper will aim at providing a representative selection of perspectives on teaching and their implications for the teacher, and will conclude with a personal synthesis of the nature of teaching.

TOWARDS A THEORY OF TEACHING

One of the difficulties of studying teaching arises from the fact that there is no more clarity on what constitutes teaching theory than there is on the wider issue of what comprises educational theory. Echoes of the long-standing dispute between D.J. O'Connor and P. Hirst over the nature of educational theory can be heard in discussions on teaching theory as well.
In brief, O'Connor approaches education as a particular series of natural phenomena which can be described in scientific terms by means of:

"a logically connected set of hypotheses whose main function is to explain their subject matter."

(O'Connor, 1957, p.75)

while Hirst refuses to see the social institution of education as a natural object which can be set out in terms of observable features, and claims that because it involves a deliberately planned act calling for an understanding of human purposes, it

"requires explanations in terms of beliefs and values, of reasons as well as causes."

(Hirst, 1973, p.67)

Despite their differences, the following common ground may be discerned between them. Both would agree that educational theory should guide practice, and that it should consist of a logically interrelated set of hypotheses which can be confirmed by observation. It should be explanatory in nature and refutable if necessary.

For the purpose of structuring comparisons between the different interpretations of teaching offered in this paper, the writer inclines towards Hirst's view, and has sought to give a wider explanation, than suggested by O'Connor. The dimensions suggested by Hammersley (1981, p.99) in identifying the constituent elements of a teaching theory have been adopted as a framework for the sake of making comparisons easier. The first of these is concerned with the teacher's role; the second with the way in which pupil action is conceptualized; the third and fourth relate to conceptions of knowledge and the curriculum; the fifth interpretations of learning embedded in different versions of teaching; and the last deals with preferred techniques of teaching and organisation.
CHAPTER ONE

PHILOSOPHICAL PERSPECTIVE

THE CLASSICAL APPROACH

The Perennialist tradition in the U.S.A. stems directly from its European heritage, and is reflected in the writing of educationalists as different as Robert Hutchins and Jacques Maritain. There is much in this approach with which supporters of the Public School tradition in Britain like Gilbert Highet would be in sympathy. In the U.S.A. the classical approach to teaching has developed two different versions, one being Perennialism and the other Essentialism.

The name Perennialist comes from the assertion that the basic principles of education are changeless and recurrent, and reflects its major intention of preserving the values, purposes and customs that have given society its identity and strength.

The metaphysical grounding of the Perennialist is a dualistic one; the basic spiritual side, apprehended by reason alone, is permanent and unchanging, whereas the immediate material side, which is apprehended by the senses, is temporal and changing. For all the surface turmoil and transience, an eternal wisdom lies at the centre. Man is seen as a moral, rational being who seeks to order and discipline his animal forces, both physical and emotional, and to develop his rational potential.
"The mind itself desires to be free - from the animal within and from the enigma without."
(van Doren, 1959, p.79)

The Perennialist ethical stand seeks to inculcate respect and obedience for absolute truth and goodness for those who are its representatives, while its epistemology is dependent on the central, core wisdom of Western civilization and an attempt to teach the student to apply these principles of truth to life by developing the power to reason which lies dormant in his mind.

The practical application of this philosophy to the teaching situation finds expression in an approach which has elements in common with Scheffler's 'rule model'. (Scheffler, 1955a). The goal of teaching is seen as the development and realization of man's rational potential rather than the fostering of emotional growth or social adjustment. Technical and utilitarian purposes are of secondary importance in this view.

"If education is rightly understood, it will be understood as the cultivation of the intellect."
(Hutchins, 1943, p.67)

The role of the teacher is a dominant one, for he is seen as the transmitter of culture to each new generation. The teacher is an active, responsible pace-setter and decision-maker, playing an important part in determining method and evaluating work and solely responsible for a particular subject in a self-contained classroom. The teacher is both an expert and a model, well-trained in what if not in how to teach.

His tasks include the fostering of goodness and justice, love of the truth and a willingness to co-operate. Mastery of basic information
which must be assimilated as a foundation and which precedes creativity is stressed. Achievement is assessed against the criterion of the group and competition is encouraged.

The child is viewed as cognitively pliable, capable of learning, rational and receptive of information. The degree to which he can profit from instruction is seen as biologically determined in terms of his intellectual endowment. He is initially a passive receiver of information, for whom school represents hard work in a competitive atmosphere, and where gratification is deferred to some future date. All children are seen as capable of and entitled to the same education.

Knowledge is seen as a body of universal truth embodied in the 'great books' of Western culture. They represent the core values which transcend all ages and cultures. The curriculum emphasizes the traditional school subjects which are regarded as bearing the combined knowledge of the human race. These are presented to the children without reference to their interest or involvement and are designed to cultivate rationality.

Learning is perceived as an individual undertaking goaded by competition and is seen as extrinsically motivated. It implies the imposition of knowledge in a transmissive process. The emphasis is on learning by hearing about rather than doing.

The teacher's techniques are dependent upon a view of teaching as the art of communicating to others the skills of reason and logic, and depend largely upon exposition and question and answer approach. There is the implication that adequate preparation in the subject matter will confer skill in transmitting this to others.
THE ESSENTIALIST APPROACH

Men such as James Conant and James Koerner represent the Essentialist traditional. This view has much in common with Perennialism, being a conservative tradition desiring to 're-present' culture accurately by the transmission of certain essential elements, but seeing also the need to adapt to the competitive, corporate organization of industry and business. Man is seen as a functioning, productive member of society: a doer rather than a thinker. He is viewed as a man of practical science rather than of the arts and classics, and derives his social worth and dignity from the occupation he holds. His ethical stand may be summed up under the 'Protestant ethic' of hard work, competition and material success, together with an emphasis on patriotism and law and order. His epistemology is dependent upon the belief that facts can be taught free of speculative opinion and value judgments, and emphasis is placed on scientific and technological information.

The Essentialist goal in teaching can be seen as the transmission of a form of vocational education that narrows its content to the basic information needed to lead a productive life, and which will initiate the pupil into adult society.

The role of the teacher and the concept of the child is much the same as that of the Perennialist, but the curriculum reflects a more practical and scientific content. Since 1970 and the 'back to basics' movement in America, this approach is enjoying a new popularity with its emphasis on the teaching of essential skills and information. This concept of teaching lends itself to the current
preoccupation with accountability.

Learning to the Essentialist involves great stress on the assimilative, reproductive type of process and supports the view that the creation of new knowledge and skills must follow and not accompany the learning process. The techniques of teaching are much the same as those of Perennialism, with stress being given to the role of imitation in acquiring new skills.

THE PERSONALIZED APPROACH

A fundamental paradox in education in democratic countries appears to be the educational neglect of the concept of individuality. In the U.S.A. John Dewey rose to the challenge with his idea of social progressive education. Dewey's view of personalized education is directed at helping pupils to achieve growth in all phases of their lives - physical, emotional, intellectual and social - and stands at the other end of the scale from romantic progressivism, which subscribes to the views of Rousseau in seeing learning as unfolded from within the individual, and in believing that placed in the right environment, the child will learn according to natural growth patterns.

Social Progressivism

The world-view of the social progressive is one of a changing, material world which progressively evolves into a higher order. Our present 'scientific democratic' order finds its truth and values pragmatically through co-operative group dynamics. Man is seen as an active, co-operative worker seeking a better, reformed social order. He sees values as tentative hypotheses to be tested rather than as
unassailable established truths. Dewey's epistemology is based on the solution of problems by trial and error in an inductive, scientific manner. His learning is a process of 'reconstruction' in which he reflects on each experience put into his overall mental perception to give it meaning and to gain control over it. The goal of teaching for Dewey is to prepare the child to meet the developing demands of a changing society and to live harmoniously in a world of change. Some see in this a more optimistic American response to the challenges which were answered in Europe with the 'fear and dread' approach of Existentialism.

The role of the progressive teacher is more demanding than that of the essentialist, for he has to provide continuous opportunities for the child to meet and solve dynamic problems as part of a democratic problem-solving group. The teacher acts as a guide and fellow explorer in the process.

"The teacher loses the position of external boss or dictator, but takes on that of leader of group activities."

(Dewey, 1963, p.59)

The role of the teacher demands that he should recognize the uniqueness of each child in setting projects, for the task set should be determined by the relationship of an individual's personal experience in that field and the learning to be established.

The child is seen as an active participant in the process of learning, and his personal needs in terms of education are seen as activity, security, the desire for responsibility and recognition. "It is regarded as important that he should recognize the need for a skill or knowledge in order to achieve a goal he has set himself.

In contrast to the Perennialists, Dewey sees knowledge as an
ever-changing set of concepts which are held tentatively because they will need to be modified as new experience is acquired. The curriculum should present increasingly more difficult challenges as the student progresses.

"When the school introduces and trains each child in society into membership within such a little community, saturating him with the spirit of service, and providing him with the instruments of effective self direction, we shall have the deepest and best guarantee of a larger society, which is worthy, lovely and harmonious."
(Dewey, 1963, p.59)

Dewey was not unaware of the 'rich fruitage of experience' to be derived from society's cultural heritage, but believed that that which the child experienced was built into his character and personality. He saw the most effective learning stemming from the child's interest and interaction with the culture in which he moved. Learning itself was identified as a five-step process involving identification of the 'felt' difficulty confronting the person, analysis and clarification of the problem on the basis of available data, the creation of possible solutions, evaluation of their implications and finally the abandonment of rejected hypotheses in favour of that indicated by the results.

The techniques employed were those of small groups or individuals working on problems or projects. Learning by doing for Dewey meant an educative experience in which

"we make a backward and forward connection between what we do to things and what we enjoy or suffer from things in consequence."
(Dewey, 1916, p.140)
THE INTERACTIONAL APPROACH

Existential philosophy and phenomenology have separate origins, but since phenomenology can be applied as a way to reveal the nature of human existence, existential philosophy has adopted this method. The concept of 'going back to the things themselves' was developed by Edmund Husserl. Others who have exerted a profound influence are Martin Buber, who wrote specifically about education and the nature of the relations between teacher and student, and Heidegger, who took as his starting point 'being-in-the-world'.

The term existentialist has been used in so many ways that it has lost currency, but there appears to be fairly common agreement on certain issues which can be grouped under this umbrella term. Proponents exhibit a tendency to view the world as alienating and oppressive, and the predicament of man as that of a lonely individual in an absurd world which has neither meaning nor purpose. Buber describes this 'homelessness' of man today as

"living in an open field and at times not having the four pegs with which to set up a tent."

(Buber, 1965, p.126)

The subjectivity, hostility to science, distrust of rationalism and tendency to dwell on the morbid and abnormal aspects of life have led commentators like Kneller to observe that it appears "most at home in a sick society". (Kneller, 1966, p.19).

The existentialist believes that man knows experientially and dialogically. A person formulates an interpretation of his experience of reality as faithfully as he can, and through dialogue or interpersonal exchanges he reaches towards truth. Values in this approach are founded on differences rather than uniformity, responsibility to others and courage to trust and enter interdependent
relationships.

The goal of teaching is seen in developing the student's self-identity, the provision of opportunity for free, ethical choices, the encouragement of self-knowledge and self-responsibility and the development of a sense of individual commitment.

The role of the teacher is that of a resource person acting as a guide. He does not direct learning, neither is he an authority figure representing the adult community. His task is broadly defined as helping the student to become for himself what he wishes to become.

The child is seen as in the process of becoming, and his behaviour is determined by his perceptions of his environment and himself, and not by innate drives or environmental stimuli. He is seen as a person who determines and creates his own world and who is eager to make his own decisions. Existence precedes essence in that first the child exists, and then he becomes what he is as a result of his own actions.

Knowledge is viewed as less important than man, for it is seen as an unfolding or formulating of personal experience of reality rather than a body of objective facts. Knowledge is thus derived from experience.

"You do not attain to knowledge by remaining on the shore and watching the foaming waves: you must make the venture and cast yourself in, you must swim with all your force, for in no other way will you reach anthropological insight."
(Buber, 1965, p. 124)

The idea of a formal curriculum is repugnant to the formal existentialist, who favours a free-choice programme by means of which a person develops self-knowledge and responsibility. Pupil interest is taken as the basis for planning an activity, and the pupil is
encouraged to develop his own purpose, and work out his own learning
tasks on the basis of his needs.

Learning is seen in terms of experiential understanding rather than
fact gathering. It involves interpreting new information and
understanding it in the light of the individual's own life.

The teaching techniques employed emphasize the need for recognition of
individual differences and stress pupil activity.

Over-specialization in any field is frowned upon, as it stunts the
inner life of the pupil.

The contribution of the existential viewpoint has particular
significance in that it reminds one of the inescapable problems of
human life and places emphasis on man at a time when the stress is on
science and technology. The challenge not to be beguiled by
technological society and to be aware of the effect of materialism on
culture is a salutary one. Existentialists are sometimes forgetful,
however, that there is also a case to be made for group or corporate
experience in a school setting in which there is both freedom and
reciprocity and in which the individuals are not thwarted. In their
emphasis on an alternative education there appears to be an
unwillingness on the part of the existentialists to be open to the
possibility that formal study - even of the basic skills - should also
be an alternative open to consideration.

ANALYTIC PHILOSOPHY

The analytic philosophers constitute a revolution in the philosophy of
education in that they have all refused to build systems "in the old
grand manner" (Butler, 1968), and find it impossible to follow the
schema of philosophy as traditionally conceived. Philosophical,
logical, conceptual and linguistic analysis all refer to component parts of the same school of thought. The basic thesis of analytic philosophy is that its task is not the search for first principles, but that its function is wholly analytic and critical.

"If we were to settle on any unifying theme in analytic philosophy, it would be on clarification with the aim of securing the greatest possible precision of meaning."

(Ozman & Carver, 1976, p.184)

Speculative philosophy or metaphysics has no role in this approach, as it is not regarded as a legitimate subject because it does not deal with that which is verifiable or confirmed.

"I suggest that no system of traditional metaphysics has ever proved to be publicly testable by experts in the same field and coherent with the rest of established knowledge, and that this, in itself, refutes the claim of such systems to be taken seriously."

(O'Connor, 1957, pp.14-15)

It is conceded that analytic philosophy may deal with epistemology to the extent that it devotes itself to statements of knowledge to determine their verifiability as accurate and precise. Since ethical judgments are excluded, this leaves only logic of the traditional elements of philosophy.

"Philosophy, then, can provide us with no knowledge about the world; it has no subject matter. Instead it is a method of logical analysis of language."

(Langford, 1958, p.21)

Concomitant with its repudiation of the speculation and normative aspects of philosophy is the linguistic analyst's commitment to the better use of language. Man, as a 'talking animal', to whom language has become a 'secondary environment' standing for the real world, often generates misunderstanding out of words. Analytic philosophy has undertaken the task of examining educational concepts by an
analysis of common or ordinary language.

"Current analysis is distinguished by its greater sophistication as regards language; it attempts to follow the modern example of the sciences in empirical spirit, region, attention to detail, respect for alternatives, objectivity of method, and use of techniques of symbolic logic."  
(Scheffler, 1973, p.9)

Scheffler explains that analysis is to be distinguished from definition. He discusses three types of definition, viz. the stipulative, descriptive and programmatic, and finds that none of these is helpful. A better approach is to pull apart the major aspects of the conceptual framework and seek clarification on what constitutes teaching.

In line with this approach, we shall examine what R.S. Peters, P. Hirst, I. Scheffler and other analytic philosophers have said of the component parts of the teaching phenomenon.

In their focus on teaching there is an underlying emphasis on what Jane Martin (1970, p.89) describes as "the rationality theory of education". R.S. Peters, for instance, sees teaching as one of

"a family of processes through which people become committed to what is valuable in a way that is illuminated by some breadth and depth of understanding."  
(Peters, 1970, p.109)

Scheffler, in similar vein, explains that

"teaching may be characterized as an activity aimed at the achievement of learning, and practised in such a way as to respect the student's intellectual integrity and capacity for independent judgement."  
(Scheffler, 1973, p.67)

This approach is consistent with T.F. Green's (1968, p.34) positioning of teaching on his continuum, for he too subscribes to the rationality theory in determining what processes shall fall within the range
assigned to teaching as distinct from indoctrination, conditioning, etc.

Peters views the teacher as one who possesses worthwhile knowledge and who is entrusted with the task of initiating the child into a sharing of this heritage. The role of the teacher is both directive and decision-making, and he has to reconcile an appreciation of the child's interests with the needs of society. While exercising control, he recognizes that mutual respect and a joint sharing of experience should characterize the encounter. While advocating a "feeling of fraternity" (1966, p.217), he urges the teacher to remember that his class should remain pupils and not sons and brothers.

Scheffler (1973) shares the view that there should be mutual respect between teacher and pupil while Peters sees the child as

"starting off in the position of the barbarian outside the gates."  
(Peters, 1967, p.10)

In getting him inside the citadel of civilization the teacher needs to pitch his teaching at the relevant level for the learner. Hirst sees the teacher's need for "psychological knowledge of the learner" (Hirst, 1973b, p.174) while Peters agrees that he should

"be thoroughly cognizant of the stage of conceptual development which each child has reached."  
(Peters, 1967, p.16)

Hirst and Peters make the telling point that the child has a responsibility to learn, and that this will be achieved only if the pupil wishes to learn.

The analytic philosophers tend to see knowledge as a body of
worthwhile information. The teacher must

"make plain what the child is to learn, and the learner
must know what he is doing, must be conscious of
something that he is trying to master, understand or
remember." (Peters, 1967, p.15)

Peters' view of the curriculum emphasizes the need for a gradual
initiation into the procedures defining a discipline as well as into
mastery of established content. He shares with Hirst the view that
there are several logically distinct forms of understanding and that
the development of the rational mind entails initiation into all these
forms and the ability to operate within them. These are seen as
Mathematics, Physical Science, Human Science and History, Literature
and Fine Arts, Morals, Religion and Philosophy. Each is believed to
have central concepts which are peculiar in character to its form, its
own distinctive logical structure, its truth criteria and method.

Current practice in curriculum development runs counter to this
approach. It stresses integrated studies, interdisciplinary studies
and project work.

There is a fairly general agreement among analytical philosophers that
teaching is an intentional activity, undertaken with the purpose of
bringing about learning. A child has learnt when he knows, and
knowing depends on the child (1) believing, (2) being true, and
(3) the child believing on good grounds. (Scheffler, 1965b, p.9).
Scheffler is particularly insistent that to be able to give a verbal
answer does not necessarily involve knowing. He says that

"though the achievement of learning is indispensable to
teaching success, it is not in itself sufficient; the
learning must be accomplished appropriately."
(Scheffler, 1968, p.20)
Learning is thus seen not as an activity to which the child is subjected, but an activity which he performs.

The analytical philosophers such as Peters, Hirst and Scheffler subscribe to a view of learning as the transmission of knowledge. Peters' emphasis on teaching as initiation and Hirst's concept of forms of understanding with their appropriate methods of scientific, historical and mathematical thought are indicative of this. Scheffler, too, appears to support this orientation.

Three lines of response emerge in response to an attempt to establish the relationship between teaching and learning. Scheffler borrowed from Ryle's distinction between achievement and task verbs, and distinguished between a success sense of teaching and an intentional or task sense. He sees a conceptual link between teaching and learning, and basic to his view of teaching is not a learning outcome, but the expectation of one.

He emphasizes that it is the intention to bring about learning that characterizes teaching. Hirst also accepts Scheffler's task/success argument, because he believes that there can be no such thing as teaching without intending to bring about learning. A discordant note is sounded by B. Otahaniel Smith (1960), whose claim that there is no logical connection between teaching and learning rests on what he sees as a 'category' mistake - teaching for him is a 'task' verb while learning is an 'achievement' verb.

A third approach is that of Paul Komisar (1968, p.169), who claims that not even an expectation of learning is necessary to teaching, since learning is only one desideratum of teaching. He quotes
'awareness' as a non-learning aim of teaching, and is joined by McMillan and McLennon (1966, p.393), who add 'understanding' and 'appreciation' to the non-learning objectives. One solution, of course, lies in the simple expedient of enlarging the concept of learning to include understanding, appreciation and awareness.
CHAP TER TWO

PSYCHOLOGICAL PERSPECTIVE

WHAT DOES PSYCHOLOGY CONTRIBUTE TO AN UNDERSTANDING OF THE NATURE OF TEACHING?

A range of teacher expectations regarding the benefits to be derived from psychology stretch from a naive faith that it can supply a cookbook solution for dealing with precise teaching situations to a denial that the human activities can be analyzed and studied with a resultant reliance on intuitive solutions. Both these extremes assume that a single set of ideas can provide a definitive account of the teaching process, but the teacher needs to maintain an open and critical attitude to ideas and theories and then examine them in the light of practical situations. Psychological theory is useful in providing the teacher with possible ways of analyzing problems. The basis for intelligent educational practice is dependent, in the writer's opinion, on the recognition that teaching involves an interaction between aspects common to many learning situations, and for which psychological theory can provide possible approaches; and the unique aspects of an individual situation, for which a teacher relies on observation and intuitive notions.

Three broad trends are discernible in psychological thought, and these may be classified as Behaviourist, Psycho-dynamic and Humanistic in orientation. An examination of the implications of each of these for the teaching/learning situation will be attempted. A psychological perspective on teaching would not be complete without giving some
attention to learning theories, and this section concludes with a brief examination of the alternatives to the Behaviourist views.

BEHAVIOURIST ORIENTATION

B.F. Skinner is perhaps the best-known exponent of Behaviourism. His views on the teaching/learning situation will be examined with particular emphasis on their implications for a technological perspective on the phenomenon.

Skinner sees the role of the teacher as that of a classroom manager, responsible for drawing up behavioural objectives and selecting appropriate programmes of instruction. As a manipulator of the learning environment he wields a powerful yet less conspicuous role than the teacher in the classical tradition. The expertise of the behaviourist teacher is rooted in his knowledge of appropriate method, either in situations where he has to do the teaching or where he is responsible for the selection of suitable programmes for teaching machines.

The teacher's role is narrowly defined in terms of achieving specific behavioural objectives. These require him to identify what is to be taught, the criteria of achievement and the means of instruction. Goals in terms of 'understanding', 'awareness' and 'appreciation' are totally unacceptable to Skinner, who views the failure to consider objectives in precise terms as one of the reasons that teaching has not been put on a firm basis. Specifically, the task of the teacher (or teaching machine) is seen as that of forming associative bonds between the subject-matter stimuli and appropriate student responses.

Skinner proposes the replacement of the human teacher by teaching machines which can be programmed more effectively than their human
counterparts.

"The simple fact is, that as a mere re-inforcing agent, the teacher is out of date ..." (Skinner, 1968; p.22)

A variety of secondary roles are now assigned to him since he is not the central element in the technological conception of the teaching process." (de Cacco, 1958, p.12)

The control of the teaching situation rests in the hands of the teacher, for the child cannot specify his own goals or reach them in his own way, neither can he express a concept in his own words or construct his own application. This view of teaching as a management procedure controlling both the behaviour of pupils and the conditions of learning is described by Skinner as follows:

"Teaching may be defined as an arrangement of contingencies of reinforcement under which behaviour changes." (Skinner, 1972, p.201)

As an evaluator the behaviourist teacher will assess the progress of each individual in terms of his readiness competences and the individual objectives set for him. Product rather than process orientation is the aim, for pupils' answers are evaluated in the light of the 'right' answers in the teacher's (or machine's) possession, and there is no concern with the motives or intentions underlying action.

Skinner sees the child as an empty organism, thus placing emphasis on learning or the acquisition of behaviour. He is viewed as a behavioural organism, more complex than, but not different from, any other animal. His actions are determined by his environment, and we need only to learn scientifically how to control his environment in order to re-shape his behaviour. The autonomous inner man, who possesses free will, is not recognised.
"What is abolished is autonomous man - the inner man, the homunculus, the possessing demon, the man defended by the literature of freedom and dignity... He has been constructed from our ignorance, and as our understanding increases, the very stuff of which he is composed vanishes... To man qua man we say good riddance."

(Skinner, 1972, p.231)

Man, according to this viewpoint, cannot be held responsible for his actions, for

"It is the environment which is 'responsible' for the objectionable behaviour, and it is the environment, not some attribute of the individual, which must be changed."

(Skinner, 1972, p.74)

Skinner's view of the child is an optimistic one, for he believes that all hostility and anti-social behaviour can be conditioned out of people in a planned society, but this is not attributable to personalities but to the environment.

Information to be included in the curriculum should be selected by experts in a particular field, and the child has no choice in what is prescribed. The focus is on objective and quantitative data and behavioural skills which lead to vocational competence. The curriculum should consist of hard data, collected modules of statistically proven facts. Values are to be excluded from this type of education, and statements such as 'It is wrong to steal' are admissible only in the form the 'stealing is anti-social', which can be researched and established or rejected empirically.

Knowledge is broken down and presented to the student in ordered steps which require the minimum of reflection and which is free from conflicting opinions or discussions. A. Dettinger, a strong supporter of education of this sort, concedes that
"without other forms of education the student may
nature under the dangerous illusion that there always
exists a correct answer to every question."
(Oettinger, 1959, p.143)

Knowledge is seen from the traditional classroom approach of separate
subjects and not from an interdisciplinary perspective.

Skinner's views on learning may well justify calling his approach a
'learning theory' rather than the 'behavioural control' label it has
acquired. Operant conditioning is the basis of his learning theory;
a view developed from the Stimulus Response theories of Pavlov and
Thorndike, but which extends Thorndike's approach. He takes a purely
external stance, insisting that psychology's main concern should be
with systematic relationships between behaviour and its consequences
without reference to either physiological or internal states. He
believes that what a man does is the result of specifiable conditions,
and once these have been discovered, it should be possible to
anticipate and to some extent determine his actions.

More recently Gagne has attempted to expand the concept of learning
outside the narrow confines of simplistic S-R interpretation. He
sees learning tasks as hierarchically ordered types of learning.
Gagne's analysis introduces considerable complexity, but remains tied
to the major conceptual concerns of the behaviourists.

Skinner's concept of learning supports the traditional view of
classroom activity as an individual rather than interactive group
process. Skinner supports the view that external motivation is
achieved effectively by the use of reward. Positive reinforcement
(response strengthening) is an important ingredient of operant
conditioning, and is achieved effectively by the use of reward.
Skinner argues that conventional teachers also employ reinforcement
but that their use of threats and punishments are aversive control techniques, which are ineffective and harmful to securing learning.

Learning is seen as the transmission of large amounts of complex material and behavioural patterns efficiently and in an unreflective manner. This concentration upon the quantitative and specific leaves little room for creative thinking.

"The teaching of truly creative behaviour is a contradiction in terms ... until we know more about creative thinking, we may need to confine ourselves to making sure that the student is in full possession of the contributions of earlier thinkers."

(Skinner, 1956, p.89)

The use of teaching machines enables the classroom manager to match the programme to the level of development of the child, rather than imposing knowledge upon him for which he may not be ready. The use of branching programmes and the child's ability to work at his own level results in a highly individualized programme. This, together with the immediate reinforcement a machine is able to offer correct answers, constitutes the real strength of a technological approach over the traditional classroom situation.

**Criticism of Behaviourism**

Skinner's assumptions about human beings are questionable, for they under-estimate the complexity and subtleties of people by equating them with his pigeons, rats and other creatures. Although it is not possible to prove the existence of free will, one may question Skinner's view that morality is only a matter of acquiring socially desirable habits. Even Skinner appears awed by the power without inbuilt control which he would grant to those controlling society.

"A technology of teaching will need to be much more
powerful if the race with cat2stroph2 is tc be won, and it may then, like any powerful technology, need to be contained."

(Skinner, 1936, p.230)

The S-R paradigm is disappointing to educators because it sees learning as the acquisition of tendencies to react in certain ways to particular situations, rather than as the development of competences to think or act. Concentration on hard data as the basis of the curriculum neglects the development of the creative or affective sides of nature and will produce a person unique to this model.

THE PSYCHODYNAMIC ORIENTATION

Fundamental to psychodynamic theory is the Freudian division of the mind into three processes and an explanation of how these components, the id, ego and super-ego develop and interact. The id represents the original biological source of all psychological energy, which seeks release of energy and tension through the realization of instincts, whereas the ego involves conscious, rational thinking in keeping the id's desires in tune with the possibilities of the real world. The super-ego, which is the internalized agent of existing social values, is often in conflict with the id.

Conflicts between the three sub-systems give rise to anxiety, but unconscious defence mechanisms are employed to distort reality and thus avoid feelings of anxiety. Repression keeps threatening urges out of conscious awareness, whereas projection causes one to transfer one's own unacceptable tendencies to others. Rationalization involves the selection of one's motives in terms that make them seem acceptable.

Freud's theory of the stages of psycho-sexual development and his use
of the Oedipus and Electra complexes emphasize the importance of childhood experiences to the achievement of well-adjusted adulthood.

Freud himself did not address the problems of educational theory and practice, but an attempt has been made by Seymour Fox to derive a conception of education consistent with Freud's frame of reference. These implications will now be considered.

The role of the teacher is a polyvalent one. He is simultaneously the significant adult, representative of society and source of knowledge for the child. The teacher must understand two children - the child in the classroom and the vestigial child in himself. To help him understand his pupils, Freud suggests the psycho-analysis of the teacher.

"... every such person (educator) should receive a psychoanalytic training, since without it children, the object of his endeavours, must remain an inaccessible problem to him. A training of this kind is best carried out if such a person himself undergoes analysis and experiences it on himself." (Strachey, 1975, p.164)

The teacher serves as a model for super-ego development.

"In the same way, the super-ego, in the course of the individual's development, receives contributions from later successors and substitutes of his parents, such as teachers and models in public life of admired social ideals." (Fox, 1975, p.165)

The child entering school is seen as having established much of his instinctual pattern and thus having available larger or smaller quantities of ego energy, which will be required for his education. Each child will differ from his peers in his potential ego strength and strength of instincts, and the child's task is to learn to control his instincts. Teaching must
"... steer its way between the Scylla of giving the instincts free play and the Charybdis of frustrating them ..." (Fox, 1975, p.155)

This involves planning for as much instinctual gratification as possible and appropriate for the child at each specific age. Extremes of either permissiveness or blockage of instinctual expression are not consistent with this view. In permitting reasonable gratification of the instincts teaching will support the mediating efforts of the ego (between id and super-ego) and help to protect it from danger of regression.

Freud was not concerned with specific problems of curriculum and instruction, but Fox concludes that instinctual gratification via action is so central in Freud that the terms with which subject matter would be viewed from this perspective would be necessarily empirical. Since the purpose of all learning is to serve the id in relation to coping with reality, the school should not merely impart knowledge, but should provide training by which such knowledge is rendered serviceable.

**HUMANISTIC ORIENTATION**

Humanistic psychologists like Carl Rogers, C. Buhler and A. Maslow do not see man at the mercy of external events (S-R extreme) nor restricted to the specific motivation of sex and aggression (psycho-analytic approach). Although no single position can be identified as the humanistic approach, each of the theorists grouped under this umbrella would agree that man is essentially an active as
well as reactive being, and that self-actualization is a basic motivation for man's reactions. Carl Rogers will be taken as representative of these approaches, and an attempt will be made to relate his view to the teaching phenomenon.

For Rogers, the role of the teacher is derived neither from the position he occupies nor from his mastery of knowledge or method, but from the kind of person he is and the nature of the relationship he establishes with his pupils.

... the facilitation of significant learning rests upon certain attitudinal qualities which exist in the personal relationship between the facilitator and the learner."

(Rogers, 1969, p. 105-106)

He claims that too many teachers play a cold, authoritarian role, and urges a real meeting between child and teacher. The teacher's role should be that of facilitator and resource person, providing a variety of educationally rich environments, and offering guidance and suggestions.

Rogers emphasizes the need for the teacher to reveal personal honesty and authenticity, which will provide an environment designed to maximize personal opportunities for both students and teacher. The teacher's role also demands the capacity to empathize with the students, for sensitive awareness of what is going on, coupled with respect, understanding and non-possessive warmth provide a favourable climate for human growth and personal autonomy.

The diminution of the teacher's control and the assumption of responsibility by the student for his own learning is of great importance to Rogers. Pupils' behaviour and achievement will be seen in terms of their unique characteristics and situation. In
assessment procedures the teacher will be more interested in the process whereby a pupil makes a problem meaningful to himself than in the amount he learns or the answer he arrives at.

The child is viewed as an active, growing, creating individual in search of adequacy or self-actualization, and who is open and receptive. His behaviour is dependent upon his perception both of his environment and of himself and it is not attributed to innate drives or environmental stimuli. In an appropriate setting it is believed that a learner will discover meaning for himself. The acceptance of the child as a unique human being lies at the heart of what Rogers calls 'prizing' another.

Knowledge is not seen as objective or important in itself, for it is made subsidiary to the process of learning how to learn. Emotions are an essential part of this process. Rogers distinguishes between subjective, objective and interpersonal ways of knowing, and sees the learner arriving at what is the best answer for himself by experiencing the interplay of these three perspectives.

Just as the key to subject matter for the behaviourist is to be found in mastery of information, so the key for the humanist lies in personal relevance. Rogers wants to

"... free curiosity; to permit individuals to go charging off in new directions dictated by their own interests, to unleash a sense of energy, to open everything to questioning and exploration."

(Rogers, 1959, p.105)

The curriculum is envisaged as flexible, student-centred, and equally weighted by intellectual, social and psychological dimensions. Affective objectives such as developing appreciation and clarifying personal values in relation to what is being taught are emphasized,
and stand in stark contrast to the behaviourist's approach.

Learning for the humanist consists of continuous interaction between the teacher, student and content, in a process in which the student occupies the central position.

"The only man who is educated is the man who has learned how to learn; the man who has learned how to adapt and change; the man who has realized that no knowledge is secure, that only the process of seeking knowledge gives a basis for security."

(Rogers, 1969, p.103-104)

Motivation comes from within the student, and there is consequently no justification for trying to impose learning on a child.

Techniques of teaching employed by humanists favour methods such as that of intellectual confrontation, in which attention is focused on ethical problems in which the students have a personal stake. The open classroom is favoured as a setting in which there is much individualized activity, with one-to-one planning, delivery and evaluation. There is a minimum of formal assessment by the teacher and where grouping is used, it is on a basis other than ability or age. Rogers condemns traditional approaches which foster competition and provide experiences of failure for many children. He also condemns didactic or expository methods, for

"Teaching is, for me, a relatively unimportant and vastly overvalued activity ..."

(Rogers, 1969, p.103)

Criticisms

There is much which is both wise and compassionate in this viewpoint, but the practical implementation of this perspective in some areas of
the school give rise to unanswered questions. For instance, there is a tacit recognition that certain basic skills need to be mastered in the primary school, but little information on how a teacher in the humanistic tradition would approach this task. The stress on self-realization tends to overlook the importance of passing on worthwhile content and subject matter.

**Learning Theories**

**Cognitive Theorists**

Cognitive theorists believe that behavioural learning theory provides only part of the answer to how we learn, and that what we learn is influenced both by what we know and by how we process the new information. Gestalt theory is neatly summed up by Smith:

"It is important to grasp that the eyes merely look and the brain sees. And what the brain sees may be determined as much by cognitive structure as by the information from the world outside. We perceive what the brain decides is in front of our eyes."

(Smith, 1975, p.26-27)

Whereas the Behaviourists explain learning as a gradual strengthening of responses, the Gestalt theorists, and particularly Wolfgang Kohler, have focused on the importance of insight, or the sudden perception of new relationships. Kurt Lewin has added a further dimension to these views with his concept of life space, which is a term for the individual's current psychological world. Within the life space, the person's past experiences are important only to the extent that they affect his current perceptions, and the only reality that matters is the person's psychological reality which directs his behaviour towards
goals which are meaningful to him.

Many of these principles play an important role in modern approaches to cognitive learning, such as those of Jean Piaget and Jerome Bruner. The latter has been especially interested in applying a cognitive learning perspective to the teaching situation, and his views will be taken to illustrate this perspective.

Jerome Bruner sees the task of the teacher as that of providing the child with problem situations which stimulate him to discover the structure of subject matter for himself. The role of the teacher is perceived both as that of an organizer who provides appropriate problems and materials and encourages children to make their own observations, to form hypotheses and to test solutions, and as a guide to discovery who asks leading questions and gives feedback about the direction problem-solving activities are taking.

The child is seen as an active and curious being, who searches for information to solve personally relevant problems, and is involved in rearranging and reorganizing what he knows to achieve new learning. His motivation is intrinsic, and is based on choices, decisions, goals and calculations of likelihood of success and failure. Like Piaget, Bruner sees the individual developing by way of steps which are not discreet or sharply separated. He differs from Piaget in that he sees language rather than internal structure making advances in thinking possible. For Bruner, the basic structure of subject matter is made up of concepts. A concept is a category of things that can be grouped together because they are similar in some way. By forming concepts vast amounts of information can be organized into meaningful units. These concepts may be related to each other in a coding system in which more specific concepts are arranged under the most
general one. Being able to form concepts and use coding systems enables people to demonstrate the most characteristic function of mental life - the ability to go beyond the information given.

The special curriculum envisaged by Bruner requires the child to be presented at an early age and in simplified form with all the subjects he is likely to encounter throughout his school years. These are then returned to in more complex forms at a later stage in order to help the child to discover relationships and to form coding systems that can be expanded and improved.

Learning is seen as taking place indirectly, moving from the specific examples presented by the teacher to generalizations about the structure of the subject that are discovered by the child.

Gilstrap and Martin (1975) find six major advantages in discovering learning of this kind. They commend the learning of methods and procedures that will be useful in solving new problems, the sense of excitement and self-motivation produced, the latitude for students to proceed in ways befitting their abilities, the strengthening of self-concepts, the development of healthy scepticism for simplistic solutions to problems and the emphasis on the student becoming accountable for his own learning. Disadvantages have been seen as the difficulty of applying this method to large groups and to children who are slow in learning, the organization tasks in providing the many specialized materials needed, and the fact that unless carefully monitored, some children get left behind. Skinner is critical of discovery learning, because he believes that it is an inefficient way of teaching all that a student must know, thus reflecting his view of knowledge being a body of knowledge to be transmitted.
An interesting contrast is provided by Ausubel, who emphasizes meaningful verbal learning through a process of reception as opposed to discovery learning. He views the younger child much as Bruner does, and agrees that discovery learning seems more appropriate for him, for he can benefit from the concrete experiences provided. He sees expository teaching as more helpful to the older child in establishing abstract relations.

The teacher is advised to present new information by means of an advance organizer which can be a definition, analogy or generalization which directs attention to what is important, and then by a process of interaction to elicit from the children their ideas and responses in terms of basic similarities and differences.

This accords with his view of learning in which he sees the need to proceed deductively from an understanding of general concepts (subsumers) to the understanding of specifics.

He sees the need for the sequential presentation of information in the curriculum in order that the new information may be combined sensibly with what is already known.

INFORMATION PROCESSING THEORISTS

Information processing theorists have attempted to understand learning by studying ways in which stimuli from the environment are perceived, stored in the memory and then recalled for use. The basic assumption is that people have a number of internal mental structures for processing information. The I.P.S. approach uses languages and concepts derived from information theory and computer simulation in developing a theory of human cognitive processes. Like other
cognitive theorists, I.P.S. theorists assume that what we know influences what we will learn and remember in a new situation.

The I.P.S. approach sees the child as essentially active, both internally and in relation to the environment. Unlike the passive behaviourist approach, the child's behaviour is seen as anticipatory, selective and constructive. This approach shares with Piaget the view that the child is engaged in achieving progressively more adequate models or schemes through interaction with the world. The I.P.S. approach acknowledges the qualitative and quantitative limits on a child's information processing skills, and this capacity limitation is part of the explanation for the selective nature of his perception.

The teacher is seen as helping the child to give his focal attention to the problem at hand, instead of merely pre-attentive (corner of the eye) awareness. In the teaching/learning situation he will be guided by the knowledge that the number of elements involved should not exceed his short-term memory power, that information will be easier for the child to the extent that he already has relevant constructs and ideas, and that the rate must be adjusted to the extent of the child's unfamiliarity with existing concepts.
CHAPTER THREE

A PERSONAL SYNTHESIS

In the personal synthesis of what constitutes teaching which follows, the writer will attempt to emphasize those features which seem most significant in the first seven years of schooling (i.e. from Sub-standard A to Standard V) since this is her field of particular concern.

THE ROLE OF THE TEACHER

Some professions have a distinctive and limited role, but that of the teacher is less easy to define. There are those who would construe the task of the teacher as that of a minor technician involved in the methodical insertion of pre-packaged and engineer-designed information into students' minds, but the situation is capable of a very different interpretation. The teacher is not just a technician but a key decision-maker in the process of teaching, for each situation has elements which are unique and which demand that the teacher should assess his particular task before deciding upon appropriate action.

Although there are certain restrictions upon a teacher's freedom to exercise the role of decision-maker, it would seem that this is an area in which many teachers in the Primary School do their classes and themselves less than justice by their reluctance to accept and to
exercise the measure of freedom which they have. In a sense, the
decision not to exercise freedom in itself constitutes a choice, but
where this is the case, it should be arrived at consciously and not by
default.

There is a tendency to take refuge behind the plea that the
system/principal/syllabus does not permit innovation or change which
is often ill-founded, and reveals timidity or unwillingness to venture
from the beaten track.

Not only is a teacher required to exercise a fundamental role as
decision-maker in those areas which concern subject matter, method and
planning, but he will also influence his pupils by his interpersonal
relations with them, and by his own identity. The teacher spends
many hours working with immature human beings, and the sometimes
infantile and undisguised emotions of children can provoke deep
reverberations in himself. Here the need for the teacher to be a
whole and well-adjusted person is at its most important, for he
provides a model for the child of what is acceptable in the adult
community. The teacher in the Primary School often serves the vital
role of significant adult with whom the child can identify in the
absence or loss of a parent, and his compassion and awareness of the
child's needs can convey security and confidence to the child.

At the same time, the role of the teacher is essentially an
authoritative one. In any rule-governed society authority is a
necessary component, for where one person's freedom impinges on that
of another, the exercise of authority is justified in order that
freedom may be enjoyed by all. The teacher's authority may be viewed
as derived simply from his position of being 'in authority' or it
may depend upon his methodological skills. Its significance lies in
the way in which it is exercised. Some may attempt to abdicate all
authority with a resultant confusion prior to members of the class
seizing a kind of de facto power; others may exercise a harsh and
restrictive authority which relies on coercion; a third approach will
attempt to establish authority on the remunerative basis of offering
rewards. The soundest approach would seem to be that in which a
mutual acceptance of values and agreement on norms of behaviour
between the teacher and those subject to authority is linked with
sound personal relationships. This apparent restriction of freedom
rests upon clearly defined limits which the children understand, and
is used in order to assist the development of the children towards
achieving autonomy. In this way the children are not handed their
freedom, but are led to it gradually, and the teacher's authority
contains within itself its own self-destructive mechanism.

The foundation upon which a teacher's authority is traditionally based
is either his academic knowledge or his skill in teaching method.
The Primary School teacher is concerned with imparting basic skills
and the fundamentals of language and number literacy, and to this
extent his grasp of these processes should reveal an understanding
sufficiently deep to enable him to match the child's needs with
appropriate method or explanation. This grounding in the
fundamentals is a vital starting point, but his task is much greater
than this. His role is not merely that of source or purveyor, but he
is more importantly also a guide to resources, organizer of
opportunities and instructor in techniques of enquiry and thought.

As an example of how the teacher may serve in the capacity of guide,
some practical examples will be drawn from the teaching of History.
Although many children in the Primary School have not reached the
level of intellectual development where they can think in terms of abstractions in subjects which require a real understanding of more difficult concepts, and for which a maturity and width of experience greater than that of the average child is needed, none-the-less the teacher can prepare the way for independent thought by introducing the child to some of the problems and techniques of sound historical thinking in terms of experiences that are meaningful to him.

Introduction to the nature of evidence in the form of conflicting accounts of the same event, the distinction between primary and secondary sources, recognition of the distortion resulting from bias or selection of information in 'using' facts to prove a particular theory, and a realization that the printed word does not necessarily carry the stamp of truth are all examples of areas where the child may be involved in acquiring the tools of sound scholarship rather than merely absorbing facts. In the same way the teacher may guide the child to a sound understanding of time in history by building up the concept in terms meaningful to the child's experience before extending it by means of a time-line or other graphic devices to incorporate the idea of periods in time and the sequence of events.

Such an approach offers great challenges to the ingenuity of the teacher in the selection of material and the devising of appropriate tasks, but the benefits to the child are of inestimable worth.

The role of the teacher as an organizer of opportunities is often overlooked. Planning and preparation are as much part of teaching as the actual process of interaction with the children in the classroom. 'Proactive' teaching, in Jackson's phrase, offers the teacher the opportunity to reflect on the desired outcomes and the appropriate means by which these may be achieved in a given situation and with
particular children in mind. Such reflection also offers an opportunity to review the strengths and weaknesses of previous attempts. In bringing critical thought to bear on what he has done, the teacher is able to assess the efficacy of various approaches and to devise means of countering weaknesses. The teacher who is well-prepared is less likely to experience disciplinary problems, for he is likely to be both more confident and better able to give attention to the critical incidents which arise unexpectedly and which require immediate, intuitive reaction. Group teaching and individual project work require a great deal of proactive teaching and more exacting organization than the teacher-oriented expository lesson. Generally the more effortless the lesson appears for the teacher, the greater has been the planning and preparation. On the level of basic practicalities, organization extends to ensuring that equipment, apparatus, books and other aids have been prepared and checked ahead of time in a way that conveys to the children that the teacher regards what he is doing as valuable and that he cares both for them and the subject.

The role of the teacher involves more, then, than delivering the facts. The teacher is committed to honouring his pupils' quest for understanding by providing honest answers to their questions and often by revealing his own judgments of value, truth and reason in the process. These are not offered as the solution, but as his personal solution, tentatively held until a better one can be reached. Each child should be encouraged to exercise critical judgment in arriving at his own viewpoint, which has merit not in terms of necessarily being similar to the teacher's stand, but in that it has been reached honestly and openly after considering the alternatives available.
The teacher is a member of society and is entrusted with the task of socializing the children in his care in order that they may contribute to that society. For the teacher who is in sympathy with the values and standards of the community in which he works, this aspect of his task, which he shares with other agents such as the home and church, presents no difficulties. For the teacher faced with the dilemma of moral conflict between his own convictions and the practices of society, the problem is more complex. For instance, in a community which pays lip service to its Christian ideals but which flagrantly disregards these in its practices when dealing with the poor and under-privileged, the teacher is morally bound to draw attention to the discrepancy between theory and practice. Honesty demands that he should set out the reasons for his dissent clearly and boldly, and that he should not 'condition' his charges to accept the status quo. In a healthy society there is room for growth and change, and no merit is seen in preserving its structures intact when circumstances and reason demand that it should accept new directions and modifications.

THE CHILD

Three institutions, the home, school and church, have traditionally shared the responsibility of educating the child in order to achieve his harmonious development, but changing social patterns have in many cases upset this triadic relationship. Broken homes and the loosening of family ties together with a decrease in religious observance have left the schools with added responsibilities. At the same time, the emergence of competing agencies such as the media which are rooted in different values have presented a further challenge to the schools in safeguarding that which is their realm of influence.
The child is not a miniature adult but a being who is in the process of physical, intellectual, social and emotional growth. As one who is not yet adult, he functions within a modified set of rights, obligations and capacities which are appropriate to childhood. These may restrict his rights in view of his limited capacities, but they also provide extenuating circumstances when his behaviour does not measure up to the standards of adulthood.

An understanding of some of the ways in which a child's physical needs differ from those of adults has direct bearing on the teaching situation. The child is much more physically active than the adult, and particularly in the early years of schooling, sitting still for long periods can be an ordeal. Together with this, the child has a shorter attention span and needs more frequent changes of occupation. Although apparently full of energy, children tire more rapidly than adults when faced with a comparable task, for many skills such as writing and reading still require the child's conscious effort.

The child's neurological development and growth in muscular control has particular significance in determining when he is ready to begin formal schooling. The practice of admitting a child to school at a particular chronological age places a responsibility on the Junior Primary school teacher for identifying and remediating those children who display developmental deficits, while at the same time meeting the needs of those whose development coincides with or surpasses the expected norms.

The child's physical growth is reflected in changes in size, shape and bodily function. At the upper end of the Primary School some children will be entering adolescence with its accompanying physical
and psychological changes, and the teacher will need to be aware of the implications in terms of the young person's increasing self-awareness, desire for freedom and changing interests.

The child is a rational being whose intellectual development appears to proceed through qualitative stages in thought. Accounts given by developmental psychologists like Piaget, Bruner, Susan and Nathan Isaacs are helpful in casting light on this process of growth, but certain reservations should be noted. The stages outlined by Bruner and Piaget, for instance, should not be taken to imply physiological barriers, for some children seem to be capable of more advanced thinking at an earlier age; further, it would appear that children's levels of thinking are not constant at any age and hence the ability to apply formal operations may well vary from the sciences to the humanities.

According to a developmental perspective such as Piaget's, the child enters the Junior Primary classes at the beginning of the concrete operational stage, and the emphasis placed upon the use of concrete examples and illustrations which are linked to the child's own experience appears well founded in the light of this theory. The need for direct experience is of major importance for the satisfactory cognitive growth of the child at this stage, for it is possible for him to learn verbal expressions of concepts without a grasp of the concept itself. Provision should be made for the child who has grasped the principles involved to progress to a more formal level. Stimulating teaching and challenging questions will help the child to test early attempts at various aspects of formal operational thought, and help to stimulate analytical thinking, even though the class as a whole is still largely dependent on concrete modes of operation.
The development of ideas about right and wrong appear to follow a developmental pattern as well, which has implications for the reasonable expectations of moral norms and standards of behaviour. To label the acquisitive behaviour of a two year old as stealing or the fantasies of a four year old as lies is to miss the significance of the differences in ways of thought between children and adults, and it is only when the child reaches a stage where he is able to handle some measure of abstraction that he can appreciate the worth of moral values themselves as distinct from ideas of retribution or punishment which follow the infringement of rules. The need for the teacher to provide a sound model is of great importance to young children, for they are likely to emulate his standards of justice, tolerance and honesty. He should help them to lay the foundations for sound moral development by creating the kind of classroom climate in which it is easy to do the right thing.

Just as the child's intellectual and physical powers develop, so his emotional control and independence progress as well. For many children going to school marks the beginning of emancipation from the family, and the child's idea of the outside world and his perception of himself in relation to it will be determined by his experiences. A warm, accepting atmosphere in which he is made to feel of worth as a person will be conducive to his emotional development and encourage him to venture for himself. He will try because he is made to feel that he is able, and he will learn to express himself without fear of criticism or condemnation, because he knows that he is accepted as he is.

The child in a healthy classroom climate will indicate high morale in being prepared to tackle a task even though the outcome is not
assured, to work at a rate compatible with his ability, to do unpleasant tasks before pleasant ones, and to trust and have confidence in others. It would be an over-simplification to describe emotional development as a progression from infantile states of dependency to that of adult independence, because the course it follows is a fluctuating one, and even the adult achieves only relative emotional independence of others, but a healthy emotional atmosphere at school will help the child to develop healthy perception of himself and his relationship with others.

The child lays the foundations for rewarding social contact with his peers while in the primary school. Although social play begins at about three years of age, it retains a fairly individual character until children enter into games requiring co-operation, rivalry and competition around about school-going age. Thereafter, friendships emerge in which children seek out the company of two or three individuals with whom they prefer to share activities. Activities in which children need to co-operate with others and acquire socially acceptable ways of dealing with conflict and personality clashes are an important function of the child's experience in the primary school. Children are at their most teachable and their most vulnerable during their early years of schooling, and this is particularly true of their social development. The teacher who is caring and compassionate soon evokes the same response in the children, who by his example learn to identify with each others' joys and sorrows and to respect the feelings and views of others. This kind of social nurture is a particular responsibility of the Primary School teacher.

Emphasis has been placed thus far on the many dimensions of growth experienced by children in their progress towards adulthood. In
seeking to describe the combined psychological and physical factors which determine an individual's characteristic modes of behaviour and thought which may be described as personality, psychologists have sought to identify patterns of behaviour derived from the way in which conflicts are resolved. In a sense these approaches to growth, both physical and psychological, stress ways in which the child is like all children or like some children. But the child is in another sense like no other, for although he shares certain identifiable elements with others, he is a unique being with a combination of aptitudes, abilities, ideals and attitudes which make him different from any other. It is in attempting to meet the needs of different children, both as individuals and as members of a group, that teaching presents one of its greatest challenges.

A VIEW OF KNOWLEDGE

In the survey of approaches to teaching undertaken in this paper, at one end of a continuum knowledge has been depicted as a body of universal truth (Perennialist) while at the other end it is seen as subjective experience unique to each individual (Existentialist). The notion of knowledge as a fixed store of information to be transmitted to the young is applicable only to the most basic skills, and even here allowance must be made for changing circumstances and techniques. What we call knowledge is based upon a tentative grasp and codification of what we perceive to be the truth at a given point,
but it is subject to change and modification in the light of new findings and insights. This is particularly true of Mathematics and the Sciences, where the proliferation of knowledge has led to far-reaching changes. Much of knowledge, then, consists of the best explanations advanced to date for explaining phenomena, and is valid pending the presentation of further evidence. The rapidity with which knowledge of this sort becomes obsolete has in many cases led to a shift in emphasis from teaching information to inculcating information - finding skills, general substantive principles, formal principles of enquiry and self-management techniques.

One of the most important features of knowledge lies in the need for each individual to appropriate and use it for himself. Whitehead has referred to 'inert' ideas, which he sees as

"ideas that are merely received into the mind without being utilized, or tested, or thrown into fresh combinations."

(Whitehead, 1959, p.1-2)

Knowledge is thus more like a catalyst in promoting the reactions of learning and growth as a result of the encounter between human capacities and increasing knowledge.

In his search for 'knowledge that', the child needs to develop not only 'knowledge how', but also the openness, flexibility and willingness to appropriate that which appears to be relevant and well-founded. Three inclinations are necessary for the successful pursuit of knowledge - the inclination to apply knowledge, to be critical and to be curious.
THE CURRICULUM

The curriculum represents a carefully selected corpus of what is deemed, by certain power figures, to be the most important and worthwhile knowledge that educands should have. It is generally composed of three elements: objectives which outline qualities of mind, skills and kinds of knowledge which it is intended to develop; content or subject matter; and method, which suggests the activities which teachers and pupils will engage to attain these goals. Sometimes evaluation is added as a fourth component, as a means of revealing how far success has been achieved in terms of curriculum itself and pupil progress. There is a danger that in an examination-oriented structure the assessment techniques may be allowed to determine objectives, content and even methods.

In the broadest sense, the curriculum may be seen to incorporate all the experiences which are offered to students under the auspices of direction of the school, while in a more formal and restricted sense, it is seen to be the systematic sequence of courses or subjects that form the school's instructional programme. The wide view combines three sub-categories of curriculum into one. These are the academic compounds or subjects offered, the extra-curricula activities which are planned but voluntary activities sponsored by the school, and the hidden component, which refers to unplanned learning activities that are a natural by-product. Among the most crucial topics in the hidden curriculum are racial bias, sex roles, rewards and punishment, and competition. A curriculum based on the wide view of its scope is more likely to give the teacher control, whereas the narrow view sees the curriculum as a sophisticated plan complete with goals, methods and activities which the teacher is required to implement faithfully. Such a detailed, pre-planned curriculum leaves little room for
teacher initiative and is in many respects similar to the 'teacher-proof' programmed curricula advocated by some.

The key to effectiveness in any curriculum is dependent upon the teacher's role in translating it into action, for he imbues the material with his own attitudes and values.

The traditional concept of a curriculum is often portrayed as content-centred and divided arbitrarily into subjects. It is criticized on grounds that it allows propositional knowledge to take precedence over the development of understanding, judgment and imagination. Some criticism of such a traditional approach is clearly misdirected, especially when it is directed at the supposed weakness of formal instruction and of class lessons, for a subject curriculum can be combined with individual and group teaching and with some forms of integration. Criticism of the narrowness of aims and neglect of social and emotional development is again a misdirected attack on the curriculum instead of on the methods employed by the teacher.

The alternative to the subject-centred curriculum has been described as child-centred or progressive. The interest in such learning incorporates what may be called 'the principle of double effect'. What the child learns not only has obvious effect in terms of what is sought after or accomplished, but also in terms of collateral learning. The child-centred conception of aims tends to concentrate on the second emphasis, and to de-emphasize the focal subject content of learning in favour of relational aims. Within this approach there is need for balance and a spread of activity, for an emphasis on child-centred relational aims could result in a heavy bias towards the arts and crafts at the expense of Mathematics and Science, and a
convergence of activity on existing interests, with some activities being repeated in different years without improvement.

In this country the curriculum for the Junior and Senior Primary School is constructed on a broadly provincial basis about a core syllabus, and allowance is made for regional differences in the form of built-in choices or options. Unwillingness to exercise the permitted latitude in interpretation and implementation of the curriculum, rather than any real constraints, often results in a slavish observance of the outline it provides, and worse, an uncritical reliance upon the textbooks purporting to cover the field in question.

Of current issues related to the curriculum few have raised greater debate than that of the teacher's accountability to society for what has or has not been learned in the schools. Although as yet confined to the U.S.A., the implications could have a bearing on this country as well. Fired by disenchantment with the poor academic performance of those granted school-leaving diplomas, the public have demanded minimum performance standards of competency for basic literacy skills, the introduction of criterion-referenced testing programmes to indicate a student's exact performance in relation to a prescribed set of learning objectives, the abolition of social promotion from one class to another and its replacement with achievement-based promotion, and the replacement of standard salary schedules for teachers with a merit system evaluated on the basis of scholars' achievement gains.

THE TEACHING/LEARNING PROCESS

Reduced to its simplest terms, teaching refers to a situation in which
there are at least four elements which interact with one another in a purposeful and intentional manner: these are a teacher, a learner(s), knowledge and a teaching/learning process. The concept of interaction provides a good starting point, for it reminds one that the classroom situation is not a static social system, but one which is in motion and in a state of dynamic disequilibrium.

Peters and Hirst have rightly seen teaching as not just a matter of the meeting of minds between teacher and pupil, but as a personal encounter. The teacher is first and foremost a person, not a deliverer of information, and in the act of teaching he is both revealing himself as a human being and sharing what he knows values and represents in a unique expression of his own personality. The teaching situation is a particular type of human relationship in which the integrity and maturity of the teacher are as important as the knowledge he imparts.

Teaching demands that the teacher should be motivated by a desire to serve the interests of the children and to set aside his own needs in the process of guiding their development. It involves a willingness to spend time in helping others to master that which he has long understood, and a readiness to share in their joy in achievement or pain in understanding problems.

Teaching involves the need for the teacher to perceive children accurately and to interpret his observations truthfully. The teacher who expects a child to succeed will help him to do so, and the teacher who treats a child in a way that makes him regard himself as valuable will help him to gain a realistic picture of his own capabilities and to accept his limitations. To label a child as stupid because the teacher cannot reach him, or to make judgments about a child by
inference is unworthy of a professional person, and yet this kind of trap is one into which many teachers fall.

The ideal teaching situation is that in which a pupil seeking knowledge is guided towards it by a teacher in a process which affords satisfaction to both. The principal factor in this relationship is that of mutual esteem, based on the teacher's respect for the individuality of the child, and the child's trust in the teacher, which is generated by the confidence that the teacher likes, understands and wishes to help him.

Teaching in the Primary School is usually on a class teacher basis, with the same children exposed to their class teacher for most of the day. The need to know and to understand each child is of paramount importance to both, for a child's joy in the adventure of learning or leaden-footed existence through the eternity of a year of his life hinges upon the kind of rapport he establishes with the teacher. The initiative is with the teacher, and he wields greater power and responsibility the lower he teaches in the school. The perceptive teacher will lose no time in learning the names of his class and in using each opportunity to learn all he can about them. Even such mundane routines as nail inspection can provide the opportunity for an individual word of encouragement or sympathetic ear for what is uppermost in a child's concern, and the sight of nails bitten to the quick speak more eloquently of tension and anxiety than many words!

These insights help the teacher to create a climate for learning which is generated by mutual understanding, the setting of reasonable goals and reasonable expectations, and which enables each child to embark on a new day with a feeling of security and in a happy sense of anticipation.
Teaching is often seen as a process of socialization in which the child is helped to enter his cultural inheritance. This does not imply that he should accept it as an heirloom to be preserved intact, or that he should be moulded into certain social roles in preparation for membership of a group, but as 'homo discens' he needs to understand why he is required to behave in a certain fashion. His mind must be engaged in understanding and appropriating for himself the values of his culture, and in acquiring acceptable behaviour in personal and social matters.

Teaching involves contact between teacher and child, but also between child and child. The role of the teacher in engineering situations in which children learn to work together as well as play together is an important one in fostering the social skills of co-operation and sharing. Where the spirit of competition between individuals is not allowed to dominate the educational process, this learning is easier to achieve.

The teacher's role as teacher is meaningful in itself, and there should be no need to try to enhance its value by equating it with 'friend' or 'big brother' to the child. The child's family members are his biological inheritance, while friends are those whom he chooses on the basis of similar interests and maturity, and he has a whole classroom of peers from whom he can select those who will fulfil this need. There is but one class teacher allocated to the child each year, whose greater experience of life, education and sense of responsibility have equipped him for his special role in relation to the child.

In any Primary School class it should be possible for the teacher to
organize the teaching process in such a way as to allow as much opportunity as possible for one-to-one contact with the child. In part it may be achieved by maintaining an involvement with what is going on in the class which Jackson stresses as being central to teaching, and which Kounin describes as 'with-it-ness', or the cultivation of awareness. Even more may be done by using group and individual tuition wherever possible. Class teaching may be reserved for those occasions where certain kinds of knowledge which are easy to assimilate are handled, or where there is a sharing of inspiration provided by good stories, poetry or music, or where discussion affords the opportunity to deepen experience and acquire skill in listening carefully to the argument of another. Group teaching permits the teacher to give more attention to individuals in tasks like writing, mathematical processes, reading, the use of dictionaries and crafts, and even the short pupil-contact time that this provides enables the teacher to identify individual difficulties and handicaps, as well as to observe the particular interests or talents of each child.

Teaching is a complex form of communication between teacher and child. While the teacher's communication with the child is the aspect which comes immediately to mind, the importance of what the teacher has to say must not make us deaf to the other side of the conversation, which is what the child wishes to communicate to the teacher.

Talkativeness is the besetting sin of most teachers, and it was a perceptive person who observed that "the Almighty in His wisdom gave us two ears but one mouth, that we should listen twice as much as we speak". It is easy for the teacher to forget that a vital part of communication is listening, and one of which he needs to be reminded. No child can pay a teacher a greater compliment than to class him as the kind of person who 'really listens'. Sometimes this involves not
only listening to the words through which the child tries to communicate, but to the meaning which lies behind them, and which he often lacks the skill to articulate.

Communication in teaching often employs more than language, for the success of a teacher may depend in large measure on his perception and understanding of such natural signs as posture, tone of voice and facial expression. It is indeed true that 'Light in the child's mind shows up in the light on his face'. Similarly, children are quick to read the unspoken communication conveyed by the teacher's sigh or smothered groan.

Communication is a transactional process in which people change and adapt their behaviour in response to what they perceive the other person to be communicating to them. The teacher who is not really interested conveys his indifference, not by words, but by his bearing and actions, which speak an eloquent language of their own and communicate his attitude to the children.
BIBLIOGRAPHY


PETERS, R.S. ( ). Quoted in About to Teach. P. Souper. (p.109).


BOOKS CONSULTED


CONTRASTING APPROACHES TO RESEARCH ON TEACHING

Introduction

Since the mid 1950's there has been an upsurge of interest in teaching as a significant area of study. Much of the literature generated reflects an approach which aspires to scientific precision in research design and hypothesis construction and which has been preoccupied with measurement and statistical analysis. (BIDDLE, 1981, p 49.) This mainstream or positivist approach, particularly characteristic of the U.S.A., is sometimes known as methodological empiricism or quantitative research. (BELLACK, 1981, p 59.) It is based on two major concepts: first, that human behaviour is essentially law governed; and second, that it should be investigated by the methods of natural science. A challenge to this orientation emerged in the 1970's in a school of thought described as interpretative or qualitative research, which is characterized by a concern for the individual and seeks to understand and interpret social phenomena from the inner perspective of man himself. This approach leans more to the 'newer' sociological than the psychological styles of research (NISBET, 1980, p 5), and contends that most of the studies within the traditional approach have addressed the wrong questions, have followed inappropriate methods and have consequently contributed little of significance. (POPKIEWITZ, 1981, p 157.) This approach has gained support in Britain and Europe, but until fairly recently has had little impact in the U.S.A. (KARABEL AND HALSEY, 1977, p 47.)

This paper will attempt to examine the differing orientations and principles of enquiry associated with each of the approaches,
although it must be recognized that the division into two camps is not always clear cut. Rather than view the situation as a confrontation, an attempt will be made to examine the strengths and weaknesses of both viewpoints, and to interpret the emergence of a range of styles as a spectrum, ranging from a positivistic to an ethnogenic approach to research. There are many ways of knowing, and no one method can answer all the questions or offer all the necessary perspectives. In the writer's view the diversity of styles adds to, that than detracts from, the power of educational research, and we would do well to concentrate on significant problems and to draw on the concepts and methods of whatever disciplinary source gives promise of dealing with the problem most adequately. The possibility of detente between the opposing camps and a mutual exploitation of findings offers hope that practices such as action research may point the way to more fruitful studies.

Philosophical bases of contrasting research orientations

The positivistic and interpretative views on research stem initially from different conceptions of reality, knowledge and human behaviour. Burrell and Morgan (1981, p 3) have identified four sets of assumptions which help to explain the contrasting orientations.

1. **Ontological assumptions** about the nature or essence of the teaching phenomenon pose the problem of whether reality is external to the individuals concerned and imposed on consciousness from without, or whether it is a product of individual consciousness.

2. **Epistemological assumptions** concern the bases of knowledge. The nature of knowledge may be seen as real and capable
of being transmitted, or as more subjective, spiritual and transcendental, based on experience of a unique and essentially personal nature. The position taken by the researcher here will affect the way he uncovers knowledge of social behaviour. For the quantitative researcher, who sees knowledge as objective and tangible, this viewpoint will demand a detached observer role, together with an allegiance to the methods of science. The qualitative researcher will see his task as one which imposes an involvement with his subjects, as he sees knowledge as personal, subjective and unique.

3. Human nature and the relationship between human beings and the environment. Two images of the human being emerge from the third set of assumptions. One views him as responding mechanically to his environment, while the other sees him as the initiator of his own actions.

"Thus we can identify perspectives in social science which entail a view of human beings responding in a mechanical or even deterministic fashion to the situations encountered in their external world.... This extreme perspective can be contrasted with one which attributes to human beings a much more creative role: with a perspective where free will occupies the centre of the stage; where man is regarded as the creator of his environment, the controller as opposed to the controlled, the master rather than the marionette." (Burrell and Morgan, p 4.)

The actual position adopted by a researcher may be pitched somewhere in the range between these two viewpoints.

4. The above assumptions have direct methodological implications, as each demands different research methods.
For those who adopt an object (positivist) approach the choice of research instruments will be limited to a range of traditional options such as surveys, experiments etc., and the emphasis will be on data that is objective, external, quantifiable, explanatory, publicly verifiable and replicable. If, on the other hand, the interpretative view of social reality is favoured, then the principal concern will be with an understanding of the way an individual creates, modifies and views the world. Unstructured interviews, participant observation, accounts and conversations will supply research data which will be subjective, internal, qualitative, interpretative, unique and negotiable.
The belief that the application of scientific principles to the investigation of social phenomena will yield the same success in uncovering law-like regularities and principles as that achieved in the natural sciences lies at the heart of the empirical-analytical approach, which is sometimes also known as a normative approach.

"Positivism is a broadly defined movement in the history of man's intellectual development, the distinguishing feature of which is the attempt to apply to the affairs of men the methods and principles of the natural sciences." (HEATHER, 1980, p 22.)

The dominant research styles of this approach are patterned after the natural sciences. Kerlinger (1969, p 1127), for instance, is quite clear that educational research should be limited to the objective, precise, quantitative perspective. Travers (1978) has defined this view of research as an activity directed toward the development of an organized body of scientific knowledge about the events with which educators are concerned. He sees the goal of educational research as the discovery of laws and generalizations about behaviour that can be utilized to make predictions and control events within the educational context. Mouly restricts the term "educational research"

".... to systematic and scholarly efforts designed to provide educators with more effective means of attaining worthwhile goals ..... It will be reserved for activities designed to discover facts and relationships that will enable educators to make the educational process more productive. Conversely, any
systematic study designed to promote the development of education as a science can be considered educational research...." (MOULY, 1978, p 26.)

The basic assumptions of scientific research

The following are the kinds of assumption that are held by scientists, often implicitly, as they go about their work.

Scientists hold that certain kinds of reliable knowledge can only originate in experience, and that the tenability of information depends on the nature of empirical evidence that can be provided for its support. (ATY, JACOBS AND RAZAVIEH, 1972.) Barratt has stated it like this:

"The decision for empiricism as an act of scientific faith signifies that the best way to acquire reliable knowledge is the way of evidence obtained by direct experience." (1981, p 8.)

The following five steps have been identified in the process of empirical science:-

a) experience - science starts with an observation to which others are added.

b) classification - this is the formal systematization of otherwise incomprehensive masses of data.

c) quantification - a more sophisticated stage where precision of measurement allows more adequate analysis of phenomena by mathematical means.

d) discovery of relationships - the identification and classification of functional relationships among phenomena.
Scientists assume that events have causes which can be found through observation, and proceed on their task of discovering and understanding these. The universe is seen to conform to a lawful pattern, and the scientist aims to formulate ideas and principles which will account for such regularities in terms of laws and relationships. These will give a firm basis for prediction and control.

The idea of parsimony is another basic assumption: phenomena should be explained in the most economical way possible. The principle of generality embraces the concept that observations of the particular can be generalized to the world at large. (COHEN AND MANION, 1980, p.16.)

The attitude of mind of the scientist is one which his highly sceptical, bent on achieving impartiality and objectivity, and respectful of facts rather than value judgements.

The ultimate level of science is theoretical science, for it seeks to gather together all the isolated bits of empirical data into a coherent conceptual framework of wider applicability and prediction. Theory is described by Kerlinger as

"... a set of interrelated constructs (concepts) definitions and propositions that presents a systematic view of phenomena by specifying relationships among variables, with the purpose of explaining and predicting phenomena." (1969, p 1127.)
Scientific theory represents our best efforts to understand the world in which we live, and holds good only until replaced by a theory with greater validity or stronger explanatory power. While accepting that theory is by nature provisional and incomplete, most scientists believe that there is a final scientific truth about the universe to which successive scientific theories ever more closely approximate. Scientific theory is thus a stage in the search for universal laws which explain and govern the reality which is being observed. Many scientists regard theory as complementary with research, and researchers like Suppes are highly critical of the "triviality of bare empiricism" (SUPPES, 1974, p 3 - 10) and endorse the view that a researcher should begin his investigation by fitting his study into the framework of existing theory.

ASSUMPTIONS ON WHICH POSITIVISTIC RESEARCH ON TEACHING IS BASED

The general principles of science require interpretation when applied to specific areas of enquiry such as teaching. The following interrelated assumptions underlie the mainstream approach to research on teaching.

a) Following in the empiricist tradition, positivism limits enquiry to what can be firmly established by means of observation and experiment.

b) Positivism implies the unity of scientific method within the diversity of subject matter of scientific investigation. Moully believes

"It is not inconceivable that some day a single theoretical system, presumably unknown at this time, will be used to explain the behaviour of molecules,"
animals and people." (p 40.)

c) There is a commitment to a disinterested science, for the statements of science are believed to be independent of human goals and values. Scientific theory is seen as an explanation of how things work, of what is; moral theory, on the other hand, concerns what ought to be. Empirical theory therefore separates itself from the interests of people who operate in social and human concepts. Mouly draws attention to the fact that many of the most persistent problems of education are ethical and moral problems which cannot be solved by the kinds of activity science engages in. (MOULY, 1978, p 16.)

d) The social world is seen as a system of interacting variables that are distinct and capable of being studied independently of each other. Teaching is thus reduced to scientific variables that can be measured independently of other elements in the system. The kinds of variables involved in investigations of this kind have been classified by Dunkin and Biddle in the following way. Presage variables, involving certain teacher characteristics; context variables, involving grade level, subject matter, size of class and other features of the context within which the teaching and learning take place; process variables, which describe what goes on in teaching-learning situations such as the ways in which the teachers and pupils interact and behave; and finally, product variables, which denote the amount of learning, or achievement of educational objectives. By interrelating the variables six possible pairings may be derived - viz. context-process, context-product, presage-process, presage-product, context-presage and process-product, and it is believed that from these the
cause of behaviour within the system can be known. The idea of causality is used to define relationships among empirical variables that can be explained or manipulated to produce conditionally predictable outcomes.

e) There is a belief in the need to formalize knowledge. Concepts about teaching, for example, are re-ordered into specific variables that have invariant meaning and can be measured concretely. By making units of analysis invariant, the researcher can create 'independent' and 'dependent' variables that show how each unit is related to others. Variables can thus be compared and manipulated in order to confirm or disprove hypotheses.

f) The search for formal and disinterested knowledge compels the researcher in this tradition to rely upon Mathematics in theory construction. Quantification of variables enables researchers to expose ambiguities and contradictions in the system's variables.

"Mathematics models are extremely powerful tools, not only for systematizing research on individual theoretical formulations but also for controlling comparisons between competing formulations."

(SNOW, 1974, p 96.)

Mathematical models may well be used by other research paradigms, but they are of particular importance to the researcher in the positivist tradition.

METHODOLOGICAL CHARACTERISTICS OF THE POSITIVIST APPROACH
One of the most important methodological characteristics of this approach is its adherence to a set of procedures which shows not only how findings have been arrived at, but which
is sufficiently clear for others to replicate. The term 'scientific method' is in reality a cloak for a number of procedures which vary in their degree of sophistication depending on their function and the particular stage of development a science has reached. The following procedures are always present in the progress of a science and may be drawn upon by the researcher according to the kind of problem which confronts him. Cohen and Manion (1981, p 13) describe these as

1. Definition of the science and identification of the phenomena which are to be subsumed under it.
2. Observational stage at which the relevant factors, variables or items are identified and labelled.
3. Correlational research in which variables and parameters are related to one another and information is systematically integrated as theories begin to develop.
4. Systematic and controlled manipulation of variables to see if experiments will produce expected results, thus moving from correlation to causality.
5. The firm establishment of a body of theory as the outcomes of the earlier stages are accumulated.
6. The use of the established body of theory in the resolution of problems or as a source of further hypotheses.

Of particular interest to the mainstream positivist researcher are stages 2, 3 and 4, for this triumvirate of research methods, often referred to as the "descriptive-correlational-experimental loop" (ROSENSHINE AND PURST, 1974, p 96) has become the most widely accepted model within which to conduct research on teaching. These methods will be examined more closely in relation to investigations of teaching.
1. DESCRIPTIVE RESEARCH

Many educational research methods are descriptive, they set out to describe and interpret what is. Perhaps the most commonly used descriptive method in the mainstream tradition is the survey.

"This is a broad classification of research methodologies, comprising a variety of specific techniques and procedures from the standpoint of their common purpose, which is to determine the present status of a given phenomenon." (MOULY, 1978, p. 179.)

Descriptive research differs from experimental research in that it provides an investigation of phenomena in their natural conditions, as opposed to experimentation which is directed to the isolation of causative factors under controlled conditions.

Descriptive research may be classified into two broad sections, namely, descriptive studies oriented towards the description of current status, and analytical studies, in which phenomena are analyzed in terms of their basic components.

1.1 DESCRIPTIVE STUDIES

1.1.1 Surveys constitute a primitive type of research in that, being exploratory in nature, they are concerned with accurate assessment of the incidence and distribution of phenomena. Their value in providing an adequate knowledge basis as 'decision' rather than 'conclusion' oriented studies should not be overlooked, for they provide information.
on which to base sound decisions. Their value, however, is not limited to fact gathering, for they are also concerned with determining the degree to which underlying factors exist in given situations, and in estimating their relative importance.

Wherever possible, mainstream researchers believe that survey data should be integrated into a theoretical structure:

"Doing descriptive research without a minimum of theorizing is like putting together a jigsaw puzzle with the blank side up. The picture obtained from non-theory oriented research usually makes about as much sense as the lines delineating the pieces on the blank cardboard side of the puzzle."

(MOULY, 1978, p 30.)

Conducted in this way descriptive research provides the spade work on which more sophisticated research can be built, and obviates the uncritical collection of relatively meaningless data. Nisbet (1980, p 4) warns that the result of information gathered without hypothesis or theory is 'news' rather than scientific fact.

Two problems of importance in research are particularly crucial in surveys. The sample on the basis of which information is collected must be representative of the population under
investigation, and the validity of the techniques or instruments used in gathering the data is very important to the validity of the conclusions.

There is tremendous variation in the scope and complexity of descriptive research. This may range from surveys carried out at national level using samples from a total population to small scale surveys within a school.

1.1.2 Survey testing

The most systematic survey conducted in education is the standardized achievement rating programme. This, together with pupil appraisal in intelligence, special aptitude, personality adjustment and vocational interest, is not usually regarded as research because the aim is not directed to deriving generalizations applicable beyond the class or school.

1.1.3 Programme Evaluation

Although basically survey research, programme evaluation is more directly tied to rational decision making than to research as its primary concern is to assist policy makers in choosing between alternate courses of action concerning given programmes. Whereas research is concerned with the derivation of lawful relations between phenomena that can be generalized, evaluation is primarily concerned with securing dependable answers concerning the functioning of single programmes.
TOOLS OF DESCRIPTIVE STUDIES

Questionnaires and structured interviews are the principal research tools of descriptive studies, and are the instruments used to convert into data the information directly given by a person. The questionnaire and the structured interview - (which is, in a sense, an oral questionnaire) - makes possible the measurement of what a person knows, (knowledge and information), what a person likes or dislikes (values), and what a person thinks (attitudes and beliefs). This information can be converted into quantitative data by using attitude scaling or rating scale techniques, or by counting the number of respondents who give a particular response, thus giving rise to frequency data.

The strengths and weaknesses of each device are discussed very clearly by Mouly (1978, p 189). In general, these methods present problems such as securing the cooperation of subjects when being interviewed or when completing questionnaires; getting them to reveal what is, rather than what they think conforms to society's patterns or their own self-interest or the expectations of the researcher; and the subjects' difficulties in verbalizing what they think and feel.

"Questionnaires do not necessarily measure what people believe but what they say they believe, not what they like but what they say they like." (MOULY, 1978, p 216.)
1.2 ANALYTICAL STUDIES

1.2.1 Analysis is one of the fundamental techniques underlying the whole process of research. It is also a research method in its own right, covering a broad category of techniques ranging from frequency counts to observational and rating studies of various degrees of complexity and sophistication.

Analysis is used to identify and allocate phenomena into distinctive categories within which relationships can be discovered. It is effective only to the extent that the breakdown of phenomena is into categories relevant to the study being undertaken, and provided that it is not carried to the point where the phenomenon ceases to exist as an entity.

1.2.2 Content analysis

From studies of a tedious clerical nature involving frequency counts of phenomena, content analysis has progressed to collecting information only after they have been fitted into a scientifically meaningful context e.g. historical accuracy, exposition of acceptable social ideas, readability etc. as a basis for assessing a History text book.

1.2.3 Factor analysis

This is an analytical technique used to reduce the matrix of intercorrelations among data to the smallest number of factors capable of accounting for the differences in individual performances.
Hypothetical constructs such as a verbal or numerical factor are extracted from the various measurements which appear to have a high loading on a given factor.

1.2.4 Observational studies

Naturalistic observation as a descriptive research activity provides useful knowledge which helps to formulate exploratory hypotheses. Certain classifications are developed to help organize what is observed, and the means employed can range from very simple to the most scientific and precise, involving the use of mechanical and electronic gadgetry to supplement human observation.

To qualify as scientific observation the following criteria are suggested by Mouly (1978, p 216)

a) The observation must be systematic rather than haphazard, and should be directed at those aspects of a situation considered important from the standpoint of the study. The effectiveness of such observations will depend upon the significant aspects having been correctly identified initially, and carries an inherent risk of overlooking important aspects outside the observer's frame of reference.

b) Observation should be objective and free from bias, notwithstanding the fact that it should be guided by a clearly defined hypothesis.

c) Wherever possible, scientific observation should be quantitative because this will increase the precision of the data obtained and make easier
their analysis.
d) The criteria of reliability and validity must be met. This presents a particularly difficult problem in view of the difficulty in controlling preconceptions and bias on the part of the observer. In his emphasis on the importance of teaching, B.O. Smith helped to focus attention on the classroom itself as a subject for scientific investigation. "If very little is known about a phenomenon, the way to begin an investigation of it is to observe and analyze the phenomenon itself. It must be observed, analyzed and classified into its various elements. Until the factors which are involved in the phenomenon are understood and described there is little likelihood that significant and correlational, predictive, or causal studies can be made." (BELLACK, 1981, p 61

Many researchers have attempted to develop descriptive schemes for the analysis of classroom teaching. Mirrors of behaviour (SIMON AND BOYER, 1970) is a 15 volume compilation of 79 analytical schemes. Many of these reveal a fundamental weakness in that their construction without reference to a theoretical framework contributes little to an understanding of teaching, and for the most part they represent collections of miscellaneous terms without an underlying conceptual rationale to describe and limit the categories included.
Bellack (1981, p 62) makes the interesting point that the compilers of such systems appear to have subscribed to a view that their principal purpose was to identify discrete teaching variables which would serve as process variables in process-product research, and that this orientation has deflected attention from analytical studies of the classroom designed to describe and explain the process of teaching itself.

Clifford (1974) points out that underlying enquiries focused on student outcomes lies a belief that changes can be brought about as a result of understanding the causes, but that in practice such changes come about through social and cultural factors rather than research. She sees a special role for researchers in the conserving role of 'making sensible' that which is stable in education. At least some time should be directed to understanding the roots of classroom practice and the forces in school and society which sustain them.

In evaluating observation research it is important to notice that unlike the use of survey methods such as the questionnaire and interview where the respondent provides data, observation provides an opportunity to get at some information at first hand. Aspects of behaviour such as attitudes, feelings and emotions, however, are difficult to ascertain except from inference.
The difficulty of getting the required data free from the many co-occurrences in the classroom situation is solved partly by the possibility of using video-tape recording, but against this must be weighed the possibility of distorting the phenomenon by introducing distractions of this kind. In fact, the very presence of a non-participant observer will serve to distort the teaching situation to some degree.

As a scientific method, the establishment of the validity and reliability of data obtained in this way presents particular problems. (ASHER, 1976, p 134.) In spite of skill in observational strategies, a clear frame of reference and apparent lack of bias, the observations made are likely to present selectivity of perception and certain distortions. When conducted under optimum conditions, however, supporters of the scientific tradition are prepared to concede that such studies can yield useful results.

1.3 CASE STUDIES

Case studies represent an intensive, detailed analysis and description of a particular unit (individual, group or institution) within the context of its environment. Case studies may be used as a method of evaluation in an educational programme, as an ancillary in formal evaluative research, or as a follow up to more rigorous investigation. At the centre of a case study lies a method of observation. This may be either participant or non-participant in nature.
The advantages offered by case studies may be seen as providing the means of complementing more rigorous experiments to the same kind of problem, providing a complete and structured picture of a unit, permitting study in a natural context and allowing more holistic qualities to be taken into account. Further, its intensive nature may bring to light variables and interactions for further attention, and can provide the investigator with insights for further hypotheses. The method makes it easier to reformulate a problem once an investigation is under way, and to abandon false trails.

The disadvantages include the fact that findings cannot be generalized to other situations as they are limited in their representativeness, and the method is scientifically weak in that the degree of control over variables operating is slight. Well-trained researchers can minimize the subjective bias to which this method is prey.

1.4 DEVELOPMENTAL STUDIES

The main purpose of developmental studies is to establish patterns of development. Although originally retaining their biological orientation in terms of having to do with the growth of perceptual and motor skills of the young, they have been proved to apply to cognitive and affective domains as well. For the teacher the most important educational advantages to be gained through studies of child development probably lie in the field of instruction and learning. Both curriculum and teaching methods can be made more effective if applied to an understanding of developmental trends. The emphasis in
child development studies has been on descriptive studies, but they are also amenable to experimental research.

Three main approaches can be identified (COHEN AND MANION, 1980, p 48.) Longitudinal studies require the investigator to study the same subjects over a period of time. In Britain the term 'cohort' or 'follow up' study is used to describe successive studies, whereas in the U.S.A. the term 'panel study' is applied. Cross-sectional studies refer to studies of different groups of children at each level of development on the assumption that groups are comparable, while trend or prediction studies examine data to establish patterns of change that have already occurred in order to predict what will be likely to occur in the future.

Longitudinal and cross-sectional studies have both advantages and disadvantages. Longitudinal studies offer continuity and are uniquely able to identify patterns of development and to reveal factors which elude other research designs, but they are expensive in terms of time, personnel and finance. Provision has to be made for loss of members of the original sample, the loss of motivation over a period of time, changes in research personnel and alterations in the school structure. The cross-sectional studies are less expensive in terms of time and money and yield results more speedily. They are particularly vulnerable to sampling errors, particularly since different subjects who may not be comparable are involved at each age level.
Appraisal of Descriptive Research

Descriptive research does not appear to be held in particularly high esteem by educational researchers in the mainstream tradition. It has been argued that it is not so much that the techniques are unsophisticated or inadequate but that the use of them in education has been superficial. This caution is reflected in the work of Asher, who says

"Research was once described as doing your best to understand a situation with the tools available to you. Descriptive research is often the only tool available, it can be quite worthwhile when well used." (ASHER, 1976, p 134.)

The tendency of researchers in the past to accept superficial relationships derived from descriptive studies at face value rather than submit them to further research has been responsible in part for this wariness.

2. CORRELATIONAL RESEARCH

One of the primary aims of those who subscribe to the mainstream approach is to discover relationships among variables in the teaching phenomenon with the view to predicting and ultimately controlling their occurrence. Much of the research on teaching from this orientation is involved in the discovery of relationships such as whether there is a link between a particular way of teaching and a desired student outcome.

Several characteristics of correlation research have led to its becoming the most favoured method in investigating teaching. (COHEN AND MANION, 1980, p 134.) It is a suitable method when variables are complex and do not lend themselves to experimental method and controlled
manipulation, which is clearly the case with classroom research. Correlation is appropriate as a method when there is a need to discover or to clarify relationships, and here it has seemed to offer particular hope in identifying the variables associated with student outcomes particularly since the correlation statistic is able to indicate degrees of relationship. Multiple correlation is able to establish the degree of association between three or more variables simultaneously, such as the degree of association between academic achievement, intelligence and neuroticism, whereas partial correlation aims at establishing the relationship between two variables after the influence of a third has been controlled.

Prior to 1960 (SHULMAN, 1981, p 87) educational researchers supposed that particular combinations of teacher traits, aptitudes, personality or attitude defined teacher effectiveness, but when this confidence that presage-process research would yield valuable insights was not fulfilled, attention was turned to process-product research, and many thousands of studies have subsequently been directed at attempts to relate variations in the behaviour of teachers to variations in children's academic achievement.

PROCESS-PRODUCT RESEARCH
There has been considerable disappointment at the comparatively slow progress and inconsequential findings of process-product research. In the preface to the Second Handbook of Research on Teaching R.M.W. Travers says "Those who participated in the First Handbook would never have guessed that a decade later, authors of
the Second Handbook would be having even greater difficulty in finding significant research to report than did their predecessors." (TRAVERS, 1974, Preface.)

In spite of the inconsistent and often insignificant findings of most process-product studies reported in reviews of teaching effectiveness such as Dunkin and Biddle's (1974) Study of Teaching, Gage is not discouraged. He remains convinced that what is required for an adequate scientific basis for teaching is the study of regular, non-chance, statistically significant events related to classroom practice, and in particular the study of reliable relationships between process and product, between what teachers do in the classroom and what children learn as a result. (GAGE, 1978.)

He sees the explanation for the disappointing results achieved thus far as being attributable in part to the complexity of what goes on in the typical classroom and to the relatively small size of samples used in conventional process-product studies. He suggests that when these inadequacies are taken into account by testing for the significance of combined results, statistically significant clusters of results can be achieved. However, even if the clustered studies do produce significant results, he does not believe that they will constitute an adequate scientific basis. He is aware of the weakness of correlation studies, and maintains that a truly scientific basis will be established only when research can demonstrate empirically by means of quantitative experimental studies that the relationships suggested in the correlational studies are causal.
Doyle (1978) has criticized process-product research by maintaining that researchers in this tradition oversimplify what actually happens in classrooms by ignoring events that intervene between specific teaching behaviours and learning outcomes, such as student behaviour in the classroom, antecedent lessons, etc. He also criticizes process-product research on the grounds that it focuses too narrowly on behaviour that is easily observed, and that by emphasizing the measurement of low-inference behaviours that can be directly observed many significant, but less easily quantifiable factors, are ignored. The naive assumption that causal influence always flows from teacher to student in stable and isolated time sequences is patently untrue, for we know that students also influence the performance of teachers, and Doyle is equally aware of this weakness in process-product research.

Doyle suggests two supplements to process-product research. Firstly, he urges that account be taken of mediating processes such as student responses and psychological processes that govern learning, and secondly, he draws attention to relationships between environmental demands and human responses in the classroom-ecology paradigm he describes. The latter involves a type of differential attentiveness and requires that the student become skilled in reading cues.

Gage acknowledges these problems, but does not believe that they invalidate the process-product paradigm as a means of obtaining reliable information. He suggests instead that the mediating and classroom ecology variables
described by Doyle should be used to construct a more complex process-product paradigm.

Process variables would still consist largely of the teaching behaviours, strategies and techniques of teaching, and these would in turn provide students with cues concerning expected behaviour. After perceiving and interpreting the cues, the students would engage in appropriate mediating responses which would influence the products. Gage sees that the application of the more complex paradigm requires that quantitative techniques be supplemented with qualitative methods to define patterns of relationships within classroom interaction. He insists, however, that the validation of findings as casual still depends on quantitative experimental findings. Many researchers are doubtful of the feasibility of experimental rather than correlational studies of teaching because the degree of control required is so difficult to achieve in the classroom.

In criticism of Gage's elaborated process-product paradigm, it appears that while he is ready to take into account the different student responses to the demands made upon them in the classroom, he underestimates the difficulty of determining what those demands are, as well as the problems in getting teachers to take them into consideration in their own behaviour. Ethnographic accounts indicate that meaning networks are exceedingly complex and variable, and that no matter how carefully planned a lesson may be, effective teaching will remain difficult because of the many changing cues to which both students and teachers
must respond. While one may agree that teachers play the central role in classroom interaction and that it makes sense to study the cues they provide, it does not follow that these can be deliberately designed to control what students learn.

In spite of the obvious problems facing process-product research, a persuasive case can be made for the kind of argument Gage advances in its support. If the quality of teaching is to improve, valid experiments that will reveal the effects of teacher behaviour on children's learning are surely a relevant field of enquiry. That advances will be gradual and that persistence will be needed to continue with investigations of this kind is unavoidable.

In a review of many studies Rosenshine and Furst (1974) concluded that students learned best when the following teacher characteristics were present: clarity; variability in methods, curricula and media; enthusiasm; task-oriented and/or businesslike behaviour; indirectness; student opportunity to learn material; teacher use of structuring comments; and multiple levels of questions or cognitive discourse. They emphasize that since most of these relationships came from correlational rather than experimental studies, it cannot be claimed that teacher behaviours caused the student learning gain. The consistency of these correlational data strongly suggest that the process-product associations are real. They also have face validity in that they hang together well and appear to be compatible and likely to be intercorrelated.
Dunkin and Biddle (1974) adopted a more critical approach, but they too reached similar conclusions about process-product relationship to those of Rosenshine and Furst. They were careful to point out that few of these correlational relationships had been borne out by experimental studies.

In accounting for the disappointing nature of many results, they criticised the failure to take into account differences of students such as intelligence and socio-economic status, failure to include control or comparison groups, and failure to investigate possible non-linear relationships between teacher behaviour and student outcomes. There appears to be fairly general agreement among Dunkin, Biddle, Rosenshine and Furst that most of the variables they list are related to student learning and attitudes, and that additional variables related to classroom management such as those proposed by Kounin could be significant.

Kounin's (1970) approach suggested that teachers most successful in managing their classrooms reveal behaviour indicative of 'withitness'; overlappingness; smoothness; ability to maintain pace and momentum; ability to keep the class alert; success in holding students accountable for attention and learning; generating enthusiasm; and providing variety in work assignments and general class activity.
Amongst researchers of this persuasion the hope remains that as knowledge about effective teaching accumulates, teaching should increasingly become an applied science comparable to medicine or agriculture. The skilled teacher is seen as one who has mastered a large body of principles and skills, who can diagnose a situation correctly and who can decide which of the many options available to him are appropriate to the situation.

3. EXPERIMENTAL RESEARCH

In its simplest form an experiment has three components: the variable which the experimenter systematically and deliberately manipulates (the independent variable); the effect produced from the manipulation (known as the dependent variable); and control (all the variables except the independent variable are held constant).

The essential ingredients of experimental research are the use of an hypothesis, rigid control, sensitive measurement/assessment techniques and the introduction of independent variables whose impact on the phenomena can be measured. The essential steps of an experiment are the following. First the problem has to be defined and analyzed and an hypothesis formulated. The population to which the researcher wants to generalize his results must be taken into account in deciding on sample size and methods, and then he must select instruments, choose tests and decide on appropriate methods of analysis. Often a pilot test precedes the experiment to identify possible snags. During the experiment itself the researcher must
endeavour to follow the tested and agreed on procedures to the letter. Finally, with data collected, the researcher processes and analyzes the results obtained. He then confirms or rejects the hypothesis in the light of these results, but this is stated in terms of probability rather than certainty. It is hoped by these means to establish true cause and effect relationships, to test predictions derived from theory and to help build up theoretical systems.

Experimental research differs from other methods chiefly in its use of the element of control. It attempts to minimize the influence of variables extraneous to the situation by means of

a) eliminating the variable as a variable—e.g. selecting subjects with the same IQ when investigating the effect of an independent variable on student performance;

b) randomization. This ensures that the effects of unspecified or unknown variables are evenly distributed through each group;

c) building the extraneous variable into the design as another independent variable e.g. the effect of an independent variable on the performance of boys and girls.

There are many different types of experimental design available. The classical design is the pre-test post-test control group design. This may be represented as

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-test</th>
<th>Treatment</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Test 1</td>
<td>X</td>
<td>Test 2</td>
</tr>
<tr>
<td>Control</td>
<td>Test 1</td>
<td></td>
<td>Test 2</td>
</tr>
</tbody>
</table>
Although this design has strong internal validity, the main problem is its external validity. Since both the experimental and control groups are pre-tested, it is not known whether the same findings will be obtained from other individuals who are selected from the same population but not pre-tested. The effects of pre-testing are likely to be more marked in studies concerning attitude change, values etc. than cognitive abilities. The contamination of the control group by experimental subjects is also likely in a school-based research.

The Solomon four group design controls the effects of pre-test, and can make several comparisons to study the impact of the independent variable.

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-test</th>
<th>Treatment</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment 1</td>
<td>Test 1</td>
<td>X</td>
<td>Test 2</td>
</tr>
<tr>
<td>Control 1</td>
<td>Test 1</td>
<td>-</td>
<td>Test 2</td>
</tr>
<tr>
<td>Control 2</td>
<td>-</td>
<td>X</td>
<td>Test 2</td>
</tr>
<tr>
<td>Control 3</td>
<td>-</td>
<td>-</td>
<td>Test 2</td>
</tr>
</tbody>
</table>

The main limitation of this design is the problem encountered in implementing it in a practical situation. The researcher requires sufficient time and resources in order to conduct two experiments simultaneously and there is the problem of obtaining enough subjects.

The demands of the experimental design are stringent, and many conditions threaten to jeopardise the validity of experiments. The rigour demanded by this type of research has resulted in only a small portion of all research and evaluation in education employing true experimental design. Often it is not possible to conduct
a true experiment because the relevant variables cannot
be controlled, or the groups cannot be randomized or
matched. Investigations conducted under such compromise
procedures are called quasi-experiments.

"The essential difference between a genuine experiment
and a quasi-experiment lies in the fact that, in the
genuine experiment, the different conditions to which
the different groups are exposed are assigned at
random to the groups. In the quasi-experiment the
conditions are taken as they are found, in naturally
occurring situations. The difference is immense.
The genuine experiment necessarily yields more certain
knowledge, and should be preferred where possible."
(TRAVERS, 1978.)

Causal research or ex post facto enquiry are terms
generally reserved for investigations where possible
causes for an existing condition are sought in the past
by an examination of records or documents. It is
appropriate in circumstances where more powerful
experimental method is not possible — where an experimenter
is not able to select, control or manipulate the factors
necessary to establish cause and effect relationships;
where the control of all variations except a single
independent variable may be unrealistic; and when
laboratory controls would be impracticable or unethical.
The weaknesses of this approach from the positivist
viewpoint lie in lack of control of independent variables;
the problem of distinguishing relevant from spurious
causal factors; the possibility that a given consequence
may have resulted from the interaction of factors instead
of a single one, and the possibility of mistaking covariant factors for clear-cut cause-and-effect ones. (COHEN AND MANION, 1981, p 47.)

CRITICISM OF POSITIVISM AND THE SCIENTIFIC METHOD

The fundamental clash between the positivist and humanistic approaches lies in their conflicting views of human nature. The humanist sees man as a unique, rational being, possessed of free will and capable of choice; not subject to scientific determinism and control but free to operate independently of the forces of nature.

"The precise target of the anti-positivists attack has been science's mechanistic and reductionist view of nature which, by definition, excludes notions of choice, freedom and moral responsibility." (COHEN AND MANION, 1981, p 14.)

Mouly finds this view of man difficult to accept

"...for the very reason that it denies the concept of orderliness that must necessarily characterize all phenomena, including human behaviour..... In fact, above all else, man must be predictable. It is true that human behaviour is complex and that, from our present limited level of understanding, it frequently appears disorganized and self-contradictory - but that is simply because we do not understand it." (1978, p 14.)

The alternative to positivism is offered by a number of schools of thought, united by a common rejection of the belief that human behaviour is governed by general laws and characterized by underlying irregularities. These see man as an autonomous being, and the social world as being capable of
being understood only from the standpoint of the individuals who are part of the action being investigated.

The positivists take the view that the complexity of human beings and phenomena present particular problems in manipulation in conformity with rigorous experimental conditions, but

"It does not mean the human behaviour is incapable of scientific determination any more than prehistoric man's inability to understand the physical world constituted proof that physical phenomena could never be brought under law." (MOULY, 1978, p 14.)

This explanation for the failure of research in the social sciences to keep up with the advances made in physical science does not satisfy the critics of positivism, who question the appropriateness of the scientific research paradigm as a basis for an investigation of teaching. The humanistic approach rejects the viewpoint of the detached, objective observer which is a mandatory feature of traditional research, and argue that understanding of the individual's interpretation of the world has to come from the inside, not the outside. Social science is thus seen as a subjective rather than an objective undertaking, for it is a means of dealing with the direct experience of people in specific contexts. Kiekegaard saw it like this:

"Subjectivity and concreteness of truth are together the light. Anyone who is committed to science, or to rule-governed morality, is benighted, and needs to be rescued from his state of darkness." (Quoted in COHEN AND MANION, 1981, p 15.)
Jones expresses concern at the way in which positivists use quantification and computation. He writes

"The argument begins when we quantify the process and interpret the human act.... However high-minded the intention, the result is depersonalization, the effects of which can be felt at the level of the individual human being, not simply at the level of culture." (Quoted in COHEN AND MANION, 1981, p 5.)

He objects not to quantification itself, but to quantification which diverts attention from a study of the human condition to an end in itself - a branch of mathematics. In similar vein, others fear that an approach which demands that nothing must be regarded as real which cannot be found by empirical science and rational methods will overlook the importance of man's inner world and consciousness in human existence.

Other critics claim that the positivist has a restricted image of man because he concentrates on the repetitive, predictable and invariant aspects of the person to the exclusion of the subjective, and that in emphasizing the parts he does not understand the whole.

Positivists concede that their approach is subject to certain limitations. Among the most pressing problems confronting education are ethical and moral considerations which cannot be solved by the type of activities scientists engage in. Values are involved in the choice of educational objectives, the selection of content, and in decisions regarding the effectiveness of teaching methods which lie in the domain of educational philosophy. However, the positivist stresses that scientific research has a part to play in the assembling
and evaluation of adequate and relevant evidence on which
judgements may be based.

A further limitation of scientific research lies in the fact
that although it has provided a good deal of information
concerning general trends, it is of limited help to the
teacher in working with the individual. Positivism fails to
take account of man's unique ability to interpret his
experiences and represent them to himself. In failing to
recognise this, positivistic social science fails to see the
profound differences between itself and the natural sciences.
Despite a bewildering number of somewhat esoteric labels such as social interactionist, phenomenologist and ethnomethodologist, certain basic concepts unite supporters of the interpretative viewpoint in their opposition to the tenets of the mainstream approach to research.

A fundamental point of departure is their common rejection of the idea of the unity of scientific method, and in insistence on a multiplicity of methods for understanding reality. They reject also the view that human behaviour is governed by laws characterized by underlying regularity, and they do not accept that the methods of the natural sciences provide an ideal standard for inquiry into human affairs. They insist on the development of research methods appropriate to the unique characteristics of human action in society and culture.

Whereas the positivist approach assumes an invariant quality in human behaviour which can be discovered and expressed in lawlike generalizations, the interpretative perspective shifts attention to the field of human action, intention and communication as the means through which rules to govern social life are negotiated and sustained.

The interpretative approach stresses the ability of human beings to use symbols to communicate meaning, and gives attention to the interactions in social situations through which people define expectations about behaviour. For instance, instead of observing the role of the teacher as an abstraction capable of being objectified and treated as a fact which can be generalized to other situations, the
interpretative approach seeks the rules governing this behaviour in each situation where people engage in teaching, acknowledging that the definition will be negotiated differently in each.

"Knowledge needed to understand human behaviour is embedded in the complex network of social interaction. To assume what it is without attempting to tap it, to refuse to tap it on the grounds of scientific objectivity; or to define this knowledge with constructing operational definitions, is to do grave injustice to the character and nature of the empirical social world that sociologists seek to know and understand." (FILSTEAD quoted in COHEN AND MANION, 1981, p 37.)

Central to the theoretical work of the interpretative school are the concepts of intersubjectivity, motive and reason. In every situation people interact and develop consensual norms that bind them to patterned ways of acting. Objectivity is not seen as a law guiding individuals, but as the result of intersubjective consensus that occurs through social interaction. The objectivity of an IQ test, for example, lies not in its innate qualities but in the social agreement that enables people to interpret the results in a certain way. The implications of this reasoning may be extended to science, which is viewed as culturally bound and historically limited.

A key concept of the positivist approach is that behaviour refers to either external environmental stimuli (e.g. demands of society) or internal stimuli (e.g. hunger). This is the 'because of' type of causation and in each case is stimulated by events in the past. The interpretative approach
takes into account motive as well as reason, and emphasizes that the 'in order to' aspect of human behaviour is equally in need of examination.

At face value, the purpose of both interpretative and positivist perspectives is the same: the development of theory. The interpretative researcher sees theory as emergent from particular situations, and holds that it should be grounded on data generated by research. Unlike the positivist, this view considers that theory should follow and not precede research. The aim for the interpretative researcher is to understand and compare the diverse sets of meaning which are yielded as theory in many different situations and at different times. There is no hope of a universal theory: simply many multi-faceted images of human behaviour arising from the varied situations and contexts supporting them.

The emphasis on understanding the social world from the standpoint of the individuals involved in the action is basic to interpretative methodology. Individual behaviour can only be understood by the researcher sharing the actor's frame of reference and by shedding the viewpoint of a detached, objective observer. The positivist researcher interprets behaviour on the basis that both he and the subject share the meaning of the action, whereas the interpretative researcher can negotiate and reconstruct meaning from the data with the actor himself.

The anti-positivist movement in sociology is represented by three schools of thought - phenomenology, ethno-methodology
and symbolic interactionism. A common concern of all three is a concern for phenomena: the things we directly apprehend, together with an emphasis on qualitative rather than quantitative methodology. The significance of each in contemporary research in classrooms is discussed below.

1. **Phenomenological Research**

Phenomenology is "a systematic attempt to observe and describe in all its essential characteristics the world of phenomenum as it is presented to us." (BURNS, 1980, p. 45.) Research in this tradition lacks the neatness of experimental method, for there is no established set of techniques beyond careful observation, analysis, description and reflection. The salient elements of phenomenological enquiry into teaching appear to be the following:

An initial suspension of judgement in order to view the phenomenon as something neither good nor bad, but in need of understanding, is accompanied by an attempt to understand the situation from the child's perspective as well as from that of the teacher. Bronfenbrenner stresses that

"provision must be made for assessing each participant's definition of the situation, how he or she perceives the setting and its various elements."

(Quoted in BURNS, 1980, p 47.)

Unless this is done, the meanings assigned to actions by the researcher without clarification by the participants can distort the truth. Great emphasis is placed on observation as a participant.
"Participant observation is a concept that is characterised by a period of intense social interaction between the researcher and the subjects in the milieu of the latter."
(BURNS, 1980, p 49.)

While not discounting the usefulness of quantitative data, the phenomenologist claims that reality is more than a statistic and that every attempt should be made to derive useful observations from a phenomenon in its natural setting. Most phenomenological investigations reply heavily on verbal descriptions derived from interviews, letters, observations, discussions, etc. This data might well be ignored by quantitative data-gathering techniques. Unlike cut-and-dried statistical results yielded by quantitative research, phenomenological enquiry demands careful consideration of all available data. The task is not how to process and analyze data, but what the reports and observations mean.

A major difficulty with studies of this kind is that the social context of the school and community with their accompanying constraints are often ignored in the emphasis on subjective meanings of teachers and pupils.

2. Ethnomethodological Research
Ethnomethodology sees teachers and students as active interpreters and constructors of the world of the classroom; the task of the researcher is to analyze how teachers and students find meaning in their mutual actions. This viewpoint contends that understanding of teaching is reached through constitutive
investigations, that is, by focusing attention on actual processes of negotiation, and structuring activities of teachers and students rather than merely describing recurrent patterns of classroom events or seeking correlations between process-product variables.

Linguistic ethnomethodologists focus attention on the use of language and the way in which everyday conversations are structured whereas situational ethnomethodologists seek to understand the ways in which people make sense of and order their environment.

Bellack makes the point that this approach, with its emphasis on negotiation over meaning by teacher and pupils in every classroom encounter, tends to divert attention away from the tendency of interactions to occur in repetitive patterns. "Teachers and children do not come together in a historical vacuum; the weight of precedent conditions the outcome of 'negotiation' over meaning at every turn." (BELLACK, 1981, p 67.)

Here again, if classroom studies are conducted without reference to the broader social context within which classroom events occur, Bellack believes that they will miss the constraints that set limits to what is negotiable between students and teachers.

3. Symbolic Interactionist Research

Symbolic interactionists see both students and teachers bringing to the classroom their own cultural backgrounds and personal histories. The way in which teachers and students 'define the situation' in the classroom will
be influenced by their own personal backgrounds and the contexts in which schools are embedded. Interactionists are attentive to the nature of interaction taking place between people, and see this as a dynamic and active process.

**Sociology of knowledge**

Research related to all three approaches discussed thus far is linked explicitly with the sociology of knowledge. The need to study how knowledge is selected and organised can be approached from an analysis of the curriculum, but to understand how it is transmitted calls for observation of the interactions between pupils and teachers in classrooms.

**METHODS OF INQUIRY**

The basic problem of method is to develop research strategies that enable the researcher to 'get at' the interpretative procedures of teachers and students in the classroom. Participant observation entails the following:

"The participant observer gathers data by participating in the daily life of the group of organization he studies. He watches the people he is studying to see what situations they ordinarily meet and how they behave in them. He enters into conversation with some or all of the participants in these situations and discovers their interpretations of the events he has described." (BELLACK, 1981, p 69.)

Bellack points out that interpretative researchers in
general "display a cavalier attitude towards reporting their methods and presenting the evidence which is the basis of their claims." (1981, p 69.) The findings which result from participant observation methods are not generalizations that apply across many teaching situations, and cannot be regarded as furnishing rules for practice; they are seen rather as 'intellectual instrumentalities' to guide teachers in the interpretation of events within their own classrooms.

The following description of research methods indicate emerging techniques of the interpretative school and range from those which have aspects in common with the traditional scientific approach to those which quite clearly belong to an ethnogenic perspective. Action research, which may meet the needs of either viewpoint, is discussed separately.

Triangulation

Some researchers have pointed out that reliance upon a single established procedure in research lays the study open to the limitations of that procedure. For example, reliance on an attitude scale to reveal students' attitudes to a course places reliance on that scale to yield accurate data, whereas often the scale selected is chosen for convenience rather than its strength in yielding results. Similarly it has been found that many studies are culture or/and time bound; sociological studies often make excessive use of individuals; while many studies are seldom replicated. As a solution, researchers have come to stress the necessity of using
two or more methodological approaches to a problem rather than rely on a single one. This process of combining methods which represent reality more accurately is known as triangulation. (COHEN AND MANION, 1981, p 211.)

Denzin has formulated a typology consisting of six categories of triangulation. He designates these as time, space, combined levels, theoretical, investigator and methodological triangulation. Time triangulation seeks to counter the omission of the effects of social change by making use of cross-sectional and longitudinal approaches. Space triangulation takes cultural and sub-cultural differences into account by helping to mitigate the shortcomings of studies undertaken among similar sub-groups within a population. The collection of data is usually at either individual, group or societal level, and combined levels of triangulation approach the problem from more than one level. In similar manner theoretical triangulation puts to the test competing theories, investigator triangulation involves the use of several observers to obtain more reliable data, while methodological triangulation refers to the replication of methods on different occasions, or the use of different methods on the same object of study.

Triangulation studies are appropriate when a holistic view of educational outcomes is required, and when complex phenomena require investigation. A multi-method approach to the investigation of achievement in basic skills in formal compared to informal classes
would yield a fuller and more realistic view of the classes for discussion of differences on a comparative basis. This process is also helpful in evaluating different methods of teaching, and where controversial aspects of education need to be evaluated more fully.

The first task of the researcher using triangulation is to decide what kinds of information he needs and what he is to do with it. This will determine whether his research data should be collected in quantitative or qualitative form. Where information from which findings can be generalized is needed, statistical data will be the most efficient, whereas accounts or interviews will be more successful in yielding a personal or phenomenological perspective.

Triangulation has been used with success in helping teachers to monitor and improve features of their teaching performance. The comparison of three sets of qualitative data - the children's, participant observer's and teacher's - may be compared to bring about a refocusing of the teacher's viewpoint and consequent improvement in his teaching performance.

Accounts

Ethnogenic studies stand in contrast to the conventional approach to studying human behaviour. This view concentrates on man as a person who is a plan-making, self-monitoring agent involved in achieving his goals. Accounting for actions involves the thoughts, feelings, intentions, conversations and written records of those
involved which explain episodes or coherent fragments within that person's experience.

"An account deals with the problem of how it should be interpreted, speculating on the motives, intentions and characters of those involved, and generally offering some kind of criticism and justification of whatever are taken to be the goings on."

(COHEN AND MANION, 1981, p 53.)

Ethnographers insist that provided these accounts are authentic, there is no reason why they should not be used as scientific tools in explaining people's actions.

Having gathered accounts from the participants, the researcher's task is then to transform them into working documents which can be coded and analyzed. The nature of the research programme will determine whether the data is quantitative or qualitative. The researcher will then prepare an account of these accounts, making explicit the cross-checks undertaken to guard against bias where interviews are used, and the safeguards taken in getting the participants to convey the truth as they see it.

The strength of this method lies in the insights made available to the researcher through the analysis of accounts and social episodes. The benefits of this approach are best seen by contrast with surveys, for accounts give attention to the very things taken for granted by them. Many surveys, for instance, have identified the incidence and duration of disciplinary
lapses whereas accounts give insight into the meaning of classroom disorder. Surveys are cross-sectional techniques taking their data at a particular time, whereas ethnogenic studies such as accounts of episodes employ an observational approach which focuses on processes rather than products.

While the importance of the meanings of events and actions to those involved is now generally recognized in social research, difficulties may arise from the multiplicity of meanings for the same behaviour. There is need to ask 'to whom' when analyzing meaning, for it is impossible to find the meaning of an act. The researcher will need to assume responsibility in deciding on the importance to give to an individual's account, and an outside observer's account of a social episode is useful alongside the explanations that participants themselves may give.

Role playing
Role playing is used as a distinctive investigative technique in research and provides an alternative to the ethically questionable techniques of deception. The researcher justifies its use by explaining that since human actions under investigation are situational and take place within a framework of roles, participation in simulated social situations can throw light on the role/rule contexts governing real life social episodes.

Role playing serves a number of functions. It throws light on people's problem-solving techniques; allows for
evaluation of decision making; permits the assessment of social skills, and enables researchers to explore people's beliefs about the way others behave, creates new ideas and is useful for generating and testing hypotheses about social behaviour.

This method is particularly relevant to the interpretative approach to human behaviour in that is capitalizes on the person as a self-directing agent. Further, simulation methods provide a means of alleviating a number of problems inherent in laboratory experiments. While the experimenter has complete manipulative control over every aspect of the situation, the subject is able to act in the way she/he considers appropriate in the situation. Ferguson's Toreside Comprehensive School is a simulation game to encourage teachers to think about the relationships between subject disciplines in a social setting. (MEGARRY, 1980.)

Personal Constructs
This theory is associated with George Kelly and has particular relevance for the interpretative researcher. Each person has his own view of the world; he has developed general rules of a scientific kind that lead him to make predictions about the consequences of certain actions. The individual makes some predictions confidently and the hypotheses on which they rest need rarely be revised; but others are modified frequently in the light of experimental evidence. This implies that man is oriented to the future, and that he has the capacity to represent the environment rather than merely respond to it. The repertory grid has been devised as
a method of gauging and symbolizing the way in which an individual's expectations interrelate. In this assessment an individual is asked to apply adjectives (and their opposites) to key figures and organizations in his life, and a mathematical analysis of these scores produces a codified account of the way in which the individual views his world. This method has been used in a number of instances with children and in the school context.

CRITICISM OF THE INTERPRETATIVE APPROACH

Critics point out that while an understanding of the actions of others requires knowledge of their intentions, there is still the task of making into an explicit and comprehensive body of knowledge that which is only known in a partial way by the actors themselves.

Further, there is a strong argument to be made for the view that in abandoning scientific procedures of verification and in giving up hope of discovering generalizations about behaviour the interpretative researchers have gone too far. The insistence upon using verbal accounts to get at the subjective meaning of events has not obviated the problem of obtaining reports that can be incomplete and misleading.

Bernstein (1974, p 59) has criticized the concern shown by phenomenologists and ethnomethodologists with meanings of situations and the way these are negotiated. He points out the power of others to impose their definition of situations on participants, and indicates that the way in which an individual defines a situation is itself a
SECTION III
RELATIONSHIP BETWEEN POSITIVIST AND INTERPRETATIVE APPROACHES

Bellack (1981) points out that the similarities and differences between the two approaches to research are brought into stark contrast in the following three key issues, but points to the possibility of a conceptual framework within which to relate the two orientations.

1. Subjective interpretation and objective description
Whereas the mainstream approach is based on objective description from the viewpoint of an impartial observer, interpretative studies stress subjective meaning and interpretation in gaining understanding of the social world of the classroom.

"... such differences, per se, need by no means constitute a loss in knowledge. On the contrary, such differences may well make for a gain in knowledge - just consider stereoscopic vision. There is a difference between the right and the left pictures that are offered to you. But it is precisely this difference that mediates the acquisition of a new wholeness, of an additional dimension, the third dimension of space. To be sure, the precondition is that we achieve a fusion between the picture on the right and on the left. And what holds good for vision is also true of cognition - unless we obtain a fusion, confusion may be the result." (FRANKL quoted in COHEN AND MANION, 1981, p 23.)

While they are both very different, they play
complementary roles in social science research.

2. Quantitative and Qualitative research
The preoccupation with the relative merits of quantitative and qualitative data is unproductive and can distract attention from the investigation of significant pedagogical problems using whatever methods are appropriate. As Karabel and Helsey observe "If the ethnomethodologists bete-noir, the methodological empiricist, can be faulted for tending to believe that relationships that are not readily measurable are not quite real, the ethnomethodologist is guilty of concluding that relationships that are measurable, but imperfectly, are equally unreal." (1977, p 47.)

3. Causes versus reasons and intentions
Mainstream researches are directed at uncovering the causes of classroom events, whereas the interpretative approach looks to reasons, intentions or purposes of teachers and students in order to understand why things happen as they do. Given the limited knowledge about teaching and factors in the school and community which influence it, it would seem that the causal/intentional approaches are not incompatible, for either causes or reasons may be involved in explaining human events.

The argument that has been advanced so far is the belief that educational research is a collage of activities, techniques and methodologies which can contribute to an understanding of teaching. Cohen and Manion have summed up the complementary rather than competing nature
of these two perspectives by saying that
"Clearly the best way forward lies in the judicious
use of both approaches with a view to synthesizing
their outcomes into a more comprehensive and
unified whole." (1981, p 27.)

This approach may well find expression in methods such
as action research, which can meet the most pressing
needs of each perspective.

**WHAT IS ACTION RESEARCH?**

Action research is less rigorous than research in the
positivist tradition in that its aim is to acquire precise
knowledge for a particular situation rather than to obtain
generalized findings applicable to many comparable situations.
It is collaborative in that researchers and teachers work
together to develop new skills and approaches to problem
solving. Action research is participatory in that it is
often undertaken by teachers in a situation who monitor
the procedures adopted. Self-evaluation is important, for
the feedback is analyzed and modifications are made with a
view to bringing about improvements to the process itself.
The practice of applying findings immediately instead of at
some future occasion as is the case with traditional research
is one of the distinguishing characteristics of action
research.

Action research may be undertaken with the following purposes
in mind in the school or classroom. It is a means of
remedying problems diagnosed in specific situations in order
to produce functional knowledge; it can serve as a means of
in-service training, equipping the teacher with new skills
and methods; it is a means of introducing new approaches to teaching/learning into a system which normally inhibits change; it is a means of improving communications between teachers and academic researchers; and, although lacking the rigour of scientific research, it is a means of providing an alternative to a subjective, impressionistic approach to problem solving in the classroom.

Criticism of this approach is directed to its more relaxed view of scientific method and its situational and specific nature. That samples are restricted and unrepresentative and that there is little control over independent variables are further indications of its less rigorous scientific nature, as is the fact that the findings are not generalizable but restricted to the environment where the research is conducted. While conceding that all this is true, it may be argued that theories can be useful, statistics helpful, and the discovery of generalizations praiseworthy, but in the end, as teachers, we must be concerned with what is practical, meaningful and useful. Should a teacher avoid attempts to understand, create and learn because he cannot embark on a project that would meet the approval of a professional researcher? Statistical complexity and elaborate terminology are surely secondary to good ideas, understanding, creativity and professional development which may be achieved by defining research in teaching as all these efforts designed to understand, enhance, and improve upon some aspect of education.
BIBLIOGRAPHY


Books Consulted


PERIODICALS AND JOURNALS


A CRITICAL APPRAISAL OF SOME DEVELOPMENTS IN TEACHER EDUCATION IN ENGLAND AND AUSTRALIA SINCE 1970

INTRODUCTION

In order to restrict this discussion to manageable proportions, an attempt has been made to illustrate trends by referring to two educational systems in particular, viz teacher education in England and Wales, and in Australia. It is perhaps a misnomer to refer to an Australian system, as education in that country is very much a state rather than a federal concern, and yet there is a surprising degree of similarity in the issues raised from one state to another. For the sake of economy of expression reference to England hereafter implies the inclusion of Wales as well.

In attempting a survey of this kind it soon becomes apparent that decisions on teacher education which are taken at political and bureaucratic levels are more often influenced by questions of finance and demand for provision than by the need to improve the quality of educational provision. A general decrease in numbers, for instance, does not necessarily imply that there should be a decrease in provision. From an educational viewpoint the resources thus released could be used to provide improved staff-ratios, in-service and refresher courses etc. However, the context in which such opportunities for revision arise results often in the situation being viewed as a problem rather than an opportunity, and it is seldom that bureaucrats can resist taking out of education the money "saved" by smaller numbers, and arguing that existing standard can be maintained at lower cost.
CHAPTER ONE
CHANGES BROUGHT ABOUT IN THE STRUCTURE AND ORGANISATION OF TEACHER EDUCATION

HISTORICAL PERSPECTIVE

In order to obtain the necessary perspective on the developments in these two countries, it is helpful to look at the factors which exerted an influence on both the numbers of teachers trained and the nature of their education.

In both countries the need for more teachers was influenced by the rising birthrate and subsequent expansion of the school-going population as well as the influx in immigrants. (Fitzgerald, 1975). Added to this was increased public confidence in schooling as a means of securing social and economic advancement and the influence that this had on extending schooling at both ends of the system. Increasing urbanization, the growth of tertiary industry and the application of technology made simple literacy outmoded for securing employment. There was a mood of optimism and exhilaration generated by confidence in the future and in the power of education to secure a better world. (Taylor, 1981, p 86). Not surprisingly, there was an accompanying rapid expansion of teacher education programmes. By 1970 the numbers in Colleges of Education in England had trebled, (Alexander, 1984a, 104) while the six universities and 14 state education departments in Australia had increased to 14 universities and 39 state teachers' colleges. (Fitzgerald, 1975, p 213.)

Lynch (1979, pp 33 - 49) describes the disquietening signs which were already in evidence in England in 1970. A drop
in the birthrate to below replacement level, mounting economic
and unemployment problems which came to a climax in the
dollar-fifty pound and the oil crisis of 1973/4, and a
flattening of the rate of increase of 16+ age participation
rates were all indicative of what lay ahead. A very
different ideological climate resulting from these factors
brought education under increasing criticism. Alexander,
Craft and Lynch (1984) describe the spirit of the time as
follows

"At one extreme, the 'Black Papers' offered a sharp
critique of egalitarian ideology and progressive
practice which found a surprisingly widespread resonance,
and at the other, proposals for 'deschooling' enjoyed
a vogue. The 'great debate' on education, introduced
by the Prime Minister of the day, contributed to a
closer scrutiny, a new concern for accountability,
and, in due course, evaluation at all levels of the
system. Education, like industrial management, the
trade unions and government, was increasingly called
to account for national economic failure, a rising
level of social disorder and a lack of national purpose."
(p XIV)

All these factors were indicative of the need to rethink
and restructure on many levels. Australia was not immune
to these problems, but they were not of the same magnitude,
came later and were dealt with in a way which marks an
interesting contrast to England.

STRUCTURAL AND ORGANIZATIONAL CHANGES

In England

Until the changes brought about by the James Report (D.E.S.1972)
and December 1972 White Paper, wryly entitled "Education : A
Framework for Expansion" teacher education had been seen as a province of the College of Education sector of tertiary provision. The Colleges of Education consisted of more than 160 institutions and offered their 120,000 students three routes to qualify as teachers. (Taylor, 1981, p 86.)

- The majority followed the three year certificate of Education course.
- The ablest minority of these, 10% in 1968, (Alexander, 1984a, p 104) were able to qualify for the four year B.Ed. offered by Colleges and awarded by the Universities with which the respective Colleges had been associated.
- A small number of students followed concurrent B.A./B.Sc. courses incorporating the study of education with a specialized subject, and enabling the student to make the choice at the appropriate time whether to teach. (Alexander, 1984a, 103 - 4.)

The role of the University was limited to the initial teacher preparation of 5,000 graduate students on one year Post Graduate Certificate of Education courses. (PGCE)

The "Mark II" B.Ed. course became known as the container revolution course. Following on the James Report (D.E.S. 1972) and associated White Paper of December 1972 the new style B.Ed. was characterized by consecutive training and the possibility of deferred choice. Its use of modular courses to accommodate a B.Ed. ordinary in three years or four years Honours B.Ed. gave maximum flexibility and reflected the attempt to link the courses with professional needs. From 1978 the undergraduate certificate courses were phased out. (Alexander, 1984a, p 110.)
Changes in the "Mark III" B.Ed. since the CNAA 1981 report (Alexander, 1984a, p 115) indicate a return to a four year, honours only B.Ed. concurrent degree.

In brief, the routes presently available for the attainment of professional qualifications to teach in England may be summarized as:

- **Primary teachers**: Concurrent B.Ed.; B.A./B.Sc. + PGCE
- **Secondary teachers**: B.A./B.Sc. and PGCE; Concurrent B.A./B.Sc.; Concurrent B.Ed. (Alexander, 1984a, p 127.)

**In Australia**

In spite of the independence of each state, they have produced very similar education systems. Pre-service teacher education is provided in either Colleges or Universities; until the early 1970's Primary School teachers and those who taught in the non-Matric classes of Secondary Schools went to State Teachers' Colleges for concurrent courses of two or three years duration, while secondary school teachers were graduates who obtained their professional training at university by means of "end on" one year courses following their degrees. (Evans, 1980, p 166.)

The development of the Advanced Colleges of Education from the older Technical Colleges and technical institutions, and the decision of the federal government to assume greater responsibility for the tertiary sector of education (while permitting states to retain policy making in respect to teacher education) (Goldman, 1976) have resulted in most Teachers' Colleges being absorbed into the Advanced Education Sector, while some of the larger ones have expanded into multi-technics.
These institutional changes have entrenched the binary system of educational provision for teachers in Australia. The typical college course is concurrent over three years for Primary teachers, and leads to the Diploma of Teaching. The college pattern for Secondary teachers is varied; usually concurrent, it may span three or four years, and in the latter case it leads to a B.Ed. award.

A majority of universities follow the end-on pattern, leading to the B.A./B.Sc. Diploma in Education, but a considerable number offer a four year concurrent course for a combined degree in arts or science and diploma in education or B.Ed. qualification. (Evans, 1980, p 166.)

COMMON THEMES

From the welter of reform in teacher education in England and Australia since 1970, it is possible to identify the following common themes and patterns of developments, and to consider these against historical and socio-cultural contexts.

1. Rationalization of Provision

Few would have denied that the structure of teacher education in England was in need of perceptive and far-reaching changes in 1970, or would have found fault with the principle of rationalization of provision. In practice, many shared Hencke's (1978, p 160) view that what had begun as an academic operation to improve teacher training became an excuse for re-organizing the public sector on the cheap.

In essence, the policy was to rationalize the 160 colleges by suggesting that within the major institutions of higher
education in the public sector there were a variety of futures open to them.
- Some might remain monotechnic but take on more in-service work.
- Some might diversify into advanced and non-advanced Further Education with or without initial teacher education functions.
- Mergers with existing polytechnics of Further Education were possible together with amalgamation with other colleges to form larger diversified institutions.
- Some might merge with Universities, provided that they fell within the Universities' overall planning target.
- Closure would be the lot of those which could not be accommodated amongst any of the above. (Dent, 1977, p 153 - 154.)

Few realized the extent of the changes which would be wrought to the whole fabric of teacher education within this decade of contraction. Inextricably interwoven with the country's economic promises as it was, it resulted in the virtual disappearance of the single purpose College of Education between 1972 - 1981, and the cutting back in numbers of those who trained outside universities by two thirds.

Alexander (1984b) has contrasted the "culture" of the pre-1972 College with the spirit permeating education for teachers ten years later. He describes the former as "...a concern for the personal development of the student, and a corresponding emphasis on pastoral
care: a residential tradition ..... small group teaching; awareness of the social and moral responsibilities of teachers; ..... a playing down of the importance of subjects and of disciplinary frontiers in favour of a child-centred, problem focused approach; anxiety about the dangers of academicism coupled with fears about the limitations of over-emphasizing relevance and the practical; a vision of the world that viewed technological advance with some scepticism, that gave a valued place to personal relations and the quality of life, that ranked sincerity, integrity and a degree of moral seriousness above training in critical analysis or a commitment to social change." (Alexander, 1984b, pp 18 - 19.)

By 1982 the changed institutional settings revealed stronger academic emphasis, a shift to a more conservative, subject-centred, instrumental education, values which addressed industrial rather than professional models of teacher organization, and decisions about course structure influenced by fluctuations in responding to demographic and economic needs.

On the credit side the process of rationalization has indeed led to a rationalization of provision and resources, and it has succeeded in bringing teacher education into the overall planning of higher and further educational provision. Not only is this seen as facilitating the transfer of staff consequent on further expansion and contraction, but it has ended the professional isolation of teachers in training. It has resulted in greater
scholarship albeit at the expense of professional concerns. On the debit side it has been poorly managed at a personal and institutional level, where personal suffering and diminished career opportunities have dealt a hefty blow at morale. Moreover, there has been a strong feeling that both economic and organizational convenience have been served at the expense of educational considerations, that the change has heralded a change from academic to bureaucratic emphasis, and that there has, in many cases, been a loss of professional skill and expertise in staffing cuts.

In Australia, as in England, some Teachers' Colleges faced closure in the later 1970's (Imeson, 1976), but greater co-operation between bureaucrats and educationalists appear to have eased the process, for during the 1960's leading academics were invited to serve on official committees of review and enquiry at both state and national level.

"Given these opportunities, the intellectual reformist was able in some cases to progress from a gadfly function to one of helping to formulate guidelines for future policy and practice." (Fitzgerald, 1975, p 167.)

Through leaving the control of tertiary education in state hands while picking up the bill, the Federal Government has assisted in restructuring provision in the ways already described, but the greater sensitivity displayed in handling the matter has resulted in the necessary reforms being achieved without the trauma which accompanied rationalization in England.
An interesting feature is the modest part played by national politics in determining teacher education policy in both these countries. This is because teacher education, its structure, organization and content do not generally engage the sharp differences of opinion that issues such as secondary education organization or examination frameworks generate. Alexander (1984b) puts it like this:

"In a democratic, pluralist society, politicians and government do not expect teachers to inculcate particular national purposes, nor to sustain ideological purity." (p 20.)

Against this background the problems facing Primary School education in this province are thrown into clear relief. The need to rationalize the provision of teacher education for all the people of the country in one educational system has already been indicated in the de Lange report (1982), but its rejection in terms of political ideology of the government perpetuates the tragic divisions in this country. At Provincial level it results in the economically and, to some, morally indefensible support of no fewer than eight colleges for white primary school teachers pursuing non-graduate courses. Six of these colleges (fully staffed and equipped on independently maintained campuses) are entrusted with the task of educating while primary school teachers. Their responsibility is for a combined annual intake of first year students reaching barely 500, based on the demographic projection of needs in the white sector four years hence. Against this background Alexander's (1984b)
observation about the political status of teacher education in a democratic country gives one much food for thought regarding the implications of an ideologically loaded national teacher education system in this country.

A further significant result of rationalization in both England and Australia has been the loss of opportunity by institutional heads to function autocratically. The internal academic governance of educational institutions has become more collegial, with academic authority vested in the Board or Senate to which faculties report. (Taylor, 1981, p 89.) While encouraging participation, such democratic process necessarily occasions delays and sometimes internal political caucusing; however the benefits to an institution of joint decision-making and participation outweigh the disadvantages.

2. Confirmation of a Binary System of Educational Provision

Both England and Australia have retained the binary system of higher education in which both universities and 'public' sector colleges and institutions such as polytechnics contribute to the education of teachers. The cornerstone for such a system in England is the Council for National Academic Awards (CNAA) which has led to many interesting developments. By 1982 the CNAA had increased its involvement from 400 registrations in 1970/71 to 15,000 by 1980/81, and represented a very substantial proportion of teacher education. (Sharples, 1984, p 71.)

Crucial features of the way it operates have been summarized by (Sharples, 1984) as
"Institutional integrity and autonomy; a concern for documentary evidence and statement; a reliance on visitation and discussion; a dependence on collective wisdom in committees, boards and visiting parties; a breadth of concern for the overall work of the institution; and a demand for the publication of information." (p 74.)

Increased autonomy of institutions

The CNAA has been instrumental in bringing about the autonomy of the institutions it validates. Several factors have contributed to this, amongst them being the following:

- Once validated, a course is very much the responsibility of those involved at College level.
- There are no procedures for annual review, and, unlike University validation, there is no close, continuing contact of persons.
- The rotation of members on CNAA visiting parties contributes further to the lack of personal continuity.
- The council is heavily dependent on documentary submissions in which Colleges propose courses and support these in written reports.
- The institutions are responsible for their own evaluative procedures and for appointing their own external examiners.

Partnership in validation

Although the system has not yet led to the development of autonomous powers of validation for the larger institutions, the encouragement given to self-appraisal by the CNAA makes this a goal to which to strive.
Growing Climate of discourse
An encouraging development from CNAA validation has been the impetus given to institutions to find shared understanding of what they are proposing to do before making submissions to the body.

A further advantage has been the remarkable forums for exchange of ideas and development of thinking in many areas provided by the open debate of principle among members of boards of the Council.

Research concerns
The emergence of concern to encourage applied, pedagogical research focusing on professional action, and the Council's expectation that a growing pool of potential researchers will come from the institutions augurs well for positive growth.

Implications for South Africa
With regard to South Africa, the binary system of tertiary provision has also been adopted, but within the structure the white technicons in the Cape Province have greater autonomy than the white Colleges of Education. Universities remain the sole degree awarding institutions.

The position of the White Colleges in the Cape Province is problematic. Linked in terms of the National Education Policy Act No 39 of 1969 (Section 1A(3)) with the Universities of their choice for accreditation of their courses, they are caught in a tryadic relationship between Provincial Education Department which exercises considerable pressure through its financial responsibility, and the
Universities with their demand for academic excellence. Where the philosophy of the University and the Department reflect ideological differences there can be no easy solution to the impasse.

3. Credentialism

A trend towards credentialism is evident in both England and Australia. In England, where for a long time non-graduates were allowed to teach in secondary schools, the achievement of an entirely graduate profession for all teachers who have qualified from about 1981 reflects this movement. (Fowler, 1984, p 268.) Courses leading to diplomas have not been offered to Primary teachers since 1978. (Bone, 1980, p 62.) A similar movement towards an all graduate profession is taking place in Australia (Evans, 1980, p 164), where there is growing interest in returning to complete degrees on the part of those who hold diplomas. Craft (1984, p 333) suggests that this movement can be explained as an example of the credentialling spiral, or as a reflection of the more demanding task of teachers (Evans, 1980, p 165), but that demography must not be overlooked in seeking explanations. In times of contraction the urgency for accountability becomes more pressing, and major surgery on posts will generally lead to the retrenchment of the least qualified.

Within the South African context there are many who would see the dissolution of the Colleges and a movement to an entirely graduate system for both Primary and Secondary education. These are the people who find it convenient to forget about the needs of schools other than those which cater for Whites, and who see no problem in widening the
already disparate provision for people of other racial groups.

4. Greater Centralization

In common with other industrialized countries, both England and Australia have witnessed a movement towards greater centralization in teacher education. As Alexander, Craft and Lynch (1984) indicate

"..... there is the pivotal but changing role of central government; we are struck by the paradox that in a period of progressive democratization in our national life, a process reflected in schools, teacher education institutions and validating procedures, there has also been a mark centralization of government control." (p XVIII)

Craft (1984) points out that in a period of financial stringency, and particularly since the disenchantment in the power of education as a panacea and means of providing "room at the top" for all, the education budget is bound to be controversial and reflect public concern. He argues that

"Provided that the role of an informed and independent inspectorate is attained, that the numerous institutionalized advisory bodies and avenues of consultation are fully utilized, and that the role of local government is not constrained further, a more accountable structure may present no threat and much more opportunity for more vigorous educational development." (Craft, 1984, p 335.)

None the less, there is uneasiness lest the "desperately
un-English" notion of increased central control impinge
too sharply on teacher educators through the Secretary of
State's approval of all existing and future courses. This
council will establish criteria relating to selection, entry
qualifications, staff content and other matters, most of
which are part of current practice, but much will depend
on the spirit of implementation.

Taylor (1981, p 90), has pointed out that although CNAA
validation might be cited as further proof of greater
centralization in England in practice it involves elements
of both centralism and institutional autonomy. Institutions
have greater freedom than they had under the previous
validation by universities, and even although the Council
operates on a national basis, with HMI assessors on many
of its committees, local authority representatives are much
in evidence.

Similarly, in Australia, where the states at first opposed
the 1972 financial take-over of tertiary education by
federal authority, this measure of financial centralization
has not resulted in any loss of state control over policy
in regard to teacher education. Another interesting facet
has been that although the highly centralized administrative
framework of states remains the same, local initiative has
been encouraged at community and school levels, and greater
authority has been delegated to Principals and staff in
areas like curriculum. (Barcan, 1980, p 353.)

Within South Africa like White Colleges of Education
falling under the control of the Provincial authorities differ from one province to another in the degree of autonomy permitted them. Those in the Cape enjoy the least autonomy, although in the case of the College known best to the writer the support derived from the association with the University has strengthened its representations to the Provincial Department, and served in some respects to ameliorate the strong influence of central direction.

5. Changes in course structures
Consecutive or concurrent?
One of the great debates of the 1970's in teacher education concerned the relative merits of consecutive and concurrent courses. Underlying this debate is the supposition that the dualism of vocational/educational or professional/personal education is valid, and the linking of different parts of the course with one or other of these conceptual groups has made the exploration of alternatives difficult. In England the pendulum swung away from concurrent towards consecutive courses, not so much on grounds of principle but more in answer to the need to preserve maximum flexibility in the late 1970's. This would enable the B.Ed. route to be more responsive to market needs and to deploy manpower in other directions. The university route with its structure of degree and Post Graduate Certificate of Education remained consecutive. The 1980's have reflected an interesting return to concurrence in the form of the B.Ed. (Mark III) degrees. The report of the CNAA enquiry into the B.Ed. (CNAA 1981) came down firmly in support of a four year, honours only B.Ed. degree. Some
of the new courses offered a framework that
"was not so much concurrent as neither consecutive
nor concurrent: the grip of an 'either/or' way of
thinking had weakened, and there appeared to be a real
prospect that some of these courses might achieve the
unification of 'personal' and 'professional' education
which had not so much eluded teacher educators for 40
years as been resisted by them." (Alexander, 1984a, p 117.

There is concern, however, that this process will be
delayed by influences such as those exerted by the HMI
discussion paper Teaching in Schools : the Content of
Initial Training (Des 1983) which places subject mastery
as its prime priority and which may hinder progress in this
direction. (Chambers and Chambers, 1984, pp 306 - 6.)

In Australia the consecutive pattern for university teacher
education has been maintained, but some of the newer
universities such as McQuarrie (New South Wales), Flinders
(South Australia), La Trobe (Victoria) and Murdock (West
Australia) have introduced some interesting concurrent
patterns. (Goldman, 1976.) The College pattern remains
concurrent, with a minority of colleges adopting the
consecutive pattern which leads to a Graduate Diploma.
(Evans, 1980, p 166.)

Initial and in-service teaching
A more fundamental structural re-appraisal concerns the
relationship between initial and in-service training for
teachers, and will be dealt with more fully in a subsequent
chapter.
CHAPTER II

CHANGES IN TEACHER EDUCATION CURRICULUM

The "Personal"/"Professional" Dilemma

The conceptual division of the teacher education curriculum in England into "personal" and "professional" subjects is unfairly blamed on McNair (Board of Education, 1944), for although he differentiated between the two, he warned specifically against separating them.

"Though we have found it convenient to refer to the content of training under the two headings of professional subjects and general subjects it would be wholly wrong to regard the staff as though some were concerned exclusively with one aspect of training and some with another. The whole of the staff are concerned with the personal education of the student and with his preparation for professional life." (para 230)

"Personal subjects were associated with subject study, and after the introduction of the B.Ed., came to be associated in a status dimension with academic study. By association, the other subjects were seen not so much as "professional" but as non-academic. This divisiveness was taken further by the separation of subject studies from their associated curriculum or method courses, and by the fact that validating bodies for the Mark I B.Ed. courses were unconcerned with method. (Robinson, 1971.) The underlying message was that only subject study was degree-worthy, and that

"...... learning how to teach one's subject was less important than continuing one's own study in that subject; that there was no necessary connection between such personal study and the kinds of understanding needed for
teaching that subject in schools." (Alexander, 1984a, p 130.)

Instead of being perceived as
"each student's central and deepest engagement with the
school curriculum." (Eason, 1971)

subject study was justified in terms of scholarship.

A D.E.S. survey (D.E.S. 1979) revealed that up to 50% of the
time in Mark I and II B.Ed. courses was set aside for subject
study. While the Secondary School student teachers could
manage with the time allocated for method courses in their
two main subject areas, the Primary School student teachers,
who had the same proportion of time to develop the vocational
skills needed for the cross-curriculum enterprise required of
a class teacher, were being inadequately provided for.
(Whalley, 1980, p 217.)

In 1981 a national interprofessional conference on the B.Ed.
as it applied to Primary School teachers (Alexander, 1984a, p 131)
emphasized the disproportionate emphasis on subject study to
the neglect of vital aspects of Primary teachers' professional
education. By the time the Mark III B.Ed. began to be
implemented there were encouraging signs of a shift towards
replacing the professional/personal polarity by a unified
concept of professional study in which understanding of a
subject was seen to be integral to one's capacity to teach it.
The notion of professional subject knowledge also showed signs
of changing from that of a repertoire of "starting points".
As Alexander (1984a) explains

"What was now indicated was a grasp of (a) the anatomy of
a subject, the underlying constructs, concepts and
procedures which characterized its essence......; and (b)
the way children's apprehension of such structures evolved from infancy to adolescence." (p 132)

The impact of such a movement was weakened by a more overtly political factor which pointed to the preservation of the status quo. Concern about alleged weaknesses in subject teaching, notably Mathematics and Science, caused H.M.I. to recommend to the Secretary of State (Taylor, 1984, p 29) that all students, primary as well as secondary, should spend two of their four years on subject study. (D.E.S. 1983a, 1983b.) In response to criticism from the primary sector, H.M.I. agreed that "subject" for primary students might mean a broad curriculum area, but were adamant about the non-negotiable nature of the two-year requirement.

Educational Studies

In the three-year certificate and Mark I B.Ed. courses, the 1960's saw a departure from the "mother hen and mush" tradition and the emergence of the four disciplines of education as autonomous modes of enquiry. In the same way that subject study had become more academic in the quest for degree-worthiness, so the academic standing rather than the professional utility of educational theory was now emphasized. As Chambers and Chambers (1984) put in "Knowledge was supreme, and skill subservient." (p 301)

The early 1970's saw efforts to mesh the components by identifying themes as a basis for integrating education courses, and attention was focused on curriculum as a basis for a totally integrated approach. The individual disciplines progressed differently, with philosophy and sociology of education...
being the growth points. Curriculum theory was emerging (Chambers, 1971) and reflected such ideas as the teacher-as-researcher, school-based curriculum development, and action research. (McIntyre, 1980; Elliot, 1980.)

By the mid 1970's it was evident that educational theory had acquired a life of its own and become increasingly more rigorous and academic. The neglect of pedagogy was being remedied in the P.G.C.E., where the constraint of time and need caused academics like Wragg (1974) and Stones (1979) to turn their attention to procedures for developing specific teaching skills. Thus the debate had clearly diverged between "pure" educational studies on one hand and "applied" professional theory on the other. Serious thought is currently being given to the role of professional theory for teaching.

Alexander (1984a, suggests that two causes for the persistence of the theory-practice problem present themselves. One is that the various solutions have been inappropriate and the other is that the problem has been wrongly diagnosed. He suggests that

"..... all the 'solutions' to the 'theory-practice problem' reported so far depend in essence on the replacement of one sort of 'given theory' by another: 'undifferentiated mush' by the disciplines of education; the disciplines by themes; disciplines and themes by a new grand theory derived from empirical classroom studies; or constructed by 'raiding the disciplines'; all these by a practical theory created by the codification of teacher craft knowledge." (p 143)
In each case, the problem of using "recipe knowledge" at one stage removed from the particular way in which each teacher conceptualizes his task, remains.

McIntyre (1980) has suggested that theory should be viewed as intellectual process rather than propositional knowledge, and argues that learning how to teach should be a continual process of hypothesis testing framed by a detailed analysis of the values and constraints related to teaching. The view of the student teacher as an active agent in constructing his own professional theory accords with the idea of a teacher's need to be involved in observation and action research, and offers an exciting challenge.

That the same kinds of problem in reconciling appropriate theory with practice have exercised the minds of educationalists in some of the Australian states becomes clear from scanning the titles of articles in their professional journals. The work of Gwyneth Dow (1979) and the research project which she led at Melbourne provides an interesting account of research along lines very similar to the views expressed above viz.

"Teacher training must find a way of relating theory and practice for its students; schools must be able to turn to teacher-training institutions for practical as well as academic help; and teacher-training bodies have to inform themselves of the new realities in the schools..... There is, moreover, great scope for action research to be undertaken by schools and universities together." (Dow, 1979, p 4.)
Curriculum Courses

For many years curriculum/professional studies were given low status, insufficient time and ignored by those universities in England responsible for validating courses. They were fragmented and often criticised as "superficial and intellectually undemanding." (Renshaw, 1971, pp 61 - 62.) The 1970's have seen an increasing concern for Professional Studies and there has been greater interest in the process of teaching.

In part, this may be attributed to the growing influence of the C.N.A.A. as a validating body, and its commitment to the establishment of parity for professional preparation with the achievement of academic standards; (Chambers and Chambers, 1984, p 303) increasing concern of H.M.I. with the lack of professional competence of teachers, particular in the primary schools; and a growing demand for time to include the more deliberate and systematic approach to pedagogy which probed problems such as teaching slow learners or mixed ability groups. The use of techniques such as microteaching (Brown, 1975) interaction analysis (Kleinberg, 1975) self-confrontation (Finlayson, 1975) and simulation and role play (Taylor, 1978) were all in accord with the spirit of the time.

The need to reconceptualize professional studies has begun at secondary level in England, but in a form which is more directed at the need to eliminate the divorce of "personal" and "professional" in terms of subject study. Alexander (1984a, p 140) indicates that such reconceptualization may well be to the detriment of primary teaching, and urges that attempts should be made to address the "whole curriculum" problem attendant on the class teaching system.
Such concerns with professional studies and the attempt to find solutions to counter the criticism of their being "lacking in practical relevance, boring, repetitious and fractionalized" permeate much of the literature in Australian states. (Turney, 1982, p 24.)

Whalley (1980, p 215) indicates that much of the work in teacher education in the 1970's in England involved the construction of courses and the re-organization of institutions, and that the emphasis should now be directed to addressing problems such as the theory/practice disjuncture and relating these findings to the content of courses.

Implications for Cape Town Teachers' College

Some of the implications of the issues raised in this chapter for the work in educating Senior Primary students at this college need to be identified. The closer links forged between this institution and the University of Cape Town since 1978 have yielded many positive results, not least of which has been concern about raising the academic standing of many of the subjects. Commendable though this is, it should not take place without equal attention being paid to the professional commitment of the college as opposed to the "search for truth" dimension of the University. A particular danger of such validation on a piece-meal, subject basis is that the coherence of the course as a whole is disregarded. The responsibility of the College itself to engage in self-evaluation becomes more urgent against this background. In seeking to avoid the mistakes made by others the College will perpetuate new ones of its own, but knowledge of what has been achieved elsewhere saves it from re-inventing the wheel in
Curriculum/professional studies are neglected in regard to an inadequate allocation of time to this component. This is an area in which the College may profitably learn from the experience of others. Although not guilty of separating subject study from the accompanying and related methodology, much remains to be done in forging links between the component sections of the course and achieving a conceptual unity. It is the writer's belief that a focus for such a restructuring of the course is provided by a systematic approach to pedagogy along the lines suggested by Stones (1979 and 1984). Certainly the College has nothing to lose by attempting such a reconceptualization of the Professional Studies course.
CHAPTER III

SCHOOL EXPERIENCE

Of central importance to this aspect of teacher training is a satisfactory reconciliation of the theoretical and practical dimensions of the courses offered. The long struggle to find a given body of professional knowledge which might be applied to successful practice is chronicled in the research literature in the positivistic tradition, surveys of which have been undertaken by people like Dunkin and Biddle (1974) with disappointing results. An increasing interest in practice itself, and attempts along the lines of those undertaken by McNamer and Desforges (1978) in objectifying the craft knowledge of teachers, have yielded little that is really helpful. Through it all, educational institutions have continued to decry the apprenticeship model of teaching, yet in practice have collaborated in keeping alive the tradition.

The writer believes that the inquiry approach outlined by educationalists like Stones (1979) and McIntyre (1980) offers a valuable alternative approach. Using what has emerged from the psychology of learning theory as a basis, Stones suggests that students should be helped to understand such concepts, recognize them in practical situations and apply them in their teaching as part of the process of continual hypothesis testing. From this perspective, the boundaries between theory and practice merge into a seamless garment. McIntyre (1980) makes the point that it is necessary to encourage the student to identify and examine the values which underlie his practice, for without these he becomes a technician and not an educationalist. McIntyre is well aware of the constraints under which teachers work and sees
the need to prepare students for these. In effect, he is making a plea for a receptiveness to participation observation and action research at each stage of the students professional development. Some of the implications of such an approach will become apparent in the discussion which follows.

In both Australia and England there has been increasing emphasis focused on school experience, (Start, 1979, p 258; Bone, 1984, p 66) and many people would place it in a central position in initial teacher education programmes. Two distinct themes underlie most of the literature on school experience: (i) diversification in patterns and functions, and (ii) proposals to integrate it with college/university-based work. It would seem that successful identification of the purposes which it is intended to achieve in relation to the theoretical basis of the course should have priority over other considerations in formulating a satisfactory programme.

In drawing attention to the discrepancy which often exists between theory and practice in teaching, Eggleston characterizes the practicum as follows:

"Allegedly, the student arrives in the school full of college-inspired faith in the individual-goodness and creativity of children with fanciful lesson plans suggested by lecturers who have not taught for many years, devoid of knowledge of how to control the turbulent and restive oversized classes and supervised by an unknown tutor ..... In such circumstances the student is in a double bind. Not only is his faith in the credibility of the college shattered by the school staff, he is also overwhelmed by their enthusiasm to help him 'really get to know the job'.

- 28 -
Teaching practice becomes an undercover initiation into an alternative style of teaching unrelated to the work of the college. Problems may indeed arise when the college assessment takes place, but the school staff are loyal to their student and conspire with him to put on the sort of show that can be relied upon to satisfy the college." (p 97)

Many features of this description are embarrassingly familiar, and reflect a kind of vicious circle from which teacher education is having difficulty in escaping. Unless there is understanding and mutual support in striving to achieve the goals to which the teacher education course as a whole is directed, the undesirable socialization of students into a theory-practice dichotomy and into isolationist roles as teachers is likely to continue.

In both Australia and England the literature reflects a growing concern to secure collaboration between tertiary institutions and schools. The essence of successful school experience is being seen as a product of co-operation between schools, students and institutions in a joint attempt to test theories which offer hope for improving practice. (Copeland, 1981; Stones, 1981; Turney, 1982, p 194.)

An important feature in securing this kind of co-operation is embodied in the James' Report (1972) recommendation that each school should have a member of staff nominated as a professional tutor, part of whose duties would lie in assisting with the education of pre-service teachers. A little thought indicates some of the desirable qualities of the incumbent of such a post. The teacher tutor needs to have a developed
consciousness of her own practice, personal qualities which enable her to communicate with students who are often more aware of their problems than the problems, and good relations with, together with the respect of her school colleagues in order to convince them of the value of student presence. In turn the teacher institution owes it to the tutor to see that she is fully conversant with the school experience policy adopted and its underlying rationale; to invite critical comment from the school's perspective; and to let her know that her contribution is valued, not just as another labourer at the chalkface giving students a proper context for their work, but as a valued colleague.

The writer believes that the teacher institutions responsibility should go further than this. Ideally, one would wish to see all co-operating teachers from schools used for the school experience programme actively involved in the way described above. One would also wish to see an attempt on the part of college supervisors to get to know their schools, to visit them, become informed participants in their experience, and to show themselves ready, not only to work alongside them and to learn with them, but also to refresh their own experience.

This mutual sharing of expertise surely constitutes one of the most effective ways of securing in-service renewal for all concerned. The strengthened association possible when lecturers assume residency at schools for set periods during the block practice period will be discussed more fully in the writer's dissertation, but it is hoped that the reduction in the number of schools used, the greater time available to the lecturer who spends a full day at the school, and the
personal links thus formed enable the institution to build up a team of colleagues who are lively collaborators and critics of what is being done.

In both England and Australia it would appear that the way in which those lecturers engaged in pre-service training have become involved in working alongside experienced teachers in both initial and in-service education of teachers constitutes an important change in teacher education. (Dow, 1979; Evans, 1983.) The involvement of co-operating teachers, lecturers and students in school-based programmes in which problems are explored and possible solutions tested reflects a significant change from both the transmission method of teaching professional components of the course and an apprenticeship model of acquiring professional competence. (Stones, 1983; Copeland, 1981.)

The literature reflects an interesting emphasis on the role of observation as a key component of school experience. In this respect the employment of ethnographic methodology and action research encourages prospective teachers to observe systematically, to step back and utilize their findings in considering why particular schooling practices occur and their implications, and to present their findings in a coherent written form. Such practice assists students in linking theory to practice, and encourages them to be reflective in considering all dimensions of teaching. (Gitlin and Teitelbaum, 1982; France and Woolton, 1982.)

In addition to providing a number of varied contacts with children, school experience is increasingly seen as providing
insights which lie beyond subject concerns. The need for the prospective teacher to be exposed to as wide a range of these as possible lies behind the change in name from "Teaching Practice" to "School Experience", and amongst these we may list pastoral care, the use of leisure and enrichment.

A gradual shift in perspective from a view of supervision as one in which the College lecturer descends upon the hapless victim in fulfilling a schedule which would dc credit to a coach tour operator, dispenses a summative evaluation and departs again, leaving the co-operating teacher to bind up wounds inflicted is yielding place to a more enlightened approach. There is an increasing movement towards subordinating the role of evaluation to the prime purpose of the exercise, that of providing a learning situation in which the student, co-operating teacher and lecturer address themselves to a teaching problem. (Stones, 1984.) Whereas evaluation has of necessity still to be done in many instances, it is more likely to be based on a programme sustained over a number of weeks rather than on a student's performance on one lesson. (Hogan, 1983; Gitlin, 1981.) Another interesting innovation has been the use of a greater measure of self assessment by the student, through which it is hoped to assist the student in fostering self-knowledge and greater professional knowledge. (Kremer and Ben Peretz, 1984.)

INDUCTION OF NEW TEACHERS

Within the last decade there has been a growing awareness in the states in Australia and in England of the crucial role of the induction year in the overall process of professional
development and socialization. The conception of the continuous nature of professional growth and development is encapsulated in the "triple I's" of Initial, Induction and In Service phases of a teacher's professional career.

In both countries there has been some activity in providing the necessary structures to support this concept, but much has yet to be done. An extensive survey by Taylor and Dale (1971) in England confirmed the need for such provision, and the James Report (D.E.S., 1972, para 65) emphasized the necessity of systematic induction and the life-long character of teacher education. The financial problems of the time were partly responsible for neglect in implementing the recommendations, and between 1974 - 1978 several D.E.S. funded research projects were launched to study the needs and problems of young teachers. Of these the work of the Bristol-based Teacher Induction Pilot Schemes (TIPS) is probably the best known. The findings which emerged confirmed that that essential area of professional support was greatly under-rated by educational authorities. In Australia a federally-funded committee was established to undertake a survey of induction practices, and this was conducted in two stages. First, between 1976 - 1978 a descriptive survey was undertaken of what state, regional and school authorities claimed was done, and then a systematic survey of what beginning teachers actually experienced followed between 1978 - 1979. Tisher, Fyfield and Taylor (1978, 1979) co-ordinated this research.

1. Induction Activities

The results of these surveys reveal many similarities in concern and focus. Among significant features the
place of induction activities and then importance will be considered.

Provision for new teachers on entry

The importance to young teachers of the first encounters with the educational employing agency in determining whether they were perceived as having worth and status was confirmed. Delays in confirming appointments and providing documentation added to teacher anxiety and contributed to the shaping of professional attitudes. The importance of supplying literature about the schools and districts in which teachers in both England and the majority of Australian states would be assigned to serve, as well as information about leave, legal responsibilities, transfers, conditions of service etc were all perceived as contributing to a feeling of security. In the Australian survey there were indications that teachers were not adequately informed in this respect.

Prior Visits

Prior visits, either self-initiated or at the invitation of the Principal, were seen as helpful in reducing anxiety before taking up a first appointment. In England pre-service orientation visits ranging from a few days to three weeks were generally accepted as standard practice, while in the Northern Territory of Australia these are organized into programmes covering methodological topics such as teaching English as a Second Language. (Tisher, 1980, p 75.)
Reduction in Workload

The need to reduce the load of new teachers was emphasized by the TIPS project, as well as the Australian reports. In practice about a quarter of the LEAS actually accommodated a reduction of 5 - 10% of workload in England in 1978, whereas the same proportion claimed to intend to do so in future (Tisher, 1980, p 75). In Australia about half of the nation's new teachers benefited by a reduction of 20%, while the remainder had smaller classes, parallel classes, or fewer supervisory and clerical duties.

2. School-based Induction Activities

There is a trend to organize professional activities for new teachers within the schools where they are serving, which includes special meetings and consultations throughout the year. In Australia it has become the practice for the Principal or his deputy to assume such responsibility. Tisher, Fyfield and Taylor (1979) report that young teachers believe that they should be given more opportunity to observe the methods of other teachers in this programme. In England this task is more the function of a designated teacher-tutor, who should be freed from evaluative responsibilities in order to assume a counselling and induction role. Regional short conferences of 2 - 3 days duration in both England and Australia are not generally as well received as school-based help.

Tertiary teacher institutions have an important part to play in fostering closer ties between the institution, employing agency and beginning teachers. A shared
perception of the continuous nature of teacher education, and of the need for true collaboration in relating pre-service training to the practical task of teaching would provide a sound start to meaningful reform.

Implications for the Cape Province

The degree of assistance given to new teachers depends more upon the initiative of individual Principals than upon any well-formulated induction policy. It may well be argued that this function is part of the responsibility of Heads of Department, but there is little formal recognition or provision for this in terms of the time that such assistance requires. The granting of permanent status at the end of 15 months, and following on a formal visit by a Superintendent of Education marks the end of a theoretical period of induction.

There is a challenge to the Colleges of Education to follow up on the training given to its students by means of questionnaires and visits, and to use some of the resources made available through decreased enrolment to pursue its continuing responsibility to students in the field.
CHAPTER IV

IN-SERVICE TEACHER EDUCATION

The current interest in in-service teacher education may be attributed to many factors, of which the following are a representative group.

- The view that teacher education is an ongoing process of professional development, commencing with initial teaching training and ending officially at retirement. (Start, 1979.)

- The need for teachers to review and modify their methods and approach in the light of extensive and fast-moving changes. (Taylor, 1980, p 328.)

- The inherent importance that teachers should continue their personal and professional education. (Bolam, 1978, p 85.)

- The need to improve upon the perception of teachers as members of an under-educated profession, whose working conditions do not encourage the kind of peer interaction which would improve performance. (Taylor, 1980, p 328.)

- The need to avoid stagnation in a profession where movement in and out of the ranks is minimal on account of falling pupil numbers.

- Contraction results in reduction in the number of promotion posts available, and increases competition for these. (Taylor, 1980, p 328.)

Contemporary thinking about in-service education of teachers appears to fall into one of two camps. (Bolam, 1982, p 216.) One view holds that professional development should consist of externally provided, off-the-job courses for individual
Implicit in this course-based approach is the belief that if the personal and career needs of individual teachers are attended to, the school system will benefit as a result. It is assumed that the needs at each stage are distinctive, but that they should form part of a coherent and integrated pattern of professional education. The alternative view is the school-based approach which is directed at meeting the needs of a school as a whole or of departmental sub-groups within that school.

The course-based model has predominated in England, in that the pattern for in-service training has been one of teacher withdrawal in order to undergo training provided by an outside agency. Criticism of such "pressure cooker" courses (generally held on Fridays and Saturdays) have been similar in both countries. At worst they have been described as "taught by tired administrators after school, or hack courses taught at the local college." (Power, 1981, p 166.)

Many courses have been criticized for being based on a teacher defective rather than a teacher development model, and often the content has been judged irrelevant by teachers. The problems of the teacher returning to a very different local situation or seeking to implement a new approach in the face of the suspicion and often hostility of colleagues has been a real difficulty not always acknowledged. By contrast, the school based alternative to external courses, which owed not a little to pressures on schools and teachers to be accountable, tended to concentrate on the curriculum without regard to the particular characteristics of the teachers who were to implement it or the school in which it was to operate.
Against this background the idea of school-focused in-service teacher education developed. It was defined as employing all the strategies of teacher educators and teachers in "directing training programmes in such a way as to meet the identified needs of a school, and the standards of teaching and learning in the classroom." (Perry, 1982, p 218.)

Henderson (1979) argues that the course-based model stressed the needs of teachers as professionals, the school-based model stressed the needs of the teacher as an employee and the school-focused model offered a means of resolving this conflict. The three main aspects of school-focused in-service provision are embraced in the following description. Needs are defined neither by a survey of what teachers want nor a listing by the headmaster of the school's needs, but by a professional assessment by the staff reaching agreement on what is required and planning how it will be achieved. In implementation it calls for the school staff to plan some activities for themselves, for more effective channels of communication with outside providers and with members of staff who can share the benefits of insights obtained while on "off-the-job" courses. Evaluation should play a part in informing the staff of their progress towards goals, redefining their needs and modifying the process of implementation. (Eraut and Seaborne, 1984, p 196.

Several challenges are directed at the teaching professional in terms of this approach to in-service education. Insufficient use is being made of available resources and possibilities in terms of professional self development, and it appears that few systematic attempts are made at self-appraisal as a basis for further growth. The habit of teaching behind closed doors
implies that very few invite colleagues to assist them.

An innovation in schools in England has been the development from 1975 of school-based advisory activity by college lecturers (Bolam, 1982, p 191.) Unfortunately this co-operation has been called "consultancy" which has raised unjustified hopes of the neat solution of identified problems by experts. The key to this enterprise lies in the acknowledgement of partnership of equal status between a college lecturer with specialized knowledge, skills and wide experience, and a teacher who, in turn, brings specialized knowledge of his children, school and its established practice. Together they explore a problem and seek solutions. It is particularly disappointing that overtures to be of assistance in this way have been received with suspicion in some areas in England, since the severe cut-backs in teacher education have led schools to believe that the help now offered is in the cause of job preservation rather than a genuine desire to be of assistance. (Bolam, 1982, p 192.)

There is fairly wide-spread recognition, in both England and Australia, that at any one time a proportion of the teaching force should be released for in-service education. In England difficult economic circumstances have resulted in a lower release percentage for in-service training than was originally planned (Eraut and Seaborne, 1984, p 176) while in Australia the Auchmuty report recommended that each teacher should have the opportunity of 5 days in-service education each year.

Finally, it is important to note that however important in-service provision is, it should not be allowed to take the
place of an individual teacher's legitimate aspirations for career education and further personal education. In addition to the teacher's role as part of a school-focused team contributing to the solution of a particular problem, the teacher should also be encouraged to pursue his own advanced studies and personal interests by appropriate funding and leave.

DISTANCE EDUCATION

In both England and many of the Australian states there has been a transformation from viewing correspondence courses as "second best" to their acceptance as valuable alternatives to full time study. Much of the credit for this goes to the Open University in the U.K., while in Australia the need has been met more recently by Macquarrie, Murdoch and Deakin Universities, together with the Universities of New South Wales and Queensland. Since the inception of the Open University in 1971, it has enrolled an average of 16 000 teachers each year for the in-service B.Ed. degree. (Eraut and Seaborne, 1984, p 179.)

Together with using radio, television and the more usual means of communication, the growth in computer-assisted schemes is of great significance to these institutions. When systems like Cicero and Cyclops can be made available at a price which will enable students to set up telephone communication with electric blackboards between users, and gain direct contact with a central computer giving access to data banks, another great milestone will have been reached.
CHAPTER V

OTHER APPROACHES TO TEACHER EDUCATION AND THEIR IMPACT IN ENGLAND AND AUSTRALIA

The Competency-based approach to teacher education (CBTE) has become the accepted rationale for many teacher education courses in the United States. These programmes envisage that the student should acquire specific knowledge of major fields against the background of liberal arts studies, and that their pedagogical knowledge should incorporate both interpretative and performance skills. (Orlosky, 1980.) The approach to interpretative skills is provided by means of protocol materials, while micro-teaching is extensively used for developing performance skills.

England and Australia have remained relatively unaffected by the CBTE approach, a factor attributed by Bone (1980, p 64) to a greater respect for the philosophy of education, less money and a less vociferous call for teacher accountability in these countries. Some of the techniques have indeed been adopted, although in a different context and for different purposes. As examples one may quote the use of protocol materials or "slices of reality" captured on tape to illustrate concepts, and the presentation of these to students so that they may identify with the teacher and devise solutions to the problems posed in the accompanying workbook.

Torney and Ryan's Inner School Teaching programme, for instance (Diehl, 1979, p 271) is the Australian equivalent of Inner City Teaching Problems laboratory devised by Cruikshank (1967). Such simulations present considerable problems of credibility for students because each person's perception of a situation
is different, and many claim that they would not have allowed a particular situation to develop. Stones (1984, p 75) suggests that the use of protocol materials in the approach which he suggests for acquiring skills provides the meeting point for theory and practice.

Micro-teaching, as a procedure in which students practice teaching with a reduced number of pupils in a reduced period of time with an emphasis on a narrow and specific teaching skill, provides a "safe" practice opportunity. Orlosky (1980, p 277) sees it as providing the same kind of transition for the teacher as the cadaver for the medical student and the mock trial for the lawyer. The early development of micro-teaching by Allen and Ryan (1969) at Stanford University incorporated the procedure currently employed, namely

- selection of a skill to be practised
- preparation of a mini-lesson to practice the skill
- provision of supervision and feedback - preferably with a video recorder, and
- retesting after receiving suggestions and identifying specific changes to be made to improve the skill.

Among the potential advantages derived from Micro-teaching over conventional training are its provision of a less complex learning environment than the classroom, the opportunity for the student to concentrate on his own learning rather than on coping with the needs of his pupils, the systematic analysis of his own practice and evaluation thereof, and the opportunity for repeated practice. (McIntyre, Macleod and Griffiths, 1977.) Bone (1984, p 63) refers to the significant but rather limited use that has been made of this technique, especially in Europe and Australia. He indicates that the difficulty in providing
trained and skilled supervision for each student has contributed to its reduced effectiveness in such situations and the overall reduction in its use.

From another perspective Stones (1984) appreciates the value of micro-teaching but feels that "it had a crucial weakness in that the selection of skills was ad hoc and unrelated to any pedagogical system." (p 26.) He believes that an analytical approach to teaching can be justified, but that different facets of a student's activity must be manifestations of the deeper underlying capabilities or structures of teaching. These he identifies as those which are general and fundamental to the teaching of any subject, and which are criterial to pupil learning. He believes that there is a sufficiently sure basis of psychological theory about human learning from which such coherent premises may be drawn.

Finally, a sharply contrasted but fast growing perspective on education is that which emphasizes the human relations training for teaching. In some institutions it is emphasized as a necessary complement to the focus on mechanically acquired competencies. The Thiokol Interaction Laboratory for Teacher Development (Bone, 1980, p 65) is one of the sets for exercises used in such places, with the students actively involved in role playing, simulation games and action-oriented problem solving. The whole aim is to improve the teachers ability to interact successfully with other people; the approach is humanistic in that it concentrates on the understanding of oneself and of others in person-to-person interaction. Bone (1980, p 66) indicates that this approach appears to be spreading to Australia as well.
Implications for Cape Town Teachers' College

The approach to teacher education is in the process of being changed from a traditional craft to an enquiry perspective. (Zeichner, 1983.) The competency based approach with its somewhat mechanistic orientation and its apparent disregard for values and context will find little favour as a model at this institution. However, some of the techniques which it employs have promise for modification and application within this situation. Similarly, while sympathetic to some of the goals of the humanistic orientation, these would be useful as an adjunct to, rather than central it importance to the training programme.
CHAPTER VI

NEW ISSUES

The micro-electric revolution and teacher education

The rapid progress in computer technology has far-reaching implications for the shape of educational structures generally. Many schools in the U.K. and in Australia have acquired modest computer capacity, and unless teachers' education includes constructive discussion of these developments, together with experience of the potential and limitations of computers in education, tomorrow's teachers will indeed be as handicapped as yesterday's illiterates. As happens so often in education, the challenge of the micro-electric revolution has called forth a reactive rather than a pro-active response. In many cases efforts are being made to see that teachers can match the youthful expertise which their pupils have acquired through growing use of personal computers, rather than being in a position to lead in employing such technical aids for educationally sound and professionally defensible reasons.

While teaching in the future may well assume a different character in terms of the skills required and possibly the numbers of personnel needed, the need for teachers who can supply the elements which no micro-electric device can replace will remain a real one. (Cortis, 1981, p 154.) As long as education is seen as a moral and rational enterprise, and not merely as an information-processing activity, there will be need of the human and personal skills of autonomous and professionally accountable teachers. (Bailey, 1982.) Skills in communication, motivation, counselling, evaluation and research remain important aspects of the teacher's professional preparation, and the likelihood of any system, no matter how
sophisticated, replacing the human experience of learning by talking, listening, moving, laughing and interacting with others seems improbable. Taylor (1981, p 92) writes of signs of a new emphasis on the teacher as a moral and political agent, and on the part that instruction is subjects and skills can play in strengthening value dispositions appropriate to late twentieth century technology and economic conditions. All these factors will combine to exercise profound influence on the academic organization and content of teacher education courses in the future.

Multi-cultural education

Until the last decade the question of teacher education for a multi-cultural society was one of the most neglected of educational issues. (Craft, 1981, p 19.) Approaches have ranged from a melting pot approach in which the schools became more sensitive to the needs of minority groups and proposed measures to accommodate them in a benevolent fashion which subtly reinforced the superior/inferior syndromes, to those in which cultural pluralism has been fostered and extended. (Lynch, 1983.) Such approaches have preserved boundaries between groups and related the curriculum functionally to the perceived personal needs and view of citizenship for each. The danger of such an approach carried to its logical conclusion is well exemplified in South Africa, with its ultimate expression in the "ethnic university."

In both England (Craft, 1981, p 15) and many of the Australian states there is evidence of real striving to engage in dialogue to develop a comprehensive strategy of multi-cultural education grounded in the needs of a truly multi-cultural society. (Bene, 1980, p 166.) The task confronting South
Africa is the negotiation of a structure on which a just and multi-cultural society can be established, and the cultivation of a climate of educational thought which perceives the key role of teachers in making this a reality.
Bibliography


<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>E. Morries</th>
<th>Individual Tuition Rota</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>08h00</td>
<td>114 R</td>
<td>119</td>
</tr>
<tr>
<td>T</td>
<td>09h00</td>
<td>21</td>
<td>118</td>
</tr>
<tr>
<td>W</td>
<td>10h00</td>
<td>41</td>
<td>120</td>
</tr>
<tr>
<td>Th</td>
<td>11h00</td>
<td>21</td>
<td>119</td>
</tr>
<tr>
<td>F</td>
<td>12h00</td>
<td>23</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>13h00</td>
<td>25</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>14h00</td>
<td>41</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>15h00</td>
<td>25</td>
<td>111</td>
</tr>
</tbody>
</table>

**T.C. Music Department**

**INDIVIDUAL TUITION ROTA**

**DATE**

**WEEK 1**

**WEEK 2**

**WEEK 3**

**WEEK 4**