THE VALUE SYSTEMS OF SECONDARY SCHOOL TEACHERS, TEACHER TRAINERS AND STUDENTS IN TRAINING

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The following was redacted from this digital copy of the original thesis at the request of the awarding university:

Appendix X

Appendix XII

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Finally I thank my typist, Miss Hilary Gaskell, for her many weeks of hard labour.

In spite of the assistance of so many people, errors which no doubt still occur are, of course, entirely my responsibility.

T E Crompton
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ABSTRACT

Ph. D. Thesis - "The Value Systems of Secondary School Teachers, Teacher Trainers and Students in Training." T. E. Crompton

The thesis examines the beliefs about education and society of the following groups of people:-

1. Teacher trainers in College and University Departments of Education.

2. Students in one College of Education training for posts in secondary schools (3 and 4 year courses).

3. Teachers in
   (i) Secondary Modern Schools
   (ii) Comprehensive Schools
   (iii) Maintained Grammar Schools
   (iv) Direct Grant Grammar Schools
   (v) Independent Schools.

Beliefs were assessed by:-

(a) (i) The Oliver "Survey of Opinions" Scales
   (ii) The Highfield-Pinsent Corporal Punishment Scale
   (iii) The writer's scales dealing with attitudes to streaming by ability and 11+ selection
   (iv) The Wilson-Patterson Conservatism scales.

(b) A series of unstructured interviews.

The data is analysed conventionally (e.g. by correlations, factor analysis, critical ratio tests of mean differences etc.) and also "conceptually" - an attempt to analyse the underlying ideological assumptions of the respondents' declared beliefs about "ability".

The study deals in controversial material - the link between political beliefs and educational beliefs; the differences in beliefs held by teachers in different kinds of institutions; the differences between the beliefs of teachers and teacher trainers and the beliefs of students.

Certain tentative conclusions about the nature of teachers' beliefs about notions of "ability" are made and the implications of such beliefs for the aims of comprehensive education.

CHAPTER ONE

STATEMENT OF THE PROBLEM

Chapter Two of this thesis gives a perspective on the problems that are felt to be of concern. Here the problems are simply listed for ease of reference:

1. What is the relationship between teachers' attitudes to specified current problems in education - to streaming, 11+ selection and corporal punishment - their philosophies of education and their degree of commitment to 'Conservatism'? 'Teachers' refers to

   (a) Teachers in maintained and independent secondary schools

   (b) 'Teacher trainers' in Colleges of Education and University Education Departments.

'Conservatism' refers to respondents' scores on the Wilson and Patterson C-scale (1970).

2. Do teachers in different kinds of secondary school (e.g secondary modern, secondary grammar, comprehensive and independent) have distinctive attitude profiles?

3. If there are differentiated attitude profiles, are they associated with the type of school or with the teachers' academic and professional socialisation? (In so far as these can be distinguished)

4. There is a widespread belief in some quarters (e.g. Cox and Boyson, 1977) that there is sharp discontinuity of attitudes to educational aims between the teachers and the teacher trainers - often posed as opposition between 'ivory-towered idealists' and 'chalk face realists' How well founded is this belief?

5. Are certain attitude profiles associated with success and failure in teaching in general? Can it be shown that the holding of certain attitudes would make success in teaching in certain types of school unlikely?

6. Are there distinctive Conservative and non-Conservative attitude profiles? Are Conservative teachers more likely to occur in one area of secondary education than another?

7. Is there a discontinuity of attitude between students at college, their tutors, and the teachers in the schools that will receive them either as students on teaching practice or as young probationer colleagues?

8. A methodological problem - how possible is it to investigate these problems with the traditional tools of the social psychologist, notably a series of attitude inventories?

CHAPTER TWO

HISTORICAL PERSPECTIVE ON THE PROBLEM (c 1920 - 1977)

> "If I were to be asked to specify the single most significant outcome of educational research in the last decade I think I would select just this one: the power of teacher attitude and teacher expectation."

Thus spoke the late Stephen Wiseman in December 1970 to the Annual General Meeting of the National Foundation for Educational Research. In his address, later published by the National Foundation (Wiseman, 1973) after his death, he went on to survey the field of educational research and concluded:

> "... there seems to me to be some danger that the more intractable and difficult area of secondary education is receiving less attention than it might." (pp 90 and 93)

It is not claimed that this study represents an answer to the call made by Wiseman, but his address was published about the time that work on this study commenced. Previous research by the writer had examined attitude holding amongst a group of primary teachers (Crompton, 1967) and there had been an attempt at a comparative study of primary and secondary teachers' attitudes to education (Crompton, 1969). To that extent, the present work is an extension of the two earlier forays into the field of teacher attitude for it attempts to concentrate on attitudes within secondary education together with an examination of the attitudes of the 'teacher trainers' in colleges and universities.

The work reported in this thesis may best be located within a general framework of research into teachers and their characteristics. Following the pioneer work of Waller (1932)

in this area - work rather untypical of its period (see below) - research and theoretical interest in the teacher does not seem to have been maintained. Although attempts to categorise the development of areas of research interests in education are almost inevitably simplistic, there do appear to have been some relatively clear phases or prominent interests of an overlapping kind over the years. In the first two or three decades of this century, interest in the measurement of intelligence (as well as the nature of intelligence) was high. Following Binet's pioneer efforts, Terman and his associates produced their first version of the Stanford-Binet individual intelligence scales in 1916 and, in the United Kingdom, this work was taken up by psychologists like Godfrey Thomson and Cyril Burt who, however, tended to be more interested in the production of a valid group test that would enable some predictions to be made about the development of scholastic ability. The apparent success of their work was reflected in the increasing use of group intelligence tests by local education authorities as part of their decision-making about the allocation of scholarships or 'free places' to secondary (grammar) schools (Banks, 1955). This attempt to measure and predict cognitive growth may be seen as part of a general research concern with the nature of the child and his development: another part was the attempt by other psychologists to understand cognitive and other kinds of growth and one thinks of the work of Gesell and Buhler in the United States and of the early work of Piaget and his associates in Geneva.

After the second world war these interests continued, but the rather narrow 'psychological' view of the child was

supplemented by a more 'sociological' perspective, viewing the child less as a developing organism and rather more as a product of his total environment. There was, during the 1950s, a move against simple genetic accounts of child development and cultural or sub-cultural explanations were sought. Spinley's much-criticised study (1953) is an example of this trend as is Jean Floud's work (Floud, et al 1957). These studies, and many others, examined the child's home and neighbourhood. Some studies of the 1960s (such as Wiseman, 1964, Douglas, 1964) took account of the school variable, too. Typically, these investigations were concerned with 'failure' in the formal, educational sense, the explanation for which was sought in child-rearing practices (Spinley), neighbourhood indices of social deprivation (Wiseman), linguistic inadequacies or inappropriateness (Bernstein, 1958, 1959) or a combination of these factors, including failure by the school (Douglas, 1964, 1968).

Thus, by the mid-1960s it could be argued that the child and his development, his family, neighbourhood and school had been quite extensively examined, mainly with a research focus on reasons for the relative failure of the 'working class' to profit from educational opportunity. Many of these studies could reasonably be described as large scale, owing something to a demographic perspective. The later 1960s and 1970s have been marked by a shift of emphasis to micro-studies - such as those of Hargreaves (1967), Lacey (1970), Nash (1973, 1976). Even studies like those of Ford (1969) and Banks and Finlayson (1973) contrast sharply in scope with the earlier ones referred to. These studies attempt to look at individual schools and even individual classrooms and teachers. The renewal of interest

in symbolic interactionism - discussed in Chapter Three- is, in part, responsible for some of this change in emphasis; no doubt, too, the micro-studies are less expensive to carry out, an important consideration at a time of inflation and financial stringency. However, it may not be altogether fanciful to see a renewal of interest in the teacher as a crucial part of the educational process as another causative factor in this shift of emphasis in educational research. This writer regards the shift as healthy; Wiseman (1972) claimed that a very high proportion of our slow learners are not born so but made so and that knowledge of genetically-determined innate abilities of pupils is inaccessible to the teacher and will remain so. In other words, the teacher is, or should be, concerned with those areas where he can affect change, through the curriculum as transacted in the classroom.

To bring to some measure of completion this section on shifting research interests one must mention the renewed interest in the sociology of knowledge (Young 1971). By concentrating on the nature, distribution and legitimising of knowledge through schools and teachers this perspective has also tended to direct attention away from the child's home and neighbourhood on to the curriculum negotiation occurring in classrooms and to query the status of teachers' implicit (at least) claims to determine worthwhile knowledge and to whom it should be distributed. Keddie (1973) (and in Young, 1971) has reported her own and others' work in classrooms using this particular social science paradigm which concentrates on the teacher's perspectives of the classroom situation, his view of knowledge and contrasts this with the children's.

Another strand converging on the concerns of this study

may be seen as stemming from accounts of school organisation. It is a common-place that debate in the 1950s and into the 1960s on the question of the common secondary school focussed on organisational matters (Podley 1963, Davis 1967) - whether 11-18 schools were too large; if common secondary schools would be able to develop 'viable' sixth forms and the problems of 'split site' amalgamations. As late as 1969 Ford's study of social class and the comprehensive school considered questions like the development of talent, the use of vertical grouping systems and children's perceptions of society without any systematic attempt to examine the characteristics of the teachers or the transactions between teachers and taught. Another organisational matter - or what was originally perceived as an organisational matter - affecting both primary and secondary schools was that of streaming by ability. Barker Lunn (1970) reviewed large numbers of investigations into the relationship between attainment and the presence or absence of streaming systems. Most of the studies she reviewed were inconclusive or contradictory and no clear relationship could be shown. Barker Lunn pointed out that a simple 'streamed/unstreamed' dichotomy based on an organisational principle left out of account the teachers' feelings about the matter and was able to produce a number of stark examples of teachers' attitudes being neglected. Out of her sample of teachers working in junior schools which were declared to be 'unstreamed', only 52% declared themselves to be in favour of non-streaming whilst in one very large unstreamed school, only the headmaster appeared to favour mixed ability. Not surprisingly, Barker Lunn raised questions about the effectiveness and quality of such 'non-

streaming'. She identified the variable of teacher attitude as being of great importance and in her work attempted to control it; this aspect of the work was reported separately (Tuppen 1966) and it does seem that such identification and measurement of this variable is both necessary and a significant advance over some earlier studies where it was not apparently recognised (e.g. Daniels, 1961a,b).

It is one thing to identify a variable - in this case teacher attitude - and to assume that it has a crucial role to play in the educational process; it is quite another to demonstrate empirically that the variable is acting in a causal manner. Put simply, the assumption is that teacher attitude is related, significantly and positively, to pupil attainment (Pidgeon 1970; Nash 1976): if the teacher perceives the child favourably, by the employment, verbally or in some other way, of positive labels such as 'bright', 'hard-working', 'good potential' or 'supportive home' then, according to the theory, the child will appear to fulfil the prediction implied by the label. This is, essentially, the process known as the 'self-fulfilling prophecy'. (Merton 1948) This is usually defined as an expectation or prediction, initially false, which initiates a series of events that cause the original expectation or prediction to become true. Its importance lies in the supposition that the teacher is a crucial actor, a significant other in the educational process; that he becomes such a meaningful person to the child and the development of a positive self-concept as to over-ride conventional variables affecting attainment such as I.Q., social class and language. Rosenthal and Jacobson (1968) in a now classic study appeared

to have provided clear evidence of the occurrence of this process in classrooms but following devastating reviews (e.g. Snow 1969, Thorndike 1968) it is difficult to accept that their evidence is valid. Numerous replication attempts (many referred to by Rosenthal and Jacobson, others by Brophy and Good 1974) have met with mixed success. Although such studies do focus on the teacher as a vital variable and many involve a form of deception, often no attempt is made to control the teacher variable following the act of deception and it may be this omission that accounts for the failure of many investigations to demonstrate clearly the operation of the self-fulfilling prophecy. Brophy and Good (1974) have suggested that the expectations of some teachers may be more powerful than the expectations of others, especially if the expectations are inflexibly rigid and inappropriate.

A semi-public expression by the school of the expectations held of children is contained in the arrangements for grouping them. Any school containing within one age cohort a number too great to be taught in one class group has to make decisions about dividing the children into two or more teaching groups. The attaching of a label such as '1A' to a group that the teaching staff, on more or less good evidence, believe to be 'bright' tells us, implicitly, something about the teachers' views on the nature and origin of intelligence and also conveys to children and parents certain information about the teachers' beliefs about that group of children. It has been suggested (eg Partridge 1968; Hargreaves, 1967; Clegg and Megson, 1968) that the meaning of such labels - even if not as overt as '1A' - is quickly understood by all the children in the school and not

just in the group thus labelled. Barker Lunn (1970) demonstrated that teachers who were prepared to use such labels could be distinguished in their general attitude to curriculum and organisation from teachers who were reluctant to use the streaming nomenclature ('Type 2' and 'Type 1' teachers respectively). Thus, attitude to streaming seems to be a significant differentiating feature amongst the constellation of teacher attitudes and is a prime concern of the investigation reported later in this study.

Another attitude which might be expected to be related to this one is attitude to selection for grammar school. Following all the controversy which has surrounded this question it may be thought that the issue has been largely settled - in a practical, if not academic sense - especially since the general election of October 1974. This view, however, ignores the fact that a substantial section of the Conservative Party as well as some sections of the Labour Party, perhaps, remain committed to the grammar school, although not so committed, perhaps perversely, to 11+ selection. "Why can't we have the old grammar schools back, without the 11+"(Sunday Telegraph, 24/7/77 -article by Graham Turner). The view also ignores the present position in secondary school re-organisation. In January 1974 - the last official statistics available at the time of writing - of three and one half million children being educated in secondary schools, over half a million were in grammar schools; in other words, one seventh of the children were in selective schools, compared with just over one quarter in 1967. (These proportions include the 'Direct Grant' sector) This suggests that, although there has been a marked growth in the number of

local authorities organising their secondary schools on a non-selective (in formal terms) basis, there are still a significant number where 11+ operates and where 'Attitudes to 11+ selection' of teachers are not simply a matter of recollection. The 1976 Tameside judgement established, temporarily at least, that there was no reason in law why selection could not be maintained or even re-introduced.

It might be assumed that attitudes to streaming and attitudes to selection are simply facets of the same attitude - an intra- and inter- school view about intelligence. Previous work by the writer (Crompton, 1969) suggests that these attitudes are not necessarily highly correlated. He found a value of only +0.55 for the correlation of those two attitudes and even this value is higher than one reported by Tuppen (1966) of +0.39. The writer suggested that teachers who were in favour of comprehensive schools - perhaps because of objections to 11+ selection, for career reasons, for ideological reasons - may not necessarily favour the abolition of streaming, believing that streaming is associated with academic attainments of a high order and that innovations need to justify themselves in terms of traditional educational values.

These are, of course, attitudes to specific problems. Another traditional problem, perhaps faced especially by secondary school teachers, is that of the use of corporal punishment. Will teachers rejecting streaming and 11+ selection also reject physical correction as part of a cluster of 'progressive' attitudes? There seems to be no necessary reason why non-streamers, for example, should not agree with corporal punishment, but according to Tuppen (1966), junior school

teachers are more likely to reject it than teachers believing in streaming. The writer's previous work with primary and secondary teachers supports this view (Crompton, 1969).

Clearly, to look at teachers' attitudes to particular problems only would be to take a very narrow view although it is the claim of the writer that the three specific attitudes identified above are important indicators of more general feelings about education and society. It might be hoped that such attitudes are part of at least an implicit educational philosophy, more or less rationally organised, although this may be too sanguine a view to take. As long ago as 1933, Peterson commented:

> "... teachers are not aware of the more subtle implications and assumptions which underlie the positions for which they declare themselves."

Oliver (1953) declares:

> "The term (philosophy of education) is perhaps too grandiose, for most people, including most teachers, have no coherent and explicit system of ideas about education as a whole... there may be inconsistencies in their attitudes and their methods." (p 31)

The classification of educational philosophies produced by Oliver (op.cit.) and discussed in Chapter Four provides a general framework within which attitudes to specific problems may be located. Finally, it might be supposed that even a coherent 'educational philosophy' is related to more general social attitudes or to an overriding ideology which Eysenck (1954) has claimed to be at the pinnacle of attitude organisation One of the most clearly established ideological stances is that of Conservatism which, on a priori grounds, one would expect to be related to some, if not all, the educational questions. An ideological commitment to Conservatism will be reflected in

political voting behaviour - although an extreme 'Conservative' may support a neo-Fascist candidate if one is available, whilst a more moderate 'Conservative' may vote Liberal or even Labour, so that one should not assume a simple relationship. Neverthe less, support for secondary school selection tends to be concentrated in the Conservative Party; thus a group of 'Conservative' teachers might be expected to show pro-selection attitudes. (Their commitment to 'Conservatism' would be indicated by scores on the C-scale.)

This background discussion suggests a number of problems that can be posed empirically and an investigation attempted, and these have been listed in Chapter One.

CHAPTER THREE

THEORIES OF ATTITUDE-HOLDING AND ATTITUDE MEASUREMENT

It must be stated at the outset that the underlying theory of this thesis rests largely, but not entirely, upon a traditional or positivistic view of social science. Such a view, in philosophical terms, accepts that there is an objective reality to investigate; that knowledge is not simply a matter of perception, of individual constructions and that the traditional tools associated with the hypothetico/deductive model can be used to investigate that reality. In such a theory, attitudes and their measurement have a respected place and a long history. Yet, in the present state of dispute within the social sciences, and especially within sociology, between what may be loosely described as the phenomenological viewpoint - although the term as used here embraces symbolic interactionism and ethnomethodology - and the traditional, positivistic perspective, the criticisms, actual and potential, of attitude theory and measurement cannot be ignored. Although it is not crucial to the argument, some account of the controversy, as it affects attitude theory, must be given: not only will this help to place the role of attitudes as a concept into a more contemporary framework but it will also provide some theoretical underpinning to the divergence from a strictly traditional position which is introduced later in the investigation.

Briefly, the dispute, although complex, appears to stem from different conceptions of the nature of reality and in this sense the argument has a long history, certainly taking in the seventeenth century concerns about appearance and reality of

Hume and Berkeley and, perhaps, reflecting a disagreement as old as the dispute between Socrates and the Sophists in Ancient Greece. Gorman (1975) sees the main points of the controversy as follows: the traditionalists/positivists - referred to as naturalists by Gorman - claim that there is a 'real', objective world consisting of a wide variety of phenomena, ranging from inanimate things to human subjects. This world can be perceived - and measured - by any scientist willing to adhere to a set of professionally-tested rules. From this procedure, systems of relationships may be determined which can then be abstracted into generalisations or even laws which then have considerable explanatory power. Opposed to this view of the world is that which holds that reality only exists through our perceptions. It has no independent, objective reality separate from our perceptions and each 'actor' imputes a personal meaning to his own experience. Thus, the 'reality' of the world is actually located in his conscious awareness. In this view, scientific knowledge is not drawn from an objective world but is

> "individually constituted by a successively purified consciousness, able to transcend (mere) subjectivity ..."
> (Gorman p 395)

Although, in this analysis, Gorman is concentrating especially on the phenomenology of Edmund Husserl, the summary given may catch something of the nature of the dispute.

Translated into the slightly more practical terms of argument between protagonists within sociology, this critique suggests a different perspective upon some of the traditional concerns of the discipline. Thus, 'deviance' is translated from a preoccupation with rules, rule-breaking and punishment to a concern with those defining the act of deviance and their

reasons for so doing (Hargreaves et al, 1975). The notion of 'educability' ceases to be the 'taken-for-granted' concept that may be found in some of the British studies of the 1960s (e.g. Douglas, 1964; Wiseman, 1964) and takes on a problematic status: who is defining a child or a group of children as having profited from their formal education? What are the values and assumptions of the defining group? Have they the power to make their definition of 'educability' the decisive one? (Young, 1971) Similar criticisms have been made of other concepts such as 'social class'.

One advantage of this perspective is that it usefully reminds us that such concepts do not exist in nature: they are man-made and, as such, may be subjected to stringent conceptual/ ideological examination and not simply empirical analysis, where the concept is accepted as 'given'. It is an oft-repeated criticism by the phenomenologists that traditional sociologistsar constantly reifying their concepts, endowing them with an independent life of their own, independent, that is, of our construction of them.

Turning now to the concept of attitudes, it appears that phenomenologists have paid less attention to this than some other traditional concerns of social science. Although, as suggested above, phenomenology has made a significant penetration into sociological theory, it has not made quite the same impact on psychology or social psychology where most research on attitudes has been normally located. As informal confirmation of this view, one might cite the contents of two leading journals in the field of social psychology, the American 'Journal of Social Psychology' and the 'British Journal of

Social and Clinical Psychology'. An inspection of articles published during 1976 suggests little, if any, penetration of the ideas of the 'new sociology'. Perhaps articles by Davey and Farr (1976) in the British Journal are the only exceptions. This contrasts with the 'capture' in 1972 of the Open University course 'School and Society', one of the University's first Education courses. It may be significant that even in this innovatory atmosphere the new Social Psychology course (D 305) first published in 1976 shows, if anything, a bias towards traditional approaches, whilst making some acknowledgement of the phenomenological perspective.

Allport (in Warren-Jahoda, 1973) discusses a large number of views on the nature of attitudes, some of them quite diverse; but all the views he mentions have one thing in common: they all assume that attitudes really exist in some form within the individual - in other words, a traditional, positivistic view. More recently, another view has developed, perhaps represented by what DeFleur and Westie (1963) call a 'probability conception'. In this perspective, attitudes have no internal dimension but consist entirely of external constructs which we develop from our observation of an individual's behaviour. For DeFleur and Westie, therefore, the measurement of attitudes by the use of scales is inadvisable: observation and recording, without preconceived categories and dimensions, would be the preferred mode of investigation. One advantage of this view is that it removes from the field of controversy the attitude and behaviour issue (see below) by abolishing the traditional concept of attitude (Davey, 1976).

As was made clear at the start of this chapter, this

writer sees continued value in traditional attitude research but, at the same time, is prepared to concede the usefulness of the newer perspective. This perspective has not been systematically developed at length, as far as the writer is aware (although Keddie, 1971, might be credited with some methodological progress in an educational setting). The following comments arise, therefore, from a personal view of the phenomenological perspective and its possible application to attitudes and their measurement.

The traditional view of attitudes still expressed today (e.g. Elms, 1976) is that a person's attitudes are positive and negative feelings about the objects in his psychological world; the use of 'psychological' is interesting as perhaps an attempt to forestall criticism that Elms takes the view that objects exist in the real world. A phenomenologist might want to argue that this shifts the emphasis from the observer, where it ought to be, to the subject and makes the assumption that the subject actually possesses attitudes which are observable and, perhaps, measureable, whereas the significant aspect is the interaction between subject and observer and the latter's belief that his subject actually has the attitudes. Why does the observer feel the need to impute attitudes to his subject? What does this tell us of the observer's values and assumptions about the world? More tellingly, perhaps, the phenomenologist might express surprise at the researcher's attempts to measure the direction and intensity of these presumed attitudes, especially if a method like the Likert or Thurstone technique of scaling were to be employed. These, it would be argued, employed the <u>researcher's</u> concepts and understanding of the dimension of the

attitudes to investigate the subject's concepts and understanding. (A similar point is made by Roiser in Armistead, 1974.) As was suggested earlier in this chapter, it is almost an axiom of phenomenologists that there is no significant external reality common to all observers; that knowledge is situational. Thus, the nearest we can get to understanding another's attitudes is for us to observe him in relevant situations, without clipboard and check-lists, and to ask him in an open-ended, unstructured way to reflect on those issues which interest the researcher. The use of Likert attitude scales, as is done in this research, involves a logical contradiction, it might be said: the ascertainment of personal feelings (attitudes) by getting the subject to report his feelings but using categories of feeling developed by another person. Perhaps a form of the Semantic Differential (Osgood et al 1957) might be an acceptable form of investigation to those holding this view or the repertory grid system of bi-polar personal constructs (Kelly, 1955) as suggested by Nash (1973). Heritage (in Armistead, op.cit.) has provided a vigorous critique of traditional methods but his prescriptions for reform are less precise ("People should be studied naturalistically"). Logically, he doubts even the possibility of quantification.

Put like this, the view of the phenomenologists appears powerful and casts some doubt on aspects of many attitude investigations. Yet, phenomenological theory itself is not without elements of self-contradiction. As many writers have pointed out (e.g. Pring, 1972; White, 1976) if all knowledge is personal and situational then this claim must apply to the theory behind phenomenology itself and thus its claim to be taken seriously must be at some risk. Young (1975) has

attempted to answer this charge, but it remains a compelling criticism in some degree. Further, it is possible to argue that the degree of personalisation of experience can be exaggerated; that although we may perceive the world differently and create different meanings for ourselves we all have the same sense organs and that within any one culture or, especially, sub-culture socialisation experiences are marked by their similarity rather than their differences; that, in other words, our perceptions of phenomena overlap to a significantly useful degree. This writer would wish to argue such a point of view. At the same time, one must concede that individual attitude cannot be 'caught' totally by the use of empirical, psycho-metrically based procedures alone; a subjective dimension is a useful if not essential addition. As explained later (Chapter Six) it was for this reason that some interviewing of subjects who had previously completed questionnaires was undertaken and, it will be argued (Chapter Eight), further important under-standing of subjects' views on some of the basic questions being investigated was thereby obtained, an understanding that could not have been derived simply from an analysis of their responses to the questionnaire. Thus, the procedures of this study rest, in the main, on a traditional concept of attitudes together with a graft of more contemporary approaches.

Having discussed briefly the possible influence of the phenomenological perspective on the concept of attitudes it may now be appropriate to deal with some semantic problems before looking at some of the major concerns of attitude theory. The concept may be narrowed by distinguishing between beliefs, values and attitudes. According to Elms (1976) beliefs are

> "assumptions about the probability that an object exists, that it possesses certain characteristics or that it is related in certain ways to other objects". (p 11)

In this view, beliefs are largely cognitive and can be simply true or false. Values, on the other hand, contain at least an element of an affective component - values are what we desire to be true and, logically, we thus seek what we desire and value. Action is implied by our values whereas our beliefs do not necessarily impel us to any kind of action. Elms argues that an attitude is a blend of beliefs and values; it is the positive and negative feelings he has about many of the things in whose existence he believes. A positive attitude will be held about those things which, he believes, will help him to attain valued goals; a negative attitude about those things which impede goal attainment. Thus, attitudes are not simply held cognitively but contain a large affective element. That they are not necessarily wholly rational in organisation simply adds to the researcher's methodological problems but, of course, contributes to man's uniqueness.

Other terms which have been related to, or used as synonyms for, attitudes include 'sentiments', 'cathexes' and 'opinions'. McDougall (quoted by Elms, 1976) preferred 'sentiments' when discussing attitudes but this preference was never shared to any extent by other social scientists. Psychoanalysts often use 'cathexes' to refer to negative and positive investments of psychic energy in particular objects but this term, too, has not gained wide currency outside psychoanalytic circles. A much more serious contender is undoubtedly 'opinion'. The two words, 'opinion' and 'attitude' are often used interchangeably, in spite of some attempts to stipulate distinctions. Thurstone

and Chave (1929) suggested that attitudes were the sum total of a man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats and convictions about any specified object. Not content, perhaps, with such a splendidly comprehensive definition, they added that 'opinion' should be regarded as a verbal expression of attitude, a distinction accepted by both Likert (1932) and McNemar (1946). But this distinction has never been widely adopted, perhaps because, making it produces problems of a conceptual and empirical nature. If 'opinions' are verbal expressions of 'attitudes', then attitudes take on the status of a theoretical construct, an internal mental phenomenon more or less adequately represented by the behavioural 'opinion' which cannot, however, be directly observed. It is probable that attempts to make such a distinction contributed to the establishment of the attitude-behaviour controversy discussed below.

Of some concern to the empirical section of this study, is the question of the formation of attitudes. As is the case with most psychological phenomena, there are those who propose a genetic explanation (McGuire, 1969, in Warren-Jahoda 1973 reviews some evidence on this interpretation). To propose the origin of anything depending upon a genetic hypothesis is, in many ways, to fail to provide an explanation. To propose the divorce of a genetic structure from the context in which it may function seems unsound. Present knowledge of the relationship between genotype and behaviour is inferential, at best, and it is difficult to accept any simple genetic explanation of the origin of attitudes at the time of writing (early 1978). A more satisfactory hypothesis may be that of Elms (1976) who

suggests an evolutionary 'natural selection' process during the individual's development. Such phenomena as direct conditioning of responses, imitation, reinforcement of behaviours and primitive reasoning in childhood seem reasonable, a priori, suggestions. Attitudes must be functional, of course, and as the individual develops out of childhood there will be a testing of attitudes against those of his various reference groups, a strengthening of the functional and a discarding of the dysfunctional or, in some cases, a change of reference group so that the prized dysfunctional may be transformed into the functional.

Further light on attitude formation is shed by the phenomenon of attitude change. Janis and Mann (1968) found that there appeared to be four major factors considered by individuals contemplating significant changes in attitude (for example, towards smoking cigarettes).

(a) Utilitarian gains or losses for the individual

(b) Utilitarian gains or losses for significant others

(c) Social approval/disapproval

(d) Self approval/disapproval

This phenomenon of attitude formation and change will be considered subsequently in the light of findings about differential attitude-holding in varied educational settings.

Finally, a note should be added about one of the abiding themes of attitude research, that of attitude-behaviour relationships. A number of studies, summarised by Davey (1976) have commented on the low correlation between expressed attitudes and actual behaviour when the subject is placed in an appropriate situation to demonstrate the behavioural dimension

of a previously declared attitude. The classic study was done as early as 1934 by La Piere. He found that although American hotel and restaurant personnel expressed considerable prejudice against minority groups, their actual behaviour when confronted with racial minorities (in this case Chinese) showed much less prejudice. However, La Piere's conclusion, that attitudes can only be determined by observing humans in actual social situations, has not met with universal assent (e.g. Abelson, 1972), perhaps because of a conviction of the value of the concept in understanding behaviour and also, no doubt, because of the amount of academic investment in attitude measurement both before and after 1934. The lack of correlation continues to attract explanation and research. Perry (1976) produced a tightly-constructed attitude scale (in terms of a behavioural criterion) and produces the rather unremarkable conclusion that

> " ... attitude scales tailored specifically to a particular behavioural criterion were more highly correlated with that criterion than scales which were not so tailored" (p 141)

Davey (1976) is critical of studies which, by implication from their research design, suggest a simple, linear relationship between expressed attitudes and actual behaviour. He suggests that such a lack of congruence is exactly what might be predicted given that "change, not stasis, is the norm of social life." (p 21). He claims that the concept of attitude is a useful one in social science but its use does not lie in attempting to predict behaviour. Again, this concern of attitude theory is relevant to the present study. If a teacher expresses unreserved hostility to, say, corporal punishment, should we expect him to stay his hand in all possible circumstances? What strength of opposition to corporal punishment, as expressed

on a Likert-type scale, would be accepted as a predictor of behaviour? What is the position of a teacher expressing strong opposition to 11+ selection found working in a Direct Grant grammar school? Such cases are reported later in the investigation (Chapters Seven and Eight).

Attitude Measurement

In this section it is proposed to examine some aspects of the techniques of attitude measurement commonly in use and to review some studies which bear upon the main concerns of this thesis in a general sense. The next chapter will deal with the subject of teacher attitude and studies in that field.

The development of the measurement of attitudes may be divided into the pre- and post-Thurstone era, for although some later developments in the field have surpassed Thurstone scaling in degree of sophistication there can be little doubt that it was he who first placed attitude measurement on at least a quasi-scientific basis in a seminal article published in January 1928, refined into two further statements the following year (Thurstone and Chave 1929; Thurstone, 1929). It may be of some interest to look at one pre-Thurstone study as there are many reports in the American journals of the 1920s reporting attempts to measure attitudes. Jones (1926) set out to investigate the attitude of college students - and it is notable, if hardly surprising, how much work has been done with populations of students rather than adults at work - to such questions as labour problems, economic status, discipline, social life and its conventions, including religion. He seems to be groping towards some measure of conservatism or, perhaps,

authoritarianism, but the domain is poorly conceptualised. The questionnaires, about which no data on preparation and item analysis are reported, each consisted of five statements scored on a five-point scale ranging from +2 through 0 to -2. The students completing the questionnaires were at different stages in their college careers but no longitudinal or cross-sectional data are reported. No hypotheses seem to have been formulated and comparative mean scores are reported without any attempt to determine significances. There is no information about sampling but he does not hesitate to compare scores of freshmen with those of senior students, drawing the rather questionable conclusion that college life made no difference to their attitudes to the problems noted above. The only serious piece of statistical analysis reported is a correlation of +0.2 between scores on a radicalism scale and I.Q. scores; with 207 degrees of freedom this value is significant at the 1% level of probability but we are not told this. It is probably this sort of work that evoked from McNemar (1946) such scathing criticism about attitude-opinion methodology although, to be fair, there are other studies reported about the same time that easily surpass the one reported above in general competence (e.g. Allport and Hartmann, 1925).

The appearance of Thurstone's scaling technique helped to eliminate some of the more obvious weaknesses in the production of attitude scales. His recommendations, briefly, involve the following steps:

1. The specification of the attitude to be measured.
2. The collection of a wide variety of statements relating to this attitude.

3. Editing of these to about one hundred brief expressions of opinion.

4. The sorting of these statements by a large number of judges (Thurstone suggests about 300!) in an order of intensity so that the difference between statements A and B is the same as the difference between statements B and C and so on. The median judged location of any statement is its finally assigned scale value. It is this stage which is such a distinctive feature of Thurstone scaling: naturally, it is perfectly possible to manage with far fewer than 300 judges.

5. Ambiguous or irrelevant statements are eliminated.

6. Reduction of the total number of statements to about twenty, evenly graded along the scale.

Respondents check the number of statements they agree with. Each of the checked statements has a weighting according to its agreed assigned position on the continuum and in this way an overall score can be determined relative to the scores of other respondents.

In spite of the obviously laborious nature of the scaling process - (4) above - it did give a new confidence to researchers and it has remained in use to the present day, still being regarded as one of the leading methods of scaling attitude statements (Stevens, 1975; Elms, 1976). However, Rensis Likert proposed (1932) a simpler method. He suggested giving a large number of unweighted statements to respondents scored on a five-way choice of response - Strongly Approve, Approve, Undecided, Disapprove, Strongly Disapprove - as 5, 4, 3, 2, 1, typically from what may be described as the 'radical' end. The awarding of 3 'points' to the respondent who checks 'Undecided' is

justified on the grounds that this indicates no strong feelings about the statement and thus placing the attitude in a median location on the assumed continuum. After the draft statements have been given to a sample of people, their responses are scored and the results dichotomised into 'high' and 'low' scoring groups, the median scores being disregarded for this purpose. The pattern of responses to each statement is then scrutinised and those statements which prove to be the best discriminators between the dichotomised groups are kept, the remainder being discarded, so that the scale may be reduced to some twenty items. Split-half and test-re-test reliability coefficients are normally calculated as evidence of improved reliability following the item analysis. This was the type of scaling eventually employed by the writer and further details of the method in use are given in Chapter Five.

The great merit of a Likert scale is its simplicity of construction. This very simplicity has led to the technique's being regarded with some suspicion (e.g. Tuppen, 1965). Likert himself was highly suspicious and only came to recommend it after extensive analyses had suggested that this simplicity was combined with a good degree of reliability (Likert, 1932; Likert Roslow and Murphy, 1934). He comments:

> "It will be noted that the writer began this enquiry with a suspicious attitude towards the simple computation used in rating scales, and adopted these simple procedures only in the light of evidence that the simpler methods gave much the same results as the elaborate."
> (Likert 1932, p 27 n)

Generally higher reliability coefficients have been reported with the Likert technique than with the Thurstone technique (e.g. McNemar, 1946; Barclay and Weaver, 1962; Potterton and

Pilkington, 1964). That the method remains a leading one may be illustrated by reference to the Journal of Social Psychology for 1976: of the articles reporting the construction and/or use of attitude scales, seven used the Likert method, two the Thurstone and no other method was used in more than one report. (Of course, some reports do not either name or give sufficient details for identification of the method employed.)

One alternative to the Likert technique is Guttman scaling (Guttman 1944) although this is not primarily a technique for item analysis (Guttman 1951) but rather a way of studying the degree of homogeneity of a particular attitude area. Some writers have expressed a strong preference for Guttman scaling (e.g. Tuppen, 1965) whilst others have been strongly critical (Eysenck and Crown, 1949) or dubious about the practicality of Guttman's 90% reproducibility criterion (Oliver and Butcher, 1962).

A more recent contender in the field of attitude measurement has been the Wilson and Patterson mode (1968). They claim that all traditional types of attitude statements used in attitude scales share the same weakness: the propositions provided for respondents to react to are long enough to contain, almost inevitably, ambiguities or contradictions. It is true that this comment was made in the context of their critique of previous measures of Conservatism but there can be little doubt that their claim could be extended to all forms of attitude testing in some measure. They suggest that, in order to improve the validity of respondents' answers, one needs to note that

(a) there is an immediate, emotional response to the central issue and

(b) this is followed by a suspension of judgement while

qualificatory and justificatory details of the statement are examined.

They feel that one is looking for the first response, the emotional one, as this is more likely to correspond with the respondent's actual behaviour. The way to achieve this is to use very short stimulus phrases of three or four words only, instead of formal sentences. On probability grounds alone, this argument of Wilson and Patterson's must have some force - the undetected ambiguity may well lurk in a formal sentence, in spite of item analysis - but whether the substitution of stimulus phrases will tap the central, emotional content of an attitude seems more doubtful. It is always possible that drastic shortening of a statement may cause semantic doubts in the respondent's mind. A short comparative study of the Likert approach and Wilson and Patterson's is reported in Chapter Five.

All these methods rest firmly on traditional assumptions about the nature of attitudes: they owe much to the positivict or even psychometric view of phenomena, a position from which the writer's investigation was launched, in the main. A method owing more to the interactionist method might be the use of the repertory grid technique of Kelly (1955) which is based on the concept of personal constructs, that is the respondent himself defines the dimensions of his attitude domain. Work in classrooms using this technique has been reported by Nash (1973, 1976) but this writer is not aware of any comparative studies using both a positivist and an interactionist perspective. Such a study might shed some light not only on the nature of attitudes but also on rival views of social 'facts'.

CHAPTER FOUR

SOCIAL AND EDUCATIONAL ATTITUDES

A. Social Attitudes

As any account of educational attitudes owes much to investigations into social attitudes, it seems appropriate to begin with the latter.

The existence of a basic social attitude, a continuum for which is usually labelled 'traditional - radical' or 'liberal - conservative' or some combination of similar terms, has been assumed for many years in both politics and social psychology. Over fifty years ago, Allport and Hartman (1925) investigated the continuum: what is interesting is that they take the existence of such an attitude dimension for granted and nowhere do they find it necessary to discuss it as a concept. Many attitude studies use, almost as a matter of course, some measure of social conservatism/radicalism and the present thesis is no exception. In America, work on social attitudes was stimulated by experiences gained during World War 11 and, in 1950, the classic study on the Authoritarian Personality (Adorno et al) was published. Begun as an attempt to study the development of fascist beliefs, the study eventually largely abandoned this overt political direction for the analysis of what was taken to be a broader attitude domain, that of authoritarianism. The measure of this domain is the 'F scale' which has undergone a number of changes over the years in response to criticism about its validity. Some items, it was felt, tended to encourage an agreement response set ("When in doubt, agree") and that a high score might represent simply a

respondent's willingness to agree rather than an authoritarian personality. On the other hand, it might be argued that this sort of implied submission was a fair indication of one aspect of authoritarianism.

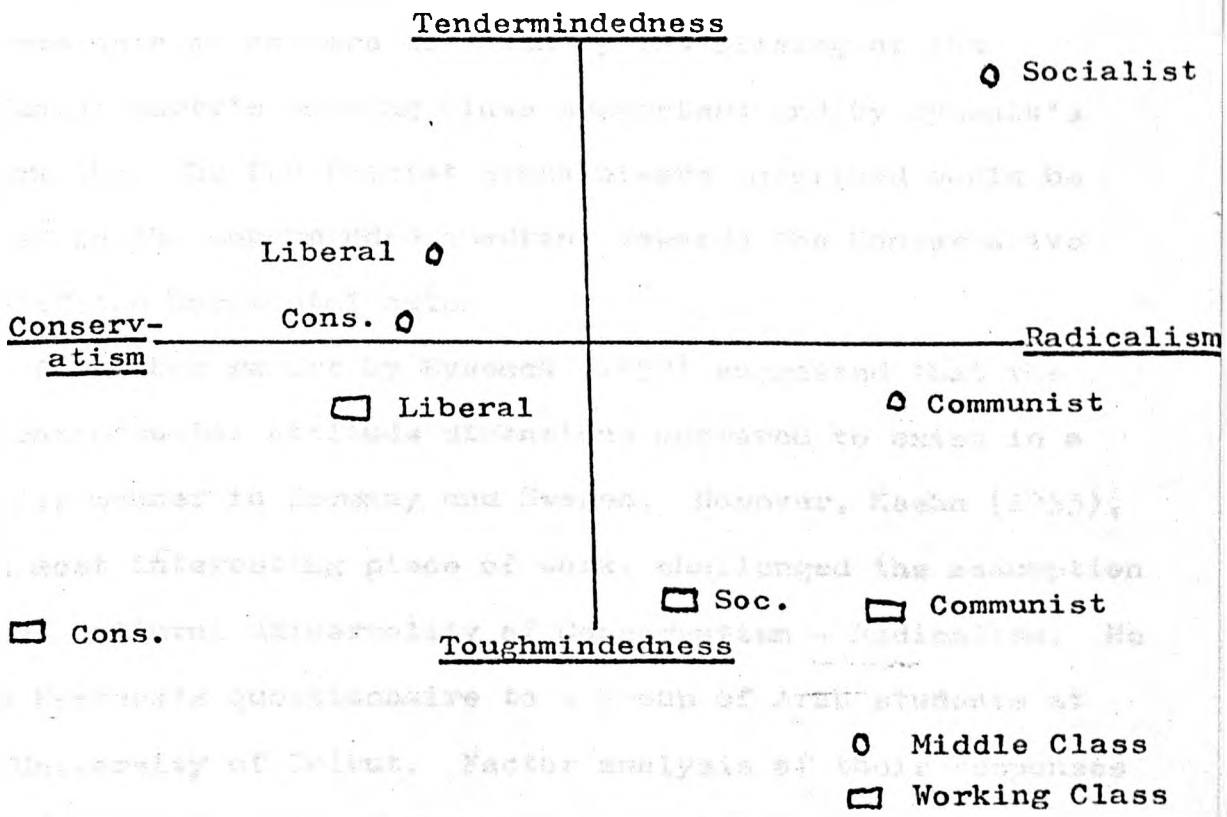
A more telling criticism, perhaps, was the suggestion (Shils, 1954) that Sanford, the F-scale's author, assumed too readily that authoritarianism was a characteristic of the political Right wing whereas there seemed good a priori grounds for believing that it was a characteristic of all extreme opinion-holding in politics. Work in America continued, especially by Milton Rokeach and his associates (1960). They preferred the term 'dogmatism' but failed to find much evidence of its existence amongst the political Left thus tending, implicitly, to confirm Sanford's hypothesis about fascism.

In this country, work on conservatism and other social/ political attitudes is associated with Eysenck. He seems to have accepted, in his early work (1944) the postulation of the radical - conservative dimension, but felt that, by itself, it was insufficient to categorise the major dimensions of social attitudes. He argued that there must be at least one other dimension, basing his argument on the 'common-sense' observation that supporters of the Labour Party drawn from 'middle class' and 'working class' backgrounds appeared to hold different views about certain key social questions. Middle class supporters' views on punishment, for example, seemed less severe than working class views; the latter saw prisons as retributive and deterrent whilst the former group preferred to stress their reformative purposes. Non-Catholic middle class support for legalised abortion was much stronger than working

class support. This led Eysenck to postulate the existence of an attitude dimension which he originally (1944) termed 'practical-theoretical' under which classification middle class Labour Party supporters' views would tend to be radical and theoretical whilst working class views would tend to be radical (although not quite as radical) and practical. Later (1947) he adopted the more familiar terms 'tenderminded' (= theoretical) and 'toughminded' (= practical).

Following an investigation (1951) he was able to refine the theory into this two-dimensional model:

Figure 1



The toughminded attitudes revealed consistently by the working class respondents, of whatever political persuasion, contrast dramatically with the tenderminded attitudes of the middle class. (But, note the odd position of the Liberal working

class: more Conservative than the Conservative middle class, but not as toughminded. This may be due, as Eysenck suggests, to the relatively small number of Liberal working class respondents in his sample.) It is also interesting to note the clear identification of the 'Alf Garnett' figure, the toughminded, working class Conservative, long before he appeared on BBC TV, perhaps an example of the conjunction of 'academic' and 'every day' knowledge. The degree of commitment to a political viewpoint also varies in terms of social class, so that, for example, the working class Conservative is not only more toughminded than his middle class counterpart but also more Conservative. The general toughmindedness of extreme opinion holders is shown by the placing of the Communist Party's working class supporters and by Eysenck's remark that the few Fascist sympathisers unearthed would be placed in the toughminded quadrant towards the Conservative pole of the horizontal axis.

A further report by Eysenck (1953) suggested that the two basic social attitude dimensions appeared to exist in a similar manner in Germany and Sweden. However, Koehn (1955), in a most interesting piece of work, challenged the assumption of the cultural universality of Conservatism - Radicalism. He gave Eysenck's questionnaire to a group of Arab students at the University of Beirut. Factor analysis of their responses failed to establish any Conservatism - Radicalism dimension, although tendermindedness - toughmindedness was clearly shown. He writes:

> "It seems more reasonable to interpret the data as suggesting that the first factor running through the analysis of public opinion reflects not

> Radicalism/Conservatism, as Eysenck suggests, but the major political issue under investigation.... they (Radicalism-Conservatism) do not occupy a major position in current Arab political thought."

Koehn (op cit) further suggests that in Near Eastern cultures it was more reasonable to interpret this factor as having something to do with Arab nationalism. In view of this, it may be unwise to regard this attitude dimension as culture-free. This point is discussed further in Chapter Five in relation to the Oliver scales.

Work along these lines has continued in abundance and it is, perhaps, only appropriate to review some of the recent studies. Eysenck himself has revisted the field (1971) and renewed controversy has followed. He administered a version of the Social Attitudes Inventory to 2000 subjects derived from his earlier (1954) study on the psychology of politics. He concludes, perhaps rather prematurely (see below):

> "The results are interpreted as suggesting that there have been no systematic changes in the structure of social attitudes in this country in the twenty years that have elapsed since the research published in 'The Psychology of Politics' was carried out".

Eiser and Roiser (1972) have criticised the Eysenck study on two grounds:

(a) Differences between social class groups are not sufficient to permit generalised statements about 'working class attitudes'.

(b) The groups are distinguished by the extremity of their response, not the response itself. It is suggested that some issues might simply have been more salient to, say, the middle class groups than the working class groups and that this in itself could account for the differences.

This second criticism is interesting as being couched,

partially at least, in phenomenological terms, a perspective that Eysenck may be expected to regard as less than compelling.

Eysenck's reply (1972) is to acknowledge (a) above, claiming that he made the comparative nature of his findings quite clear:

> ("It is almost impossible, linguistically speaking to repeat this statement - 'comparatively speaking' - every time a comparison is made.") (p.400)

His reply to (b) is to refer to other studies supporting his conclusion and to challenge Eiser and Roiser to disprove his findings.

Eysenck has also reported (1975) a factor analytic study of the structure of social attitudes which comes to a slightly less confident conclusion than the one quoted above (Eysenck 1971). He now concludes:

> "It seems clear that the structure of social attitudes is somewhat more complex than outlined in 'The Psychology of Politics'."
> (Eysenck, 1975 p.330)

He proposes a hierarchical structure: at the bottom, innumerable opinion statements with which individuals can agree or disagree which are organised into 'primary attitudes' of which there are at least ten: permissiveness, socialism, racism, laisser faire, pacifism, capitalism, religion, reactionary individualism, human nature and libertarianism. Above these are three higher order factors - 'superfactors' - which are termed

conservative - radical
toughminded - tenderminded
politico-economic conservatism.

He suggests that the greater complexity of attitude holding revealed in this study, as compared with his 1954 study, is

due to 'a better coverage of the area' or to having 'sufficient items relating to the factor' and claims that the introduction of computer analysis has made unnecessary 'economy' in the construction of attitude scales. The discovery of the third dimension - politico-economic conservatism - is thus attributed to the production of scales and modes of analysis of greater sophistication. However, this discovery may be as much a comment on methodology as on the existence of 'real' social attitudes. The existence of a superfactor must be at least suspected before items relating to the suspect can be included in an inventory; a concept must be constructed before its existence can be shown. Such a significant 'reality phenomenon' as a superfactor should not necessarily depend for proof of its existence upon the creation of more and more sophisticated measures and tools of analysis for its detection. What other superfactors may await discovery by workers possessed of the skills yet to be developed? This writer prefers Eysenck's original four-level hierarchy of attitude-holding (Eysenck, 1954) which is described in detail in Chapter Five in relationship to the scales used in the present investigation.

Major work on the study of Conservatism has been reported by Wilson and Patterson (1968). They have designed a scale to measure commitment to Conservatism which, Wilson (1970) has claimed, establishes the C-factor as a uni-dimensional element, arguing further that his data establish the concept of a 'general attitude' (C) at least as legitimate as that of general intelligence. Discussion of the C-scale itself and some of the controversy surrounding it is contained in Chapter

Five; here, we are mainly concerned with the nature of Conservatism as perceived by Wilson and his co-workers.

The main analysis of Conservatism appears in a series of papers (Wilson, Ed, 1973) but the editor himself provides a conceptual account of the components of Conservatism upon which the C-scale is based. He identifies nine components of the Conservative ideology which should occur, with differing emphases, in the attitude profile of a person holding Conservative beliefs.

1. Religious fundamentalism. This is represented by statements on the C-scale concerning Divine Law, Sabbath observance, church authority, inborn conscience and evolution theory.

2. Pro-Establishment politics, represented by statements concerning empire building, licensing laws, royalty and student pranks.

3. Insistence on strict rules and punishments - death penalty, strait jackets, birching and an item which asks directly about strict rules.

4. Militarism - disarmament, military drill, casual living and patriotism.

5. Ethno-centrism and intolerance of minority groups - items on beatniks, coloured immigration, apartheid, patriotism and student pranks.

6. Preference for the conventional in art, clothing and institutions - items on modern art, computer music, conventional clothing, women judges and pyjama parties.

7. Anti-hedonistic outlook and restriction of sexual behaviour - items on striptease shows, Sabbath observance, birth control,

abortion, self-denial, moral training, chaperones and chastity.

8. Opposition to scientific progress - items on evolution theory, computer music and flouridation.

9. Superstition - items on evolution theory, horoscopes and inborn conscience.

As the selection of items relating to the different components of Conservatism demonstrates, there is overlap, as Wilson (op cit) admits between them. He further remarks that there is no reason to suppose that Conservative attitudes are normally distributed in the population.

We will now examine more closely the nature of educational attitudes and consider the relationship between them and the social attitudes discussed above.

B. Educational Attitudes

Oliver (1953) commences his seminal attempt to classify educational attitudes by remarking:

> "One of the first steps in clear thinking about education, as about other subjects, should be the establishment of useful categories. We need to have some idea what aims, policies, curricula methods and the like go together... Education requires a taxonomy if discussion on a scientific or philosophical level is to be practicable." (p. 32)

He reviews a number of opinions on this subject and concludes that the most far-reaching distinction seems to be that between idealism and naturalism: he regards Dewey's pragmatism as a variety of naturalism. He sees these two positions as occurring at opposite ends of a continuum, as attempts to order our thinking about the same educational problems in alternative ways. He describes the 'idealist metaphysic' and then suggests how such a set of beliefs may be detected

operating in education. By idealism, he understands a belief in a set of absolutes towards which man strives.

> "There are absolute standards of truth, goodness and beauty to which human experience and behaviour can approximate."

He quotes Sir Fred Clarke in support of this belief:

> "... there are ultimate standards, common to and authoritative for, all alike and that belief in them in some form is necessary for both social cohesion and for an adequately purposeful education." (p.33)

Plato and the Ministry of Education are also summoned as upholders of this viewpoint. In education, such attitudes as an insistence on disciplined work, the transmission and augmentation of our cultural heritage may be seen as examples of idealism in practice. Oliver does not claim this, but one might expect the grammar school and public school to show signs of this ethos; it may be less in evidence in, say, an urban comprehensive school.

On the other hand, the naturalist emphasises the universe we experience through our senses. This universe, though orderly, is not stable: change is the most characteristic feature of human life. Life has no ulterior motive and growth, like education, is its own end. In its stress on change and on our perception of the world through our senses, naturalists are at one with the phenomenologists whose views were discussed in Chapter Two. Oliver quotes Rousseau as an example of the naturalist viewpoint:

> "Present interest, that is the motive power that takes us far and safely" (p. 34)

It would not be difficult, he continues, to identify naturalist beliefs being put into practice in education: self-expression

methods might be interpreted as the release of the life-force; learning by doing implies a pragmatist theory of thought and action; the use of direct and immediate relevance as a criterion for content choice in the curriculum may reflect the naturalist philosopher's belief in change, in the irrelevance of the past.

This distinction, between idealism and naturalism, is a powerful one, but, by itself, it is quite inadequate to the task of clarifying educational belief patterns which is Oliver's main purpose. That it is inadequate is suggested by the fact that it places both Plato and Froebel in the idealist sector and Rousseau and Marx in the naturalist. He proposes that it is in the concept of authoritarianism that another fruitful way may be found of ordering finer distinctions between naturalists and idealists, between, say, Plato and Froebel. Here, we enter the realm of method rather than goals, of means rather than ends; of ways of bringing about naturalist and idealist aims where the authoritarian, sure of the rightness of his ends would compel (perhaps in 'the interests of the child') whilst the 'individualist' would seek to persuade. Oliver adopts the William James's formulation of 'toughminded' for the authoritarian and 'tenderminded' for the non-authoritarian. We now have a two-way classification which yields four categories:

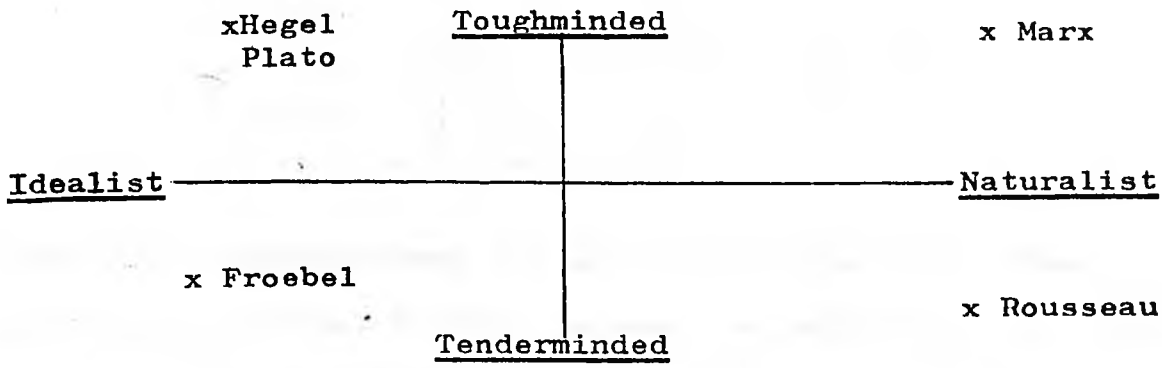
Figure Two

	Toughminded	Tenderminded
Idealist	1	2
Naturalist	3	4

where 1. would be a toughminded idealist, 2. a tenderminded

idealist and so on. However, each of the dimensions are to be thought of as continua, rather than discrete categories so that individuals are described as more or less idealist, more or less toughminded.

Figure Three



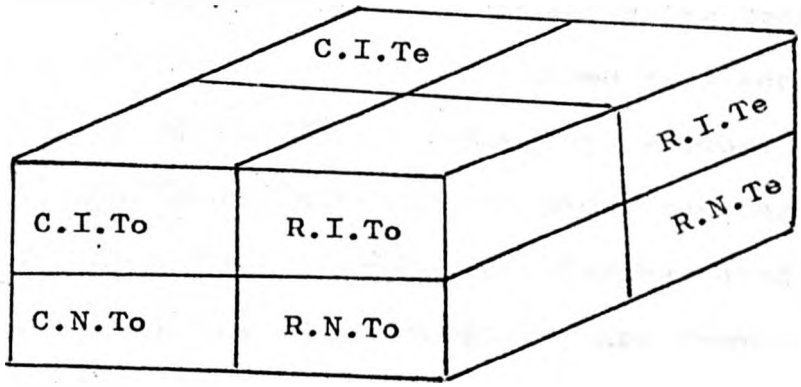
By adapting the sort of diagram used by Eysenck (1951) one can place individuals classified by Oliver as shown in Figure Three above.

Oliver draws support for the existence of tenderminded and toughminded attitudes in education from the work on social attitudes of Eysenck, previously described. However, the association between educational and social toughmindedness is more complex than at first appears: this will be demonstrated later, but Oliver himself implies this complexity when he remarks:

> " ... allowance (must be) made for tho fact that the two sets of concepts originate in rather different contexts of educational theory and social and economic problems". (p. 39, op cit)

It is also from the field of social attitude analysis that Oliver draws his third and final dimension for the classification of educational attitudes, that of radicalism - conservatism. The model is now 2 x 2 x 2.

Figure Four



Seven of the combinations are shown in Figure Four; the eighth (out of sight in this perspective would be C. N. Te.). Prudently, perhaps, Oliver refrains from attempting to name any individuals or educational practice in terms of the model, preferring to await empirical verification, but he summarises the role of each continuum in ordering educational attitudes as follows:

Naturalism.....Idealism: the aims of education

Toughmindedness.....Tendermindedness: the mode of achievement of aims

Radicalism.....Conservatism: the rate of achieving the aims.

This analysis by Oliver provides the rationale for the construction of his 'Survey of Opinions about Education' - described in Chapter Five - one of the sets of scales used by the writer in the present investigation. Butcher (1959) seems to have been largely responsible for the technical work in the production of the scales and results obtained from their use have been published by the authors (Butcher 1965 ; Oliver and Butcher 1968) who used samples of students, teachers on in-service courses and serving teachers. Findings of direct

relevance to the writer's investigation were that teachers in grammar schools were significantly less naturalistic than teachers in other types of school; Conservative teachers (as determined by voting preference) showed less educational radicalism than non-Conservative teachers; grammar school teachers were more tenderminded whilst older teachers in all types of school were more toughminded. Further studies reporting use of the 'Survey of Opinions' are reported later in this chapter.

Studies of teacher attitude are legion, especially in the United States, and it would be neither possible nor desirable to attempt a large scale review; only those bearing very directly on this thesis - in the main drawn from British sources - will be considered. It is, however, worth making two general observations about studies of teacher attitude: (i) Most studies appear to have been done with student populations. As there is ample, recurring (over time) evidence that students tend to show more 'progressive' profiles than serving teachers (Steele, 1958; Butcher, 1965; Morrison and McIntyre, 1967b; McFarlane-Smith, 1973; Hussell and Smithers, 1974), to infer data about the attitude profiles of teachers from data obtained from students is likely to be unsound. Further, some work, apparently done with serving teachers, turns out to have been done with teachers on in-service courses (McLeish, 1969) who share with students the advantage of accessibility and, perhaps, amenability to educational researchers. But there is some evidence that teachers on courses, especially full-time courses, hold attitudes that are not typical of teachers of the same age, sex and background

who are serving in schools. (Peterson, 1933; Butcher, 1965; Crompton, 1969) Once again, therefore, due caution should be exercised in inferring from this restricted sample - in qualitative terms - data about attitudes of serving teachers.

(ii) Few studies concern themselves with attitudes to specific problems faced by teachers which are, it may be argued, more meaningful to them than generalised statements about educational attitudes. Most studies use scales to measure general attitudes, scales such as the 'Survey of Opinions' or the 'Minnesota Teacher Attitude Inventory' (M.T.A.I.). An exception to this general rule is the measurement of attitudes to corporal punishment which has attracted some interest (Highfield and Pinsent, 1952; Kissack, 1956; Starr, 1967, 1969a,b) whilst Tuppen (1966) has reported the development of scales of a Guttman-type dealing with attitudes to a number of specific problems encountered by primary school teachers (see below). An assessment of the 'Survey of Opinions' is contained in Chapter Five; the M.T.A.I. evokes conflicting opinions, especially about its fakeability. Evans (1958, 1966) doubted the validity of the scale whilst in a further report (1967) she expressed doubts about the nature of the attitudes the scale was attempting to measure and concluded that whatever they were they were easily susceptible to training.

In order to impose some structure on the review of relevant studies, it is proposed to deal with them in the following order:

(i) Major studies utilising the Oliver 'Survey of Opinions' scales.

(ii) Studies dealing with attitudes to corporal punishment

(iii) Studies dealing with attitudes to other specific educational problems.

These categories are not, of course, entirely discrete.

Purchasers of the 'Survey of Opinions' are provided with a booklet entitled 'Survey of Results obtained with Scales in Survey of Opinions about Education, 1969'. No author is given and the booklet is far from complete - even in its references to studies prior to 1969 - but it is a most useful synthesis, especially as it includes details of unpublished material. One of the earliest reported uses of the Survey of Opinions is probably by Kissack (1956) who must have used a draft version, as Butcher's thesis, which gave details of the scales, was not presented until 1959. Kissack was principally interested in students' attitudes to corporal punishment but he found what others report: no worthwhile correlation between the tough-mindedness scale in the Survey of Opinions and his corporal punishment scale, or, indeed, between any of his scales and those in the Survey of Opinions. Steele (1958) also used the Survey of Opinions with College of Education Students together with a measure of her own of 'progressivism'. Her findings were typical of a number of similar studies (e.g. Evans, 1967; 1969; Morrison and McIntyre 1967a; MacFarlane Smith 1973; Hussell, 1973) namely that during their time at college students move towards greater radicalism, tendermindedness and naturalism - a direction that is normally regarded as being 'progressive'. Longitudinal studies, such as Steele herself reported, together with Morrison and McIntyre (1967b) and MacFarlane Smith (1973) suggest that the 'progressive' scores are not maintained during the probationary year. A refinement of this was provided by

Morrison and McIntyre (1967b). They found a differential shift of attitude: having administered the Survey of Opinions to 100 trainee teachers, graduate and non-graduate women and graduate men at the end of their training and after one year's teaching, they found, as expected, a significant decline in respondents' scores on the R, T and N scales for the graduate women but a decrease in the R and T scores only, in the case of the non-graduate women who were, presumably, employed in primary schools. They failed to establish any significant changes in the scores of the graduate men. The respondents were asked to rate their schools, subjectively, on a progressivism scale and it was then found that teachers working in schools they rated as 'progressive' maintained their 'college profiles' better than those working in 'non-progressive' schools. This is probably an example of the way in which staff-room pressures work (Hargreaves 1972) and, thus, is not altogether surprising. On the other hand these Scottish students had a longer period of training than those in Steele's sample and, it could be argued, had internalised their attitudes more thoroughly than the English students.

This work in Scotland by Morrison and McIntyre provides an interesting comparison with Butcher's work in England. The Scottish students appeared to be more naturalistic, radical and tenderminded than their English counterparts. The authors suggest that this difference may be due to training differences and to the fact that seven years separate their testing from Butcher's. They were especially surprised, however, by the greater tendermindedness of the Scottish students as this seems to be at variance with widely-held beliefs about the

greater use of corporal punishment in Scottish schools. In response to their query about the T-scale, Butcher, in a private communication not quoted in full, remarked that "this scale (T) might better be described as a theoretical-practical one". In a communication to the present writer in 1969 Butcher repeated this modification (Crompton 1969). The nature of the T-scale will be discussed later (Chapter Eight) in the light of results obtained but at this stage it may be remarked that an inspection of items on the T-scale suggests that being tenderminded (or theoretical) involves taking the view that education has no end beyond itself whilst being toughminded (or practical) involves taking a more instrumental view of the purposes of education. Relevant, too, is Morrison and McIntyre's (1967a) finding that graduate students were more tenderminded than non-graduate students; the latter, having a greater 'training' or 'vocational' element in their course (and, perhaps, in their pattern of motivation) might be expected to take a more instrumental view. Also relevant is Oliver and Butcher's finding (1968) that grammar school teachers - who would be largely graduates - were more tenderminded than teachers in other schools, especially those in primary schools. Case study evidence from Stevens (1960) and empirical evidence by Crompton (1969) tends to support this view of grammar school teachers' attitudes.

The general picture of an increase in R, T and N scores during the two or three years of a college course is modified by interesting findings reported by Finlayson and Cohen (1967). They used a role definition instrument with students and head teachers, rather than the Survey of Opinions, and so any

comparison is speculative, but they found a move towards a more 'liberal' interpretation of the teacher's role, which occurred during years one and two of the students' course was reversed during year three so that they left college with role expectations similar to those with which they started their course. The authors offer the following interpretation of this phenomenon:

> "As the disparity of the students' and head teachers' role is maximal during the second year of training, it could be that the regression in expectations which takes place during the third year of training is evidence of the students' growing awareness of these disparities and that they are seeking to narrow the gap in the conceptions of what is thought desirable teacher behaviour by the college and what they see will be expected of them in the schools." (p.29)

Thus, it may be not the length of training which is crucial in this respect - one of the explanations suggested by Morrison and McIntyre (1967b) referred to above - but the stage in their course when tested. Data which bear on this question are presented in Chapters Seven and Eight.

Two large scale investigations using the Survey of Opinions, amongst a battery of tests, have been reported by McLeish (1969, 1970). The first report is an ambitious cross-cultural study of teacher attitude based on a sample of 581 tutors, teachers and students; all the teachers were undertaking advanced in-service courses. Amongst the other scales used were the Kissack corporal punishment scale, the Steele 'progressivism' scale and the Eysenck Social Attitudes Inventory. Few differences between national groups were found, the greatest differences being between different groupings within the same national group. Women were found to be more radical than men: findings on this question conflict, e.g. Start (undated) found evidence supporting

McLeish; Oliver and Butcher (1968) found no significant difference whilst Crompton (1969) also failed to establish any significant difference. Older teachers were found to be less formal and more radical than younger teachers: Tuppen (1965) found the opposite to be the case; Oliver and Butcher (1968), Crompton (1969) found no significant differences, whilst Jones (1975), investigating the attitudes of secondary school music teachers - not, however, with the Survey of Opinions - found his whole sample to be very conservative, with the older teachers (those with more than 20 years' experience) the most conservative. It could be that the cross-cultural nature of McLeish's sample accounts for this conflict of findings on the age variable; it may also be significant that most of his teachers must have been reasonably 'successful' as they had been selected for secondment and to regard such teachers as 'typical' may be unwise. Radicalism was found to be negatively correlated with church affiliation. Social tendermindedness was positively related to church membership but educational tendermindedness was negatively related, reinforcing the point made earlier about a too simple transfer from social to educational tendermindedness. A 'Conservative' group was low on radicalism and naturalism but high on toughmindedness, findings generally in the same direction as those reported by Oliver and Butcher (1968).

McLeish also used the Oliver scales in an investigation of attitudes of College of Education students at all ten colleges in the Cambridge Institute (McLeish, 1970). He had a total sample of 1671 respondents with a very high response rate and an equally high 're-test rate' at the end of the students' course. (On the other hand, of the one college staff approached,

only 50% agreed to respond). Apart from some speculation about the characteristics of students who terminated - or were made to terminate - their course, he reports data on the differing attitude patterns of various subject specialists on entry to college.

Humanities students	- radical and toughminded
Maths. students	- toughminded
Scientists	- tenderminded (Details of the actual discipline are not given but they are almost certainly mainly Biologists)
Art	- very radical and toughminded
Music	- tenderminded and conservative
Divinity	- tenderminded and conservative
Environmental Studies	- toughminded and conservative
Physical Education	- very conservative

It should be remembered that, in spite of the size of the sample, 92% of these students were female and aged under 25.

During their course significant changes occurred in what may now be termed the 'expected' direction, that is towards a set of profiles that are interpreted as being more 'progressive'; McLeish comments that the shift is also towards the attitudes held by their tutors, although he does not have data from all colleges bearing on tutor attitude. Not surprisingly, the P.E. students changed the most; the maths. and music students changed the least and there was the usual lack of correlation between educational and social tendermindedness. Gallop (1972) has also reported work with the Survey of Opinions using

subject specialists as respondents. His sample was 48 teachers in 'Foundation Art Classes' and he found them to be more tenderminded, radical and naturalistic than secondary school teachers in general and secondary modern school teachers in particular, although scores used for the general population of secondary school teachers are derived from others' work. His sample, too, is not really comparable to McLeish's in either size or qualitative aspects.

Start (undated) in an unpublished piece of work has examined the hypothesis that the Survey of Opinions scales may discriminate between successful and unsuccessful teachers: his sample of secondary modern school teachers (N=146) - and this is the only part of his report likely to be directly relevant to this study - showed only non-significant differences. The competent appeared to be more radical, but the poor teacher was more naturalistic and tenderminded. A longitudinal study has been reported by Cortis (1968, 1973 and 1975) using the Survey of Opinions, amongst his battery of scales. With a sample of 259 students from Colleges of Education in the Manchester area, he reports a correlation of +0.182 between educational naturalism and success in teaching, a value significant at the 1% level (Cortis, 1968). Although scarcely an impressive degree of relationship this correlation between 56 predictors and success in teaching was the only one that reached significance. In a later report (1973) Cortis gives details of a study done with 222 teachers each with two years' experience. The teachers supplied self-ratings of job satisfaction and head teachers supplied ratings of their estimate of the success enjoyed by the teachers in the sample. The least satisfied

teachers had profiles which showed more naturalism, radicalism and tendermindedness than their satisfied colleagues, whilst those rated as 'successful' by heads were not especially 'progressive' in terms of R, T and N. In personality terms, the successful group appeared to be easy-going, sensitive, friendly and conventional - apparently a 'consensus' person. He quotes Lane, Corwin and Monahan (1967):

> "The success of these people is as much a function of other people's evaluation of them as it is of their own performance" (Cortis, op cit, p 121),

a conclusion scarcely designed to encourage the belief that attitude profiles are likely to provide a significant discriminator between the successful and unsuccessful teacher. This prediction receives implicit support from Dunkin and Biddle (1974). In an extensive survey of the literature dealing with teacher effectiveness there is no report of any study investigating the relationship between attitude holding and effectiveness in the classroom. The terms 'attitude' and 'opinion' do not occur once in the index.

A further report by Cortis (1975) suggests that assessments of teaching success are stable over seven years - on leaving college, after two years' teaching and after five further years' teaching, but, perhaps significantly, he reports no data bearing on the question of teacher effectiveness stemming from his use, again, of the Survey of Opinions.

The review of this section of the literature suggests that the writer is unlikely to find any significant attitude profile differences between groups of successful and unsuccessful student teachers. Perhaps one reason for this is the very basic problem referred to by Warwick (1974) "... we have little or

no consensus as to what good teaching is ..." (p 46). If, as Cortis (1973) suggests, assessments of teaching success are based largely on value judgements, we are not likely to get much consensus.

Turning now from the large number of studies reporting use of the Survey of Opinions to studies of attitudes to corporal punishment it may be noted that studies of attitudes to specific problems are generally scarcer than studies of 'educational philosophies', no doubt on the reasonable grounds that more generalisable conclusions may flow from studies of general attitudes. One famous study of corporal punishment, which included a chapter on teachers' attitudes, is that of Highfield and Pinsent (1952). They found widespread agreement with the use of corporal punishment in schools, only 5.6% of their sample wishing to see the practice abandoned. Amongst men, young teachers, both assistants and heads, were least in favour of its use, but amongst women teachers opposition was more evenly spread amongst age groups, although in general women were more opposed to corporal punishment than men. Between schools, it was women teachers in grammar schools and heads of 'all-age' schools who held the least favourable opinions. As previously reported in this chapter, Kissack (1956) developed scales to assess attitudes to corporal punishment of students in three Colleges of Education. He found, with Highfield and Pinsent, that women were more opposed than men; significant correlations between opposition to corporal punishment and marks on theory and practice of education. In a longitudinal study he found little or no change in opinions during the students' (two year) course but a

significant shift towards approval after ten months' teaching, the largest favourable shift being recorded amongst teachers of infants with classes of 40+.

Starr (1967) using the Pinsent scale with a sample of 100 students on a Graduate Certificate course found a clear relationship between religious affiliation and favourable attitudes to corporal punishment, significant at the 1% level (cf Crompton, 1969). Men were more favourable than women, but not significantly so, but there was a positive and significant correlation between 'ability' and 'success' (as measured on Theory and Practice of Education respectively) and opposition to corporal punishment (cf Kissack, 1956). Attendance at a 'non-punitive' secondary school was positively and significantly ($p = 0.01$) correlated with unfavourable attitudes.

Starr (1969a) has reported further work with students in Northern Ireland, again using the Pinsent scale. His sample of 202 students was drawn from a University Department of Education and Colleges of Education and replicated a number of his earlier (1967) findings. As an extension of his work on the relationship between teaching success and opposition to corporal punishment he asked the students to rate their teaching practice school on a frequency scale of usage of corporal punishment. The findings here were not clear, perhaps due to the unsatisfactory nature of the school punishment criterion measure: men teaching in non-punitive schools showed anti-corporal punishment scores but women opposing corporal punishment tended to be concentrated in punitive schools.

Starr (1969b) has also attempted to examine the relationship between attitudes to corporal punishment and personality

variables by comparing profiles of favourable and unfavourable groups using the Cattell 16 P.F. Scale. Significant differences were found as follows:

(a) Expedient vs Conscientious: the favourable group were more conscientious and moralistic.

(b) Toughminded vs Tenderminded: the favourable group were toughminded and realistic.

(c) Trusting vs Suspicious: (for women only) favourable group were more suspicious and self-opinionated.

(d) Practical vs Imaginative: the favourable group were more conventional and practical

(e) Forthright vs Shrewd: the favourable group were shrewder and less sentimental.

Although none of the above differences is surprising, this is an interesting attempt to investigate the personality characteristics of a punitive group of potential teachers. On the other hand, as has been shown earlier in this chapter, attitudes to corporal punishment are likely to change during the first year of teaching; personality organisation of young people in their early 20s is unlikely to change to any marked extent over a period as short as one year and, so, a repetition of this work twelve months later would be likely to reveal a different picture with some of the non-punitive students joining the punitive group. As the personality characteristics of the non-punitive group are different their addition to the pool of punitive teachers is likely to alter the personality profile of that group, perhaps making non-significant the reported differences found when they were students.

Further work on attitudes to corporal punishment has been

reported by Tuppen (1966). In addition, he has attempted to assess attitudes to streaming and selection at 11+ with a large number of practising teachers (N = 968) rather than students so that his investigation is particularly relevant to the writer's concerns. Earlier work on attitudes to streaming has been reported by Daniels (1961a) and Jackson (1961). Daniels was concerned to assess the effects of a move to non-streaming on the part of junior schools and part of his report (1961b) is a comparative study of streamed and non-streamed junior schools over a period of one year during which time the attainments of the children at the non-streamed schools appeared to improve at a better rate than those of children in matched streamed schools. Little credence can be placed in these results, although Daniels deserves much credit for his attempt to bring some empirical evidence to bear on a contentious argument. His findings are not supported by the much larger study of Barker Lunn (1970) and, in spite of administering an attitude test to the teachers in the schools, there does not seem to have been any attempt by Daniels to control the teacher variable; nor does any account appear to have been taken of the possibility of the 'Hawthorne effect' occurring in the schools changing to non-streaming. Jackson (1961, 1964) found the great majority of the junior school teachers in his sample to be strongly in favour of streaming and his work is a rich mine of anecdotal evidence concerning teachers' feelings about selection at 11+ and streaming in the junior school.

Returning to Tuppen's work (op cit), it is unfortunate from the point of view of the present investigation that all his teachers were junior school practitioners, so that comparison

with the data presented later in this study is of limited value. Tuppen developed six attitude scales which were subjected to scalogram analysis along the lines suggested by Guttman et al (1950). Inter-scale correlations are reported as follows:

Table One

	A	B	D	G	H	I
A. Permissiveness						
B. Physical Punishment	.29					
D 11+ Selection	.22	.24				
G. Noise in the Classroom	.31	.25	.31			
H. Streaming	.23	.27	.39	.34		
I. A Streams	.19	.16	.32	.27	.54	

Although some of these values are relatively modest, they are all significant beyond the 1% level of probability.

Without doing the comparison too much violence, the values may be compared to some obtained by Crompton (1969) using Likert scales although his sample included infant and secondary as well as junior school teachers.

Table Two

	A	B	C
A. Streaming			
B. 11+ Selection	.55 (.39)		
C. Corporal Punishment	.39 (.27)	.47 (.24)	

(All values significant at the 1% level and Tuppen's comparable correlations given in parentheses). Although the highest r in each case is between scores on the 11+ selection scales and the

streaming scales there appears to be no other obvious connection between the sets of data except that Tuppen's values are consistently lower. Neither sets of data were factor analysed so the presence of a general factor, as both writers imply, can be an inference only.

No further British studies of teacher attitude were located which appeared to bear upon the concerns of this study. Specifically, the following areas appear to be poorly represented in the literature:

(i) Studies of attitudes of practising teachers to specific problems and controversies.

(ii) Studies dealing with the attitudes of teacher trainers in Colleges of Education and, especially, in University Departments of Education.

(iii) Studies dealing with differential attitude holding in different types of school such as different forms of secondary education and, especially, as between the independent and maintained sectors.

It is clear that some hypotheses can be framed based upon work discussed in this chapter. It is equally clear that evidence is lacking on some of the problems posed in Chapter One and the examination of these problems is more akin to the geologists' technique of sinking boreholes.

CHAPTER FIVE

DEVELOPMENT OF WRITER'S SCALES AND OTHERS USED

Overview of Chapter Five

This chapter is in four sections. Following a brief introduction the development of the scales is described under these titles:

1. The writer's scales. Two scales were developed by the writer to measure attitudes to Streaming and 11+ Selection.

2. The Corporal Punishment scale. This is the scale used by Highfield and Pinsent in their 1952 study.

3. The Oliver 'Survey of Opinions about Education'. This consists of three scales designed to measure what Oliver (1953) refers to as Tendermindedness, Radicalism and Naturalism.

4. The Wilson-Patterson Conservatism scale.

Introduction

As mentioned in Chapter Three, Eysenck (1954) has suggested that there is a four-level hierarchy of opinion-holding. A modification of these views (Eysenck, 1975) was also discussed. The first level consists of opinions expressed on the spur of the moment: these are probably opinions about which their author has thought little. They are essentially 'uninformed' and may never be repeated, at least in the form in which they were originally expressed. This study is not concerned with opinions at this level. At 'level two' are to be found more habitual opinions expressed about specific topics which are likely to be reasonably stable. In the case of

teachers, this level of opinion may be represented by views on such matters as streaming by ability, selection for secondary education and corporal punishment, in other words opinions about specific issues. The scales described below, under headings 1. and 2. may be perceived as attempts to measure opinions conforming to Eysenck's 'level two'. At 'level three' may be found groups of cohering opinions from 'level two' which may be indicators of a true attitude. Eysenck cites ethnocentrism as an example of a true attitude and in this study it is claimed that the three scales in the 'Survey of Opinions about Education' are, for teachers, representative of 'true attitudes'. These scales are described under heading 3. below. At the fourth, or highest level, are to be found ideologies, the most stable examples of opinion-holding, which are composed of elements from, especially, levels two and three. Eysenck gives Conservativism as an example of an ideology and, as will be argued later in this Chapter under heading 4., the Wilson-Patterson Conservativism scale is a suitable instrument with which to measure teachers' acceptance or rejection of this ideology. At the end of this chapter is a schematic summary of the Eysenck model and its claimed relationship to the present investigation.

1. <u>Scales to measure attitudes to Streaming and 11+ Selection (the writer's scales)</u>

It was argued in Chapter One that attitudes to streaming and 11+ selection (and, also, corporal punishment) are central to the concerns of most teachers, especially to those working in secondary education; that they are likely to form a signifi-

cant part of a teacher's attitude to the whole educational process. (See Barker Lunn, 1970; Shaw, 1971)

The writer's scales were construced by a method of scaling statements suggested by Rensis Likert (1932). This method is but one amongst a number available, such as the Thurstone technique, Guttman scaling, Eysenck and Crown's scale-product method, Guilford's weighted proportions and the item writing system suggested by Wilson and Patterson. Rational selection amongst these various possibilities is not easy, especially for the statistically unsophisticated, although helpful guidance is available from various standard texts on the subject (eg Oppenheim, 1966).

The Likert method was eventually preferred as it seemed to combine simplicity with an acceptable level of reliability. The Thurstone technique has been described in a number of sources by its originator (Thurstone 1928, 1929, Thurstone and Chave 1929). Although it employs a relatively sophisticated method of item selection its reliability coefficients have been found to be disappointing by a number of workers (McNemar 1946; Barclay and Weaver, 1962; Potterton and Pilkington 1964), usually lower than those obtained by using the apparently less sophisticated Likert method. However, the Thurstone technique is still regarded as one of the standard methods of scaling attitude statements (Stevens, 1975, Elms, 1976) along with the Likert method, the semantic differential (Osgood et al, 1957) and the Wilson-Patterson technique (Wilson and Patterson, 1968). The Likert method and the Wilson-Patterson recommendations were the chief contenders in the decision as to which method to use in this research and, eventually, it was decided to use both

in a parallel investigation to see which gave the better reliability coefficients. The theory behind each method has been described in Chapter Three and it is appropriate now to describe the scale construction.

The construction of a Likert scale begins with the collection of a number of statements about the attitude to be investigated - in this case attitudes to streaming and selection at 11+for secondary education. The writer had previously investigated attitudes to these issues (Crompton 1967, 1969) and a number of statements which still seemed relevant were thus available. Where a statement seemed to be formulated in 'dated' terms it was re-worded and others were written following perusal of relevant articles in the 'Times Educational Supplement', 'Forum' and conversations with colleagues and students. Eventually forty statements were collected for each scale, twenty that were felt to be 'pro' statements and twenty felt to be 'contra'. Of course, at this stage one is choosing intuitively until the item analysis, described below, tends to reveal cohering groups of statements. The statements were then split into two parallel forms, A and B, so that four scales of twenty statements each were available, two scales relating to streaming and two to 11+ selection. The scales were administered to a group of 4th Year B.Ed College of Education students who volunteered to help. A period of two-three weeks was allowed to elapse between the completion of Form A and the completion of Form B. The scales are reproduced at Appendix One. Following scoring, rank order correlation coefficients were calculated between the scores recorded on Forms A and B in respect of each scale with the following

results:

Table One

Correlation between scores on Form A and Form B of the writer's scales

Streaming Scale	+0.664
Selection Scale	+0.684

'rho' rather than 'r' was calculated in view of the relatively small number of respondents, in terms of a recommendation of Guilford's (1965). Both these values are in excess of the .01 level of confidence (Guilford, 1965; Table 1, p 593). However, although significant, the values are quite modest; one would normally look for a value of at least +0.8 and, preferably, better than this. The next step in the construction of Likert-type scales is to carry out an item analysis to eliminate those statements of low discriminatory value. An indication of the discriminative value of any statement may be obtained by carrying out procedures on each of the 40 statements on each scale as recommended by Likert (1932). A group of high scorers and low scorers is identified; in this case, a high scorer is one who consistently expresses agreement with statements against streaming and selection (and, of course, disagreement with statements in favour of streaming and selection). A low scorer has an opposite pattern of response. It was possible to select ten 'streamers and selectors' and ten 'anti-streamers and anti-selectors' in this way. For this analysis therefore the scores of the remaining thirteen respondents are ignored. The pattern of responses of each of the high scorers for each of the forty

statements was compared with the pattern of responses of the low scorers. (Details of this analysis are contained in Appendix Two.) In this way, a discrimination index is derived for each statement such that statements which discriminated between high and low scorers were revealed. For example, Statement 17 on Form A of the Streaming scale was the best discriminator between the two groups and was, therefore, retained for inclusion in the final form of the scale. Final forms for each scale were produced in this way, each containing the twenty statements that appeared to be the best discriminators. (These, revised, scales are reproduced at Appendix Three)

In any test-retest situation there is always the possibility that the reliability coefficients are affected not by the ambiguity of the statements but by actual shifts in opinion by the respondents in the interval between the two administrations. With a relatively small number of respondents the possibility of genuine shift in opinion - always possible with 'level two' opinions - must be taken seriously in that a decided change of view by two or three respondents can disproportionately affect the obtained value of the coefficient. Stevens (1975) puts the possibility as follows: 'The problem ... is that there could be a genuine fluctuation in the attitudes of the subjects between the two administrations.' (p.21) He claims, correctly, that this is a particular problem with the test-retest method but argues that one avoids the problem with the alternate forms method (as described above) and the split-half method. It is probably true to say that the split-half method is the safer of the two for if any interval is allowed between the administration of alternate forms then the phenomenon of

attitude change could occur. If the forms are presented simultaneously then this problem would be avoided but one would risk 'contaminating' the reliability coefficients by permitting subjects to compare responses on the two forms. It may be noted that by actually requiring subjects to focus their attention on a specific issue, their attitudes to that issue may be affected and some sort of attitude change actually facilitated.

Following the item analysis, a final form of the two scales was compiled, once again consisting of twenty statements to each scale. These were administered to the same group of students, although five of the original number declined to help giving N = 28 on this occasion. A two week interval occurred between administrations and, once again, rank order correlations were calculated between scores on the two administrations with the following result.

Table Two

Correlations between scores on Final Form of writer's scales, test-retest

Streaming scale	+0.784	(+0.664)
Selection scale	+0.907	(+0.684)

The figures in brackets give the values obtained prior to the refinement of the scales following the item analysis. In each case the values have improved, strikingly so in the case of the selection scale. Once again, each of these values is significant at well beyond the .01 level of confidence. The lower coefficient for the streaming scale is in terms of a previous finding by the writer during reliability testing

(Crompton 1969). An explanation in terms of a real attitude shift by some students may account for this relatively modest value: it may be that the issue of selection at 11+ was much more familiar to students than the issue of streaming and thus the former attitude may have more persistence or resistance to change.

One other phenomenon deserves mention. It has been argued earlier in this chapter that an attitude scale should aim at a rough symmetry of pro- and contra- statements in order to avoid any set towards the scales on the part of the respondent and to this end each of Forms A and B contained equal numbers of what were assumed to be statements favouring and opposing the questions. Once an item analysis is carried out, however, this symmetry is likely to be disturbed in that the best discriminators may not be distributed equally on the two sides of the question. In a few cases, one may be lucky in that two statements, both of relatively low discriminative value, may have the same discrimination index; in such an instance one can select the statement for inclusion in the final form that best maintains the balance. In the final form of the streaming scale (Appendix Three) there are eleven pro-streaming statements and nine anti-streaming statements, whilst on the selection scale there are nine pro-selection and eleven anti-selection statements. As the statements are randomly mixed it may be felt that this imbalance is only slight and should not lead to any marked response set by the respondents.

Thus, two scales constructed on Likert's recommendations were produced. As mentioned earlier, however, Wilson and Patterson (1968) and Wilson (1973) have been critical of all

attitude scales which contain propositions for subjects to respond to. In addition, Elms (1976) has argued that the five point response scale demanded by the Likert technique is likely to result in a loss of validity. Wilson and Patterson (op.cit.) also argue that the longer the statement, the more likely it is to contain ambiguities and thus to reduce further the validity of the respondents' answers. They claim that, in responding to attitude statements, two stages are involved:

(a) There is an immediate, emotional response to the central, controversial issue involved in the statement.

(b) This is followed by a suspension of judgement whilst qualificatory and justificatory details of the statement are examined.

They then argue that one looks for the first, emotional reaction, rather than the second, more rational, cognitive response, as the first is likely to be more in accord with the responder's beliefs in action: the second is more likely to represent what he thinks he believes or some impression he would like to give. All this has been appreciated for some time and is why many attitude scales, for example the Oliver scales, include the injunction: 'You are advised not to spend a long time considering each question' or, more succinctly, 'Just give your first reaction'. However, such instructions may be ignored and some other device for tapping the emotional content of attitude response may be required.

What Wilson and Patterson (1968) appear to be claiming is that by using very short, stimulus phrases instead of formal sentences, both the reliability and the validity of scales will be improved. The question of validity is very difficult to

resolve - apart from certain technical considerations, it involves the epistemological problem of whether one person can ever 'know' what another person believes and thinks and the philosophical problem of whether a person has a 'true' attitude to something which can then be discovered if only the scales are efficient enough - but some insight into claims about reliability might be obtained by carrying out a comparative study, that is by constructing scales to measure the same attitudes on Likert lines and on Wilson and Patterson lines. The construction of the scales on Likert lines has already been described and it remains to describe the construction of scales to measure streaming and selection attitudes as advocated by Wilson and Patterson.

The construction of the Conservatism scale is described later in this chapter; it may be remarked at this point that the authors give little detail about the type of item analysis carried out, but it is clear that their 50 item scale represented a reduction from over 130 items chosen intuitively. As a first step in constructing streaming and selection scales of the Wilson/Patterson variety, the writer attempted to 'translate' his Likert statements into a 'list of brief labels or catch phrases'. (Wilson and Patterson, 1970, p.5) The forty item scale resulting from this procedure is reproduced as Appendix Four. The scales were first given to some colleagues of the writer's: they were asked to comment on the wording and on the mode of response (YES ? NO). A number of alterations were made as a result of these comments and the two scales were then produced as parallel forms A and B, which may be seen in Appendix Five. The Form A version of these scales was given

to the same thirty three students as had been given the Likert versions of the scales and at the same time; the Form B version was given separately, however when the Form B (Likert) had been collected. The correlations between responses to Form A and responses to Form B (Wilson-Patterson) were calculated by the rank order method and yielded the following results.

Table Three

Correlations between scores on Form A and Form B of writer's scales (Wilson-Patterson format)

Streaming	+0.687	(+0.664)
Selection	+0.751	(+0.684)

The figures in brackets are the values obtained at the same stage in the Likert construction and it will be seen that neither method, at this stage, appears to have a decisive advantage, although the values obtained by the Wilson-Patterson method are slightly higher.

An item analysis along Likert lines was then carried out, full details of which are to be found in Appendix Six. As a result, twenty of the poorest discriminators were discarded from each scale. Once again the problem of imbalance between pro- and contra- statements occurred. On the streaming scale the balance was, fortuitously, exactly maintained but on the selection scale a weighting of 11 to 9 in favour of non-selection statements was noted. As was suggested earlier, it seems unlikely that such a slight imbalance in randomly mixed statements would produce a response set.

The final form of the Wilson-Patterson version of the two

scales was now administered to the same twenty eight students who had previously completed the Likert versions of the scales and at the same time. (See Appendix Seven for these final versions) Test-retest was the basis of the administration, and a two week interval elapsed between the testing and the retesting. Reliability coefficients, using the same Spearman rank order method, were calculated.

Table Four

Correlations between test-retest of final form of writer's scales (Wilson-Patterson version)

Streaming	+0.777 (+0.687)
Selection	+0.907 (+0.751)

The figures in brackets are the values obtained prior to the item analysis. As in the case of the Likert scales, the values have improved following item analysis, markedly so in the case of the selection scale and are highly significant ($p > .01$). Comparison with the Likert values shows the following:

Table Five

Comparison of values for reliability coefficients, Likert and Wilson-Patterson scales, final forms

	Likert	Wilson-Patterson
Streaming	+0.784	+0.777
Selection	+0.907	+0.907

The values are remarkably close and there is no evidence here that could be regarded as being decisive in choosing between the two methods. (It is noticeable, however, that in each case the reliability coefficients for the streaming scale are lower than those for the selection scale.) However, respondents

were encouraged to comment on the statements, especially about which version of the statements they preferred to respond to. Many students commented freely and the balance of opinion was quite clear: they preferred the more traditional form of wording statements (that is the Likert form). It was upon this, admittedly slender, basis that the decision was taken to use the Likert form of the writer's scales for the main investigation.

2. The Corporal Punishment Scale

It will be recalled that this is the third scale at what is claimed to represent Eysenck's (1954) second of his four-level opinion-holding hierarchy. In previous investigations (Crompton 1967, 1969) the writer devised his own scale concerning corporal punishment but on this occasion it was decided to use a published one. The writer's previous experience was that although his scale appeared to have reasonable reliability there were some doubts about its validity. Apart from the fact that this area of opinion may be particularly susceptible to the gap between expressed attitude and actual behaviour discussed in Chapter Three, the scores on the writer's corporal punishment scale did not correlate very highly with such measures as Toughmindedness and Radicalism; the relationships discovered were positive and significant but not close. An explanation was offered through an analysis of the concept 'Toughmindedness' as used in the construction of the Oliver scales and it was concluded that although the superficial interpretation of the concept could not be rejected, there were other important aspects implicit, such as a belief in education as a means to some end, an instrumental view of the aims of education. It is entirely possible, of course, that this complex explanation is

incorrect; a more obvious interpretation of the relatively low correlations might simply be that the corporal punishment scale was not a valid measure. On this occasion, therefore, the writer determined to use the Highfield and Pinsent measure of attitudes to corporal punishment.

The scale was constructed by A. Pinsent and details of its construction have been reported (Highfield and Pinsent, 1952). Thirty nine statements were collected in the form of propositions expressing support or opposition to corporal punishment except for one which was framed to express as neutral a position as possible. Fifty 'judges' were then asked to rate the statements, not only as to whether they appeared to express support of opposition to corporal punishment but the strength of the position. In other words, a form of Thurstone scaling was employed. The judges consisted of psychologists, University teachers of education and psychology, research students in those subjects and headmasters and headmistresses. Presumably, as a result of this scaling, the twelve statements comprising the final form were selected. Seven express support for corporal punishment, four express opposition and one is presumed to be neutral. Some imbalance will be noted in this mix, but it is the one yielded by the scaling. These twelve were then randomly mixed and respondents asked: 'Do you fully agree? Answer Yes or No'.

This was the scale adopted by the writer (See Appendix IX, in spite of some doubts about the wording of some items. However, if one adopts a scale, one cannot, with safety, amend the wording or it then becomes a different scale and comparisons between results obtained with the

earlier results of Highfield and Pinsent (op.cit.) would be invalid. The scoring of the scale also presents some problems. There is a two-point response system, with no room for doubt. This scoring mode was not used; instead, the five-point response mode was employed to give consistency with the streaming and selection scales, and also with the 'Oliver' scales (see below).

Unfortunately, Pinsent does not appear to have tested his scales, apart from the Thurstone scaling, on a sample population before proceeding to the main investigation so no figures for reliability can be given. However, there is a wealth of information about the opinions of various categories of teacher which may provide a useful basis of comparison with the writer's results (See Chapter Eight).

3. <u>The 'Survey of Opinions about Education' scales - R.A.C. Oliver</u>

(A copy of the 'Oliver scales, together with the Likert scoring key used will be found at Appendix X.)

It will be recalled from the introductory section to this chapter that it is claimed that these scales represent opinions at the third level of Eysenck's four-level hierarchy and that opinions expressed at this level are expressions of a 'true attitude'. Details of the construction of the scales have been reported (Butcher, 1959; Oliver and Butcher, 1962) and an outline only is given here. The respondent sample was anonymous and drawn from the Manchester area. 440 teachers, contacted through headmasters, agreed to help but this number was reduced to 300 so that it conformed to the national distribution of teachers. Thus, rough norms may be claimed for the results

obtained from this investigation, such that limited comparisons may be made between the norms (Oliver and Butcher 1968) and scores from other research in respect of different categories of teacher. However, close comparisons are not possible as Oliver and Butcher's work was done with the 'experimental' or 'long' version of the scales; those offered to other research workers are the 'short', factorially pure versions.

Reliability data were based on a sample of fifty seven evening students who were working for advanced qualifications in education at Manchester University. Obtained values were as follows:

Table Six

Oliver Scales - split-half reliability coefficients

Naturalism	Radicalism	Tendermindedness
+0.917	+0.849	+0.813

(Explanations of these three terms were given in Chapter Four) The test-retest coefficients (with a three week interval between administrations) were:

Table Seven

Oliver Scales - test-retest reliability coefficients

Naturalism	Radicalism	Tendermindedness
+0.896	+0.870	+0.877

It will be noted that these values fall between those reported in Table Two earlier in this chapter for the writer's scales.

Attempts were made to get estimates of the validity of

the scales. For the N-scale, the students' philosophy tutor (T.H.B. Hollins) rated thirty three of the students. His rating correlated +0.65 against the N scores of the students. What this means is not entirely clear, of course. The value is quite modest, although apparently typical of values for validity obtained in this way (Crompton 1969). The crucial point is which estimate, the tutor's or the scale's, is regarded as the criterion measure. There cannot be a satisfactory, objective measure against which to validate attitude scales (a similar problem is faced when attempting to validate intelligence scales where the techniques of construction tend to be more sophisticated), but the fact that there is a positive relationship between the two sets of scores suggests that both the tutor and the scales are at least recognising and assessing a similar area of belief. Whether anyone has a 'true' belief which is better assessed by subjective or objective measures - the 'better' thus becoming the criterion measure - must remain a matter for speculation. The phenomenological argument, as reported in Chapter Three, would deny such a possibility of conceptualisation and measurement.

The R-scale was validated by examining the scores of subjects who were avowedly radical or non-radical in their social beliefs together with two other groups serving as informal controls, with the following results:

Table Eight

R-scale - Validity Estimates

	M.	S.D.	N.
Conservative and Unionist Association	74.9	15.6	72
National Association of Labour Teachers	122.3	19.1	81
Dip.Ed and M.Ed students	100.3	18.0	57
Occasional students	95.4	17.9	73

The much higher (more radical) score of the Labour teachers suggests not only that there is a relationship between social and educational radicalism but that the R-scale is able, in some degree, to distinguish between radicals and non-radicals. The relationship between beliefs about education and political beliefs, suggested by this validation study on the R-scale, is a key area of research in the present study.

The T-scale was validated in terms of a suggestion by Oliver (1953) that church workers who were teachers would be tenderminded and that a strongly favourable attitude to technical education would indicate a toughminded, practical attitude. A similar suggestion about toughmindedness, in social attitudes, was earlier suggested by Eysenck (1944, 1951). The comparative scores resulting from testing for T-scale validity are as follows:

Table Nine

T-scale, validity estimates

	M.	S.D.	N.
Institute of Christian Ed.	137.9	14.9	58
Bolton Training College for Technical Teachers	123.2	15.8	73
Dip.Ed and M.Ed students	143.3	13.8	57
Occasional students	126.1	15.7	73

The difference between the first two mean scores is significant lending credence to Oliver's suggestion about the T-scale. An indication at least as interesting is that the Dip.Ed and M.Ed students, used again as informal control groups, appear to be the most tenderminded of all. The difference in means between the students and the Christian teachers is just significant at the .01 level. It will be recalled that the same group of students had relatively high scores on the R-scale (see Table Eight) suggesting that students on advanced courses in education may be more tenderminded and radical than serving teachers. Butcher tends to agree (1959, 1965) that students in contact with what may be described as 'Theory of Education' tend to be more 'progressive' than serving teachers. Whether this is the result of the course or whether 'progressive' teachers tend to offer themselves for advanced courses in greater numbers than their 'non-progressive' colleagues is not clear. An attempt by the writer to gain insight into this problem (Crompton 1969) was inconclusive.

The three scales were also subjected to a scalogram analysis which suggested that the T-scale was the most homogeneous and the N-scale the least. To some extent, these results are predictable: of the three scales under discussion, it could be fairly claimed that the N-scale deals with attitudes that are least well understood; Radicalism and Tendermindedness have both been extensively examined as social attitudes, especially by Eysenck (1951). On the other hand, the suggestion that the T-scale appears to be more homogeneous than the R-scale receives indirect support from work done in other cultures with social attitude scales (eg Keehn 1955, as reported in

Chapter Four).

The data were also factor analysed. Quartimax rotation was employed after unrotated factors had not suggested any clear psychological interpretation. Four factors emerged clearly, the three major ones being T, R and N. A fourth factor, contributing 4.5% of the variance remained unidentified - it appeared to be concerned with censorship and moral instruction.

An attempt was then made to construct factorially pure scales. The original inter-scale correlations had been:

Table Ten

Original inter-scale correlations (Oliver scales)

N/R	N/T	R/T
+0.582	+0.306	+0.300

In the revised scales (which are the shortened ones used in the writer's investigation) only items with high loadings on N, R and T were retained - 11,12 and 14 items respectively. Re-calculation of inter-scale correlations gave the following values:

Table Eleven

Inter-scale correlations following factorial revision ('Oliver' scales)

N/R	N/T	R/T
+0.347	+0.334	+0.208

Two of the values have been considerably reduced although, oddly, one value has risen. The residual inter-scale correlation may be due to the presence of an unidentified general

factor. With a sample of 166 primary and secondary school teachers, Crompton (1969) found much higher inter-scale correlations than those reported in Table Eleven above.

The reliability of the new, shorter scales was calculated by drawing a random sample of sixty from the original 300 and giving the revised scales on a split half basis. Values obtained for r were higher in spite of the shorter length of the new scales, although one might suspect a certain familiarity with the items by this time on the part of the respondents.

Oliver concludes that the T-scale is the 'best' of the three (that is, having the greatest number of scalable items) clearly identifying a strong factor in teacher attitude; the R-scale is almost as good and the N-scale, whilst being the least satisfactory, does exist in its own right and not merely as a product of the other two.

The degree of testing which the 'Oliver' scales underwent is certainly impressive. A recent analysis of the scales has been reported (Wilson and Bill, 1976). Their data were collected in 1972 (compared with the data collection done in the 1950s by Oliver and Butcher). The order of internal consistency, they report, is the same as when the scales were produced, namely that the T-scale is the most homogeneous and the N-scale the least. They claim that the R- and N- scales tend to fracture into item sub-sets and that, since their construction, the scales have lost something of their 'structural cohesiveness'. They advance three reasons for this: geographical, populational and temporal. The first two are easily demonstrated - their sample consisted of post-primary school teachers only and

was carried out in a different region of the country. The temporal explanation is the most interesting, however. They focus particularly on the R-scale and suggest that the connotation of certain items has altered since the scale's construction. It is less radical to believe in comprehensive education today than it was in the 1950s, they suggest, and they argue further that there are instances on the N-scale of the same temporal phenomenon. They imply that the time is coming for major reconstruction of the scales. This writer would not seriously contest this implication, but, as is argued later (Chapters Eight and Nine) other objections can be raised and some defences offered.

4. The Wilson-Patterson Conservatism Scale

Some description of this scale has been given, incidentally, earlier in this chapter and in Chapter Four. Historically, it appears to stem from studies of the authoritarian personality (eg Adorno, et al, 1950).

Details of the construction of the C-scale have been reported by Wilson and Patterson (1968, 1970). Their basic contention is that 'items presented in the form of detailed propositional statements can never provide a satisfactory basis for the measurement of attitudes'. (Wilson and Patterson, 1970, p.4). Instead of proceeding to argue for some sort of interactionist mode of approach, as they appear to be implying, they argue for the substitution of propositional statement with 'cueing' phrases.

Wilson has considered in some detail (1973) what he considers to be the basic characteristics of the extreme or ideal Conservative. Although these were given in Chapter Three,

it will be convenient to repeat them here.

1. Religious dogmatism
2. Right-wing political orientation
3. Insistence on strict rules and punishments.
4. Ethnocentrism and intolerance of minority groups
5. Preference for conventional art, clothing and institutions.
6. Anti-hedonistic outlook.
7. Superstition and resistance to scientific progress.

Over 130 items, chosen intuitively as being likely to assess these characteristics, were chosen. These were, presumably, given to a group of respondents for the next step is stated to be the examination of the performance of the items 'in a series of upper-lower third difference item analyses' (Wilson Patterson, op.cit. p.5) a procedure which seems to resemble a Likert item analysis. As a result fifty items were retained, half of which are scored in the Conservative 'direction' and half in the opposite way. Further criteria determining item selection are stated to be: positive correlation with whole test scores; power to discriminate; ease of understanding; avoidance of redundancy in meaning; expected ability to maintain validity over several years and to withstand cultural transplant. (This last comment seems rather odd in view of Statement number 50 which attracts a lot of comment from respondents.) Although these claims appear far from modest, the figures quoted on reliability and validity are impressive and may suggest that the authors' confidence in their scale is not, on the whole, misplaced.

A copy of the scale, with scoring instructions, is given

at Appendix XI. It will be noted that the scoring is on a three point system of YES ? NO, described by Wilson and Patterson (1970) as a three-point Likert-type scale. The ? response category is clearly included with some reluctance. This is suggested not only by the instruction 'if absolutely uncertain circle ?' printed in the notes to subjects but their comment (1970): '... the ? category was included to help maintain rapport by averting the annoyance experienced by many respondents when dichotomous choice is demanded'. (p.6) Quoted reliability coefficients range from +0.84 to +0.94 using split half, parallel form and test-retest methods. It is interesting to note that some reliability coefficients were derived from data obtained by testing children as young as twelve.

A large set of mean scores is given for different occupational groups in different countries. Unfortunately, not only are many of these, as is often the case, students of one kind or another, but they do not quote secondary school teachers in the United Kingdom as one of their occupational groups. Fortunately, Hartley and Holt (1971) have reported work using the scale with teachers in this country - although they used half the scale (twenty five items) only in their enquiry - and useful comparisons should be possible between this study and the writer's data (see Chapter Eight).

Using the 'known groups method' Wilson and Patterson (op. cit.) were able to demonstrate some useful validity measures.

Table Twelve

C-scale validity estimates

	N.	M.	S.D.
New Left Club	17	17.3	8.9
Junior National Party	20	55.8	7.8
Scientists	22	30.8	8.9
Gideons	17	70.5	6.2

(The higher the score, on the scoring convention employed, the more 'Conservative' the beliefs.)

These figures were obtained in New Zealand. The New Left Club and the Junior National Party are Socialist and Conservative student groups respectively within a New Zealand University. The scientists were physical and social scientists with some medical practitioners whilst the Gideons are a well-known religious group. Orpen and Rodenwoldt (1973), using the C-scale in South Africa, conclude: 'The results were generally positive and indicate that the scale possesses considerable construct validity, even in a cultural setting (white South Africa) which differs considerably from that in which the scale was originally developed.' (p.94)

The cumulative evidence about the reliability of the scale in use is impressive; that of its validity in the United Kingdom less so. Naturally, a certain critical literature has developed concerning the scale. For example, Boshier (1972) and Robertson and Cochrane (1973) have queried the unidimensionality of the scale, but Nias and Wilson (1972) have defended it against Boshier's criticism. Ray (1971), using the scale with a randomly drawn sample of the population reported a significant fall in reliability and concludes: 'the C-scale is not suitable for use

with a sample randomly drawn from the general population'. (p.79) (The C-scale as used in this investigation is with a non-random sample, of course.) In a further report (1972) Ray helpfully provides a revised version of the scale which, he claims, may be more properly used with random populations. In any case, Thomas (1975) disputes that aspect of Ray's claim that the scale is unreliable when the sample includes subjects with little formal education.

Although the C-scale is a relatively recent one, compared with, for example, the 'Oliver' scales, it does seem to be reliable, valid and easy to administer, qualities which convinced the writer that it was the right scale to employ to assess subjects' political values. In order to avoid the likelihood of a set of negative with scores on the other scales, the scoring convention has been reversed so that a Conservative statement receiving a 'Yes' response scores 0 whilst such a statement receiving a 'No' response scores 2. Respondents checking the ? category receive 1, of course, as in the original scoring. Thus, in this investigation, a high score represents a 'non-Conservative' set of beliefs; a low score represents a Conservative set of beliefs.

A trial administration of the C-scale was done using a small group of the writer's colleagues (N = 6) to see if any of the statements or the method of responding was likely to prove unacceptable. Statements 12 and 22, for instance, (see Appendix XI) might give offence to some people whilst others might feel that the mode of response required was unnecessarily restrictive. Reaction was favourable, however, and it was predicted that use of the scale would not create any serious problems in the way of resistance to completion by respondents.

Figure One

Schematic representation of the relationship between the scales used and Eysenck's theory of the hierarchy of attitude systems

Eysenck's level	Applicable scales
Level Four (Ideology) →	Wilson-Patterson C-scale Conservatism
Level Three (True Attitudes) →	Oliver's Survey of Opinions Tendermindedness Radicalism Naturalism
Level Two (Habitual opinions) →	Group One scales Streaming (Crompton) Selection (Crompton) Corporal Punishment (Pinsent)
Level One (Uninformed opinion) →	None

CHAPTER SIX

RESEARCH DESIGN

(i) Statement of Hypotheses

1. Teachers identified as 'Conservative' (on the Wilson-Patterson scale) will show the following attitude profile:

    they will support streaming, selection at 11+ and corporal punishment,

    they will be idealistic, toughminded and conservative in terms of the 'Survey of Opinions' questionnaire,

in comparison with teachers placed at the non-Conservative end of the Wilson-Patterson scale.

2. Teachers showing this 'Conservative profile' will be found concentrated in 'selective' secondary schools, rather than in non-selective secondary schools. The term 'selective' means maintained grammar schools, direct grant grammar schools and independent secondary schools. (The term 'non-selective' refers to secondary modern and secondary comprehensive schools.)

3. Teachers working in the area of 'teacher training' will hold attitudes which are more radical, tenderminded and naturalistic and which oppose streaming, 11+ selection and corporal punishment ('progressive attitudes') than teachers serving in any of the secondary schools referred to in Hypothesis 2.

4. Within Colleges of Education, tutors working in 'Education' Departments will hold views that are more 'progressive' - as defined in Hypothesis 3 - than colleagues working in 'Subject' Departments.

5. Students about to embark on a final teaching practice in non-selective secondary schools will hold attitudes more akin to teachers in the schools than to tutors in their college.
6. Students identified as 'successful' and 'unsuccessful' during teaching practice will not be differentiated from one another by their attitude profiles.

It will be appropriate to offer a justification for each of the hypotheses. Support for within- and between-school selection based on notions of 'ability' seems to be associated with Conservative political beliefs: one of the editors of the series of 'Black Papers', Dr Rhodes Boyson, is a Conservative M.P. and this series of papers has lent a general support to the two practices. One is less certain about support for corporal punishment: although Conservatives, generally, seem to favour 'strict discipline' in schools this may not necessarily extend to corporal punishment. Wilson (1973) however regards support for physical chastisement as an indication of social and political Conservatism. Idealistic views of knowledge, what Evetts (1973) has called the 'knowledge ideal' may be found, again, in the Black Papers, especially in Cox and Dyson (1969) and one would certainly expect some relationship between social Conservatism and educational Conservatism, as measured by the 'Survey of Opinions'. The relationship between Conservatism and toughmindedness is more problematic, particularly if one takes the view, expressed in Chapter Four, that there is no simple relationship between social and educational toughmindedness. If 'educational toughmindedness' equals 'practical ends' as an educational belief, then there may not be such a strong association between that and Conservatism.

Hypothesis 2 is based upon suggestions from some earlier work by the writer (Crompton 1969). In this study, it was found that a group of teachers drawn from grammar schools showed distinctively 'Conservative profiles' which contrasted sharply with a sample drawn from comprehensive schools. In this study, the widening of the 'selective' concept to include direct grant and independent schools may accentuate this difference. The inclusion in the battery of scales of a measure of Conservatism may also help to clarify any distinction.

Hypothesis 3 is based on some evidence (e.g. Finlayson and Cohen, 1967, McLeish, 1970) but mainly on suggestion and belief, the most recent statement of which at the time of writing is Cox and Boyson (1977). There has been a tendency to attribute to 'teacher trainers' beliefs about education, inculcated into students, which serving teachers regard as inappropriate. These beliefs are normally regarded as being 'progressive' although less neutral descriptions are sometimes applied. Certain recent events, such as the 'William Tyndale affair', the Tameside dispute and, perhaps, research evidence such as Bennett's (1976), which appeared to lend some support to traditional practices, may have highlighted this perceived difference in attitudes to educational aims, stereotyped as the 'progressives in the colleges' and the 'realists in the schools'.

Hypothesis 4 is based on a personal observation that it seems widely believed in colleges that tutors in Education Departments hold more progressive or 'child-centred' views than their Subject Department colleagues. In order to avoid imputing differences discovered to this simple academic dichotomy, biographical detail will enable tutors who have

taught only in primary schools to be eliminated from the analysis in case it is this professional experience rather than their academic orientation that is associated with the differences.

Hypothesis 5 is based entirely on the work of Finlayson and Cohen and is rather more speculative in the sense that the 'majority verdict' on this issue seems to be that it is during the probationary year that the retrogressive shift to 'traditional' attitudes occurs (Morrison and McIntyre, 1967a; Macfarlane Smith 1973; Hussell, 1973).

Hypothesis 6 stems from the work of Cortis, (especially 1973, 1975), Start (undated) and, by implication, Dunkin and Biddle (1974). In this case, the null hypothesis seems to be the most appropriate form in which to express the prediction.

(ii) The sample

Following the construction of the writer's scales described in the last chapter, copies of the C-scale were purchased from the N.F.E.R. and copies of the Oliver scales were purchased from Manchester University. The Pinsent scale is reproduced in full in 'Survey of Rewards and Punishments (1952), and copies were made of this. A sheet of instructions was compiled, with responding instructions for the Streaming, Selection and Corporal Punishment scales; instructions for the other scales are given on the measures themselves. The advice 'A quick reaction is best' was given. The rest of this first sheet (which is reproduced at Appendix XII) asked for a certain amount of personal information such as age, sex, length and type of experience. In addition details of academic and professional education were sought together with an indication of post

currently hold and subjects taught (reduced to Arts, Social Sciences and Science/Mathematics). It was hoped, by seeking this information, that various groups, such as old/young, men/women, headmasters/non-heads could be identified for comparative purposes. Finally, a reference number was included so that the writer could identify, easily, the name and type of school in which the respondent worked.

Respondents were given a categorical promise of anonymity as, it was hoped, this would increase the response rate. It may be that when investigating sensitive, political areas in education, such as this enquiry attempts, such a condition is essential. Secondary schools are, in general, hierarchical institutions (with some notable exceptions) and an approach to the staff inevitably involves an approach to the headmaster, in the first place. More significantly, the return of the questionnaires is also often done by the headmaster or his deputy, and some teachers, it was felt, would be reluctant to reveal their views as openly as signing their name would involve. They would also, presumably, be inhibited in writing comments on the issues and statements as they were encouraged to do.

Generally, the respondents co-operated well in filling in details of their personal and professional lives, very few omitting this. Some, however, scribbled out or cut off the reference number thus tending to confirm sensitivity over the matter of confidentiality. A number of the writer's immediate colleagues were dubious about his claim that individuals could not be identified from these numbers.

Because a great deal of attitude work is done with students who are both more accessible and amenable than teachers in

schools, the question of anonymity is not always given the weight that, it could be argued, it should be. In this writer's view, it is most important that guarantees of confidentiality relating to both individuals and institutions should be given and scrupulously kept. (See Webb, Campbell, Schwartz and Sechrest 1966) On this general question of signed versus unsigned questionnaires, the work of Corey (1937) and Ash and Abrahamson (1952) is often cited: those citing this work usually draw from it the conclusion that promises of anonymity are largely irrelevant and do not affect either the response rate or the validity of responses. Certainly, such an interpretation is supportable from the evidence referred to above and there are some advantages in getting signed questionnaires, notably greater ease of administration and collection. However, Corey's work, in particular, lends itself to another interpretation. In a section of his investigation not always reported by his interpreters, Corey warns against generalising. His sample consisted of freshmen students and they may have been anxious to create a good impression of their honesty, even when responding anonymously. It is implied that, to some extent, anonymity is not the crucial factor: the important factor is the relationship between the investigator and the people in his sample. Both Corey and Ash and Abrahamson used their own students in their work and found no difference in type of response whether the scales were signed or not. They do not report any data on rate of response - one would assume that there was a high response rate, because investigator and students were in a professional relationship with each other. This writer has found, when using his students for research purposes, that they

co-operate well. McLeish (1970) reports a very high response rate for signed questionnaires from students. It would be interesting to mount an experiment, similar to that of Corey and Ash and Abrahamson's, in which a group were dichotomised into signed and unsigned responses. It might be predicted that, if the investigation dealt with matters perceived as sensitive, there would be a lower response rate from the signed than the unsigned group, especially if a non-student population were used.

The sample for this investigation was, broadly, located in secondary and post-secondary education, the primary sector having been used in a previous study (Crompton 1967) and comparisons between primary and secondary in a further study (Crompton 1970). Teachers working in the following type of institutions were invited to give their opinions:

Secondary Modern Schools

Secondary Grammar Schools (Maintained by local authority)

Secondary Grammar Schools ('Direct Grant' type)

Comprehensive Schools

Colleges of Education - including a sample of students from one college

Independent Secondary Schools

University Departments of Education

All the schools in the sample are located in the North West of England and, thus, in geographical terms the sample cannot claim to be representative. Two of the three colleges are in the same area, the third being in London. The University Departments are more widely spread. In addition to the teachers and tutors whose opinions were sought a group of students in the third year of their course, being prepared for careers in

secondary schools in one of the sample colleges, had their attitudes measured. The whole sample is self-selected and this is clearly a weakness as one has no way of knowing if there is any systematic bias. It could be, for instance, that there are significant differences between the attitudes of those teachers prepared to fill in questionnaires and those who are not. Stevens (1975) has suggested, for example, that 'high authoritarians... are ... less willing to volunteer for psychological experiments' (p 55). Although it is clearly an illogical enterprise, an attempt was made to gain some insight into the thinking of non-respondents by attaching to the front of the questionnaire 'booklet' a simple note headed: 'A Note to those not wishing to complete the scales' in which non-respondents were invited to give briefly a reason for not co-operating (see Appendix X11). Not surprisingly this request to non-responders to respond in another way met with little success. Some did complete the response sheet but there was no consistent trend in their answers many of which appeared to be in the nature of rationalisations. Non-responders seem to be characterised by their unwillingness to return scales - any scales of whatever length - rather than being believers in empirical or ethical imperatives about educational research.

One approach to the problem identified above is to 'randomise' the obtained sample. This is hardly satisfactory in this case as it would not remove unsuspected bias but would simply confer an appearance of scientific rigour that was almost totally spurious. Another approach is to stratify the sample in terms of the teaching force in the United Kingdom by age, sex, experience, type of school etc. as indicated in the annual

D.E.S. statistics. This is attractive and it is, in fact, the procedure used by Butcher (1959) as reported in Chapter Five; by doing this he reduced his sample from 440 to 300. There are a number of reasons why this was not done in the present study: it is no claim of this writer that his results will provide even informal norms about attitudes to controversies in various types of English secondary school; in view of the difficulties in getting some categories of teacher to respond (for instance, those in the independent sector as reported later in this chapter) a reduction in numbers following stratification would have placed the size of some sub-samples at an unacceptably low level. Stratification needs to be done in advance, on a national basis, with the full co-operation of the teaching force and with the authority of some central body behind the sampling procedure. Even such a strategy could not absolutely guarantee a fair sampling of opinion: one could stratify carefully and nationally, with all categories represented in satisfactory numbers and still end up with a preponderance of communist party members! It may be better simply to accept the fact that the sample is self selected and hedge one's inferences with the sort of prudent safeguards that bear the fact in mind. Cortis (1973) writing about the problem of sampling teacher opinion in a similarly sensitive area has commented as follows:

> "Samples of...(practising) teachers are very difficult to contact and assess and this inaccessibility is likely to impose limitations on the research design that can be used. Purely random sampling, for example, is likely to be practically impossible, since the whole area of teacher assessment/career investigation is a very sensitive one, demanding the experimenter's reassurance to subjects at the personal level. A sample which will satisfy the statistical 'purists' is unlikely to yield such personal variables: conversely, a sample which yields personal variables will most

likely be 'impure' statistically in some degree. Perhaps the answer to this problem 'lies in the determination and estimation of sources of error, in the careful discussion of results and not in the avoidance of the possibility of error at the expense of reality'." (Wall, 1968, p 10)

(iii) Objectives

The objectives of any empirical research must be to obtain data against which to test previously-formulated hypotheses and this must clearly be the prime objective of this study. At the same time additional information may be obtained beyond that which bears directly on the hypotheses. In this research it is hoped to gain knowledge which may enable future hypotheses in this area to be framed more precisely and fruitfully. The sort of area which may be incidentally illuminated is that of the nature of the hierarchy - if it is a hierarchy - of attitudes held by teachers, its organisation and inter-connectedness; some of the variables which appear to influence the formation of teachers' attitudes - such as type of school, subject specialisation and the effect of professional and academic courses. As argued later some insight may be gained into technical matters connected with different forms of scale construction.

A matter of greater interest to the writer, and one which has developed during the preparation of this thesis, is the supplementing of traditional attitude measures with unstructured interview material. In Chapter Three, the competing claims of the positivist and interpretive positions on the getting and analysis of data were briefly discussed. It was indicated that, when this study was started in October 1972, the intention was to use traditional attitude scales only. However, the unsatis-

factory nature of such an approach, unsupported by any other means, became more apparent as the work proceeded although, as suggested in that chapter, this traditional approach still seems to be the broadly-accepted orthodoxy of social psychology. The problem is that although scales and their attendant statistical analysis enable one to make certain cautious generalisations within stated bounds of probability - and this is no small advantage - they lack a qualitative dimension which can yield insights of an 'oblique' nature on the data. Hence the decision was made, after the commencement of the work, to undertake some interviewing of an open-ended type of teachers who had completed sets of scales. An account of the procedure followed and the results obtained is given in the second part of Chapter Seven.

It has been suggested that teachers may not be aware of the implications of some of the attitudes they hold nor of the relationships between various aspects of their value system (Petersen 1933, Oliver 1953). The present writer has already commented on one facet of this problem (Crompton, 1969): the relatively low correlation between attitudes to streaming and attitudes to 11+ selection, this apparently slight connection being confirmed by Tuppen (1966). An 'a priori' assumption about the relationship might be that both attitudes relate to the same phenomenon, the grouping of children by ability within the same school or between different schools set up to reflect beliefs about ability (as with grammar and modern schools). However, there may not be a perfect reciprocal relationship between the two forms of grouping beliefs: it would not be illogical to be in favour of comprehensive schools through an intense dislike of 11+ procedures but to believe that the best

interests of the children were served by clear streaming within the school. On the other hand, to reject streaming by ability and to favour mixed ability teaching would probably be an indicator of a rejection of 11+ selection. It is difficult, although not impossible, to see the logic of wishing to teach all abilities within one class but not within the same school.

A further example of this apparent lack of coherence of views may be cited, also drawn from Crompton (1969). A high score on the Oliver N-scale may be interpreted as a commitment to 'child-centredness' in education. But the correlation between scores on this scale and scores on the corporal punishment scale is reported by the writer as +0.592: it seems from this that there are teachers who claim, in questionnaire response, to have child-centred beliefs but are willing to cane or cause to be caned, the children in their class. Tuppen (1966) reports a correlation of +0.29 between scores on a physical punishment scale and belief in 'permissiveness'. Whilst the latter cannot be equated with naturalism, it could be an aspect of it. (One statement on Oliver's N-scale reads: 'Naturalism is more important than good manners in children' - agreement with this is an indicator of naturalist beliefs.)

In addition to further investigating the inter-relationship of different attitudes, the relationship of political opinion to educational values is worth examining, and in the Wilson-Patterson C-scale one has an instrument that has been shown to relate to actual political voting behaviour (Wilson and Patterson, 1970). It is often argued, especially by the political Right that 'politics should be kept out of education'. The Left are more likely to perceive education as a form of

social and political action and it will be interesting to see if clusters of political opinion do relate to clusters of educational values and to what degree.

The inclusion of a sample of student opinion may not only throw some light on whether different values distinguish the successful from the unsuccessful but also the relationship between student values, the values of their tutors - a sample of tutor opinion from the College in which the students are located is available - and the values of the teachers in the schools. An NAS/UWT discussion document reported in 'The Guardian' on 20th June 1977 made the following claim:

> "Many of the misfortunes which have befallen schools in the past ten years or so are directly attributable to the inept theories eagerly and often sincerely preached by teacher trainers who had lost contact with the real school situation and who unduly influenced the newly-qualified and inexperienced."

There is a claim here that (a) teacher trainers have an 'undue' influence over their students and that (b) the theories the teacher trainers propagate are 'inept', not in terms of 'school reality' and, probably, incongruent with the views held by the majority of teachers. The data in this study cannot, because of the sampling, pass any kind of verdict on such a claim but it may throw some light on it.

(iv) Collection of data

The rather descriptive account of data collection which follows may serve two purposes: (a) it may be of some assistance to other workers seeking to sample teacher opinion and (b) it may indicate methodological procedures so that they may be judged relatively sound or unsound.

The collection of data proceeded on what may be termed a concentric principle: those respondents who, it was predicted, would co-operate best and who often tended to be nearest to hand, were approached first. Hence data collection began in May 1975 with an approach to the three Colleges of Education in the sample. The timing was not propitious as the Colleges were undergoing a period of contraction in numbers, if expansion in function: one was threatened with complete closure; another was amalgamating with a larger College and the third was trying to diversify. It is a tribute to the staffs of the colleges that they were prepared to give generously of their time to complete questionnaires. This part of the sample was dichotomised into 'Education Department' members and 'Academic Department' members as the former often contain large numbers of ex-primary school teachers whilst the latter are usually composed mainly of ex-secondary, even selective secondary, school teachers. The personal information supplied by tutors enabled those with only primary school experience to be identified.

In October 1975 comprehensive schools were approached. As the writer has good professional contacts with schools in the north west of England, these were the ones contacted. Care was taken to ensure that no secondary schools were used in this investigation that had been sampled in a previous work (Crompton 1969). The procedure followed was the same in each case: a letter was sent to the headmaster (Appendix XIV) with a copy of the scales, explaining the purpose of the research, emphasising the confidentiality of the results and asking for co-operation. As an inducement - it was hoped - a feedback containing scores obtained, with a simple interpretation, was offered (Appendix XIII).

In some cases it was necessary to send a reminder one month later (full details of responses by institution are given in Chapter Seven).

Next, a group of maintained grammar schools was approached. This part of the sample caused some problems as this type of school is not well-represented in the region, many areas having re-organised their secondary school system. Seven schools were contacted and four asked for scales to be sent. All were facing re-organisation with consequent inroads being made upon the time of the staff. Again, their help must have been given in face of real difficulties but their situation did mean that the matters dealt with, especially on the 11+ Selection questionnaire, may have had an urgency that might not have been anticipated.

The Direct Grant sector, too, was going through a significant period in that in September 1976 the Treasury Grant to these schools was withdrawn - in respect of their first year intake - and many local authorities ceased to take up places traditionally allocated to them. Hence, for Direct Grant school staffs, too, many of the statements on the questionnaires must have taken on a sharp relevance, a suspicion confirmed later at interview. Postal administration was employed here, too, except in one case. A colleague working in a nearby University offered to support the writer's initial approach to two Direct Grant schools and this support produced an invitation to visit one of the schools and speak to the staff in an attempt to enlist their support, the only occasion when this happened. Although time-consuming this was productive of a good number of responses, no-one spoken to declining to help.

Many of the secondary modern schools in the area are small and so eleven were approached to ensure a reasonable response; all but one responded positively although in three cases only the headmaster completed scales. (It may be worth remarking at this point that the sample contains the replies of twelve headmasters, a small but by no means negligible number of senior staff, especially when added to the seventeen deputy heads who also replied.)

Gaining the help of the independent sector proved to be difficult, mainly because the writer had no obvious line of contact. Two famous schools were written to: one replied immediately regretting that they were unable to help; no reply was received from the other. This seemed to be a rather daunting beginning. However, at this point the writer visited the Direct Grant school mentioned above where the headmaster quite spontaneously offered the use of his name in connection with letters to independent schools. He also suggested that a more profitable approach might be to write only to schools in the north west. As a result a further eight schools were contacted and four agreed to help. The sample yielded is small, but valuable. In fact, the pattern of scores conformed in most cases to that of teachers in Direct Grant schools and, for most purposes, the samples were combined (See Chapter Seven). It is worth noting that one school, where the headmaster offered his help - and, in fact, returned his personal questionnaire at once - withdrew that offer. This was due to the return, to the headmaster, of the 'feedback' (Appendix XIII). This 'feedback sheet' does suggest a narrow, behaviourist view of the investigation, perhaps necessarily so owing to the brevity of the information given.

Whereas, in one comprehensive school, receipt of this information by some staff had stimulated others to ask for questionnaires, in this independent school, receipt of the information had the opposite effect.

Almost equally daunting was the approach to University Departments of Education. It may be remarked that U.Ds.E. are considerable producers of educational research but may not be quite so accustomed to acting as 'research fodder' for other workers. One Professor of Education suggested that university staff might be too "test sophisticated" and that a certain naivety of response was helpful in terms of validity. In spite of this cautionary note, he agreed to help. Another incident relating to approaches to universities may be instructive. One Professor was asked for his 'help' and that of his staff. He misunderstood the request for 'help' and interpreted it as a request for professional advice on the writing of the thesis! He properly declined to give such help, but the incident may illustrate the point that he, and his staff, are not used to receiving requests to take part in 'form-filling' and simply assumed that the writer's letter could not mean anything so mundane.

The student sample was approached in September/October 1976. They were third year (Certificate) students about to embark on their final teaching practice; all were trained for the secondary age-range and all were undertaking a practice in 'non-selective' secondary schools. 35 of the 51 students returned their questionnaires.

A final note on the collection of data may be recorded. No denominational schools or colleges are included; this was

an attempt to exclude those who might have obviously strong religious views. Of course, such respondents certainly have not been excluded but there is a good chance that they occur randomly, as a proper part of a range of opinion. A group of teachers working in a Roman Catholic secondary school might respond as Roman Catholics rather than as secondary school teachers. As some sub-sample sizes are small, the inclusion of such a group of homogenous opinion-holders might have biassed the sample undesirably. It must be admitted, however, that the arguments on this point are nicely balanced.

As remarked at the start of this section, it may be felt that this part of the study is overly-descriptive, even discursive. The writer feels, however, that such experiences are not incidental to data-gathering but may be of crucial importance not only to the argument of the thesis but also to other workers in the field. The failures to gain co-operation may be particularly instructive: they suggest reasons why much work on 'teacher' attitudes is, in fact, done with students and teachers on advanced courses. The writer's experiences in data-gathering also suggest that the best co-operation is obtained if the researcher is known in the school, although validity may be improved if he is not. Failing this personal line of approach, intervention by a third party known and respected in the school can be almost as helpful. Without one of these two conditions it seems almost impossible for the independent researcher even to gain access to staff - who may be willing to help - if the headmaster judges the request to be unworthy of support. The headmaster clearly perceives himself, in most cases, as the arbiter of such requests and it must be said that it is a

valuable role he performs in protecting his staff from too many research projects. Certainly, however, this writer would have appreciated more invitations from headmasters to attempt to persuade staff to co-operate. In the end, the staff may be the best judges of when to help and when to with-hold help.

CHAPTER SEVEN

STATEMENT OF RESULTS

This chapter is in two parts: part one gives details of the various statistical analyses performed on the data whilst part two contains an account of the interviews carried out in the schools.

Part One - Statistical Analyses

311 usable sets of scales were eventually returned, not all of them complete in respect of the seven separate scales employed. The following analyses were performed at the Keele Computer Centre, using programmes in the Statistical Package for the Social Sciences (S.P.S.S.):

1. Means and standard deviations of scores on each of the seven scales.
2. Inter-scale Pearson product-moment correlation coefficients.
3. Factor analysis.
4. Regression analysis.

In addition a number of profiles were drawn together with certain sub-group mean score comparisons in order to gain some view of possible differences between the various created groups of teachers, lecturers and students. In very general terms, analyses 1 - 4 tend to yield information about the data as a whole and their inter-connectedness whilst the profiles and mean score comparisons tend to yield information about differences between the various created sub-groups. An interpretation of the results is offered in Chapter Eight.

The breakdown of the sample of 311 usable sets of scales

as between the various institutions returning them is as follows:

Origin of Sample

Table One

Universities (Schools and Departments of Education only)

No. approached	Agreed to respond	No. of staff responding		No. of staff in institution	Notes
4	4	No.1	3	9	
		No.2	6	16	4 sets also returned by teachers on advanced courses - not used.
		No.3	1	32	Including a "P.E." and "Special Education" section.
		No.4	3	21	
		TOTAL	13		

Table Two

Independent Secondary Schools

No. approached	Agreed to respond	No. of staff in each school responding		No. of staff* in each school	Notes
10	4	No.1	6	47	Boys' school
		No.2	4	45	Girls' school
		No.3	4	30	Boys' school
		No.4	1	21	Headmaster only co-educational
		TOTAL	15		

* full time teaching in senior school

Table Three

Colleges of Education

No. approached	Agreed to respond	No. of staff responding		No. of staff in institution	Notes
3	3	No.1	20	140	
		No.2	14	35	College accepts "mature" students only.
		No.3	64	125	
		TOTAL	98		

Table Four

Direct Grant Grammar Schools

No. approached	Agreed to respond	No. of staff responding		No. of staff* in institution	Notes
4	4	No.1	10	31	Girls' school
		No.2	4	47	Boys' school (includes headmaster)
		No.3	14	51	Boys' school (includes headmaster)
		No.4	7	39	Boys' school
		TOTAL	35		

* full time members teaching in senior school

Table Five

Maintained Grammar Schools

No. approached	Agreed to respond	No. of staff responding		No. of staff in institution	Notes
7	4	No.1	8	42	Co-educational
		No.2	11	35	Girls' school
		No.3	12	42	Girls' school
		No.4	1	37	Headmaster only Co-educational
		TOTAL	32		

Table Six

Comprehensive Schools

No. approached	Agreed to respond	No. of staff responding		No. of staff in institution	Notes
6	4	No.1	18	95	11-18 school Co-educational
		No.2	19	60	11-18 school Co-educational
		No.3	3	60	13-18 school Co-educational
		No.4	1	50	Headmaster only 13-18 school Co-educational
		TOTAL	41		

Table Seven

Secondary Modern Schools

No. approached	Agreed to respond	No. of staff responding		No. of staff in school	Notes
11	10	No.1	4	79	Including headmaster
		No.2	5	22	
		No.3	9	44	
		No.4	1	38	Headmaster only
		No.5	1	47	
		No.6	1	50	Headmaster only
		No.7	1	29	Headmaster only
		No.8	2	67	Including headmaster
		No.9	9	29	Including headmaster
		No.10	9	45	
		TOTAL	42		All schools co-educational

Table Eight

Students in one college on "Secondary" course

No. approached	Responded	Men	Women	Notes
51	35	12	23	Teaching practice 'grade' available for 51
Men = 20 Women = 31				

Table Nine

Means and Standard Deviations

Variable	Cases	Mean	Median Point of Scale	Standard Deviation(σ)
Streaming	311	60.40	60.00	16.38
Selection	310	61.36	60.00	14.99
Corporal Punishment	309	32.04	36.00	10.63
Conservatism	306	59.18	50.00	14.26
Tendermindedness	290	41.55	42.00	8.60
Radicalism	292	42.10	36.00	6.84
Naturalism	292	29.50	30.00	5.61

The results are listed in the order in which the scales were presented. It may be noted that a one hundred per cent response was obtained only on the first scale in the series (Attitudes to Streaming). On the last three scales (the 'Oliver' scales) the rate fell to 93%. No doubt fatigue and the fact that these final scales require a response on a sheet separate from the one containing the statements (see Appendix X) account in some measure for this falling off in response.

Table Ten

Inter-scale Correlation Coefficients

(please see following page)

Table Ten

Inter-scale Correlation Coefficients

	Streaming	Selection	Corp. Pun.	Cons.	Tend.	Rad.	Nat.
Streaming	++	.773	.598	.496	.463	.619	.604
Selection	.773	++	.557	.490	.425	.637	.558
Corp.Pun.	.598	.557	++	.535	.450	.590	.608
Cons.	.496	.490	.535	++	.527	.602	.608
Tend.	.463	.425	.450	.527	++	.442	.646
Rad.	.619	.637	.590	.602	.442	++	.617
Nat.	.604	.558	.608	.608	.646	.617	++

All the values are significant beyond the .001 level of confidence and all are positive. (It will be recalled that the scoring on the C-scale was reversed so that a low score indicates a set of beliefs claimed to be Conservative.) (see Chapter Five)

Factor analysis

A simple form of factor analysis was performed whereby a first factor is extracted and, if further factors with an eigen value greater than unity are noted ('Kaiser's criterion') an orthogonal rotation is employed so that any second factor extracted would be oblique to the first. In fact, the first factor extracted proved to be a large general factor contributing 62.7% of the total variable variance. As the next

largest factor contributed just over 10% to the total variable variance and had an eigen value of 0.76 only, the criterion for further extraction was not reached and the rotation of axes was by-passed.

The correlation between the general factor and each variable (the factor loadings) are:

Table Eleven

	Factor 1
Streaming	.793
Selection	.774
Corporal Punishment	.739
Conservatism	.711
Tendermindedness	.636
Radicalism	.788
Naturalism	.811

The uniformity of these loadings on each variable - with the partial exception of the T-scale - will make the psychological interpretation of the factor difficult.

Regression Analysis

A form of step-wise regression analysis was performed on the data whereby each variable in turn is put into the regression equation as the dependent variable and the predictive power of each other variable in turn is estimated.

1. Dependent variable - Corporal Punishment

The programme enters the other variables in the order of 'best predictor'. In this case, therefore, the best predictor of a respondent's score on the corporal punishment scale is his

score on the N-scale.

Table Twelve

Variable	F.	Significance
Naturalism	10.57	>.001
Streaming	10.02	.002
Radicalism	9.69	.002
Conservatism	5.52	.019
.....		
Selection	0.656	.419
Tendermindedness	0.463	.830

The .01 level of confidence will be adopted in looking for significance in all results reported, rather than the less stringent .05 level. Hence, in Table Twelve the predictive power of the variables below the line must be regarded as insignificant.

2. Dependent variable - Streaming

Table Thirteen

Variable	F.	Significance
Selection	116.56	>.001
Corporal Punishment	10.03	.002
Naturalism	6.12	.014
.....		
Radicalism	1.96	.163
Tendermindedness	1.03	.312
Conservatism	.17	.682

3. Dependent variable - Conservatism

Table Fourteen

Variable	F.	Significance
Radicalism	17.27	>.001
Tendermindedness	11.20	>.001
Naturalism	9.01	.003
Corporal Punishment	5.52	.019
.....		
Selection	1.02	.312
Streaming	.17	.682

4. Dependent variable - Selection

Table Fifteen

Variable	F.	Significance
Streaming	116.56	>.001
Radicalism	19.08	>.001
.....		
Conservatism	1.02	.312
Corporal Punishment	.66	.419
Naturalism	.097	.755
Tendermindedness	.040	.841

5. Dependent variable - Tendermindedness

Table Sixteen

Variable	F.	Significance
Naturalism	52.82	>.001
Conservatism	11.20	>.001
.....		....
Streaming	1.03	.312
Radicalism	.40	.530
Corporal Punishment	.046	.830
Selection	.040	.841

6. Dependent variable - Radicalism

Table Seventeen

Variable	F.	Significance
Selection	19.08	>.001
Conservatism	17.27	>.001
Corporal Punishment	9.69	.002
Naturalism	9.42	.002
.....		
Streaming	1.97	.163
Tendermindedness	.40	.530

7. Dependent variable - Naturalism

Table Eighteen

Variable	F.	Significance
Tendermindedness	52.88	>.001
Corporal Punishment	10.57	>.001
Radicalism	9.42	.002
Conservatism	9.01	.003
Streaming	6.12	.014
.....	.....	.....
Selection	.097	.755

Following this analysis, the data were then examined to detect possible differences between different groups. 'Institutional' differences were recorded as follows under the title of each institution, which are now listed:

1.	C.E. = College of Education	Teacher trainers
2.	Univ. = University Schools/Departments of Education	Teacher trainers
3.	D.G. = Direct Grant Grammar Schools	The Selective Schools
4.	M.G. = Maintained (by the local authority) Grammar Schools	The Selective Schools
5.	Indep. = Independent Schools	The Selective Schools
6.	S.Mod. = Secondary Modern Schools	The non-selective schools
7.	Comp. = Comprehensive Schools	The non-selective schools
8.	Students	

Table Nineteen

Group Means on the Seven Scales, Lecturers, Teachers and Students

		C.E.	Univ.	D.G.	M.G.	Indep.	S. Mod.	Comp.	Stu.
STREAMING	Mean	68.00	72.31	47.00	53.15	48.67	63.90	59.58	56.69
	σ	15.48	10.79	9.40	12.22	11.31	17.68	17.25	12.12
	N	98	13	35	32	15	42	41	35
SELECTION	Mean	66.67	69.92	48.71	54.90	49.00	66.05	66.39	59.57
	σ	13.82	11.38	9.02	12.62	8.51	14.95	15.65	13.07
	N	98	13	35	31	15	42	41	35
CORPORAL PUNISHMENT	Mean	37.41	41.46	26.64	32.90	25.47	28.26	30.34	28.34
	σ	11.58	9.03	7.19	9.77	5.59	7.58	9.84	8.72
	N	96	13	35	32	15	42	41	35
CONSERVATISM	Mean	62.41	73.77	57.76	53.72	54.00	55.45	54.13	57.66
	σ	15.68	11.14	11.62	16.12	15.30	12.51	12.10	11.74
	N	96	13	33	32	15	42	40	35
TENDERMINDEDNESS	Mean	43.94	47.18	37.89	42.00	38.43	41.14	38.29	41.05
	σ	8.23	7.40	7.89	7.96	9.54	9.05	8.49	6.65
	N	96	11	31	27	14	42	35	34
RADICALISM	Mean	45.45	47.17	39.13	40.78	34.07	40.57	39.49	40.97
	σ	6.73	6.75	4.79	6.24	6.51	6.55	5.55	9.09
	N	95	12	32	27	14	42	35	35
NATURALISM	Mean	32.59	33.73	26.13	27.56	25.36	29.50	27.56	28.17
	σ	5.60	3.33	4.03	3.92	5.46	5.84	4.96	3.85
	N	96	11	32	27	14	42	35	35

It was then necessary to dichotomise the data in various ways to test the hypotheses (see Chapter Five) and to see if any unpredicted differences occurred.

The first comparison is between those who scored at or beyond 1σ above and below the mean score for the C-scale. Owing to the reversed scoring on this scale this means that those falling at or beyond 1σ above the mean (i.e. >73) are non-Conservative in their beliefs whilst those scoring less than 1σ below the mean (i.e. <44) are Conservative in their beliefs. The responsents scoring between +1σ and -10 are excluded from the analysis for this purpose.

Table Twenty

Comparison of Mean Scores of High and Low Conservatives
(N = 40, N = 56)

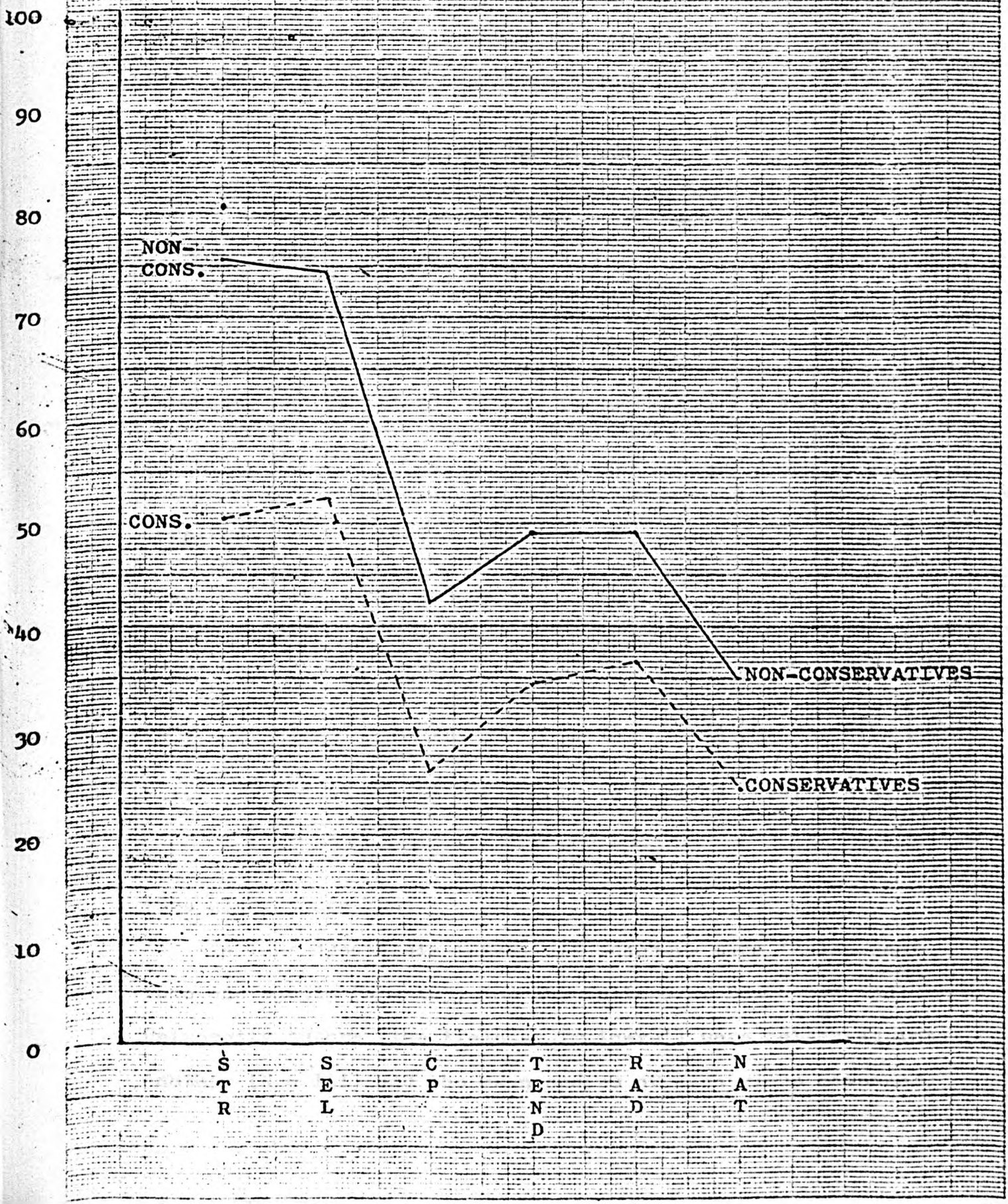
Cons. = <44
Non.-Cons. = >73

	Mean Cons.	σ	Mean Non-Cons.	σ	Diff.	t	p	df
Streaming	50.50	16.09	75.57	14.27	-25.07	7.81	.001	94
Selection	52.50	11.66	74.50	12.25	-22.00	8.84	.001	94
Corp.Pun.	26.02	4.38	42.24	12.03	-16.22	9.12	.001	94
Tend.	34.62	7.91	49.15	7.20	-14.53	8.85	.001	90
Rad.	36.58	6.09	49.16	6.15	-12.58	9.49	.001	89
Nat.	24.30	4.86	35.11	5.26	-10.81	9.96	.001	89

See also Figure One. (In all "profile" comparisons, the scores have not been normalised. Hence it is the extent of separation

PROFILE COMPARISON -- CONSERVATIVES vs NON-CONSERVATIVES

FIGURE ONE



between the two graphs, and not the shape of the graphs that is important.)

In order to test hypothesis two, teachers working in 'Selective schools (N = 82) had their scores on the seven scales compared with their colleagues in 'Non-selective' schools (N = 83). The results are given below.

Table Twenty One

Mean Scores, "Selective School" teachers (N=82) vs "Non-Selective School" Teachers (N=83)

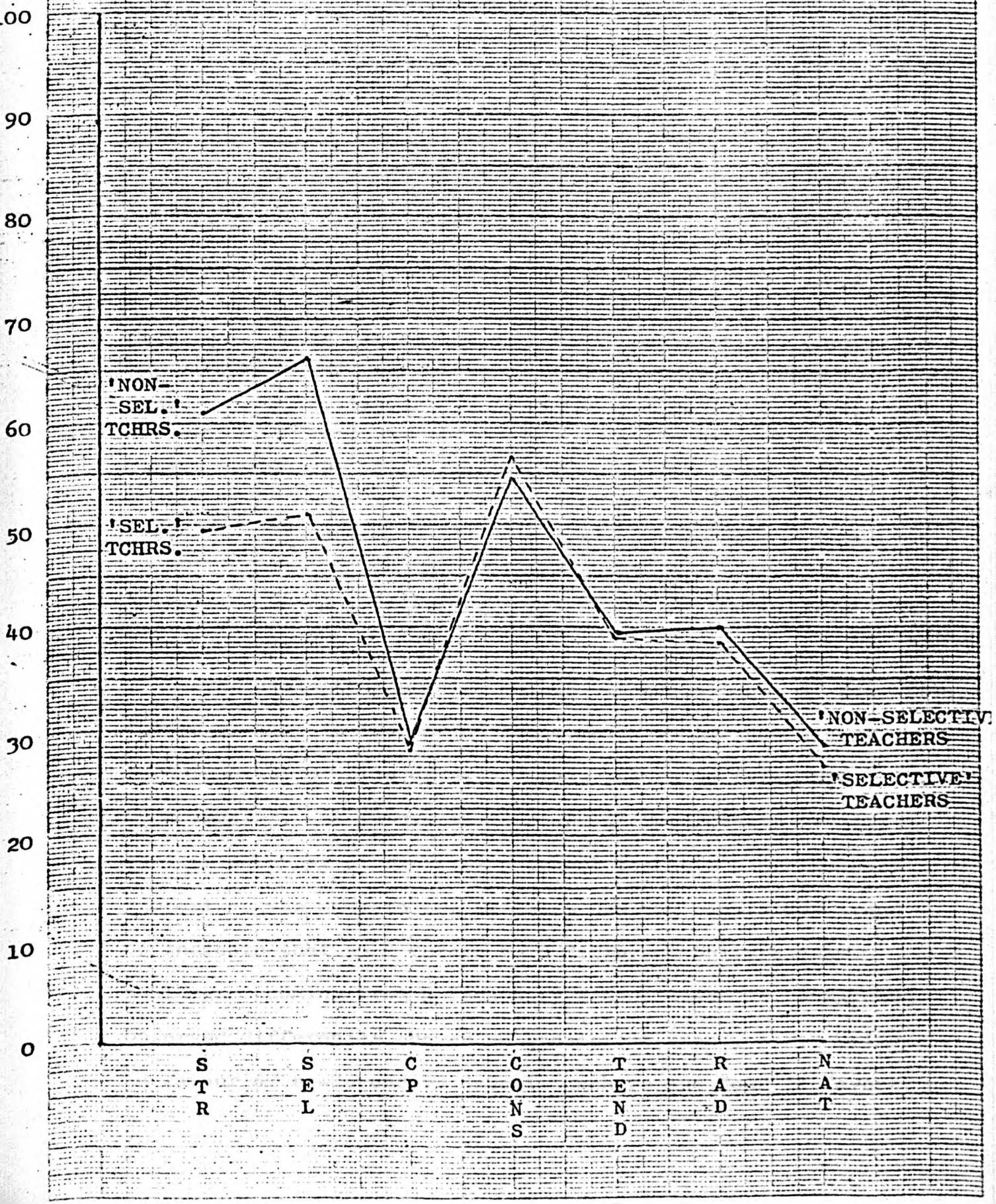
Scale	Mean Sel. Sch. Tchrs	σ Sel. Sch. Tchrs	Mean Non-Sel Sch. Tchrs	σ Non-Sel Sch Tchrs	Diff. Sel.- Non-Sel	C.R.	p	df
Streaming	49.61	12.20	61.13	17.60	-11.52	4.86	>.001	163
Selection	51.04	11.36	66.30	15.38	-15.26	7.20	>.001	162
Corp.Pun.	28.05	8.23	29.29	8.63	-1.24	0.94	N.S.	163
Cons.	56.45	14.50	55.35	12.25	1.10	0.59	N.S.	160
Tend.	39.08	7.99	39.70	8.65	-0.62	0.46	N.S.	147
Rad.	38.62	6.34	40.90	6.41	-2.28	2.19	N.S.	149
Nat.	26.69	4.36	28.60	5.52	-1.97	2.41	N.S. (>.02)	148

(See also Figure Two)

To test hypothesis three, all teachers were 'collapsed' into one sample (N = 165) and the College of Education and University tutors (the 'Teacher Trainers') were collapsed into another (N = 111) and the mean scores of each group compared.

PROFILE COMPARISON - 'SELECTIVE' vs 'NON-SELECTIVE' TEACHERS

FIGURE TWO



For this analysis, the students were excluded.

Table Twenty Two

Mean Scores, "Teacher Trainers" (N = 111) vs Teachers (N = 165)

Scale	Mean Tchr Trnrs	σ Tchr Trnrs	Mean Tchrs	σ Tchrs	Diff. Tchr Trnrs-Tchrs	C.R.	p	df
Streaming	68.55	15.21	55.59	15.92	12.96	6.62	>.001	274
Selection	66.75	13.40	58.77	15.54	7.98	4.53	>.001	273
Corp.Pun.	38.12	11.23	28.91	8.44	9.21	7.26	>.001	272
Cons.	63.61	15.32	56.75	13.40	6.86	3.79	>.001	269
Tend.	44.28	8.18	39.56	8.71	4.72	4.42	>.001	254
Rad.	45.28	6.73	39.90	6.48	5.38	6.38	>.001	255
Nat.	32.71	5.41	27.34	5.02	5.37	8.01	>.001	255

Hypothesis Four predicted that within Colleges of Education, tutors working in 'Education Departments would show a more 'progressive' profile of scores than tutors in 'Academic Departments'. As tutors in 'Education' Departments usually contain a number of ex-Primary School teachers a preliminary comparison was made to see if there was any consistent trend to indicate that such tutors held different beliefs from colleagues coming from a Secondary School teaching background. Observed differences showed no consistent trend, three being in favour of ex-Secondary School teachers and four in favour

of ex-Primary school teachers. Only on the Streaming scale did the differences reach significance, the ex-Primary School teachers being significantly more opposed. The similarities are generally much more striking than the differences and so the comparison between 'Education' tutors (N = 44) and 'Academic' tutors (N = 54) was made.

Table Twenty Three

Mean Scores, College of Education Tutors
"Education" Departments (N=44) vs "Academic" Departments (N=54)

Scale	Mean "Educ"	σ "Educ"	Mean "Acad"	σ "Acad"	Diff. Ed-Ac	C.R.	p	df
Streaming	70.60	12.27	66.35	17.54	4.25	1.39	N.S.	96
Selection	68.16	12.05	65.98	15.17	2.18	0.78	N.S.	96
Corp.Pun.	36.73	10.14	38.50	13.08	-1.77	0.74	N.S.	94
Cons.	60.82	13.39	63.39	16.43	-2.57	0.83	N.S.	94
Tend.	44.64	7.78	43.32	8.56	1.32	0.78	N.S.	94
Rad.	44.50	5.13	46.04	7.39	-1.54	1.18	N.S.	93
Nat.	32.79	5.60	32.79	5.88	0.00	0.00	N.S.	94

Hypothesis Five predicted that the beliefs of students training as secondary school teachers would resemble those of the teachers in the schools rather than of their college tutors, especially if the measurement were done immediately prior to a teaching practice. The comparison was made only with teachers working in 'non-selective' schools, as these are the kind of

schools into which all the students were placed for teaching practice and the type of school in which the majority will pursue a career. (See also Figure Three)

Table Twenty Four

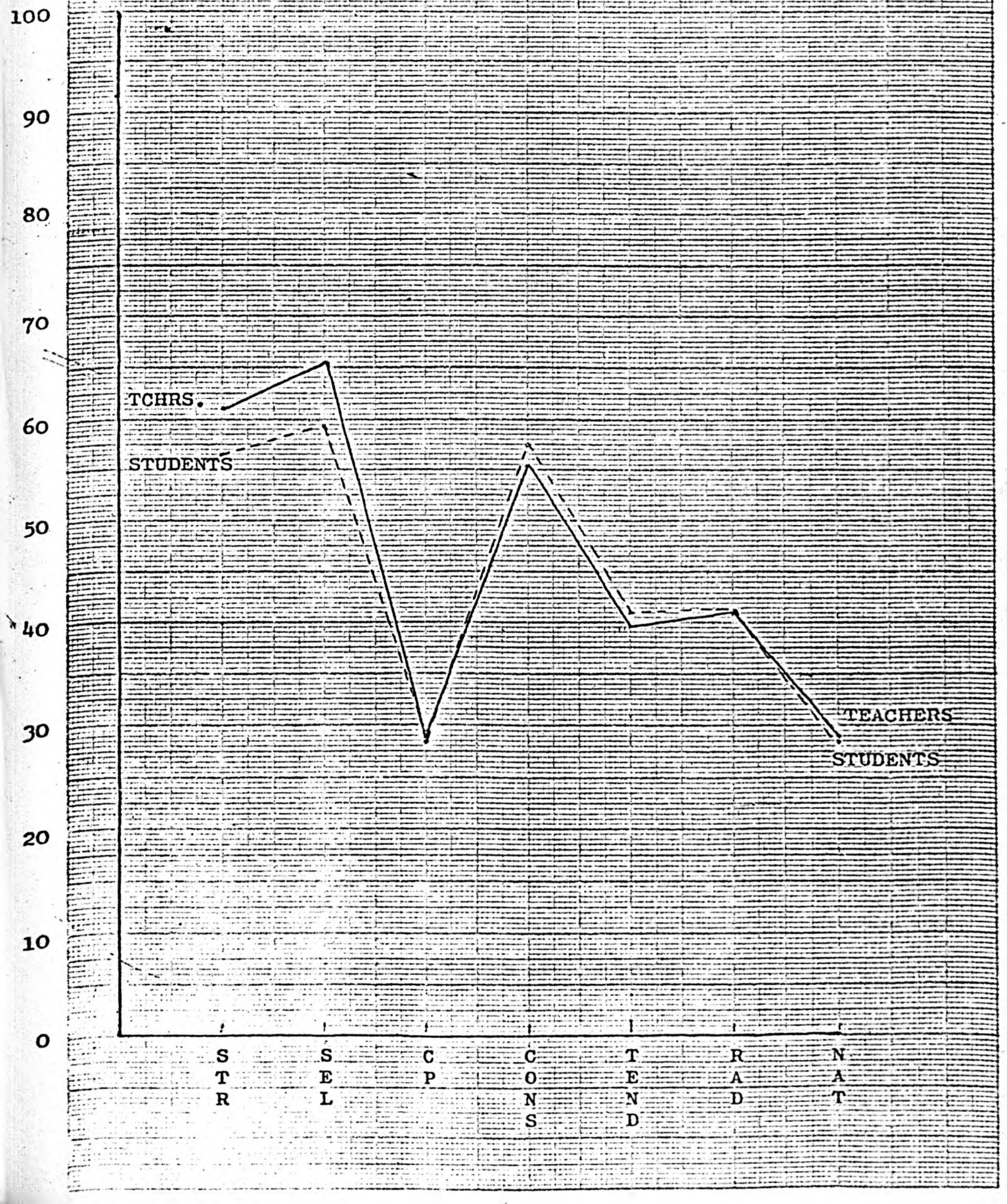
Mean Scores, "Secondary" Students (N=35) vs "Non-Selective" School Teachers (N=83)

Scale	Mean Stu.	σ Stu.	Mean Tchrs	σ Tchrs	Diff. Stu. -Tchrs	C.R.	p	df
Streaming	56.69	12.12	61.13	17.60	-4.44	1.56	N.S.	116
Selection	59.57	13.07	66.30	15.39	-6.73	2.40	N.S.	116
Corp.Pun.	28.34	8.72	28.87	8.63	-0.53	0.30	N.S.	116
Cons.	57.66	11.74	55.35	12.25	2.31	0.94	N.S.	115
Tend.	41.05	6.65	39.70	8.53	1.35	0.81	N.S.	109
Rad.	40.97	9.09	40.90	6.41	0.07	0.10	N.S.	110
Nat.	28.17	3.85	28.60	5.06	-0.43	0.44	N.S.	110

Hypothesis Six predicted that 'Successful' and 'Unsuccessful' students would not be distinguished by differing value profiles. A rating on a ten point scale (1 = very successful ..... 10 = fail) was available from tutors supervising the teaching practice for all 35 students who had completed sets of scales prior to the start of the teaching practice. Students scoring at ranks 1, 2 or 3 were deemed 'successful' for this analysis whilst those scoring 7, 8, 9 or 10 were deemed 'unsuccessful'.

PROFILE COMPARISON -- STUDENTS vs TEACHERS
IN NON-SELECTIVE SCHOOLS

(FIGURE THREE)



(In this instance, Ex^2 and Ey^2 were used rather than o in view of the small numbers involved; in all cases in the tables in this chapter, where 't' is quoted, then Ex^2, Ey^2 have been the basis of the calculation; where C.R. is quoted, σ has been employed.)

Table Twenty Five

Mean Scores, "Secondary" Students (N=35)
"Successful" (N=15) vs "Unsuccessful (N=9)

Scale	Mean Succ	σ Succ.	Mean Unsucc	σ Unsucc	Diff. Succ-Unsucc	t	p	df
Streaming	56.73	16.51	57.56	9.9	-0.83	0.37	N.S.	22
Selection	65.00	12.36	55.22	12.47	9.78	1.96	N.S.	22
Cor.Pun.	28.33	8.63	30.11	12.52	-1.78	0.39	N.S.	22
Cons.	61.6	11.66	53.0	10.54	8.60	1.76	N.S.	22
Tend.	39.43	7.5	41.78	8.32	-2.35	0.84	N.S.	21
Rad.	42.20	5.26	39.89	6.09	2.31	0.93	N.S.	22
Nat.	28.53	3.19	28.11	4.47	0.42	0.26	N.S.	22

Finally, although not included in the set of hypotheses, a set of what may be described as 'standard comparisons' were made. Firstly, the whole sample was dichotomised into men and women and the scores of each sex compared:

Table Twenty Six

Comparison of Mean Scores of Men and Women

Scale	Men	σ	Women	σ	Diff. Men-Women	C.R.	p	df
Streaming	61.62	16.87	57.92	15.47	3.70	1.96	N.S.	302
Selection	63.41	15.40	59.00	13.96	4.41	2.57	N.S.	301
Corp.Pun.	31.75	10.83	31.67	9.93	0.08	0.07	N.S.	300
Cons.	60.47	15.4	58.82	13.25	1.65	0.98	N.S.	297
Tend.	42.30	8.85	40.41	8.01	1.89	1.85	N.S.	281
Rad.	42.04	7.08	41.73	6.37	0.31	0.38	N.S.	283
Nat.	29.75	6.04	28.90	4.89	0.85	1.30	N.S.	283

In view of Oliver and Butcher's finding (1968) that teachers in grammar schools - who were largely graduate - were significantly more tenderminded than teachers in other types of school - who were largely non-graduate - the scores of graduate teachers in this sample were compared with the scores of non-graduate teachers (students are excluded from this comparison):

Table Twenty Seven

Mean Scores, Graduate (N = 194) vs Non-Graduate (N = 77) Teachers and Lecturers

Scale	Mean Grads	σ Grads	Mean Non-Grads	σ Non-Grads	Diff Grads Non-Grads	C.R.	p	df
Streaming	61.30	16.66	59.31	16.87	1.99	0.87	N.S.	269
Selection	61.86	15.26	61.64	14.76	0.22	0.11	N.S.	268
Corp. Pun.	33.38	11.25	30.66	9.39	2.72	2.01	N.S.	267
Cons.	60.40	14.28	57.40	15.71	3.00	1.44	N.S.	264
Tend.	41.88	8.45	40.40	9.21	1.48	1.16	N.S.	249
Rad.	42.18	7.03	41.36	7.19	0.82	0.81	N.S.	249
Nat.	29.48	5.72	29.33	6.08	0.15	0.18	N.S.	250

Another fairly obvious comparison which is often made with data such as this is between old and young respondents. Information about the age of respondents, in grouped form, was available in most cases and respondents under the age of 35 were arbitrarily assigned to the 'young' group whilst those over 35 were assigned to the 'old' group. The results were as follows: (once again with students, who were all 'young' excluded from the comparison)

Table Twenty Eight

Mean Scores "Young" Teachers and Lecturers (35 N=101) vs "Old" Teachers and Lecturers (35 N=170)

Scale	Mean Young	σ Young	Mean Old	σ Old	Diff. Young-Old	C.R.	p	df
Streaming	59.65	16.69	61.09	16.88	-1.44	0.68	N.S.	269
Selection	61.40	15.79	61.97	14.84	-0.57	0.29	N.S.	268
Corp.Pun.	30.66	10.68	33.51	10.58	-2.85	2.13	N.S.	268
Cons.	63.61	13.94	56.85	14.81	6.76	3.74	>.001	265
Tend.	42.52	8.11	41.00	9.15	1.52	1.36	N.S.	250
Rad.	41.84	7.04	42.11	7.22	-0.27	0.29	N.S.	251
Nat.	28.10	5.99	29.78	5.73	-1.68	2.17	N.S.	251

Data were also available about the level of appointment held and so it was possible to dichotomise the respondents into two further groups, those holding senior appointments (Headteacher, Deputy Headteachers, Heads of Departments, Heads of House and Heads of Year) and those holding junior appointments. Such a division, of course, tends to produce similar groups to the 'old' and 'young' comparisons referred to above, except that in this particular analysis students and teacher trainers were excluded:

Table Twenty Nine

Mean Scores, "Senior" Teachers* (N=86) vs "Junior" Teachers (N=68)

Scale	Mean Sen. Tchrs	σ Sen. Tchrs	Mean Jun. Tchrs	σ Jun. Tchrs	Diff. Sen.- Jun.	C.R.	p	df
Streaming	59.03	15.19	51.71	14.64	7.32	3.01	>.01	152
Selection	60.31	15.52	55.40	15.51	4.91	1.93	N.S.	151
Corp.Pun.	28.79	8.23	28.87	8.51	-0.08	0.06	N.S.	152
Cons.	56.52	13.87	57.04	13.08	-0.52	0.24	N.S.	149
Tend.	39.69	8.44	39.13	8.66	0.56	0.38	N.S.	137
Rad.	40.15	6.47	39.39	6.25	0.76	0.70	N.S.	138
Nat.	28.75	5.33	27.13	4.46	0.72	0.86	N.S.	138

* Heads, Deputy Heads, Heads of Department, Heads of House, Heads of Year.

Finally, data had been requested about the subjects taught, simply divided into Arts Subjects (which includes social science) and Science Subjects (which includes mathematics). Students and lecturers were again excluded from this comparison:

Table Thirty

Mean Scores, Teachers of Arts* Subjects (N=122) vs Teachers of Sciences** (N=66)

Scale	Mean Arts Tchrs	σ Arts Tchrs	Mean Sci. Tchrs	σ Sci Tchrs	Diff. Arts-Sci.	C.R.	p	df
Streaming	55.98	14.91	54.65	15.72	1.33	0.56	N.S.	186
Selection	58.35	15.50	58.62	13.59	-0.27	0.12	N.S.	185
Corp.Pun.	28.90	7.93	28.36	8.70	0.54	0.42	N.S.	186
Cons.	57.75	12.92	55.42	14.00	2.33	1.10	N.S.	183
Tond.	40.04	8.38	39.38	8.11	0.66	0.50	N.S.	172
Rad.	40.66	6.35	38.86	5.45	1.80	1.96	N.S.	174
Nat.	27.58	4.56	27.08	5.01	0.50	0.65	N.S.	174

* Includes Social Sciences

** Includes Mathematics

PART II - INTERVIEWS

Six teachers were interviewed, two of whom worked in comprehensive schools and four of whom worked in direct grant grammar schools. This involved visiting two comprehensive schools, both of the 'all-through' 11-18 variety and two direct grant grammar schools which also spanned the 11-18 age range. Interviews took place between February and April 1976.

The teachers interviewed were chosen largely because their pattern of scores indicated some variation from their population 'norms' suggesting, perhaps, that they would have interesting views on the topics to be discussed. For example, one of the teachers chosen from comprehensive schools - a deputy head - scored the maximum of 60 on the corporal punishment scale, indicating, apparently, an implacable opposition to this form of punishment. One of the four teachers working in a direct grant school seemed to show a profile of scores indicating some disagreement with the predicted direct grant profile.

The interviews were loosely structured around the topics covered by the scales. As the topics were discussed in the order of their previous presentation to respondents (that is, streaming, followed by selection and ending with the N-scale) most of the time was spent analysing opinions about the more immediate problems faced by teachers that is the two forms of selection and corporal punishment. All the teachers gave generously of their time - the interviews varied in length between twenty minutes and one and a half hours - and they appeared to speak very freely, sometimes to the limits of professional responsibility. The writer became increasingly interested in his respondents' views on the nature of human abilities as this

appeared to underpin their attitudes to a wide variety of educational questions.

There now follows an account of each interview, in chronological order.

Subject C.12 - Interviewed 17.2.76

This, the first teacher to be interviewed, was, by chance, also the oldest, recording his age in the 46-55 range. He was Head of Department of Physical Education in a large co-educational 11-18 comprehensive school: he also taught social studies. He was chosen, not for the normal reason that his scores departed from 'average' or were in any way remarkable but because of the profusion of comment he included when completing his scales. His scores, with the 'comprehensive school mean' in brackets following are as follows:

Streaming	61	(59.58 σ 17.25)
Selection	65	(66.39 σ 15.25)
Corp. Pun.	23	(30.34 σ 9.84)
Cons.	55	(54.13 σ 12.10)
T.	28	(38.29 σ 8.49)
R.	42	(39.49 σ 5.55)
N.	27	(27.56 σ 4.74)

With the marginal exception of his T-scale score all these values lie easily within 1σ of the population mean for comprehensive schools.

As this was the first interview of the series a certain amount of trial and error procedures occurred in search of a reasonable modus operandi. The interview lasted over one hour

and began with an oral interpretation by the writer of the teacher's scores. He felt that they fairly represented his position on the various issues and, further, claimed that he had enjoyed the experience of completing the scales: he often felt 'cut off' in his teaching - especially in physical education - and thought that thinking and talking about the matters raised by the scales was good for him.

On streaming, as his score suggests, he was neither strongly pro nor contra the practice. He advocated a rational view and claimed to support setting (streaming by subject) rather than streaming, "for those subjects which felt they needed it". In his school they had a non-streamed foundation leading to a setted superstructure and he approved of this system. On the other hand, he stressed the role of the teacher: non-streaming would work if the teachers wanted it to work.

He appeared to be more anti 11+ selection than his score of 65 suggests. He was scathing about the effects of the selection procedure on the primary school curriculum - he had taught in a primary school. On the other hand, he was unhappy about some aspects of secondary school re-organisation: for example he was very critical about the size of some comprehensive schools. He showed a lot of interest in independent secondary schools, claiming that Eton and Harrow were comprehensive in the academic sense, but not in social terms. He felt that one important difference between the provided and independent sectors was the lower staff:student ratios in the independent sector. "Give us 12:1 and we will get the results" was one comment. He objected strongly to local education authorities who operated grammar schools and 'so-called

comprehensives' side by side, citing a local example of this practice.

He commented at length on corporal punishment. "Corporal punishment is no panacea but it is a simple way of demonstrating society's outrage when some rule of behaviour has been broken. It is understood by the young and unsophisticated child. Dubious with older people. The teacher's understanding, personality and sympathy are factors to include in the thinking ." He was clearly not in favour of all staff being able to administer corporal punishment but, in general, his views were quite straightforward - a properly-regulated system was necessary.

He accepted his C-scale score with the comment: "Yes, I'm a bit on the blue side". On the T, R and N-scales he accepted the 'verdict' of his scores. He realised, as his scores indicate, that he was more radical about education than social affairs generally, remarking: "...perhaps because I know more about education". He also commented on his N-score. "I feel that education must be a putting in before there can be a drawing out", a remark which tends to confirm his generally non-child-centred view of education.

Although no profound depths were reached in this interview, which took about 60 minutes, the teacher did offer useful, if informal, validity data on the various scales. He was thoughtful and 'sound' in his views and in the way he expressed them.

Subject C.36 - Interviewed 19.2.76

This teacher produced an interesting pattern of scores, including the maximum possible (60) on the corporal punishment scale. In view of his position as a deputy headmaster - a role

often associated with the maintenance of discipline - this seemed to be an interesting conjunction of position and belief. His scores, with the 'comprehensive mean' in brackets, are as follows:

Streaming	89	(59.58 σ 17.25)
Selection	84	(66.39 σ 15.25)
Corp. Pun.	60	(30.34 σ 9.84)
Cons.	67	(54.13 σ 12.10)
T.	42	(38.29 σ 8.49)
R.	43	(38.49 σ 5.55)
N.	29	(27.56 σ 4.74)

Expressed as deviation scores from the population mean, these are:

Streaming	1.71σ above the comprehensive school mean
Selection	1.18σ above the comprehensive school mean
Corp. Pun.	3.01σ above the comprehensive school mean
Cons.	1.06σ above the comprehensive school mean
T.	0.44σ above the comprehensive school mean
R.	0.63σ above the comprehensive school mean
N.	0.30σ above the comprehensive school mean

In all cases, his scores suggest that he is more 'progressive' than other teachers in comprehensive schools; with respect to his corporal punishment score, remarkably so. As the interview reveals, however, his views on corporal punishment were more complex than the uncompromising opposition suggested by his scores.

The work of this deputy head (who was employed in a large

11-18 coeducational comprehensive school - not the same one as Subject C.12) was largely administrative and he was not normally concerned with disciplinary matters. By training a scientist, he did little teaching nowadays. He referred more than once to a university course on 'middle management' he had attended, the first sustained further education experience he had undergone since his first degree in the 1950s. He had taught abroad - in independent schools - and in grammar and comprehensive schools in the United Kingdom.

If the streaming scale possesses reasonable validity, a score of 89 such as this subject gained should indicate a decisive rejection of the practice. This proved to be so. At his previous school (which was located in a well-known, even notorious, 'New Town' area of North West England) he had experienced a 'banding' (coarse streaming) system where, he felt, the bottom band was "extremely difficult to teach". Hence, his original opposition to streaming was based on a belief about its effect on behaviour. He had done little reading about this controversy and described his views as being based on 'practical judgement'. But, de-streaming as an administrative measure only, i.e. not linked with a change of aims and methods, was a waste of time. In his view, there was no loss to the 'brighter child', but he did show concern about the 'slow learner' in a mixed ability class, favouring withdrawal for basic subjects, but only if there was a well-established and experienced remedial department.

His score of 84 on the selection scale again suggests strong opposition to 11+ procedures and, again, this proved to be the case. The only contrary indication was that he felt that inter-

school transfers (as between modern and grammar schools) could be successful: he cited a situation he had experienced, when the school-leaving age was still 15, whereby the modern and grammar schools co-operated closely in correlating their curricula, resulting in a large number of successful transfers to the grammar school at 15.

But, it proved to be his views on corporal punishment that were the most interesting. As with his views on streaming, this was a practical judgement based on his experience at his last school, one which would be perceived as being 'difficult' by most teachers in the area. "If we could manage without it there, we can manage without it anywhere." This seems clear enough but he went on to qualify his view. He had recently (Summer Term 1975), for the first time in his life, caned a boy in the absence of the 'caning deputy head' (sic). The boy had been caught stealing from a colleague's car, on school premises, and he had carried out the caning, against his better judgement, to show professional support to the Head of Middle School who had brought the boy to him and clearly expected him to be caned. He went on to make further distinctions between formal and informal corporal punishment: he had less absolute objection to 'ear-tweaking and hair pulling' which he admitted to in his early days as a teacher. In summary, he felt that caning worked with pupils who didn't really need to be caned but did not work with the 'hard cases'. He honestly admitted that his views had never been severely tested during his career: he got on well with children but was less sure if he could maintain his attitude if faced by examples of abuse or violence, especially if offered to women teachers.

His score of 67 on the C-scale suggests that he is mildly radical: he claimed a large degree of indifference to political matters. He felt that he might be more radical in education ("I can have some influence on educational affairs.") but his score suggests otherwise. Whether this is a failure of insight into his own beliefs or a comment on the validity of the R-scale is a matter for conjecture. There appeared to be nothing of note about the T and N-scales: in any case, he had already given the writer 90 minutes of his time.

In general, he claimed to have enjoyed both the scale completion and the interview. (It may be worthy of note that it was at this school that the staff requested further copies of the scales following the arrival of the notes of interpretation (see Appendix XIII) to the first teachers to volunteer.) He felt that his scores were valid and alluded to the course on 'middle management' as having been influential on his beliefs on 'general educational questions'. By this he appeared to refer to the T, R and N scales rather than the Streaming, Selection and Corporal Punishment scales where, by his clear admission, practical rather than theoretical judgements were involved.

Subject D.23 - Interviewed 26.3.78

His pattern of scores (with the 'direct grant grammar school means and standard deviations in brackets) is reproduced here:

Streaming	61	(47.00 σ 9.4)
Selection	61	(48.71 σ 9.02)
Corp. Pun.	28	(26.54 σ 7.10)

Cons.	69	(57.76 σ 11.62)
T.	46	(37.89 σ 7.89)
R.	40	(39.13 σ 4.79)
N.	28	(26.13 σ 4.03)

This pattern is not unusual for a teacher in a direct grant grammar school, as represented by this sample, and he was chosen because he had some of the highest, i.e. most 'progressive' scores amongst teachers in this school. He taught chemistry and had taught in this school only, apart from teaching practice experience in a College of Further Education. He warned the writer that his time was limited - in fact the interview lasted for only 25 minutes - and so we proceeded straight to a discussion of his scores on the attitude scales without any preliminary talk about the nature of ability.

As his score on the streaming scale implied, he had mixed feelings about the practice. He pointed out that the grammar school was itself a stream and felt that further streaming, especially in the lower school, was unnecessary. He also argued that streaming was unfair to teachers - "...no-one should have to teach all the duds". He believed that the 'good' lifted the 'bad' - he mentioned that he had no patience with the 'bad apple in the barrel' type of argument as applied to classes of children. Many very able children - the 'high fliers' in his terminology - appeared to come from modest home backgrounds whilst the sound, solid middle class homes tended to produce the 'ploddors'. Thus, although to some extent employing stereotypes, he was not employing what may be called the expected stereotypes: a practice that may be related to his somewhat different pattern of scores.

On the question of 11+ selection, he claimed to have an open mind. He reminded his interviewer that he was a scientist and that he would prefer to judge the matter on the basis of evidence. He felt that there was too much emotion in the arguments about comprehensive schools and wished to see more reason to the fore. He attempted a similar argument on the subject of corporal punishment. He did not employ it himself but felt that he had no right to deny it to colleagues nor to himself at some future time: a very pragmatic argument. He had no particular comments concerning his scores on the C, T, R and N-scales accepting the writer's brief interpretation of the scores as a reasonable statement of his views.

When completing the first three scales in the battery, he had made a number of ? responses (Don't know). He made the point that he needed to respond quickly to attitude statements. "If I think about the question, I find it almost impossible to give a definite reply." At this point a school bell sounded and, with apologies, he rushed off to a lesson.

Subject D.27 - Interviewed 26.3.76

Although this was the shortest of the six interviews, in some ways it turned out to be the most productive. This teacher's scores, with the usual comparisons in brackets, were as follows:

Streaming	22	(47.0 σ 9.4)
Selection	38	(48.71 σ 9.02)
Corp. Pun.	18	(26.64 σ 7.19)
Cons.	48	(57.76 σ 11.62)

T.	45	(37.89 σ 7.39)
R.	29	(39.13 σ 4.79)
N.	24	(26.13 σ 4.03)

It may be seen at once why this teacher was chosen for interview. In deviation terms, his scores may be summarised as:

Streaming	2.66σ below the Direct Grant Grammar School mean
Selection	1.19σ below the Direct Grant Grammar School mean
Corp. Pun.	1.29σ below the Direct Grant Grammar School mean
Cons.	0.34σ below the Direct Grant Grammar School mean
T.	0.28σ above the Direct Grant Grammar School mean
R.	2.12σ below the Direct Grant Grammar School mean
N.	0.53σ below the Direct Grant Grammar School mean

Even for the Direct Grant sample, these scores are, with one exception, very low, the streaming score remarkably so. It is, in fact, the lowest score recorded on this scale for any respondent. This teacher had taught Biology for six years, in this school and in one independent school. In September 1976 he was moving to another post, also in a Direct Grant Grammar School.

He immediately showed great interest in questions concerning the nature of human abilities. He emphasised speed as a criterion for the identification of high intelligence but also included a sense of humour. (This is an interesting link with the much-criticised work of Getzels and Jackson (1962) who associated sense of humour - often of a macabre kind - with

high divergent ability.) He felt that there were regional differences in intelligence; that Northern boys had a small active vocabularly but a large passive one compared with boys he had taught in Southern England. One of his tasks as a teacher, he declared, was to make active this large passive vocabulary. Heredity was paramount in determining mathematical and logical ability, but environment, especially upbringing, was the crucial factor in determining other types of ability. An interesting point is that, although on balance, he appeared to give more credence to environment as a determinant of ability, he believed absolutely that ability was fixed, had gained a ceiling, by the age of eleven and that the level was determined largely by experiences in the home prior to age eleven. Thus, for him as a teacher in a secondary school receiving children at the age of eleven, abilities were just as fixed as if determined by an iron law of inheritance. Although in his conversation he stressed the developmental nature of intelligence, the nature of his discourse was to give the impression that ability was an entity possessed by the individual and that the task of secondary education was to determine the ceiling of this ability and to develop knowledge structures appropriate to this (known) level.

Although his streaming score - as noted above - was the lowest recorded, in interview he was less positive than the score suggested he would be. "It is efficient in a goal-oriented manner" and "To deny the need for streaming is to deny the human condition" were two comments he made, the second being much the more positive. He had no experience of non-streaming but observed that it must, sometimes, be hurtful to the less

able. He was less sure about the need for streaming in a highly selective school such as the one in which he was currently working, although one detected some regret at the recent decision by the headmaster to abolish the 'express stream'. In Mathematics and other hierarchical subjects he accepted that streaming was essential - indeed, acceleration, as in an 'express stream', was desirable - but he felt that it was less necessary in subjects where maturity of writing was more important than reaction speed.

On 11+ selection he felt that the government was unwise to move to a totally comprehensive system as this sharpened the polarity between the independent and provided sectors (by abolishing the intermediate position of the Direct Grant Schools). He saw many virtues in independence from the state in education but lack of time precluded any further investigation of this point. He showed little interest in or knowledge of the various forms of comprehensive re-organisation.

His views on corporal punishment reflected those of other teachers interviewed. It was effective in the punishment of certain kinds of mis-behaviour, such as general mischievousness. "A good hiding stops him messing about and he doesn't bear any grudge." It should not be administered for academic failings nor for any kind of serious misdemeanour. (This point was commonly held by the teachers interviewed and is also recorded in Highfield and Pinsent 1952).

Throughout the interview, this teacher stressed the intrinsic worthwhileness of education - it was to train the mind generally, not for any kind of direct vocational purpose. This view is reflected in his T-scale score, the only one to

rise above the Direct Grant grammar school mean. (It is also higher than all other group means, except the highest of all - the University teachers' mean.) It will be recalled (in Chapter Six) that a high score on this scale might reasonably be interpreted as a commitment to education for its own sake.

Subject D.34 - Interviewed 1.4.76

An untrained graduate in French, he was selected for interview because of his unusual - for a teacher in a Direct Grant school - pattern of scores which are given here, togethet with the Direct Grant means and standard deviations.

Streaming	51	(47.0 σ 9.40)
Selection	74	(48.71 σ 9.02)
Corp. Pun.	45	(26.64 σ 7.19)
Cons.	71	(57.76 σ 11.62)
T.	34	(37.89 σ 7.89)
R.	51	(39.13 σ 4.79)
N.	26	(26.13 σ 4.03)

In deviation scores, these may be expressed as

Streaming	0.43σ above the D.G. mean
Selection	2.8σ above the D.G. mean
Corp. Pun.	2.55σ above the D.G. mean
Cons.	1.14σ above the D.G. mean
T.	0.49σ below the D.G. mean
R.	2.48σ above the D.G. mean
N.	0.03σ below the D.G. mean

With the exception of his T. score and (triflingly) his N.

score, all these results are above the D.G. mean, suggesting a profile that may be interpreted as being more 'progressive' than the majority of his colleagues.

On the question of the nature of human abilities, he had inclined earlier in his career to an environmentalist viewpoint, but now (he is under 35) he tended to place more emphasis on endowment. He accepted that abilities were normally distributed in the population and that, as a consequence, talent was scarce. At the same time, he argued that the selective system of secondary education missed numbers of able children whose talents were not best developed in secondary modern schools. He was actively seeking a transfer to a comprehensive school as he felt that this was, broadly, the type of secondary school in which children would develop their abilities to the highest degree.

At the same time he strongly believed that comprehensive schools should group according to ability, but preferred the finer system of 'subject setting' to the coarser streaming. When completing the streaming scale he had written: "In most boxes, for 'streaming' preferably read 'setting' " and now confirmed this. On the other hand, as a teacher of French, which may be seen as an incremental subject (certainly in the language aspects), he may have been answering in the context of his subject only, for he did admit that it should be possible to teach less incremental subjects, such as history, English and geography in mixed ability groups.

His views on 11+ selection may be inferred from his earlier views on the nature of ability. He was dubious about the validity of selection, feeling, in addition, that it resulted

in social separation, an undesirable occurrence, he felt. He was strongly against the Direct Grant grammar school as a system and particularly upset that his school had recently opted to go independent. He claimed that some 30% of the staff agreed with his view but that none of them had been consulted. (It will be recalled that Direct Grant status was progressively withdrawn by the Secretary of State, commencing on 1st September 1976.) His position was that they should have become a maintained school with a comprehensive intake.

On corporal punishment, although he would not prohibit its use, he had serious doubts about using it himself. He found formal corporal punishment particularly objectionable but distinguished this from an 'informal tap' or the like. In any case he felt it was suitable only for trivial offences and never - this expressed with great strength - for academic failings.

He agreed that the scores were generally valid for him. For instance, his T. score of 34, as noted above, is low - in the opposite direction from the majority of his scores relative to the D.G. mean (which is already the lowest of any of the group means). Again, interpreting this scale as a commitment to intrinsic / extrinsic goals in education, with a low score falling in the extrinsic belief area, the fact that this teacher is responsible for careers guidance may make him tend to see vocational goals (extrinsic to the system) as paramount. Certainly this was the explanation offered by him at interview.

In general, this teacher was slightly reticent (except when expressing his disappointment at the school's policy in joining the independent sector) but spoke freely enough for

his views to be made clear. Spontaneously, at the end of the interview, he claimed to have enjoyed both the scale completion and the interview as they had enabled him to turn his mind to 'serious educational matters', something which he apparently felt he did too infrequently.

Subject D.35 - Interviewed 1.4.76

This teacher worked in the same school as D.34 and was interviewed immediately after him. He was selected for interview because his pattern of scores suggested s strong commitment to selection of various kinds and to 'traditional' attitudes generally. His scores, with the Direct Grant grammar school means and standard deviations in brackets, are as follows:

Streaming	34	(47.00 σ 9.40)
Selection	51	(48.71 σ 9.02)
Corp. Pun	23	(26.64 σ 7.19)
Cons.	41	(57.76 σ 11.62)
T.	26	(37.89 σ 7.89)
R.	44	(39.13 σ 4.79)
N.	19	(26.13 σ 4.03)

Expressed as deviations from the Direct Grant mean his scores are:

Streaming	1.42σ below the mean
Selection	0.25σ above the mean
Corp. Pun.	0.51σ below the mean
Cons.	1.44σ below the mean
T.	1.51σ below the mean

R. 1.02σ above the mean

N. 1.77σ below the mean

In each case, except, the R.-scale and, triflingly, the Selection scale, his scores are below the Direct Grant means which are themselves, as noted above, already the lowest of the school group means recorded.

He taught chemistry and had been at the school for six years: it was his first post. His views on the nature of ability were not quite what might have been predicted from his scores. The role of parents was seen as very important in determining the level of their children's ability - he attached little importance to heredity in the determination of individual differences. He was scornful of I.Q. testing but his views here were highly pragmatic: apparently the headmaster was inclined to use I.Q. scores as a kind of 'weapon' against some of the staff in that if a boy was failing academically, the headmaster was likely to produce that boy's score. As the school pursued a policy of very fine selection at 11+ this score was usually a very high one and the headmaster drew the conclusion that, given this high score, no child in the school ought to 'fail'.

On the subject of streaming, his views were more predictable. He stressed that there were different kinds of knowledge and different styles and paces of learning. Thus, in the sciences and languages, ability sets were essential, but were less important for subjects such as English.

A strong preference for the principle of selection was expressed but he was unhappy with the present system which, he felt, was too inaccurate. He suggested, as an alternative,

the maintenance of 11+ selection but the introduction of a two-year 'probationary' period during which the selective and non-selective schools would teach a common curriculum. At the end of this time (when the children were aged 13+) inter-school transfers could occur on the basis of established attainments. He accepted that ability was normally distributed in the population and that there was a limited pool of children possessing high ability.

On the question of punishment, he argued that the school's detention system was no deterrent as the same boys turned up week after week: it had become a sort of 'exclusive club'. Interestingly, however, he did not apply the same argument to corporal punishment which he wished to see maintained in both formal and informal senses.

His tendermindedness score of 26 is quite low. When the interpretation of this factor was put to him (about its being concerned with intrinsic - tenderminded - and extrinsic views about the aims of education) he agreed that his views were strongly instrumental. He saw science as an essential area of knowledge for living in the twentieth century. This links with his very low N. score of 19 - he expressed great impatience with child-centred views of education: children needed to learn science and should be required to do so whether they wished it or not. On the other hand, his R.-scale score of 44 is a slight puzzle. It will be recalled that it is just over 1σ above the Direct Grant mean and does not accord with his relatively modest score on the C.-scale (1.44 σ below the Direct Grant Mean). An r of +0.602 has been recorded earlier in this chapter as the strength of the relationship between

scores on the C.-scale and the R.-scale. The strength of this relationship is also suggested by the regression analysis. From his conversation - and his scores - this teacher is clearly not a 'radical' in educational matters but he did express his views on the present regime in his school with some degree of vehemence. He expressed great resentment, for example, against the headmaster whom he saw as an unreasonable authoritarian. It may be that this general mood of resentment inflated his score on the R.-scale which he may have used - as he certainly appeared to use the interview - as a form of 'release'.

(In parenthesis, it may be noted that this teacher criticised his 'Arts' colleagues for their oft-repeated claim that scientists were 'narrow' in their interests and he argued that it was often the Arts teachers who were narrow, knowing little and caring little about scientific matters. For himself - and he said that this was common amongst his scientific colleagues - he claimed a broad set of interests - including aviation and archaeology.)

As implied above, this was a very lively interview in which the teacher spoke very frankly indeed. The writer was rather surprised at the degree of frankness in that the interviewer was a total stranger and was known by this teacher to work in a College of Education, an environment towards which he might have been thought to be suspicious or even hostile.

This report is intended to be mainly factual, with preliminary, essential interpretations only. Further interpretation of the teachers' comments, together with a

synthesis of this with the statistical data reported earlier in the chapter will be given in Chapter Eight.

CHAPTER EIGHT

INTERPRETATION AND DISCUSSION

Restatement of Hypotheses

1. Teachers identified as 'Conservative' (on the Wilson-Patterson scale) will show the following attitude profile:

   They will support streaming, selection at 11+ and corporal punishment.

   They will be idealistic, toughminded and radical in terms of the 'Survey of Opinions' questionnaire.

The data bearing most directly on this hypothesis are contained in Table Twenty in Chapter Seven. In this analysis, 'Conservatives are defined as those scoring 1σ below the population mean on the Wilson-Patterson C-scale (that is, <44); non-Conservatives are defined as those scoring 1σ above the population mean (that is, >73), which yields groups of 40 and 56 respectively. The differences between the two groups are striking. On all six variables, the mean differences are significant beyond the .001 level of confidence. Some of the differences can fairly be described as very large indeed, for example on the Streaming, Selection and Corporal Punishment scales. Put simply, the results in this table indicate that, as far as this sample of teachers, lecturers and students is concerned, the 'Conservative' group do, in relative terms, support streaming, 11+ selection and corporal punishment and that they are toughminded, non-radical and idealistic as predicted by the hypothesis. It will be recalled from the discussion in Chapter Five that the C-scale is claimed to have reasonable validity in that obtained values correlate with political belief and voting behaviour. On no other criterion employed for dichotomising the sample do

such clear and consistent differences occur. These data suggest a political dimension to educational beliefs and values that is very plain. It suggests that, for example, 'Conservatives' have quite different views about the values, intentions and methods of education from 'non-Conservatives', at least as far as the teaching force represented here is concerned. Of course, this result is obtained by ignoring those respondents whose C-scale scores fall within $+1\sigma$ and -1σ of the mean, that is those who do not appear to have decisive political beliefs and this does mean ignoring a large section of the sample; on a conventional normal curve, 68.26% of the respondents are ignored for this analysis, but this seems justified if one is seeking some political polarity.

Other data bear indirectly on this hypothesis. The correlation matrix (Table Ten in Chapter Seven) implies a strong relationship between 'Conservatism' and the other six variables: the <u>lowest</u> obtained r (that with scores on the Selection scale) is +0.49. The regression analysis points the same way: with 'Conservatism' as the dependent variable, four of the remaining six variables have a worthwhile F value: in other words scores on these four variables are good predictors of 'Conservative' beliefs. Less direct evidence is contained in Table Nineteen (Chapter Seven) from which it may be seen that the 'Conservative profile' is to be found most strongly in 'selective' secondary schools, but these data are more relevant to the next hypothesis.

2. <u>Teachers showing a 'Conservative profile' will be found concentrated in 'selective' secondary schools, rather than in 'non-selective' secondary schools. (The term 'non-selective'</u>

refers to secondary modern and comprehensive schools: the term 'selective' refers to independent, direct grant and maintained grammar schools.)

Some of the most direct evidence bearing on this hypothesis is contained in Table Nineteen in Chapter Seven. The data here are arranged in the form of a value hierarchy, whereby the most progressive beliefs are to be found amongst University and College of Education tutors whilst the least progressive beliefs seem to occur in the selective school sector, especially the Direct Grant and Independent schools. Other direct evidence relating to this hypothesis is found in Table Twenty One of Chapter Seven. The scores of the teachers in the non-selective schools (N= 83) are consistently 'higher' (i.e. in a more progressive direction) than those of their colleagues in the selective schools (N = 82), except on the C-scale where the selective school teachers appear to be less Conservative, but the difference is not significant. However, only on the Streaming and Selection scales does the difference reach significance ($p > .001$) although on the N-scale, the difference approaches significance ($p > .02$). It is curious, perhaps, that the only difference favouring the selective school teachers is on the C-scale itself, scores on which appear to be a good discriminator of educational beliefs (see discussion above). This finding may be, in part, a function of the differences between graduates and non-graduates. (There are many more graduate teachers in the selective sector than in the non-selective.) In this research, graduates were (non-significantly) less Conservative than non-graduates (see Table Twenty Seven in Chapter Seven and Table Four later in this Chapter). Wilson and Patterson (1970)

reporting a large number of studies using their scale show that undergraduate students in the United Kingdom are much less Conservative than students on non-graduate courses in Colleges of Education ($p > .001$). Thus, although there is little evidence to contradict Hypothesis Two, it can only be substantially supported in terms of beliefs about streaming and selection.

3. <u>Teachers working in the area of teacher training will hold attitudes which are more radical, tenderminded and naturalistic and which oppose streaming, 11+ selection and corporal punishment ('progressive' attitudes) than teachers serving in any of the secondary schools referred to in Hypothesis Two.</u>

The most direct evidence bearing on this prediction is to be found in Table Twenty Two in Chapter Seven, although Table Nineteen is also relevant. The differences are striking. On all seven variables including the C-scale, the tutors in Colleges and Universities are significantly more 'progressive' than the teachers in the schools ($p > .001$ in all cases). These data appear to support an implication in the NAS/UWT (1977) statement quoted in Chapter Six. The data certainly suggest that in terms of educational values the College and University staffs in this sample hold beliefs very different from those held by the teachers in the schools. This difference could create problems when the two groups meet, for instance when tutors visit schools to supervise students on teaching practice or when teachers enter in-service courses, although, as was noted earlier (Chapter Five) such teachers are not necessarily typical of the teaching force as a whole in their beliefs.

As this finding appears to be important, further evidence was sought. Many tutors have only primary school experience -

especially those tutors working in colleges - and so the sample of teacher trainers was reduced by removing all tutors whose biographical data indicated that they worked in primary schools (or where the data was missing) and the University sample was also removed. It will be recalled that the University teachers were the most 'progressive' of all. This left a group of 54 tutors from colleges who had worked in secondary schools only prior to taking up their college appointment. Their attitudes were compared with those of teachers in non-selective secondary schools (N = 83).

TABLE ONE

Comparison of mean scores, College of Education tutors (non-primary experience (N=54) and mean scores of teachers in non-selective secondary schools (N=83)

Scale	Mean, Coll. of Ed. Tutors	σ	Mean, Non-sel. School Teachers	σ	Diff. Tutors-Teachers	CR	p	df
Streaming	58.02	15.66	61.13	17.6	-3.11	1.08	N.S.	135
Selection	64.87	13.73	66.3	15.38	-1.43	0.57	N.S.	135
Corp. Pun.	37.5	12.81	29.29	8.63	8.21	4.11	>.001	133
Conservatism	62.09	15.81	55.35	12.25	6.74	2.63	>.01	134
Tend.	43.72	7.92	39.7	8.65	4.02	2.75	>.01	129
Radicalism	45.06	7.4	40.90	6.41	4.16	3.32	>.01	129
Naturalism	32.27	6.08	28.6	5.52	3.67	3.50	>.001	129

There is here some modification to the picture presented in Table Twenty Two. Although the tutors still appear to be generally more 'progressive', the level of significance has fallen in three cases whilst on the Streaming and Selection scales the teachers now appear to be (non-significantly) more 'progressive'.

This modification does suggest some variable contamination from the presence in the College of Education sample of ex-primary school teachers. The withdrawal of the University sample has also had its effect. This point throws into some relief the rather stark contrast between the values as shown here of University tutors and the values of the teachers in whose schools, presumably, a good number of students trained in U.Ds.E. will teach (see also Table Nineteen in Chapter Seven).

There is a simple explanation, strongly hinted at in the NAS/UWT document (op. cit.), of this difference. The beliefs of the students are, therefore, of crucial importance. Will they adopt the value stance of their tutors or their mentors in the schools? The discussion of Hypothesis Five, below, throws some light on this question.

4. <u>Within Colleges of Education, tutors working in 'Education' Departments will hold views that are more 'progressive' - as defined in Hypothesis Three - than colleagues working in 'Subject' Departments</u>

The data relevant to this prediction are contained in Table Twenty Three in Chapter Seven. There appear to be no significant differences in attitude between the two groups and the observed values found are inconsistent in the direction of their differences. On the Streaming, Selection and T-scales, the 'Education' Department tutors appear more progressive; on the Corporal Punishment scale, the C-scale and the R-scale the 'Subject' Department tutors appear more progressive and on the remaining variable, the N-scale, there appears to be complete accord between the groups, to two decimal points. This hypothesis is not verified by these data.

5. Students about to embark on a final teaching practice in non-selective secondary schools will hold attitudes more akin to the teachers in the schools than to tutors in their college

The data bearing most directly on this hypothesis is to be found in Table Twenty Four in Chapter Seven; it is mildly surprising. On five of the seven variables the non-selective school teachers show (non-significantly) a more progressive profile of scores. On the selection scale, this difference approaches significance (C.R. 2.40, $p > .02$). Only on the C-scale and the T-scale are the students' scores indicating more progressive beliefs than the teachers' and in each case the difference is trifling. (See also Figure Three, Chapter Seven) Thus, the profile of scores of students resembles quite closely those of the teachers into whose schools they were about to undertake teaching practice. This may be due to anticipatory professional socialisation and the data contradict that of Morrison and McIntyre (1967,a) but supports the argument and data of Finlayson and Cohen (1967). It also throws some light on the claim of the NAS/UWT discussion document (op.cit.) which argues:

(a) that the theories 'preached' by teacher trainers are inept, if sincere, and bear no relation to the 'real' school situation. If the 'real school situation' refers to the beliefs of teachers in the schools then, as claimed above, the data in Table Twenty Two suggest that these beliefs are indeed very different from those of the teacher trainers.

(b) that the teacher trainers 'unduly influenced' the newly-qualified and inexperienced. The small sample of students in this investigation show no signs at all, at the time they were

tested, of having been influenced by the beliefs of their tutors. Their beliefs appear to have been largely influenced by (what they take to be) the beliefs of the teachers in the 'host' schools. There is some evidence of 'over-correcting' - that the students hold beliefs which are more traditional than those of the teachers about to receive them on teaching practice.

As a refinement of the analysis, a further comparison was made. The students were all from one College of Education and a sample of opinion (N = 64) of tutors in that college was available. A comparison of the profiles of the two groups, students and tutors, was made which does modify the earlier picture.

TABLE TWO

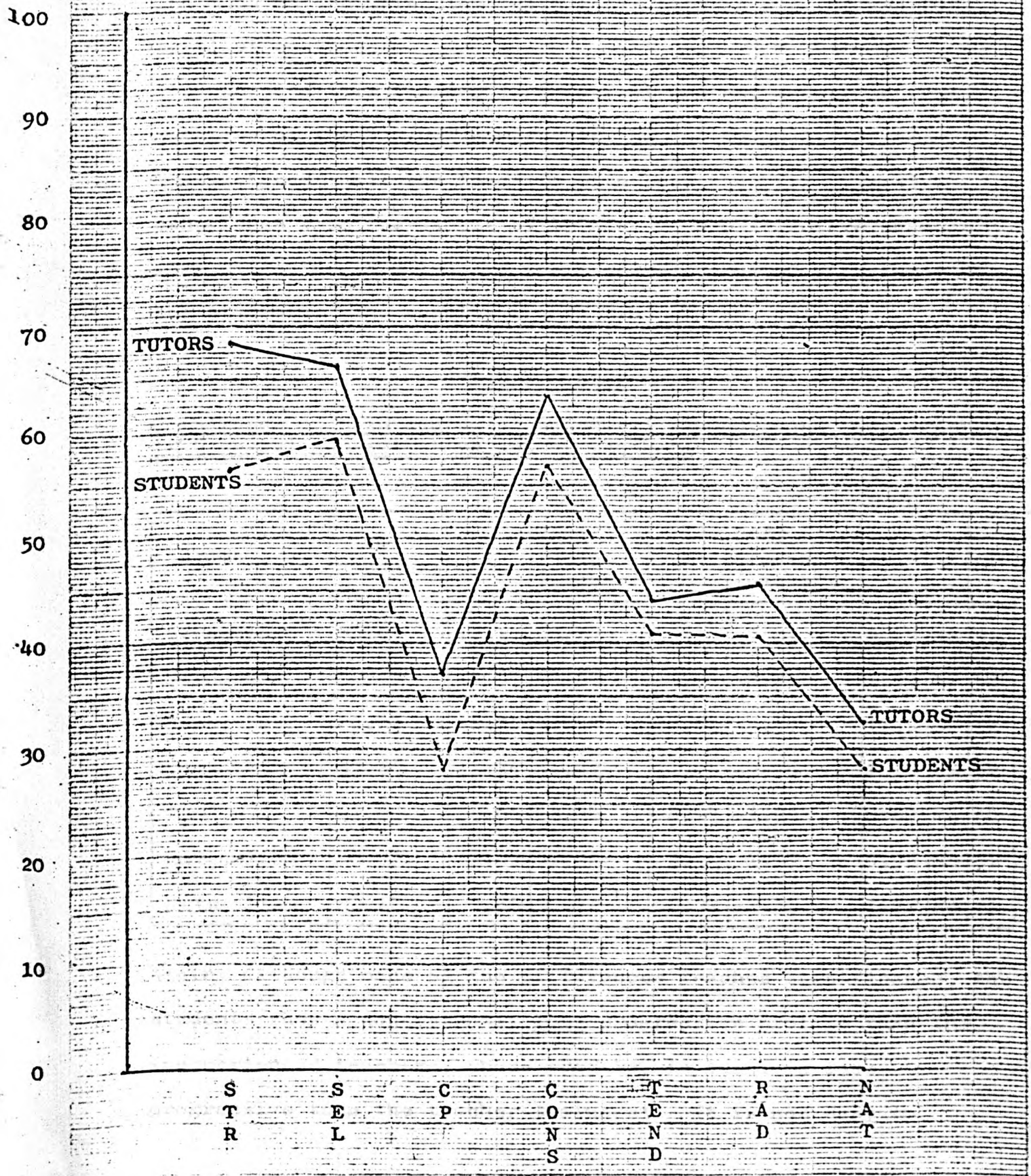
Comparison of mean scores, one College of Education tutors (N = 64) and third year 'secondary' students from that college (N = 35)

Scale	Mean College Tutors	σ	Mean Students	σ	Diff. Tutors-Students	C.R.	p	df
Streaming	68.17	15.31	56.69	12.12	11.48	4.04	>.001	97
Selection	66.14	13.99	59.57	13.07	6.57	2.31	NS	97
Corp. Pun.	37.00	12.22	28.34	8.72	8.66	3.99	>.001	95
Conservatism	63.59	14.98	57.66	11.74	5.93	2.14	NS	96
Tend.	44.25	8.29	41.05	6.65	3.19	2.03	NS	96
Radicalism	45.38	7.43	40.97	9.09	4.41	2.42	NS (>.02)	97
Naturalism	32.55	6.21	28.17	3.85	4.38	4.26	>.001	97

As would be predicted there is good separation of the scores (see also Figure One) much better than between the students and the teachers. On all variables the tutors appear to score in the

PROFILE COMPARISON -- ONE COLLEGE OF EDUCATION
TUTORS AND STUDENTS FROM THAT COLLEGE

FIGURE ONE



more progressive direction: on the Streaming, Corporal Punishment and N-scales the difference is highly significant whilst the difference on the R-scale approaches significance and that on the Selection scale falls between the .05 and .02 level of confidence.

In case this finding is a-typical and not a fair representation of the NAS/UWT concept of the 'newly-qualified and inexperienced' all the teachers with less than five years' experience from the sample of opinion in non-selective schools were extracted (N = 19) and their scores compared with those of the students. The results are in Table Three, below.

TABLE THREE

Comparison of mean scores, 'secondary' students and inexperienced (< 5 years) non-selective school teachers

Scale	Mean Students	σ	Mean Inexp. Teachers	σ	Diff. Students-Teachers	t	p	df
Streaming	56.69	12.12	65.73	15.15	-9.04	2.19	NS	52
Selection	59.57	13.07	68.26	15.9	-8.69	1.99	NS	52
Corp. Pun.	28.34	8.72	31.84	10.65	-3.50	1.20	NS	52
Conservatism	57.66	11.74	61.42	11.65	-3.76	1.10	NS	52
Tend.	41.05	6.65	43.00	8.97	-1.95	0.80	NS	50
Radicalism	40.97	9.09	42.94	5.16	-1.97	0.98	NS	51
Naturalism	28.17	3.85	30.72	5.27	-2.55	1.77	NS	51

Again, although none of the differences reaches significance, the students show a consistently less progressive profile than the inexperienced teachers, whose profile, in turn, is less progressive than the teacher trainers'. It is not easy to

interpret this evidence, but it may be suggested that students may become slightly more progressive once they are in post than they were during their final teaching practice - perhaps a sign of greater confidence. On the other hand, the data in Table Three are also consistent with the theory that some students are affected by the progressivism of their tutors and retain some of it after appointment to a post. This comment appears not to apply to the students in the sample but their attitudes after appointment are not known. It must be stressed again that the sample sizes are far too small and non-random for any confident interpretation to be offered. Nevertheless, the data lends tentative support to Hypothesis Five.

6. <u>Students identified as 'successful' and 'unsuccessful' during teaching practice will not be differentiated from one another by their attitude profile.</u>

The data bearing on this hypothesis occur in Table Twenty Five in Chapter Seven and are relatively easy to interpret. There are no differences of any significance between the scores of the successful and the unsuccessful, nor are any of the observed differences in any way consistent. On three of the variables, the unsuccessful appear to be slightly more progressive whilst on the other four variables the successful group appears more progressive. The largest differences, suggesting the successful have more progressive attitudes, occur on the Selection and C-scales but even here the significance is low (p is between .1 and .05 with 22 df). One subjective comment may be valid: there was a distinct tendency for the completed scales of the successful group to be returned more quickly and without prompting than those of the unsuccessful group, perhaps suggesting

that the former group are better organisers than the latter, a facility they may carry into their teaching.

The null hypothesis is supported. There appears to be no predictive value - predictive of teaching success - in comparing attitude scores. This conclusion tends to be supported by Start (unpub.) who tested a large sample of competent/less competent teachers in all types of school using the Oliver scales; he found no consistent differences.

So far this discussion has related to the hypotheses. In summary, of the six hypotheses, numbers one, three, five and six appear to receive some support; two receives slight support whilst four is rejected.

The remaining inter-group analyses fall outside the concerns of the original hypotheses. Table Twenty Six in Chapter Seven presents a comparison of attitudes of the sexes. There are no significant differences, although men score consistently higher (that is, appear to be more progressive) than the women. On the Selection scale, the observed difference of 4.41 just fails by .003 to reach the .01 level of significance with 301 df. There is little to comment on here. Wilson and Patterson (1968) report that men appear to be consistently less Conservative - as measured by their scores on the C-scale - than women and that this difference persists from adolescence to age 70. Pollock (1965) with a sample of 175 teachers drawn from secondary and post-secondary education using the Oliver scales found only trifling differences on N, R and T between the men and women in his sample. Start (unpub.) also using the Oliver scales reports slight differences only between men and women (N = 143).

On scales dealing with more specific problems, Crompton

(1969) with a sample of 166 primary and secondary teachers found no significant differences in attitudes to streaming or corporal punishment but men more significantly opposed to selection at 11+. Highfield and Pinsent (1952) found women more opposed to corporal punishment whilst Starr (1967) also found women more opposed, but not significantly so. Tuppen (1966) found no difference between men's and women's attitudes to streaming in the primary school.

The data reported in Table Twenty Seven (Chapter Seven) also appear inconclusive. In this analysis, a simple graduate/non-graduate dichotomy is made: that is, B.Ed. teachers are included in the graduate sample along with those trained by a consecutive route. Although the graduates score consistently higher (appear more progressive) the differences are not significant. Pollock (op.cit.) using the Oliver scales with a sample of 116 teachers trained in either a training college or a U.D.E. (and, in 1965, this would have been, effectively, a non-graduate/graduate dichotomy) found no significant differences on N, R or T. Crompton (1969) found few differences between a graduate and a non-graduate group of teachers: graduates were more opposed to corporal punishment and were more tenderminded, but the difference was significant at the .05 level of confidence only. Oliver and Butcher (1968) report that teachers in secondary modern schools were more Radical and Naturalistic than teachers in grammar schools but that the latter were more tenderminded. Again, this is effectively a distinction between non-graduate and graduate teachers. However, only the N differences and the T differences were significant and then only at the .05 level.

A recent report by Gallop (1978) has some bearing on this

question. He hypothesised that there would be significant differences in personality and value systems between graduate and non-graduate trainees for teaching, as well as differences in the perceived organisational environment between a U.D.E. and a College of Education. His graduates (N = 230, although this number included some students on Magister degree courses and advanced diplomas, who may have been non-graduate teachers) were at Aberystwyth University and the non-graduates (N = 240) were at Trinity College of Education, Carmarthen. They were third (final) year students. The testing was carried out in 1975 and a one third random sample was drawn from each population. A one hundred per cent response rate was achieved although there are no details about how the tests were administered. Three instruments were used:

(a) Cattell's 16 P.F. inventory

(b) The Allport-Vernon Study of Values

(c) McLeish's College environment index

On the 16 P.F. clear differences were found: for example, the College of Education students were less intellectually capable, more self-controlled, less imaginative, creative and unconventional but more realistic. The UDE group were less sympathetic to radical ideas and change, more inclined to treat knowledge as 'a priori', but were more self-sufficient and had less need for group support. On the Study of Values, the graduate group scored more highly on the Theoretical scale and on the Political scale (but p only $<.03$ and $.05$ respectively).

On the McLeish instrument, the U.D.E. students perceived their environment as dynamic, individualistic, intellectually demanding but weak in social commitment and involvement in staff-

student relationships. As this part of the data was analysed by a series of discriminant functions, the College of Education students perceived their environment as the reverse of this picture.

Gallop concludes that there are two types of teacher and that they are distinguished through being trained through consecutive (graduate) or concurrent processes (non-graduate). He argues, perhaps rather boldly, that these differences have implications for comprehensive re-organisation:

> ' ... to expect a Type B (Graduate) teacher to teach his subject to B and C stream secondary modern children is asking a great deal'. (p.53)

It may be that this conclusion contains a number of unexamined assumptions about (a) the nature of children's abilities and school organisation and (b) the generalizability of his conclusions.

His work bears only tangentially on that of the writer's since his sample consists largely of students, his variables are different and he ignores the impact of B.Ed. courses as well as post-graduate courses in Colleges of Education. However, his distinction of concurrently trained from consecutively trained is an interesting one and prompted the writer to re-examine his data. The biographical detail supplied enabled university trained teachers (consecutive route) to be distinguished from college-trained, non-graduate teachers (concurrent route). For this analysis, only teachers were included and anyone whose biographical data were not clear was excluded. The results are given in Table Four below.

TABLE FOUR

Comparison of mean scores of University trained teachers (N = 72) with College trained teachers (N = 49)

Scale	Mean Grads	σ	Mean Non-Grads	σ	Diff. Grads-Non-Grads	C.R.	p	df
Streaming	57.14	15.91	52.05	15.84	5.09	1.71	NS	119
Selection	56.64	15.1	59.4	15.52	-2.76	0.96	NS	118
Corp.Pun.	30.41	10.5	26.74	5.52	3.67	2.46	NS (.02)	118
Conservatism	57.29	15.03	52.63	12.37	4.66	1.79	NS	115
Tend.	40.81	8.42	36.86	8.46	3.95	2.33	NS	104
Radicalism	40.21	7.02	39.59	6.31	0.62	0.48	NS	104
Naturalism	27.39	4.81	26.64	4.69	0.75	0.79	NS	104

Although the variables here are different from Gallop's as noted earlier, there is not the sharp distinction between the groups that he found. The university graduates appear to be consistently more progressive (with the exception of scores on the Selection scale); none of the differences reaches significance: the graduates' more hostile attitude to corporal punishment, however, almost reaches significance ($p > .02$). It appears that the type of experience undergone is more significant than initial academic and professional education. In other words, university graduates working in more selective schools have very different attitudes from university graduates working in comprehensive schools. This difference is probably a combination of initial preference reinforced by subsequent experience. Gallop's conclusion - that it may be unwise to ask university graduates to teach less able children in comprehensive

schools, based, as it is, on a sample of student opinion, may be premature.

An attempt was made to examine the differences between young and old teachers. This analysis used age 35 as a cut-off point, teachers below this age being deemed 'young' and over this age 'old'. The results are contained in Table Twenty Eight in Chapter Seven. On five of the variables, the older teachers appear to be (non-significantly) more progressive than the younger teachers whilst on the T-scale and the C-scale the results are reversed, the difference on the C-scale being highly significant ($p > .001$). In an earlier investigation by the writer (Crompton, 1969) no consistent differences were found between young and old teachers. On the Oliver scales, the differences were trifling; only on the Selection scale were young teachers significantly more opposed ($p > .01$). Oliver and Butcher (1968) also report age differences on the Survey of Opinions. There was a tendency on all scales for the scores to fall with age (become less progressive), although on the R and T scales it was the 30 - 39 age group that had the highest scores. Pollock (1965) using the shorter version of the scales found little difference with age on N or R but a significant fall in scores on the T scale ($p > .01$) between age 20 - 29 and 60+. Wilson and Patterson (1968) have also shown a consistent growth in Conservative beliefs with increasing age, particularly between ages 25 and 55.

Nevertheless, the data do not support the conclusion that progressive attitudes in education are simply a function of age, that younger teachers are more progressive than older teachers. It could be that the holding of progressive attitudes involves more risk-taking than the holding of traditional attitudes;

older, more experienced teachers may be more willing to take some risks, based on their presumed greater confidence, than younger, possibly insecure teachers. This factor may, to some extent, balance what is often presumed to be the more radical views of the young.

The data in Table Twenty Nine examine possible differences between teachers holding 'senior' positions and those holding 'junior' positions in secondary schools. A 'senior' position has been defined as a headmaster, a deputy headmaster, a head of department, a head of house or a head of year. All other teachers are deemed 'junior'. Of course, this analysis must be related to age differences discussed above but some surprising exceptions to a straightforward relationship between age and seniority were noted: a head of department, for example, with less than five years' experience. With two trifling exceptions (on the C-scale and the corporal punishment scale) the senior teachers appear to be consistently more progressive, but the differences are very small, except on the Streaming scale where senior staff appear to be significantly more opposed ($p > .01$). Data on differences in attitude between junior and senior school teachers are not numerous. Barker Lunn (1970) has no direct evidence on this point but there is an implication that primary school heads may have been more willing to try unstreaming than their staffs. Hartley and Holt (1971) using a half version of the C scale with teachers and students report the following data relevant to this question:

TABLE FIVE

	N	M	σ
Teachers			
Male	21	64.4	8.4
Female	13	63.6	13.8
Deputy Heads			
Male	16	61.4	16.8
Female	12	69.4	12.4
Headteachers	15	60.2	12.2

These results - which have been 'translated' into full scale scores using the writer's mode of scoring (and are, therefore, to some extent, estimates) - show no consistent trend. The heads appear to be the most Conservative with women deputy heads the least Conservative, junior staff falling between these two points. The results are based on small samples and the differences are not striking.

A report in the 'Times Educational Supplement' of 2nd September 1977 throws an oblique light on possible differences in views between senior and junior staff. A large sample of headteachers (N = 215) together with other senior staff (N = 250) was interviewed on certain sensitive, quasi-political issues in education. The views of 382 non-senior staff were also obtained. On those questions which have some, albeit tangential, bearing on the present study (and collapsing the samples of heads and senior staff into one group) the following findings are of interest:

1. Senior staff opposed a uniform curriculum in secondary schools more strongly than junior staff.

2. Senior staff were slightly more opposed to grammar schools than junior staff.

3. Senior staff were slightly more in favour of 'new teaching methods'.

4. Senior staff were slightly more opposed to the raising of the school-leaving age from 15 to 16 than junior staff. (This was particularly true of deputy heads).

5. Senior staff were much more opposed to vocational training in schools than junior staff.

6. There was no difference in attitudes to corporal punishment between the two groups.

The differences in the report are quoted in percentage responses and none of them is particularly large. There does not appear to be any clear interpretation of these results, nor is it possible to relate them directly to the data reported above as they involve different variables. However, the attitudes of senior staff to vocational training (no 5 above) may indicate a more tenderminded atittude on the part of senior staff but other differences are not consistent with an interpretation of greater or less progressivism for either group.

The final inter-group analysis, Table Thirty in Chapter Seven, looks at possible differences between Arts teachers (including social scientists) and Science teachers (including mathematicians). The differences are negligible, although with one exception (on the Selection scale) appear to indicate that the Arts teachers are more progressive than their Science colleagues. The difference on the R-scale is significant at the .05 level of confidence but none of the other differences even approaches significance. Two pieces of research, reported in

Chapter Four, are relevant to this point. McLeish (1970), examining the attitudes of women students and using the Oliver scales found that on entry to college, maths students were toughminded but that science students were tenderminded (his 'scientists' are almost certainly largely biologists). Art students and humanities students were radical and toughminded. From his data, there is no consistent Arts/Science division in attitudes as measured by the Oliver scales, lending support to the null hypothesis interpretation of Table Thirty in this study. Gallop's (1972) finding that art teachers on in-service courses were more tenderminded, radical and naturalistic than secondary modern teachers in general may simply have repeated the finding that teachers on in-service courses tend to appear more progressive than those not on courses.

Hudson's work (1966, 1968) points up interesting psychological differences between scientists and artists (schoolboys) along the dimension of convergence/divergence, but any attempt to apply his work to the present discussion would be speculative. However, it may not be too fanciful to see his work as lending some support to the view that scientists do tend to be more conservative than artists, especially physical scientists, in the sense that they appear to have more conventional attitudes: this view gains slight support from Table Thirty.

The statistical analyses reviewed so far have been concerned with inter-group differences, but there are earlier analyses in Chapter Seven which deal with the data as a whole. Table Nine simply lists the means and standard deviations of the data, together with the mid-point of each scale. The mid-point is not, of course, in any sense a 'norm' for each scale

but provides some indication of what a score for a neutral attitude would approximate to. For example, a respondent giving the ? response to each statement on the C-scale would score 50 - the mid-point of the scale. Such a person might be considered to have no very strong political views, if he were unable to respond positively to any of 50 statements, some of them couched in quite provocative terms. The same result would be gained by anyone agreeing with an equal number of Conservative and non-Conservative statements, again possibly an indication of either no strong beliefs or inconsistent beliefs.

On the Streaming and Selection scales the population mean and the scale mid-points almost coincide. The range of scores was also very full so this may be an indication that the distribution of opinion is not highly esoteric. On the Corporal Punishment scale the mean falls below the mid-point: this is one area in which most teachers and students appear to be agreed. The means of the various groups range from 25.47 to 32.90 (see Table Nineteen) with the teacher trainers well outside this range - 37.41 and 41.46. This may be an indication that this sample of secondary teachers and students wish to see corporal punishment retained or, at least, are not prepared to see it abandoned for the reasons implied in the Highfield and Pinsent scale. This result is almost exactly the same as the one reported by Crompton (1969). With a sample of 166 primary and secondary teachers, the population mean was approximately four points below the mid-point of the scale, suggesting that support for corporal punishment in the profession remains fairly constant.

On the C-scale the mean is well in advance of the mid-

point suggesting that the sample is on the non-Conservative side of political neutrality. However, the reported mean of 59.18 is less than (more Conservative than) a mean of 63.19 reported by Wilson and Patterson (1970) based on a sample of 200 'heterogeneous males' in the United Kingdom. A sample of 200 Dutch males scored a mean of 59.94. Neither of these two comparisons suggests any wild eccentricities in the writer's sample of tutors, teachers and students.

Both the T-scale and the N-scale produce means which again virtually coincide with the mid-points of those scales, but the R-scale mean is well in advance of the mid-point. This probably shows another aspect of the non-Conservative bias of the sample (there is a correlation of +0.602 between the R-scale and the C-scale - see Table Ten, whilst R-scale scores are the best predictors of C-scale scores - see Table Fourteen). It may also be appropriate to suggest that many of the items on the R-scale - couched in the form of suggestions about changing education - would, if carried out, benefit teachers (for instance items number 4, 6, 7, 8, 9 (especially) and 10 - see Appendix X) so that agreement with these items may be done as much out of self-interest as out of a disinterested radical spirit.

Table Ten gives the inter-scale correlation values. With the reversal of the C-scale scoring, all values are both positive and significant. They range from a low of +0.425 between scores on the Selection scale and those on the T-scale to a high of +0.773 between scores on the Streaming and Selection scales, although this is the only value to exceed +0.7. It is interesting to compare these values with values

obtained in 1969 by the writer using the Oliver scales and a set of scales measuring attitudes to Streaming, 11+ Selection and Corporal Punishment. The values obtained in the late 1960s were consistently lower, ranging from +0.099, between the T-scale scores and Streaming scale scores to +0.66 between R-scale scores and scores on the Corporal Punishment scale. The values of r given in Table Ten are also higher than those reported by Tuppen (1966) between similar variables. The matrix suggests a degree of homogeneity and consistency of views about education which appears to have increased since the 1960s. It may be over-ambitious to suggest that the teachers in the sample are more aware of the overall implications of their views than the teachers in earlier samples: the presence of teacher trainers (and, perhaps, also the presence of students) in this population - people who have to be consciously aware of the implications of their views, as part of their professional lives - may have added to the apparently increased consistency. The relatively high value of r for the relationship between attitudes to streaming and attitudes to 11+ selection (+0.773) is noteworthy as being higher than that reported in 1969 by Crompton (+0.55) and Tuppen (1966) (+0.39). These were obtained from a sample which included primary as well as secondary teachers. The closer relationship discovered in this study between these two variables - which many would see as related rather than independent - may be due to greater experience gained since the 1960s by teachers in both unstreamed situations and in non-selective secondary schools.

The factor analysis, details of which are contained in Table Eleven, points the same way. It is clear that one large

general factor runs through the data contributing 62.7% to the total variable variance. The next highest factor contributes only 10%. The loadings on each variable are quite uniform ranging from .811 to .636 and the latter value is untypical. Ignoring this loading (on the T-scale) the range is only from .811 to .711. It is notable that it is the T-scale which is untypical: on the correlation matrix the T-scale yields consistently lower values for r and, predictably, is out of the relatively narrow range of loadings for each of the other variables. Oliver and Butcher's (1962) conclusion that the T-scale is the 'best' of the three scales in the Survey of Opinions may seem at variance with this finding. Of course, by 'best' they mean that it has the greatest number of scalable items, but the problem of what this scale is measuring remains. It may be ironic that the highest correlation between scores on the T-scale and scores on any of the other variables is with another of the Oliver scales - the N-scale. It will be recalled from the discussion in Chapter Five that the scales in the Survey of Opinions were shortened in order to gain greater factorial purity, that is to reduce the inter-scale correlations. These data certainly suggest that the scales are by no means factorially pure, possibly for the reasons suggested by Wilson and Bill (1976) discussed in Chapter Five.

It is proposed to suggest a simple interpretation of the general factor which appears to dominate the data - this will be termed 'educational progressivism' on the grounds that a high score on each of the variables - with the possible exception of the T-scale, to be discussed below - can be seen as part of a progressive profile. To turn this interpretation

round, to believe, in 1978, in streaming, 11+ selection, corpor l punishment and subject-centredness would be perceived as part of the cluster of beliefs of, say, the Black Paper writers who would be generally labelled 'traditionalists' in educational terms. If, in addition, a measure of social and educational conservatism is added to the profile, the interpretation does seem to have some credibility. The evenness of the contribution of each variable - again with the partial exception of the T-scale - to the total variable variance also tends to support the interpretation of the general factor running through the data as 'educational progressivism'.

Moving now to the series of regression analyses, some interesting implications appear. With corporal punishment as the dependent variable (Table Twelve in Chapter Seven) it is notable that Naturalism - usually interpreted as a measure of child-centredness - is the best predictor. The T-scale is the worst, having virtually no predictive value of any kind. It is also interesting that rejection of streaming is a good predictor of attitudes to corporal punishment. This is in terms of Tuppen's (1965) finding that teachers in unstreamed primary schools were significantly more opposed to corporal punishment than teachers in streamed schools ($p > .01$).

With streaming as the dependent variable (Table Thirteen), beliefs about selection are easily the best predictor. This is apparent from the high correlation already reported and is again supported by Tuppen's (op.cit.) finding that teachers in streamed primary schools were much more likely to support 11+ selection than teachers in non-streamed primary schools. On this occasion, the C-scale appears to be a poor predictor of

attitudes to specific problems.

In Table Fourteen, the C-scale itself is the dependent variable. In keeping with the apparently pervasive influence of the beliefs measured by this scale, four of the remaining six variables are significant predictors - one of these is the T-scale with an F value of 11.2: whatever this scale is measuring, it appears to be related to non-Conservative beliefs.

With the Selection scale as the dependent variable - Table Fifteen - only the Streaming scale and the R-scale are significant predictors. Given the very high F value of the first variable in the regression equation (Streaming, F = 116.56) it is not surprising that only one other variable is able to achieve significance level: even the C-scale is not able to achieve this.

Table Sixteen presents interesting data with the T-scale as the dependent variable. Again, only two other variables are good predictors - Naturalism and the C-scale. This seems to suggest that this scale is mis-named: there is an unfortunate semantic implication of tendermindedness, as applied to education, which does not seem to be confirmed by these data - for instance by the absence of any worthwhile relationship between attitudes as measured by the T-scale and attitudes to corporal punishment. It is perfectly possible for someone to express support for corporal punishment and yet produce a tenderminded set of scores. Morrison and McIntyre (1967a) suggest that a better name for this scale would be Theoretical .... Practical, with the former at the Tenderminded end of the continuum. In a private communication to Morrison and McIntyre (op.cit.) Butcher apparently concurred with this suggestion. Crompton (1969) suggested that an important aspect of a Theoretical attitude to

education would be to see the activity as intrinsically worthwhile, following Peters' (1966) distinction between education as conceptually involving intrinsically worthwhile activities and training which amongst other things, involves goals extrinsic to the process. Some empirical verification of this claim is to be found in Oliver and Butcher (1962) who found toughminded attitudes in a training college specialising in the training of teachers of technical subjects in technical colleges. They suggest that such teachers are likely to support the vocational aspects of education, that is to determine the worthwhileness of the process by reference to external purposes.

The best predictor of scores on the T-scale is the N-scale, a measure of child-centredness. To accept Naturalism, therefore, is to value the child for its own sake, not as some future adult (Oliver, 1953). Logically, it would appear that to hold such views should entail holding views about the intrinsic worthwhileness of education. It is the writer's contention that this is also an important aspect of what the T-scale is measuring - as argued above, the scales are not factorially pure - that Tendermindedness, in part, involves valuing education as an end in itself and not for some pre-industrial purpose. Naturalism may be a link between what the T-scale is measuring and beliefs about corporal punishment. It is noteworthy again that the 'pervasive' C-scale is the only other variable to have any predictive power for Tendermindedness.

Table Sixteen indicates the important components of educational radicalism, at least as this is measured by the R-scale. These are, in order of significance, rejection of 11+

selection, political non-Conservatism, rejection of corporal punishment and a belief in child-centredness. Again the T-scale scores seem to fall outside this range of interpretation, as is implied by the factor loadings (Table Eleven).

Finally, the data in Table Eighteen about the N-scale suggest that, although the items may not be highly scalable, it is a useful instrument. Five of the six remaining variables predict N-scale scores - an indication, of course, of its relative lack of homogeneity. The components of Naturalism appear to be: a belief in education and the child as ends in themselves; a rejection of corporal punishment; having radical beliefs about education and society, at least in the context of the United Kingdom; a rejection of streaming by ability with, perhaps, the holding of flexible views about the nature of human abilities, often associated with beliefs about non-streaming. (For an explicit statement of this association, see Simon, 1978.)

Some comments about Table Nineteen seem necessary. In one sense these data tend to confirm certain stereotypes: teacher-trainers do appear to hold views at variance with the teachers in secondary schools; teachers in the selective sector of secondary education do appear to hold traditional views about the ends and means of education; teachers in non-selective schools appear to be rather more progressive. There is widespread agreement in the schools about the retention of corporal punishment. Perhaps, oddly, no-where is support for caning stronger than in the independent and direct grant sectors: it may be felt that children here would be in less need of physical chastisement than children in, say, a secondary modern school.

Although this difference is not significant (see Table Twenty One), that between the comprehensive school staff and the independent school staffs just fails to attain significance ($t = 2.26$ with 54 df).

Two qualifications to this 'stereotype' should be made. The teachers in the maintained grammar schools show a rather more progressive profile than their colleagues in the direct grant and independent schools. This is particularly true in the case of their attitudes to corporal punishment, although they tend to be slightly more 'Conservative' than the rest of the selective school staffs. The other exception is the students' profile. This sample of students are not the potential 'Red Guard' of the teaching profession. Their attitudes seem to be traditional and much more similar to those of teachers in non-selective schools than to those of their tutors.

There now remains the material contained in the interviews. These proved to be quite productive and, it will be argued, provided some of the hoped-for qualitative extension of the statistical data. They were largely unstructured, and, as noted in Chapter Seven, most of the teachers spoke very freely. Some informal validity information was gained: none of the teachers felt that his score was not representative of his beliefs, although there were occasional deviations: Subject C.36's score on the R-scale was at variance with his declared radicalism in education (his score is quite modest). Of course, the final insight into validity could only be obtained by observing these teachers in their transactions with children over

correlated with their behaviour, a problem discussed in Chapter Three.

It was re-assuring that all the teachers - who were selected for their score pattern rather than their attitude to testing or research - said that they had enjoyed both the scale completion and the interview. Some added that they had been forced to make explicit their values and that this had been a useful experience. There was no indication that these teachers had been overwhelmed recently by requests from researchers for assistance - quite the contrary. It is encouraging for the researcher to get this reaction for he often feels that the research process is one-way only - he takes and gives nothing in return.

Some data was provided about the Oliver scales. The interpretation of the T-scale as, in part, a measure of degree of commitment to intrinsic values, argued earlier in this chapter, receives some support. Subject D.27, for example, scores 0.90σ above the direct grant grammar school mean on the T-scale; he stressed the purpose of education as being non-vocational - to 'train the mind' generally. On the other hand, D.34, with a relatively low T-scale score, was responsible for careers education which may have made him more aware of extrinsic purposes. Similarly D.35, with a very low T-scale score, insisted that children must be made to learn science on the grounds that science was necessary for successful living in the twentieth century, rather than as a worthwhile form of knowledge.

One point concerning the R-scale may be emphasised. The same teacher (D.35) scored just over 1σ above the direct grant.

mean as part of a generally non-progressive profile. His mood at the time of the interview may be described as one of some resentment against authority in the school and his score on this scale may have been an indication of his vehemence and resentment, rather than any indication of radicalism. It will be recalled, as argued earlier in this chapter, that some of the R-scale items have a degree of 'desirability for teachers' built into them. Further, as Wilson and Bill (1976) noted, agreement with many of the items on this scale may represent a less radical attitude than would have been the case in the 1950s when the scale was compiled.

On the N-scale, the same teacher (D.35), with a low score, provided some insight with his remark that children ought to learn science whether they wished to or not. He set this remark in a context of anti-child-centredness. Subject C.12's remark is also of interest in the context of a low N-scale score: 'I feel that education must be a putting in before there can be a drawing out'.

However, the writer would argue that the most important insight into teachers' thinking provided by the interviews was given by a remark by D.27 whilst the nature of human abilities was being discussed. The writer had assumed that notions about the nature of human abilities could be based around the nature-nurture controversy, which is probably familiar to most teachers. There is the related assumption that those who take an hereditarian stance tend to see abilities as fixed, with a ceiling, whilst those favouring the environmentalist position might take a more open, flexible view of the nature of abilities. D.27 showed that, for him, this was not a meaningful distinction.

He felt that heredity was paramount in determining some kinds of ability, such as mathematical and logical ability but that upbringing was much more important in relation to other areas of knowledge. However, the crucial remark appeared to be that, by the age of eleven, abilities of all kinds were fixed at a ceiling level. This was as much due to environment (especially family environment) as heredity. For this teacher, ability was a quality, an entity, possessed by the individual; it could not be changed after a certain age; it could be known and measured; and education should take account of this (known) quantity.

Some of the possible implications of this view are considered in the final chapter.

CHAPTER NINE

EDUCATIONAL IMPLICATIONS AND CONCLUSIONS

The main purpose of this final section is to consider some of the educational implications of the discussion in the previous chapter and to draw together some of the principal points suggested by the data. An obvious note of caution must be entered at this point. Like most samples, the one in this study is defective. Its principal defect is that it is self-selected, an 'acquiescence sample' and thus neither random nor stratified. The problems associated with this have already been discussed (see Chapter Six); the conclusion drawn there was that the best procedure with a self-selected sample - which frequently tends to occur in attitude research - is to be suitably cautious when drawing conclusions from the data, especially conclusions which may be seen as generalisable in this case to the whole secondary school teaching force, students in training and teacher trainers. At the same time, the range of opinion received does not suggest in any obvious way that the sample is seriously biassed towards progressivism or traditionalism.

Another problem, always encountered but not always acknowledged in attitude measurement, is simply the degree of credence that can be placed in the responses received. It is not a case of respondents consciously seeking to deceive the researcher but of their attempting to create a favourable impression, for whatever reason. A number of factors make this unlikely in the case of the majority of respondents in this sample. With the exception of the teachers interviewed,

all responses are anonymous; there was no professional connection between the researcher and his sample, except for the group of students, and thus no possible advantage could accrue by amending views. In many cases the teachers can have had little or no idea who the researcher was, as the matter was handled centrally in the school by the head or his deputy. Further, the range of response does not suggest any consistent biassing of opinion, although one could never know in any absolute sense that this is the case. The six teachers interviewed tended to confirm, in their oral responses, the written opinions previously given. However, the gap between belief (honestly stated) and behaviour, discussed in Chapter Three, remains an unsolved problem as far as this study is concerned. In other words, although one may fairly claim that there was little if any attempt at consistent deception of the writer, one cannot be sure that the respondents did not unconsciously indulge in self-deception. Some measure of, preferably, indirect observation would have to be employed to judge the extent of this divergence, although it would be an error to assume that observation necessarily yielded a 'truer' notion of a person's attitudes than his responses to a questionnaire. Further discussion of methodology is reserved for the end of this chapter.

Six hypotheses, listed in Chapter Six, were tested in this study and a preliminary discussion of findings was given in Chapter Eight, but further discussion will be appropriate at this point. The inclusion in the sample of a group of students proved to be a useful addition to the original intentions about sampling, especially in view of criticisms levelled at the opinions of newly-qualified teachers (e.g. see J. Simon, 1974,

although, interestingly, this criticism was levelled at teachers coming into service with the I.L.E.A.). Whilst the sample is small and unrepresentative, and bearing in mind that the students were on the eve of a final teaching practice when their opinions were sought, one can say that there is no evidence at all here to support the view that new entrants to the profession have views wildly at odds with established members of the profession. The attitude profiles of the two groups (Figure Three in Chapter Seven) show a remarkably high degree of similarity. Indeed, one might make the opposite point: the students from this college seem to be largely unaffected by the opinions of their tutors, after nearly three years' 'exposure', although this is not to argue that their courses have no effect on their professional socialisation. It may be that, for example, the primary-trained students show different attitude profiles from those of their secondary-trained colleagues, although some evidence drawn from teachers (e.g. Crompton, 1969, Oliver and Butcher, 1968) tends to support the view that there are no significant differences in a 'progressive' direction favouring primary school teachers.

Any hope that differences in attitudes could be a useful addition to devices employed to select students entering colleges of education or departments of education receives no support from this study, nor others. Halliwell (1965, reported in Butcher 1969) found virtually zero correlations between scores on the Survey of Opinions scales and final teaching practice grade. In a democratic society, this is a re-assuring finding: it might be disturbing to discover that successful students resembled their tutors whilst unsuccessful students

were characterised by holding opinions very different from their tutors'. At a more individual level, Start (1968, quoted in Morrison and McIntyre, 1969) found a tendency for headmasters to approve of the ability of those members of staff who had similar personalities and beliefs to their own. Morrison and McIntyre (op.cit., p.53) comment:

> "It is probable that college tutors are similarly influenced by their personal relationships with students",

although no evidence is quoted in support of this suggestion.

In summary one could say that, although the views of college tutors in this sample appear to be at marked variance with views of the sample of teachers, the students appear to resemble the teachers. Such a conclusion supports the views of Finlayson and Cohen (1967) but is at variance with evidence provided by McIntyre and Morrison (1967a) and Steele (1958) although the latter study was done at a time of two-year training and with intending primary school teachers only. It may be that the time during the students' training that opinions are sought is crucial and that on the eve of a teaching practice they tend towards traditional views, even when answering questionnaires for a college tutor. The views of many students, at this stage, are likely to be subject to rapid change and to be affected by the kind of school environment in which they find themselves. As McIntyre and Morrison have suggested (1967b) students taking a first post in a school with a 'progressive ethos' are more likely to sustain their progressive views than students working in a more traditional atmosphere.

Another marked separation of scores occurred when the

sample was split between those respondents scoring clearly in the direction of Conservative beliefs on the Wilson-Patterson scale and those clearly scoring in the opposite direction. As already pointed out (Chapter Eight) this process involves the elimination of all respondents whose scores fall between $+1\sigma$ and -1σ on this scale on the grounds that their political beliefs as indicated by their score are unclear. Those remaining, it was argued, have very clear political opinions and the quite dramatic separation achieved between these two groups on the remaining six variables is shown in Table Twenty and Figure One in Chápter Seven. Put at its simplest, these data suggest that in the case of teachers and others holding clear (or, perhaps, relatively extreme) political beliefs, these beliefs permeate their views about the objectives, methods and organisation of secondary education. On this evidence, political beliefs seem inextricably woven with educational beliefs - even down to quite specific matters - and thus the appeal to keep politics out of education seems a vain one, remembering that scores on the Wilson-Patterson scale correlate well with actual voting behaviour. On a priori grounds, there is nothing particularly surprising about this relationship: both educational and political beliefs are a part of a person's total philosophy or 'Weltanschauung'. Perhaps the only surprising aspect of the relationship is that political beliefs should be related not simply to broad aspects of educational policy and that anyone should seriously try to deny the relationship.

The differing patterns of belief of teachers working in different types of secondary schools also calls for further

comment. The data contained in Tables Nineteen, Twenty One and Figure Two in Chapter Seven show that beliefs about streaming and 11+ selection are very different, as might be expected, but that beliefs about corporal punishment and the philosophies measured by the Oliver scales are not as sharply differentiated as might have been predicted. In spite of some differences in academic and professional socialisation, and superficially, very different aims for the different schools, these teachers seem to be in broad agreement about the nature of their professional tasks. Even removing the 32 teachers working in maintained grammar schools from the 'selective' sample and comparing profiles between independent (including the direct grant) school teachers and the 'non-selective' group does not seriously alter this conclusion (see Figure One), although some of the differences now achieve significance (see Table One below).

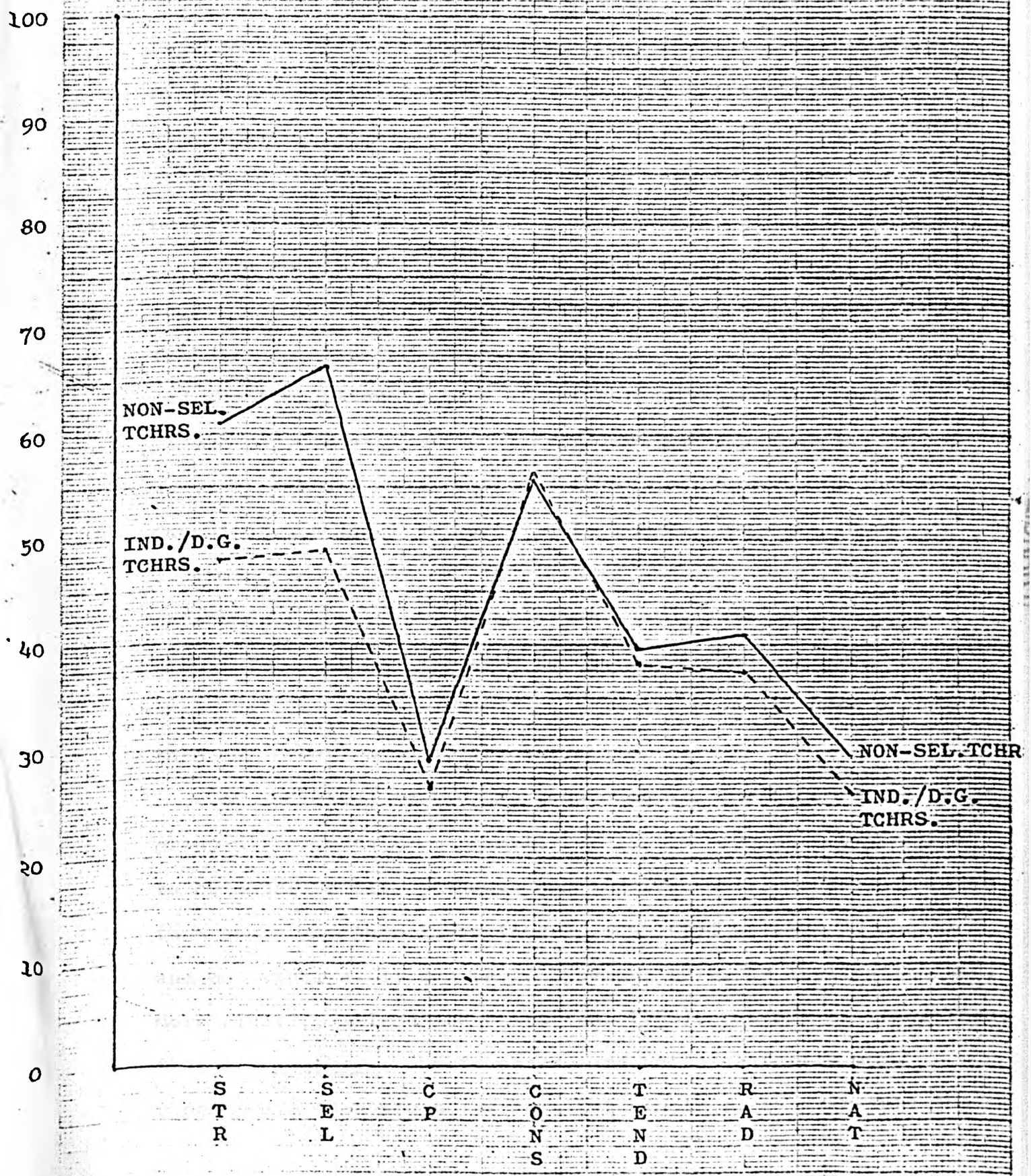
Table One

Mean Scores, Teachers in Independent and D.G. Schools (N=50) vs Teachers in "Non-Selective" Schools (N=83)

Scale	Mean D.G./ Ind. Tchrs (A)	σ	Mean Non-Sel. Tchrs (B)	σ	Diff. A - B	C.R.	p	df
Streaming	47.84	9.8	61.13	17.6	-13.29	5.52	.001	131
Selection	48.30	9.4	66.30	15.39	-18.00	8.29	.001	131
Corp.Pun.	26.40	6.36	28.87	8.63	-2.47	1.87	N.S.	131
Cons.	55.96	13.9	55.35	12.25	0.61	0.25	N.S.	128
Tend.	37.87	8.28	39.70	8.53	-1.83	1.15	N.S.	120
Rad.	37.70	5.76	40.90	6.41	-3.20	2.95	.01	121
Nat.	25.87	4.68	28.60	5.06	-2.73	3.00	.01	121

PROFILE COMPARISON - INDEPENDENT AND DIRECT GRANT SCHOOL TEACHERS vs NON-SELECTIVE SCHOOL TEACHERS

FIGURE ONE



One feature of these data - and this comment applies to the data in Table Nineteen in Chapter Seven - is the comparatively restricted range of opinion in the selective school sample. With only one exception (on the C-scale) the range, as represented by the standard deviation, is less than the range of the non-selective school sample. The difference is particularly marked in the case of attitudes to streaming and selection, perhaps a case of 'closing ranks' in face of a perceived threat to customary practices.

The sample of 32 teachers from maintained grammar schools suggests some additional speculation. In general terms, they fall between the 'progressive' pole of the non-selective sample and the 'traditional' pole of the selective sample, which almost reproduces their administrative relationship to the two sorts of school: they are selective but they are not independent of the local authority. In terms of beliefs about streaming and selection, they assume the posture of the selective school, but on the other scales seem to move much closer to opinions expressed in the maintained sector. In their beliefs about corporal punishment, they are more opposed than any other group of teachers.

As indicated in the previous chapter, the other dichotomised group differences seem to call for little comment. Men appear to be consistently, although non-significantly, more progressive than women and this indication is supported by work on social and political attitudes (e.g. Eysenck, 1975, by implication and, more clearly, Wilson and Patterson, 1968). It may be, therefore, that men <u>teachers</u>, qua teachers, are not necessarily more progressive than women teachers but simply carry over into their

professional lives the rather more radical perceptions associated with being male. The graduate/non-graduate distinction does not yield any very meaningful differences except a general suggestion that university graduates appear to have slightly, but non-significantly, more progressive attitudes than non-graduate teachers. As argued earlier, the type of professional experience rather than the type of training appears to be more influential in the formation of teachers' attitudes.

The data on age differences are not clear but a suggestion has been made that there is no simple relationship between age and attitude. It has already been argued by the writer that the increasing security of the established teacher may balance some of the generally-assumed radicalism of younger teachers and that placement into a traditional or progressive atmosphere (following McIntyre and Morrison, 1967b) is a crucial factor, rather than simply the age variable. Further analysis of the data into junior and senior staff tends to support this suggestion in that there were no consistent differences for progressivism associated with seniority of position. A division of the data into Arts/Science proved similarly inconclusive, although there is a slight suggestion that Science teachers may be less progressive than Arts teachers.

One clear impression which arises from this summary is that there is both coherence and some agreement between teachers concerning the major issues they were asked to react to in this investigation. Only the political dimension clearly puts teachers into two 'camps' and then only by eliminating a large group whose opinions seemed unclear or indecisive. On

the specific issues of selection, the selective school and non-selective school sample of teachers were sharply polarised, but not so sharply divided on the other issues. Particularly on the issue of corporal punishment, the teachers (and the students) appear to be solidly in favour, although strong individual dissenters were noted. Group means here ranged narrowly from a low of 25.47 (independent school sample) to only 32.9 (maintained grammar school sample). The range of the scale is 10-60. The higher correlations found in this data have already been contrasted with the modest ones found previously by Tuppen (1966) and Crompton (1969) in investigations of problems overlapping with those in the present investigation. As would be expected, the factor analysis too, showing one large pervading general factor, supports the hypothesis that teachers' views have a coherence and logic that may have grown over the past ten years. If this is the case, it may be speculatively attributed to the problems faced in secondary school re-organisation, the changed status of the direct grant sector, the lengthening of the period of teacher training and the introduction of the B.Ed. degree and the greater interest shown since about the mid-1960s in the area generally known as 'curriculum', in both initial and in-service teacher training.

In one sense, this is re-assuring. It would clearly be a matter of great concern if one could demonstrate that a sample of teachers held views that were incoherent or self-contradictory. On the other hand, the consensus found in this study over some issues, for instance the use of corporal punishment, is rather disturbing. It could be argued that the

profession would be on a sounder basis if there were constant debate about this issue, and others, rather than an active minority campaigning against corporal punishment and a large majority apparently passively content to see the practice continue, on an unargued basis. It is also rather disturbing to find that the one body of opinion which appears to be clearly against the practice is the sample of teacher trainers in college and university, for, as observed earlier, this situation lends itself more easily to cynical interpretations rather than to any genuine debate.

Related to this general agreement about educational issues in this sample of teachers is the discussion commenced in Chapter Eight about teacher's perceptions of the nature of children's abilities. It will be recalled that this sprang from a comment by the teacher coded as D.27 who worked as an assistant science teacher in a direct grant grammar school. He felt that children's abilities were firmly fixed by the age of eleven, either by endowment, in the case of mathematical and logical abilities, or by family influence for other forms of ability. The nature/nurture dimension was not meaningful for him, therefore, and it did not appear to be particularly important to the other teachers interviewed. A 'fixed-fluid' dimension appeared to be more significant, with the majority of teachers, in a latent sense, at least, appearing to favour the 'fixed' notion. (Indications of this are to be found in comments written on the questionnaire dealing with streaming where 'setting' seemed to be widely favoured.) There were no indications anywhere, from either the interview material or the questionnaire responses and comments, that teachers were

aware of an alternative view of the nature of abilities such has been urged by, for example Young (1971) and, especially, Squibb (1973, 1977). Briefly, this alternative view rejects the notion that ability is a 'thing' possessed by a person, like eye colour, which is observable and even measurable. Instead, it is argued that intelligence, like other concepts viewed in this perspective, is a construct dependent upon the views of those doing the constructing and the time at which the construct is made; intelligence consists of a set of behaviours approved as being of value by the powerful in any society and perceived or not perceived by licensed onlookers, such as psychologists and teachers. It is the perception or non-perception which is crucial, not some sort of objective possession of the person being perceived/assessed. In this perspective, which clearly relates to the discussion of phenomenology in Chapter Three, abilities or intelligence are not 'there' in a conventional sense but are observed or not observed by the teacher and others as a result of various cues, written (as in a formal test of 'intelligence', or in an essay), spoken (use of standard English, the elaborated code, standards of civilised language), behavioural (abiding by the spoken, unspoken and written conventions of society) or even postural (see Chaikin, Sigler and Derlerga, 1974). Two points are, perhaps, important here:

(a) The origin of children's abilities does not seem to be too important to the teachers in this sample: whether this is genetic or environmental, it leads to the fixing of abilities, no doubt with the connected concept of a 'ceiling' to those abilities.

(b) Even when a teacher shows what has been described as a 'progressive' profile, this notion of fixed as against fluid abilities seems paramount. For instance, the teacher coded C.36, who decisively rejected streaming, still employed traditional terms and concepts during his interview, such as 'brighter child' and 'slow learner', without any qualification. It is interesting to note that the 'opposite' of 'streamed class' is usually taken to be 'mixed ability class'; but this compound adjective 'mixed ability', even when used by those in favour of non-streaming, is an interesting indication of how they view the matter. In this perspective, abilities are still knowable, a set of entities possessed by the learner, which are deliberately mixed for learning purposes. Indeed, to constitute a 'mixed ability class' it is necessary to know what the children's abilities are so that they can be judiciously mixed and balanced.

It is no part of this discussion to argue that teachers who view intelligence in this way are mistaken. It is the apparently widespread, uncritical acceptance of the view that abilities are knowable and fixed, at least by the time children enter secondary education, that is being commented upon. White's view (1969) that ability should be viewed as a goal rather than as 'given', something to be achieved rather than something to work with, appears to receive little if any credence. Williams's view (1961), by implication at least, that notions of intelligence are used, perhaps unconsciously, as a sort of rationing device to limit access to high status knowledge by working class children, seems unfamiliar to this group of teachers - and, incidentally, to the college lecturers,

too, to whom much of this discussion could also apply. Williams further comments (p.147):

> "The truth is that while for children of a particular social class we have a conception, however imperfect, of a required minimum of general education (he is referring to upper middle class children in private education), whatever their measured intelligence might be, we have no such conception, or a much lower conception, for the majority of those outside this class."

The question obviously arises as to the practical importance of these matters. If teachers believed in the 'phenomenological view' of the nature of intelligence, would this make any difference to the children they teach? One matter which is connected with this question is that of the expectancy effect and the self-fulfilling prophecy. Although the claimed results of the expectancy effect still await conclusive empirical verification, Brophy and Good (1974), after a lengthy survey of the field of expectancy effects, conclude, tentatively, that teachers who believe that I.Q. or achievement data represent accurate and unchanging characteristics of children are likely to adapt their teaching to what they believe the child can handle and are unlikely to experiment with methods to get him to do better. They further argue that teachers who adopt this rather rigid attitude to children's abilities simply risk invoking the self-fulfilling prophecy - their predictions are fulfilled by the nature of the teaching strategies and goals they adopt. Thus, there is some evidence that rigid attitudes, especially concerning the nature of intelligence, may inhibit the free development of that intelligence that is certainly one object of formal schooling.

That such attitudes should be so widespread, apparently,

in comprehensive schools is surprising. Ford (1969) has argued that one purpose of comprehensive education is to 'produce a greater development of talent than tripartite schools'. (p. 12) Her own research provided no evidence that comprehensive schools were achieving this - although there was only one such school in her investigation - and she pointed to the effects of streaming in both contributory primary schools and the comprehensive school under investigation as a prime factor in this failure. Interestingly, a replication of her work by Cohen and Fisher (1973) using an unstreamed comprehensive school produced a result rather more favourable to the comprehensive ideal. However, this writer would argue that those who wish to see comprehensive schools succeed cannot be content with a simple act of unstreaming. It is not 'streaming/unstreaming' which appears to be the crucial variable but an attitude of mind of teachers towards the notion of 'ability'. As long as this remains unproblematic to the majority of teachers, to be equated with the I.Q. metric, then unstreaming into 'mixed ability' groups, with the connotation of that phrase, is likely to be relatively ineffective, certainly in producing the change in cognitive skills that is looked for. As Barker Lunn (1970) has suggested, this may be the reason why investigations of streamed/non-streamed classes seem to be either contradictory or inconclusive in the matter of which system produces the more effective learning. One of the latest reports in this country (Newbold, 1977) investigating streaming in comprehensive schools simply confirms that neither system has a clear advantage in this respect. In the selective sector of secondary education, it is, in many ways, logical for teachers to hold

the view that abilities are unproblematic, for their clients have been selected on the basis of this belief. It seems less logical for these beliefs to be widely accepted, implicitly, at least, in the non-selective sector.

A further interesting point arises out of this discussion, relating to attitude measurement methodology. From a simple interpretation of the group mean scores of teachers in the selective and non-selective sectors on the streaming scale, it would appear that teachers are sharply differentiated in their beliefs about this practice. But the interviews indicate that the values and beliefs lying behind these declared attitudes may be very similar. What may be termed the 'orthodox wisdom' of the comprehensive school is currently against streaming by ability, certainly in the lower school (the first three years) just as the 'orthodox wisdom' of the selective school tends to be in favour of streaming. But beliefs about the nature of children's abilities seem relatively uniform - although the evidence is negative, in the sense that there is no data to contradict this claim. If the traditional methods only of attitude measurement had been employed in this study, that is attitude scales, then a rather different conclusion would have been reached, namely that the stereotypes of the selective and non-selective school teachers' beliefs applied to this sample. In other words, following the results from group mean comparisons of scores on the streaming and selection scales one could reasonably have concluded that as far as this sample was concerned the non-selective group opposed streaming and selection whilst the selective group supported these practices. Indeed, this conclusion is still yielded by the

data, but it would be wrong to infer from this that the beliefs of the teachers about intelligence were opposed. The most likely explanation is that they are disagreeing on other grounds: that un streaming brings social advantages to children and professional advantages to teachers, that unstreaming and non-selection generally are in accord with the 'equality ethic'.

As indicated at the start of this chapter, the weakness of all traditional attitude research lies in the sample: it may be unrepresentative, in the formal sampling sense, and it may be unrepresentative in the sense that the respondents' views do not span the full opinion spectrum. The second point is always a matter of great concern, for it is unknowable and it is an error to assume that formal stratification will in any way help; nor will randomisation necessarily solve the problem. The control or even correct identification of variables is another constant problem. An example of this occurs in the Cohen and Fisher study referred to above. There is a clear assumption that the reason why their results are different from those of Ford is that 'their' comprehensive school postponed streaming until Year 4 whereas Ford's comprehensive streamed from Year 1. Of course, this could well be the crucial variable: but it could also be that the relative efficiencies of the teachers working in the comprehensive school and grammar school in Cohen and Fisher's study were different from those of the teachers in Ford's study. The two situations are different for many reasons. Further replications could simply find in favour of Ford or in favour of Cohen and Fisher and the reasons could be different in each

case. It could be argued that the Cohen and Fisher study provided useful political ammunition following the wide publicity accorded to the Ford study, although the former received very little attention, as is often the case with 'denials'.

The writer feels that quite a lot is now known about teachers' attitudes and their organisation and he would not advocate much further research, except in one specific area. Following a suggestion of Brophy and Good (1974) it would be useful to identify a group of teachers who apparently accepted the notion of intelligence as a problematic concept. This might be done with a short questionnaire, which would probably have to be administered to large numbers of teachers to identify such a group. Interviews and indirect observation might follow to check the extent to which the teachers' declared views accorded with their behaviour. The progress of children under these teachers could be monitored, either as a series of longitudinal case studies or, more traditionally, by comparison with a group of children taught by teachers holding the traditional, more rigid view of the nature of intelligence. One must doubt whether this could lead to effective action for it is not clear how teachers come to hold the problematic view of the nature of intelligence.

Certainly as indicated above, there seems to be massive agreement, not only in the profession but amongst teacher educators, that the opposite view is correct.

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LIST OF APPENDICES

APPENDIX 1

FORMS A AND B

STREAMING AND SELECTION

SCALES (LIKERT SCALING)

ATTITUDES TO EDUCATION

You are invited to give your opinion on two educational questions, statements about which are given on the following pages. Responses to these statements are, of course, matters of opinion - there can be no question of 'right' or 'wrong' answers. You are simply asked to indicate what your personal opinion is.

Please indicate your opinion in the following manner

If you strongly agree	write	+ +
If you agree	write	+
If you disagree	write	-
If you strongly disagree	write	- -
If you are undecided or have no opinion	write	?

Give one response only to each statement.

Do not spend too long considering each statement.

Please try to use the full range of response - if you feel that a statement is provocative don't hesitate to use the 'strongly ...' category.

It is appreciated that this manner of response to complex questions does not always permit you to say precisely what you feel. At the end of the questionnaire, or on the reverse side of the sheet, there is room for you to amplify your opinion if you wish.

****** ** ********** *******

If you are prepared to give your opinions, will you please:

(a) Complete a response for every statement

(b) Fill in your name below. (This is given in confidence and is simply to help me with the scoring of your responses on the two sets of scales.)

THANK YOU VERY MUCH FOR YOUR HELP.

NAME .....

T.E. Crompton
10/73

QUESTIONNAIRE ON STREAMING BY ABILITY

FORM A
Responses

1.	Streaming by ability is the only realistic way of teaching large numbers of children.	
2.	The able child is held back by being placed in a class with children of lower ability.	
3.	Streaming is undesirable because it is a form of social selection.	
4.	Placing a less able child in a low stream prevents him from making proper progress.	
5.	The abolition of streaming is advocated by theorists and not by practising teachers	
6.	Streaming is a tried and tested way of organising a school and ought not to be abandoned in favour of a theory unsupported by evidence.	
7.	Streaming leads to a high degree of anxiety amongst children in lower streams.	
8.	The abolition of streaming will lead to the removal of the stigma which attaches to the lower stream child.	
9.	Putting children of varied abilities into the same group would lead to social friction between them.	
10.	In mixed ability groups the slower children can be helped by the brighter to their mutual advantage.	
11.	Competition in the classroom is the most effective spur to progress.	
12.	In an unstreamed class the slower child would be more likely to be neglected by the teacher.	
13.	Children learn more effectively in homogeneous ability groups.	
14.	'A' stream children tend to have an inflated idea of their own importance in the school.	
15.	Lower stream children suffer from feelings of rejection.	
16.	The movement to abolish streaming is inspired by political motives and not educational ones.	
17.	It is very difficult to teach a mixed ability group without the clever ones becoming bored by the unsuitably slow pace that the teacher must adopt.	
18.	It is inhuman to grade children like eggs and streaming carries this sort of implication.	

Continued/

QUESTIONNAIRE ON STREAMING BY ABILITY (CONTINUED)

Form A

		Responses
19.	Streaming tends to break up the unity of a school amongst children and staff.	
20.	Children of widely differing abilities have different needs which cannot be catered for in the same class.	

In the space below, please add any comments you wish to make on the issues raised by the statements.

QUESTIONNAIRE ON SELECTION FOR SECONDARY SCHOOLS

		FORM A Responses
(1)	The demand for the abolition of the 11+ comes largely from parents whose children were not allocated to a grammar school	
(2)	Selection should be abolished because of the impossibility of ever selecting with sufficient accuracy.	
(3)	It is morally wrong to classify children as 'clever' or 'dull' at 11 or any other age.	
(4)	The 11+ procedures distort the work of the Primary school.	
(5)	The comprehensive school is a political solution of a purely educational problem.	
(6)	The neighbourhood comprehensive school is wrong because it seriously limits parental choice.	
(7)	The grammar school has not been anything like as successful as many people claim	
(8)	Only a comprehensive school can offer the range and quality of secondary education af secondary education that all children are entitled to.	
(9)	The present selection procedures choose accurately most of those children who can benefit from an academic secondary education.	
(10)	Children who are wrongly allocated at 11 can be taken care of by later transfer.	
(11)	The vast majority of ordinary people are satisfied with the system of tripartite secondary schools.	
(12)	Those who wish to retain the existing system of secondary education are just as politically motivated as they accuse their opponents of being.	
(13)	The present system of selection has worked remarkably well and it would be the height of folly to abandon it in favour of a system about which we know little or nothing.	
(14)	Comprehensive schools will inevitably lead to a 'levelling down'.	
(15)	The present system of allocation to grammar and modern schools involves an immense waste of potential ability.	
(16)	We need more grammar schools, not more comprehensive schools.	
(17)	Selection at 11 wastes the time of both teachers and children in the Primary school.	

QUESTIONNAIRE ON SELECTION FOR SECONDARY SCHOOLS (Cont)

Form A

	Responses
(18) Specialist graduate resources are wasted at the moment by being dissipated amongst the small grammar schools which still exist in some rural areas.	
(19) Less able children feel far more insecure in a large comprehensive school than they do in a smaller secondary modern school.	
(20) A comprehensive school is the only practical way of dealing with the borderline case and the late developer.	

In the space below, please add any comments you wish to make on any of the issues raised by the statements.

ATTITUDES TO EDUCATION

You are invited to give your opinion on two educational questions, statements about which are given on the following pages. Responses to these statements are, of course, matters of opinion - there can be no question of 'right' or 'wrong' answers. You are simply asked to indicate what your personal opinion is.

Please indicate your opinion in the following manner

If you strongly agree	write	+ +
If you agree	write	+
If you disagree	write	-
If you strongly disagree	write	- -
If you are undecided or have no opinion	write	?

Give one response only to each statement.

Do not spend too long considering each statement.

Please try to use the full range of response - if you feel that a statement is provocative don't hesitate to use the 'strongly ...' category.

It is appreciated that this manner of response to complex questions does not always permit you to say precisely what you feel. At the end of the questionnaire, or on the reverse side of the sheet, there is room for you to amplify your opinion if you wish.

****** ** **********

If you are prepared to give your opinions, will you please:

(a) Complete a response for every statement

(b) Fill in your name below. (This is given in confidence and is simply to help me with the scoring of your responses on the two sets of scales.)

THANK YOU VERY MUCH FOR YOUR HELP.

NAME .....

T.E. Crompton
10/73

QUESTIONNAIRE ON STREAMING BY ABILITY

FORM B

	Responses
1. Streaming by ability leads to a greater degree of anxiety amongst children.	
2. It is better to keep children from 'good' and 'bad' homes apart.	
3. Bright children might benefit from being placed in mixed ability groups by learning through helping the less bright.	
4. Co-operation in the classroom reduces tension and leads to the achievement of higher standards.	
5. Slower learners would be more likely to be neglected in an unstreamed group.	
6. Streaming tends to divide the teaching profession by labelling some teachers 'A' stream and others 'C' stream.	
7. The abolition of streaming will lead to a general lowering in the standard of children's attainments	
8. The practice of streaming recognises that there are inherent differences in intelligence between children and thus permits them to work at varying paces.	
9. The proposals to abolish streaming should be seen for what they are: an attempt to impose a mis-conceived idea of equality.	
10. A child placed in a 'C' stream will tend to take on the characteristics of that stream even if he has been wrongly placed.	
11. The trouble with streaming is its rigidity - far too few children ever change stream.	
12. Slower children would be spurred into raising their standards if placed with brighter pupils.	
13. Slower children will be discouraged if put with their more able peers.	
14. The most experienced/successful teachers tend to work with 'A' classes whilst their younger or less successful colleagues are given 'C' streams.	
15. Streaming should be retained as it has the overwhelming support of the teaching profession.	
16. The abolition of streaming would result in a sharp deterioration in children's behaviour, especially amongst those at present in the 'A' stream.	
17. The grammar school should take the lead in abolishing streaming as its intake is the most intellectually homogeneous of any school's.	

QUESTIONNAIRE ON STREAMING BY ABILITY(Continued)

FORM B

	Responses
18. Streaming incorporates a 'self-fulfilling prophecy' - the children will conform to the implied expectations of their teachers.	
19. Children from 'A' and 'C' streams do not mix easily.	
20. Whilst unstreaming may be justified in some Primary Schools, it has absolutely no place in the practices of the Secondary School.	

In the space below, please add any comments you wish to make on any of the issues raised by the statements.

QUESTIONNAIRE ON SELECTION FOR SECONDARY EDUCATION

FORM B

		Responses
1.	More children will stay on at school beyond the minimum leaving age in a comprehensive system	
2.	We would be unwise to introduce comprehensive education as the normal pattern after the Americans' unfortunate experience of such a system.	
3.	The grammar school has failed to produce the number and quality of scientists and technologists we need because it is still wedded to a mainly classical/linguistic curriculum	
4.	The few comprehensive schools that are able to draw on the full range of ability have results in the G.C.E. that are at least as good as those produced by grammar schools	
5.	Selection at 11 is valuable to the Primary School as an indication of the success of its teaching.	
6.	Nothing should be done to upset the fine work being done in the grammar schools.	
7.	Comprehensive schools are a revolution; evolutionary practices are preferable in educational matters.	
8.	The rest of the world relies, in the main, on non-selective secondary education; therefore it is we who are out of line.	
9.	Selection at 11 is wasteful of teachers' and children's time in the Primary School.	
10.	By the age of 11, children have such widely differing abilities that it is unwise to teach them in the same school.	
11.	Comprehensive education will enable social and educational justice to be done to all children instead of only a minority, as at present.	
12.	Comprehensive schools will be so large that they may become impersonal. 'education factories'.	
13.	The very size of a comprehensive school will enable it to offer a variety of courses not possible under the present selective system.	
14.	Graduates and other specialised staff will leave the profession rather than be forced into comprehensive schools.	
15.	Grammar schools and comprehensive schools ought to be run side by side in certain areas to see which is the more successful.	
16.	Objections to the size of comprehensive schools fail to take into account the large size of some of our Public and Direct Grant Grammar Schools.	

QUESTIONNAIRE ON SELECTION FOR SECONDARY EDUCATION (CONT.)

		FORM B Responses
17.	It would be most unwise to disperse our scarce resources (eg Maths graduates) thinly.	
18.	A child of high ability needs a teacher of similar ability.	
19.	Selective secondary education has encouraged undesirable divisions in the teaching profession.	
20.	Less able children would benefit greatly by being taught by specialists: the present system of selective schools discourages this.	

In the space below, please add any comments you wish to make on the issues raised by the statements.

APPENDIX 11

ANALYSIS OF THIRTY-THREE RESPONSES TO STATEMENTS ON FORMS A AND B. STREAMING AND SELECTION SCALES (LIKERT SCALING)

STREAMING, FORMS A AND B

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
S.A.	A	5	5	1	4	3	1	3	3	3	3	3	4	2	2	4	2	2	1	4	4	59	23=
	B	2	4	2	4	4	4	2	2	3	4	5	1	2	4	3	2	2	4	2	4	60	31=
P.A.	A	2	1	4	2	1	2	5	2	2	2	2	2	2	5	4	2	1	3	4	1	49	31=
	B	5	4	2	4	1	5	5	4	4	5	4	1	2	4	4	2	2	5	1	5	69	20=
J.A.	A	4	4	5	4	3	2	4	3	4	4	2	2	3	5	2	3	4	4	4	4	70	11
	B	5	5	4	4	4	4	5	2	4	5	5	4	4	5	4	5	4	5	4	5	87	1=
L.B.	A	5	4	4	3	4	4	2	2	5	4	2	5	3	5	4	4	5	4	4	5	78	5=
	B	4	5	4	4	5	4	3	2	4	5	5	4	2	5	3	4	2	5	5	4	79	8=
EJB	A	4	4	4	2	2	2	3	4	4	4	3	2	3	4	4	4	2	4	4	4	67	14=
	B	4	4	4	4	2	3	4	2	4	4	4	4	4	4	3	4	3	4	2	5	72	14=
J.B.	A	2	4	4	2	2	4	5	4	3	3	2	3	4	4	4	2	2	4	4	2	64	16=
	B	3	4	4	4	3	5	4	2	2	4	5	3	3	4	2	5	2	2	5	4	70	17=
H.B.	A	5	4	4	4	4	5	4	2	4	4	4	4	2	5	5	2	2	4	2	4	74	8
	B		4	4	4	4	4	3	2	2	5	5	4	4	5	5	5	4	5	2	5	80	6=
DCB	A	4	4	3	2	3	2	2	2	3	2	2	2	2	3	4	2	2	3	3	2	52	30
	B	2	2	2	4	2	2	3	2	3	4	4	4	3	4	3	4	4	4	2	4	62	29
KMD	A	3	4	2	2	3	2	2	4	3	5	4	4	4	2	3	3	2	1	3	4	60	22
	B	3	4	2	4	3	1	4	3	3	2	2	2	4	4	3	4	2	3	2	4	60	31=
DFD	A	1	4	2	2	4	2	4	4	4	4	2	1	3	5	4	4	2	5	2	2	61	21=
	B	4	5	4	4	2	1	4	4	2	4	5	4	5	5	3	5	2	2	2	4	71	16
A.D.	A	5	4	2	2	4	3	4	4	5	5	5	4	2	4	4	3	5	5	4	5	79	2=
	B	4	5	4	3	4	4	4	4	4	5	4	3	3	4	4	4	3	4	2	5	77	10=
V.G.	A	5	4	3	3	4	4	4	3	4	3	4	4	4	3	4	4	2	4	4	2	72	9=
	B	4	5	4	4	4	4	4	4	4	4	4	3	3	4	3	5	4	4	4	5	80	6=

STREAMING, FORMS A AND B/page 2

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
A.H.	A	4	2	5	4	5	5	4	3	4	3	5	4	3	4	4	4	4	4	4	4	79	2=
	B	5	5	4	5	4	5	5	5	5	5	4	4	4	4	5	5	2	5	1	5	87	1=
R.H.	A	5	4	4	3	4	2	1	5	4	5	5	4	5	4	5	4	5	4	3	2	78	5=
	B	4	5	4	4	2	5	5	2	4	5	5	4	4	5	5	4	2	5	2	5	81	5=
S.H.	A	4	4	2	4	5	5	4	4	5	5	2	5	5	4	4	5	5	2	1	4	79	2=
	B	4	4	4	4	4	5	4	2	4	5	4	5	5	5	5	4	5	5	4	5	87	1=
J.H.	A	4	2	2	2	2	2	4	2	2	4	2	2	4	4	4	4	2	2	4	2	56	28
	B	5	5	4	4	2	4	4	2	4	4	5	4	4	4	4	5	2	4	2	4	76	12
S.H.	A	2	4	2	2	4	4	3	2	4	2	3	2	2	4	3	4	2	2	4	2	57	26=
	B	2	4	2	4	4	4	2	2	3	4	5	2	2	4	3	2	2	4	2	4	61	30
D.J.	A	2	2	4	2	2	4	2	5	5	2	5	2	5	5	2	2	1	2	2	1	57	26=
	B	4	5	4	5	2	4	2	2	2	5	4	2	2	1	4	5	4	4	5	4	70	17=
J.L.	A	5	4	4	5	1	4	4	5	5	4	4	4	3	4	4	4	5	5	2	4	80	1
	B	4	5	2	5	4	5	5	2	4	5	4	4	4	5	5	4	4	5	2	4	82	4
A.M.	A	4	4	2	2	3	3	4	2	4	4	4	5	3	4	3	3	4	2	2	2	64	16=
	B	3	4	3	4	4	2	4	2	3	3	4	3	3	2	4	3	3	4	4	4	66	26=
S.M.	A	1	2	2	2	3	2	3	2	4	2	2	4	2	2	2	3	1	2	2	1	44	33
	B	2	4	2	4	4	2	1	1	1	3	4	2	2	4	2	1	2	3	3	1	48	33
L.M.	A	2	2	1	2	4	2	1	4	5	3	2	4	3	1	1	4	1	1	1	1	45	32
	B	2	4	4	5	2	4	2	1	2	4	5	4	4	4	3	3	2	2	5	4	66	26=

STREAMING, FORMS A AND B/page 3

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
J.M.	A	4	3	2	3	4	2	3	2	4	4	2	4	4	4	3	3	5	3	4	4	67	14=
	B	3	5	4	4	3	4	3	3	4	4	3	3	3	4	3	3	3	4	4	3	70	17=
S.R.	A	3	3	3	3	4	3	3	3	4	4	3	3	3	2	2	3	3	3	3	3	61	20=
	B	3	5	3	4	3	3	3	3	4	4	4	3	3	3	3	3	3	4	4	3	68	24=
E.R.	A	3	2	2	2	2	1	2	4	4	4	1	5	1	4	4	4	2	2	2	2	53	29
	B	2	5	4	4	5	4	4	1	2	4	5	2	2	5	3	4	5	5	4	4	74	13
L.R.	A	4	4	1	4	4	4	3	4	4	3	4	4	4	2	2	2	4	4	4	4	69	12=
	B	2	4	4	2	4	2	4	4	4	4	4	4	4	2	4	4	4	4	4	4	72	14=
E.S.	A	4	4	2	3	3	2	3	2	4	4	3	5	4	2	2	3	2	1	2	4	59	23=
	B	2	5	3	4	4	4	4	2	3	4	4	4	4	4	3	4	2	3	2	4	69	20=
N.S.	A	4	4	4	4	2	4	4	3	4	4	4	4	2	4	4	3	4	3	3	4	72	9=
	B	4	4	4	4	4	3	4	2	2	4	4	3	3	3	4	4	4	4	2	3	69	20=
S.S.	A	2	4	4	2	4	4	2	2	4	4	2	2	2	4	4	2	4	2	4	4	62	18=
	B	4	5	4	4	2	4	4	2	2	4	4	2	2	4	3	4	4	4	2	4	68	24=
L.T.	A	2	2	2	4	3	2	3	4	3	4	1	4	3	4	4	3	4	2	2	2	58	25
	B	4	5	2	4	4	4	2	1	2	4	5	4	4	3	4	2	2	4	2	1	63	28
G.T.	A	4	4	4	2	2	4	4	5	4	3	2	1	2	5	4	4	2	5	4	4	69	12=
	B	4	5	2	4	2	4	3	2	2	5	5	3	2	4	4	3	4	5	2	4	69	20=
S.W.	A	4	4	4	4	4	4	2	2	5	4	5	4	4	5	5	3	4	4	3	4	78	5=
	B	5	3	4	5	4	4	4	2	4	5	4	4	2	4	4	4	3	5	5	4	79	8=
E.W.	A	2	2	2	4	4	2	4	2	4	2	1	5	2	4	4	4	4	4	2	4	62	18=
	B	4	5	4	5	2	4	4	2	4	2	5	4	4	4	4	4	2	5	4	5	77	10=

SELECTION, FORMS A AND B

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
S.A.	A	4	2	2	2	1	2	4	1	5	3	4	2	3	2	2	4	2	3	3	1	52	31
	B	4	1	1	2	2	4	2	1	2	2	2	1	2	3	5	2	2	1	4	3	46	33
P.A.	A	1	3	5	2	2	4	1	4	4	5	1	2	4	2	5	4	3	2	1	4	59	19
	B	1	4	2	4	4	4	5	2	3	4	4	1	4	4	2	4	4	2	4	1	63	21
J.A.	A	2	4	5	5	2	2	3	2	2	4	3	4	4	4	4	4	4	3	2	2	65	12
	B	2	5	2	4	5	5	4	2	5	5	4	2	5	3	4	4	4	2	4	5	76	1=
L.B.	A	3	3	4	4	4	1	1	2	4	4	2	4	3	2	2	3	4	3	1	1	55	28
	B	2	3	1	2	5	2	3	2	4	4	3	2	4	3	3	3	3	5	4	3	61	25=
E.B.	A	2	3	4	4	2	4	2	2	3	2	3	4	3	2	4	3	4	2	1	2	56	24=
	B	3	3	3	3	4	2	4	3	4	4	2	2	4	3	3	2	4	4	3	2	62	22=
J.B.	A	3	5	5	4	3	4	3	4	4	5	3	4	4	3	3	4	4	3	3	5	75	5=
	B	4	4	2	4	4	4	4	3	4	4	4	1	4	5	4	3	4	4	4	4	74	7
H.B.	A	2	4	4	5	4	4	2	4	4	4	2	2	4	3	4	4	2	2	4	4	68	10
	B	3	4	4	4	4	4	4	2	4	4	4	2	4	4	4	2	2	2	4	4	69	14=
D.B.	A	2	4	2	3	2	3	2	2	4	2	3	3	3	2	4	4	2	2	2	2	53	9=
	B	3	4	2	3	2	4	2	3	2	4	2	2	4	4	3	3	2	2	3	3	57	29=
K.D.	A	2	5	3	4	3	4	2	2	4	2	2	3	4	2	3	2	2	2	3	4	58	20=
	B	2	2	2	3	4	4	3	1	2	3	2	2	3	3	4	2	3	3	2	4	54	31
D.D.	A	4	1	4	5	2	2	2	2	4	4	3	2	4	2	5	4	4	2	3	5	64	14
	B	3	4	1	4	4	4	2	2	4	5	4	1	4	4	2	4	4	2	2	4	64	18

SELECTION, FORMS A AND B/page 2

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
A.D.	A	3	4	4	5	5	4	2	2	4	5	2	4	4	5	5	3	4	4	2	4	75	5=
	B	4	3	4	4	5	4	3	2	2	4	2	2	4	4	5	3	3	5	4	3	70	12=
V.G.	A	4	3	4	4	4	2	4	3	4	4	4	3	4	3	3	4	4	3	2	3	69	8=
	B	4	4	4	4	4	4	3	4	4	4	3	2	4	4	4	4	4	3	4	4	75	4=
A.H.	A	4	4	4	4	3	4	5	4	5	4	4	3	5	4	4	4	4	3	4	4	80	1=
	B	3	4	2	2	5	5	5	4	5	5	4	3	4	4	4	3	4	2	4	4	76	1=
R.H.	A	4	4	5	4	3	4	2	4	4	4	3	4	5	4	5	5	4	4	2	4	78	3
	B	2	3	2	5	5	4	4	2	5	4	5	2	4	3	4	2	4	1	5	5	71	9=
S.H.	A	2	4	2	1	4	5	1	1	4	1	1	2	3	5	2	4	1	2	2	4	51	32=
	B	4	4	2	4	5	4	4	2	2	4	4	4	5	5	2	4	2	2	4	4	71	9=
J.H.	A	2	2	2	5	2	4	2	4	4	4	2	4	4	2	4	4	4	4	1	4	64	14=
	B	4	4	4	4	5	4	4	3	5	4	4	1	4	4	2	4	4	4	4	4	75	4=
S.H.	A	3	2	2	4	4	2	2	1	3	4	2	4	3	2	4	3	4	3	2	2	56	24=
	B	2	3	3	2	4	4	4	2	4	2	2	2	4	3	2	3	3	2	4	2	57	29=
D.J.	A	5	4	1	4	4	4	2	2	2	4	4	4	2	1	1	4	2	2	2	4	58	20=
	B	4	4	2	4	5	4	2	2	4	4	1	1	4	5	2	4	2	4	4	2	64	18=
J.L.	A	4	4	2	4	2	4	3	4	4	4	4	4	4	4	4	5	4	5	3	4	76	4
	B	4	4	4	4	4	4	4	2	4	4	2	2	4	4	4	4	2	2	4	4	70	12=
A.M.	A	2	2	4	4	2	2	2	1	5	2	3	3	4	3	3	3	3	3	1	1	53	29=
	B	2	4	2	3	4	5	3	3	4	4	4	1	2	4	1	2	4	2	3	4	61	25=

SELECTION, FORMS A AND B/page 3

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
S.M.	A	1	2	3	2	2	2	2	2	2	3	3	2	4	2	1	2	2	2	1	2	42	33
	B	3	2	2	3	2	2	3	2	2	2	3	1	4	3	2	3	3	1	2	2	47	32
L.M.	A	2	2	1	4	4	4	2	2	2	2	3	3	3	4	4	3	4	1	2	4	56	24
	B	5	4	4	4	2	4	4	4	5	4	5	2	3	4	4	3	5	2	2	5	75	4=
J.M.	A	3	2	4	4	2	2	2	3	3	3	4	3	3	2	2	4	4	3	1	2	56	24=
	B	3	3	3	3	4	3	3	4	3	4	3	2	3	3	4	3	3	2	3	3	62	22=
S.R.	A	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	60	18
	B	3	3	3	3	4	3	3	4	3	4	3	2	4	3	3	3	3	2	3	3	62	27=
E.R.	A	2	4	3	5	2	2	2	3	4	4	2	4	4	4	5	4	3	4	1	4	66	11
	B	3	2	1	4	2	2	5	2	4	4	2	1	4	4	4	1	4	2	5	4	60	27
L.R.	A	3	4	4	4	4	4	3	2	5	4	3	4	4	4	2	4	4	2	3	2	69	8=
	B	4	4	4	3	4	4	4	3	4	4	4	2	4	4	4	4	4	4	4	4	76	1=
E.S.	A	2	4	4	4	3	4	3	2	3	2	2	3	3	2	4	2	1	2	3	4	57	22
	B	2	3	2	4	5	4	4	1	3	4	2	3	4	4	4	2	3	2	4	4	64	18=
N.S.	A	2	3	4	4	3	4	3	2	4	2	2	3	4	4	3	4	3	2	4	4	64	14=
	B	2	2	3	4	5	4	4	3	2	4	4	2	4	4	3	4	4	3	4	4	69	14=
S.S.	A	1	4	4	4	2	4	2	2	4	4	4	4	4	4	4	3	2	2	2	2	62	17
	B	2	4	4	4	4	2	4	2	2	4	2	2	4	4	4	2	4	4	4	4	66	17
L.T.	A	1	4	3	3	2	4	2	4	4	4	2	4	5	4	4	4	1	2	3	5	65	12=
	B	2	4	4	4	4	4	4	3	2	4	4	2	5	5	2	3	2	2	4	4	68	16

SELECTION, FORMS A AND B/page 4

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
G.T.	A	1	3	4	4	2	4	1	2	2	4	3	4	3	2	4	3	4	2	2	3	57	22=
	B	3	3	2	4	5	2	4	4	4	4	2	1	2	4	1	2	2	2	4	4	59	28
S.W.	A	4	4	4	5	3	4	3	2	4	3	3	3	4	4	4	4	4	3	3	2	70	7
	B	4	4	3	3	5	3	4	4	4	3	4	2	4	4	4	3	3	2	5	3	71	9=
E.W.	A	4	5	4	4	2	4	4	4	5	5	4	4	4	4	4	5	4	2	4	4	80	1=
	B	4	4	2	4	4	4	4	2	4	4	4	2	4	4	5	4	2	4	4	4	73	8

APPENDIX 111

FINAL FORMS. STREAMING AND SELECTION (LIKERT SCALING)

F.

ATTITUDES TO EDUCATION

You are invited to give your opinion on two educational problems statements about which are given on the following pages. Responses to these statements are, of course, matters of opinion - there can be no question of 'right' or 'wrong' answers.

You are asked to indicate your opinion in the following manner

If you STRONGLY AGREE WITH A STATEMENT	write	+ +
If you AGREE WITH A STATEMENT	write	+
If you DISAGREE WITH A STATEMENT	write	-
If you STRONGLY DISAGREE WITH A STATEMENT	write	- -
If you are UNDECIDED or HAVE NO OPINION	write	?

Give one response only to each statement and please do not omit a response in any case.

Do not spend too long considering any one statement.

Please try to use the full response pattern given above - if you feel strongly about any of the matters raised, do not hesitate to use the 'Strongly .....' category.

It is appreciated that this manner of response to complex questions does not always permit you to indicate precisely what your feelings are. At the end of each questionnaire there is room for you to amplify your expressed opinion if you wish.

****

Your personal anonymity and that of your school is guaranteed. Please do not sign your name or in any way indicate the name of your school.

THANK YOU VERY MUCH FOR YOUR HELP.

QUESTIONNAIRE ON STREAMING BY ABILITY FINAL FORM

		Responses
1.	It is very difficult to teach a mixed ability group without the clever ones becoming bored by the unsuitably slow pace that the teacher must adopt.	
2.	It is inhuman to grade children like eggs and streaming carries this sort of implication.	
3.	Children of widely differing abilities have different needs which cannot be catered for in the same class	
4.	Streaming by ability leads to a greater degree of anxiety amongst children.	
5.	Streaming is the only realistic way of organising the teaching of large numbers of children.	
6.	Streaming is a tried and tested way of organising a school and ought not to be abandoned in favour of a theory unsupported by evidence.	
7.	Streaming tends to divide the teaching profession by labelling some teachers 'A' stream and others 'C' stream.	
8.	Competition in the classroom is the most effective spur to progress.	
9.	Streaming incorporates a 'self-fulfilling prophecy' - the children will conform to the implied expectations of their teachers.	
10.	The abolition of streaming would result in a sharp deterioration in children's behaviour, especially amongst those at present in the 'A' stream.	
11.	Slower children would be spurred into raising their standards if placed with brighter pupils.	
12.	The abolition of streaming will lead to a general lowering in the standard of children's attainments.	
13.	Streaming is undesirable because it is a form of social selection.	
14.	Whilst unstreaming may be justified in some primary schools, it has absolutely no place in the practices of the secondary school.	
15.	In mixed ability groups, the slower children can be helped by the brighter to their mutual advantage.	
16.	Proposals to abolish streaming should be seen for what they are: an attempt to impose a mis-conceived idea of equality.	

Continued ....

QUESTIONNAIRE ON STREAMING BY ABILITY (CONTINUED)

		Responses
17.	Placing a less able child in a low stream prevents him from making proper progress.	
18.	Streaming should be retained as it has the overwhelming support of the teaching profession.	
19.	The able child is held back by being placed in a class with children of lower ability.	
20.	Bright children might benefit from being placed in mixed ability groups by learning through helping the less bright.	

In the space below, please make any comments you may have on the matters raised by these statements.

QUESTIONNAIRE ON SELECTION FOR SECONDARY SCHOOLS

FINAL FORM

		Responses
1.	Comprehensive education will enable social and educational justice to be done to all children instead of only a minority, as at present.	
2.	Children who are wrongly allocated at 11 can be taken care of by later transfer.	
3.	Only a comprehensive school can offer the range and quality of secondary education that all children are entitled to.	
4.	Selection should be abolished because of the impossibility of ever selecting with sufficient accuracy.	
5.	Less able children feel far more insecure in a large comprehensive school than they do in a smaller secondary modern school.	
6.	A comprehensive school is the only practical way of dealing with the borderline case and late developer.	
7.	We would be unwise to introduce comprehensive education as the normal pattern after the Americans' unfortunate experience of such a system.	
8.	Less able children would benefit greatly from being taught by specialists: the present system of selective schools discourages this.	
9.	Comprehensive schools will inevitably lead to a 'levelling down'.	
10.	Objections to the size of comprehensive schools fail to take into account the large size of some of our Public and Direct Grant Grammar schools.	
11.	The neighbourhood comprehensive school is wrong because it seriously limits parental choice.	
12.	It is morally wrong to classify children as 'clever' or 'dull' at 11 or any other age,	
13.	Nothing should be done to upset the fine work being done in the grammar schools.	
14.	The 11+ procedures distort the work of the primary school.	
15.	By the age of eleven, children have such widely differing abilities that it is unwise to teach them in the same school.	
16.	The grammar school has not been anything like as successful as some people claim.	

Continued .....

QUESTIONNAIRE ON SELECTION FOR SECONDARY SCHOOLS

(Continued)

		Responses
17.	Grammar schools and comprehensive schools ought to be run side by side in certain areas to see which is the more successful.	
18.	The present system of allocation between grammar and modern schools involves an immense waste of potential ability.	
19.	Selection at eleven is valuable to the primary school as an indication of the success of its teaching.	
20.	Selection at eleven is wasteful of primary school teachers' and children's time.	

In the space below, please make any comments you may have on the matters raised by these statements.

APPENDIX IV

FORMS A AND B, STREAMING AND SELECTION ("WILSON/ PATTERSON TYPE" - ORIGINAL WORDING)

FORM A
(ORIGINAL WORDING)

Questionnaire on Non-Streaming

The following statements are concerned with unstreamed (mixed ability classes)

If you agree with the statement circle YES
If you disagree, circle NO
If you really can't decide, Circle ?

A quick reaction please - second thoughts are not necessarily more valid than first thoughts in attitude measurement.

Please comment on any statements you find especially difficult to respond to.

1.	Unrealistic with large numbers	YES	?	NO
2.	Able child handicapped	YES	?	NO
3.	Social selection	YES	?	NO
4.	'C' stream a 'sink'	YES	?	NO
5.	Not practicable	YES	?	NO
6.	Untried and untested	YES	?	NO
7.	Reduces anxiety in children	YES	?	NO
8.	Removes stigma	YES	?	NO
9.	Increases social harmony	YES	?	NO
10.	Helps slower children	YES	?	NO
11.	Reduces competitiveness	YES	?	NO
12.	Slower child neglected	YES	?	NO
13.	Inefficient learning situation	YES	?	NO
14.	Slower child accepted	YES	?	NO
15.	Politival movement	YES	?	NO
16.	Too slow teaching pace	YES	?	NO
17.	Helps school unity	YES	?	NO
18.	Ignores individual differences	YES	?	NO
19.	Primary school only	YES	?	NO
20.	Most teachers in favour	YES	?	NO
21.	Higher standards	YES	?	NO
22.	Ability is inherited	YES	?	NO
23.	Unites teachers in school	YES	?	NO
24.	Doctrinaire egalitarianism	YES	?	NO
25.	Fairer distribution of teaching skills	YES	?	NO
26.	Introduces flexibility	YES	?	NO
27.	Able child assisted	YES	?	NO
28.	Improves teachers' expectations	YES	?	NO
29.	Ability is acquired	YES	?	NO
30.	Lowers attainments	YES	?	NO
31.	Reduces behaviour problems	YES	?	NO
32.	Improves voluntary staying on	YES	?	NO
33.	Slower child encouraged	YES	?	NO
34.	Improves child's image of school	YES	?	NO
35.	Increases social friction	YES	?	NO
36.	Complicates teaching	YES	?	NO
37.	Interferes with specialist interests	YES	?	NO
38.	Increases co-operation	YES	?	NO
39.	Grading of children inhuman	YES	?	NO
40.	Advocated by theorists only	YES	?	NO

COMMENTS

FORM A

(ORIGINAL WORDING)

Questionnaire on Comprehensive Education

The following statements are concerned with comprehensive secondary schools.

If you agree with the statement circle YES
If you disagree, circle NO
If you really can't decide circle ?

A quick reaction please - second thoughts are not necessarily more valid than first thoughts in attitude measurement.

Please comment on any statement you find especially difficult to respond to.

1.	Most parents approve	YES	?	NO
2.	Inefficiency of selection	YES	?	NO
3.	Morally correct	YES	?	NO
4.	Political purpose	YES	?	NO
5.	Helps primary school curriculum	YES	?	NO
6.	Limits parental choice	YES	?	NO
7.	Grammar schools outdated	YES	?	NO
8.	Educational quality for all	YES	?	NO
9.	Selection accurate	YES	?	NO
10.	Transfer children later than 11	YES	?	NO
11.	Tripartite system logical	YES	?	NO
12.	Unequal distribution of selective places	YES	?	NO
13.	Most teachers support	YES	?	NO
14.	'Levelling down'	YES	?	NO
15.	Wastage of talent in separate schools	YES	?	NO
16.	More grammar schools needed	YES	?	NO
17.	Helps late developer	YES	?	NO
18.	Schools too large	YES	?	NO
19.	More efficient use of teachers	YES	?	NO
20.	Selection procedures time-wasting	YES	?	NO
21.	Encourages 'staying on'	YES	?	NO
22.	Proven inefficiency in America	YES	?	NO
23.	Better GCE results	YES	?	NO
24.	Selection helpful to primary schools	YES	?	NO
25.	Need evolution, not revolution	YES	?	NO
26.	Destroys good schools	YES	?	NO
27.	Recognises individual differences	YES	?	NO
28.	Educationally just	YES	?	NO
29.	Equality of opportunity	YES	?	NO
30.	Schools too impersonal	YES	?	NO
31.	Range of courses	YES	?	NO
32.	Lose highly qualified staff	YES	?	NO
33.	Experiment first	YES	?	NO
34.	Schools for the gifted	YES	?	NO
35.	Teachers opposed	YES	?	NO
36.	In new towns only	YES	?	NO
37.	Improves pupils' attitudes	YES	?	NO
38.	Social justice	YES	?	NO
39.	Ignores individual differences	YES	?	NO
40.	Hinders able working class pupil	YES	?	NO

COMMENTS

FORM B
(ORIGINAL WORDING)

Questionnaire on Non-Streaming

The following statements are concerned with classes which have been unstreamed deliberately (i.e. put together on the basis of mixing children of different abilities).

If you agree with the statement, circle YES
If you disagree, circle NO
If you really can't decide, circle ?

A quick reaction please. Second thoughts are not necessarily more valid in attitude measurement.

Please comment on any statements you find especially difficult to respond to.

1.	Able child handicapped	YES	?	NO
2.	Avoids 'C' stream 'sink'.	YES	?	NO
3.	Largely Untested	YES	?	NO
4.	Reduces anxiety in children	YES	?	NO
5.	Helps slower children	YES	?	NO
6.	Poor learning situation	YES	?	NO
7.	Politically inspired	YES	?	NO
8.	Helps school unit	YES	?	NO
9.	Relevant to Primary school only	YES	?	NO
10.	Higher standards of behaviour	YES	?	NO
11.	Unites teachers as a profession	YES	?	NO
12.	Fairer distribution of teaching skills	YES	?	NO
13.	Slower child encouraged	YES	?	NO
14.	More favourable attitude to school	YES	?	NO
15.	Complicates teaching	YES	?	NO
16.	Interferes with teachers' specialist interests	YES	?	NO
17.	Increases co-operation	YES	?	NO
18.	Causes Lower attainments	YES	?	NO
19.	Grading of children inhuman	YES	?	NO
20.	Advocated by theorists only	YES	?	NO

COMMENTS (if any) here please.

FORM B
(ORIGINAL WORDING)

Questionnaire on Comprehensive Education

The following statements are concerned with comprehensive secondary schools.

If you agree with the statement, circle YES
If you disagree, circle NO
If you really can't decide circle ?

A quick reaction please. Second thoughts are not necessarily more valid in attitude measurement.

Please comment on any statement you found particularly difficult to respond to.

1.	Inaccuracy of selection	YES	?	NO
2.	Political purpose	YES	?	NO
3.	Limits parental choice	YES	?	NO
4.	Educational quality for all	YES	?	NO
5.	Transfer children at 13	YES	?	NO
6.	Unfair distribution of grammar school places.	YES	?	NO
7.	'Levelling down'	YES	?	NO
8.	More grammar schools needed	YES	?	NO
9.	Schools too large	YES	?	NO
10.	Selection procedures time wasting	YES	?	NO
11.	Proven inefficiency in America	YES	?	NO
12.	Recognise individual differences	YES	?	NO
13.	Educationally just	YES	?	NO
14.	Equality of opportunity	YES	?	NO
15.	Larger range of courses	YES	?	NO
16.	Build in new towns only	YES	?	NO
17.	Improves pupils' attitudes to school	YES	?	NO
18.	Social justice	YES	?	NO
19.	Ignores individual differences	YES	?	NO
20.	Disadvantages able working class pupil	YES	?	NO

COMMENTS (if any) here please

APPENDIX V

FORMS A AND B, STREAMING AND SELECTION ("WILSON AND PATTERSON TYPE" - REVISED WORDING)

QUESTIONNAIRE ON NON-STREAMING FORM A

The following statements are concerned with classes which have been unstreamed deliberately (ie put together on the basis of mixing children of different abilities).

If you agree with the statement, Circle YES

If you disagree, circle NO

If you really can't decide, circle ?

A quick reaction, please. Second thoughts are not necessarily more valid than first thoughts in attitude measurement.

Please comment on any statements you find especially difficult to respond to.

1.	Unrealistic with large numbers	YES	?	NO
2.	Involves social engineering	YES	?	NO
3.	Not practicable	YES	?	NO
4.	Removes stigma	YES	?	NO
5.	Increases social harmony	YES	?	NO
6.	Reduces competitiveness	YES	?	NO
7.	Slower child neglected	YES	?	NO
8.	Teaching pace too slow	YES	?	NO
9.	Ignores individual differences	YES	?	NO
10.	Most teachers in favour	YES	?	NO
11.	Ability is inherited	YES	?	NO
12.	Doctrinaire egalitarianism	YES	?	NO
13.	Slower child accepted	YES	?	NO
14.	Introduces flexibility	YES	?	NO
15.	Able child assisted	YES	?	NO
16.	Improves teachers' expectations	YES	?	NO
17.	Ability is acquired	YES	?	NO
18.	Reducesbehaviour problems	YES	?	NO
19.	Improves voluntary staying on rate	YES	?	NO
20.	Increases social friction	YES	?	NO

Comments (if any) here, please

The following statements are concerned with comprehensive secondary schools.

If you agree with the statement, circle YES

If you disagree, circle NO

If you really can't decide, circle ?

A quick reaction please. Second thoughts are not necessarily more valid in attitude measurement.

Please comment on any statements you find particularly difficult to respond to.

1.	Most parents approve	YES	?	NO
2.	Morally correct	YES	?	NO
3.	Helps primary school curriculum	YES	?	NO
4.	Grammar schools outdated	YES	?	NO
5.	Selection accurate	YES	?	NO
6.	Tripartite system logical	YES	?	NO
7.	Most teachers support	YES	?	NO
8.	Wastage of talent in separate schools	YES	?	NO
9.	Helps late developer	YES	?	NO
10.	More efficient use of teachers	YES	?	NO
11.	Encourages 'staying on'	YES	?	NO
12.	Better GCE results	YES	?	NO
13.	Selection helpful to Primary schools	YES	?	NO
14.	Need evolution, not revolution	YES	?	NO
15.	Destroys good schools	YES	?	NO
16.	Larger schools too impersonal	YES	?	NO
17.	Lose highly qualified staff	YES	?	NO
18.	Experiment first	YES	?	NO
19.	Need schools for the gifted	YES	?	NO
20.	Teachers opposed	YES	?	NO

Comments (if any) here, please.

QUESTIONNAIRE ON NON-STREAMING

Form B

The following statements are concerned with classes which have been unstreamed deliberately (ie put together on the basis of mixing children of different abilities).

If you agree with the statement, circle YES

If you disagree, circle NO

If you really can't decide, circle ?

A quick reaction please. Second thoughts are not necessarily more valid in attitude measurement.

Please comment on any statements you find especially difficult to respond to.

1.	Able child handicapped	YES	?	NO
2.	Avoids 'C' stream 'sink'.	YES	?	NO
3.	Untested	YES	?	NO
4.	Reduces anxiety in children	YES	?	NO
5.	Helps slower children	YES	?	NO
6.	Inefficient learning situation	YES	?	NO
7.	Politically inspired	YES	?	NO
8.	Helps school unit	YES	?	NO
9.	Relevant to Primary school only	YES	?	NO
10.	Higher standards of behaviour	YES	?	NO
11.	Unites teachers as a profession	YES	?	NO
12.	Fairer distribution of teaching skills	YES	?	NO
13.	Slower child encouraged	YES	?	NO
14.	Improves child's perception of school	YES	?	NO
15.	Complicates teaching	YES	?	NO
16.	Interferes with specialist interests	YES	?	NO
17.	Increases co-operation between children	YES	?	NO
18.	Lower attainments	YES	?	NO
19.	Grading of children inhuman	YES	?	NO
20.	Advocated by theorists only	YES	?	NO

COMMENTS (if any) here please.

QUESTIONNAIRE ON COMPREHENSIVE EDUCATION

-xxx-

Form B

The following statements are concerned with comprehensive secondary schools.

If you agree with the statement, circle YES

If you disagree, circle NO

If you really can't decide circle ?

A quick reaction please. Second thoughts are not necessarily more valid in attitude measurement.

Please comment on any statement you found particularly difficult to respond to.

1.	Inaccuracy of selection	YES	?	NO
2.	Political purpose	YES	?	NO
3.	Limits parental choice	YES	?	NO
4.	Educational quality for all	YES	?	NO
5.	Transfer children later than 11	YES	?	NO
6.	Unequal distribution of grammar school places	YES	?	NO
7.	'Levelling down'	YES	?	NO
8.	More grammar schools needed	YES	?	NO
9.	Schools too large	YES	?	NO
10.	Selection procedures time wasting	YES	?	NO
11.	Proven inefficiency in America	YES	?	NO
12.	Recognise individual differences	YES	?	NO
13.	Educationally just	YES	?	NO
14.	Equality of opportunity	YES	?	NO
15.	Larger range of courses	YES	?	NO
16.	In new towns only	YES	?	NO
17.	Improves pupils' attitudes to school	YES	?	NO
18.	Social justice	YES	?	NO
19.	Ignores individual differences	YES	?	NO
20.	Hinders able working class pupil	YES	?	NO

Comments(if any) here please.

APPENDIX VI

ANALYSIS OF 33 RESPONSES TO ITEMS ON FORMS A AND B, STREAMING AND SELECTION SCALES ("WILSON/PATTERSON" TYPE)

STREAMING, FORMS AND B

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
S.A.	A	3	3	3	1	1	1	3	1	3	1	2	1	1	3	1	2	3	1	2	3	39	22=
	B	3	3	3	3	1	3	3	2	2	3	3	3	3	3	1	3	2	2	2	3	51	13=
P.A.	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	21	33
	B	1	1	3	3	1	1	1	2	3	1	1	1	1	2	1	1	3	1	1	3	32	31
J.A.	A	3	3	3	3	3	1	3	3	3	2	2	2	3	3	3	3	3	2	3	3	54	2=
	B	1	3	2	3	1	1	1	3	1	3	2	3	3	3	1	3	3	2	3	2	44	21=
L.B.	A	2	3	3	3	2	1	3	3	3	2	1	2	3	2	3	3	2	2	2	3	48	11=
	B	3	3	3	2	3	3	2	2	3	2	1	3	3	3	3	3	3	3	3	3	54	4=
E.B.	A	1	1	3	3	3	1	1	1	3	2	2	3	3	3	3	1	2	2	2	3	43	19
	B	3	3	3	3	3	3	2	3	3	2	3	3	3	3	1	3	3	3	1	2	53	7=
J.B.	A	1	2	1	3	3	1	2	2	1	1	3	2	3	3	2	2	3	2	2	3	42	20=
	B	3	2	2	2	2	3	1	3	2	3	3	2	3	3	1	2	3	3	3	1	47	20
H.B.	A	1	1	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3	54	2=
	B	3	2	3	1	3	3	1	3	3	2	3	3	3	3	1	3	3	3	3	3	52	10=
D.B.	A	2	1	1	1	2	3	1	1	1	1	2	1	1	1	1	3	2	3	2	2	32	29
	B	1	3	1	2	1	1	1	3	2	2	2	3	2	2	1	3	2	3	1	1	37	28
K.D.	A	2	2	2	3	3	1	1	2	1	2	3	2	2	2	2	1	2	1	2	3	39	22=
	B	3	1	2	1	1	2	2	2	2	1	1	1	1	2	2	2	2	2	1	2	33	29=
D.D.	A	1	1	3	3	3	1	1	3	3	1	1	3	3	3	3	3	3	3	3	3	48	11=
	B	3	3	3	3	3	3	3	3	3	3	2	3	3	3	1	3	3	3	3	3	57	1

STREAMING FORMS A AND B/page 2

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
A.D.	A	1	3	3	3	3	3	3	3	3	3	3	3	2	2	2	3	3	1	3	3	53	4=
	B	3	3	3	3	3	3	3	3	3	2	3	3	3	3	1	2	3	3	2	3	55	2=
V.G.	A	1	2	3	3	3	2	3	2	3	1	3	2	2	2	2	2	2	3	2	3	46	15
	B	3	3	3	2	2	3	1	3	3	3	2	2	2	2	1	3	2	3	3	3	49	18=
A.H.	A	3	3	3	2	2	2	3	3	3	2	3	2	3	3	3	2	2	2	2	2	50	7=
	B	3	3	2	3	2	3	1	3	3	2	2	3	3	3	1	3	3	3	2	3	51	13=
R.H.	A	1	3	1	3	3	1	3	3	1	3	2	1	3	2	1	3	3	1	3	3	44	17=
	B	3	3	3	3	3	3	1	3	3	1	2	3	3	3	1	3	3	3	2	3	52	10=
S.H.	A	3	1	1	3	3	1	3	3	3	2	3	2	3	3	3	3	3	1	2	3	49	9=
	B	3	3	2	3	3	3	3	3	3	2	3	3	3	2	1	3	3	3	1	3	53	7=
J.H.	A	1	3	3	3	3	1	3	1	3	2	1	1	3	3	1	3	3	3	1	3	45	16
	B	1	3	3	3	3	1	1	2	1	1	3	3	3	2	1	3	3	2	1	3	43	23
S.H.	A	1	2	1	3	3	1	1	1	3	2	2	2	3	3	1	2	2	1	2	3	39	22=
	B	3	2	1	2	2	1	2	3	1	1	2	3	2	3	1	3	2	2	2	3	41	25
D.J.	A	1	1	2	3	3	3	1	2	2	1	3	3	2	3	2	3	1	2	1	3	42	20=
	B	1	1	2	2	1	3	2	3	3	2	3	3	1	2	1	3	3	1	1	3	41	25=
J.L.	A	3	1	3	3	3	1	3	3	3	2	2	3	3	3	3	3	2	3	3	3	53	4=
	B	3	3	3	3	3	3	1	3	2	3	3	3	3	3	1	1	3	3	3	3	53	7=
A.M.	A	1	2	1	1	2	1	2	1	1	2	2	2	2	2	2	2	2	1	2	2	33	28
	B	1	1	1	1	1	1	2	2	2	1	2	2	1	1	1	2	2	1	2	2	29	32=

STREAMING FORMS A AND B/page3

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
S.M.	A	1	1	1	2	3	2	1	1	1	1	1	2	1	1	1	2	2	2	2	3	31	30=
	B	1	3	2	1	2	1	1	2	1	1	1	3	1	2	1	1	2	1	1	1	29	32=
L.M.	A	3	1	3	3	3	3	2	1	3	2	1	1	3	3	2	3	3	1	3	3	47	14
	B	1	3	3	1	3	3	1	3	3	1	3	3	3	3	1	3	3	3	3	3	50	15=
J.M.	A	2	2	3	3	3	3	3	3	3	2	3	2	3	3	3	2	3	3	3	3	55	1
	B	3	3	3	3	3	3	2	3	3	2	3	3	3	2	3	3	3	2	2	3	55	2=
S.R.	A	1	2	3	3	3	1	3	3	3	2	3	2	3	3	2	3	3	2	2	3	50	7=
	B	3	3	2	2	3	3	1	2	3	2	2	3	3	3	1	3	3	2	2	3	49	18=
E.R.	A	1	3	1	3	3	1	3	1	1	2	2	1	3	3	2	1	2	1	2	3	39	22=
	B	3	2	3	3	3	3	3	2	1	2	2	3	3	2	3	3	3	2	3	3	52	10=
L.R.	A	1	3	3	3	3	1	3	3	3	3	1	1	3	3	3	3	1	2	3	3	49	9=
	B	3	3	2	3	3	3	1	3	3	2	2	3	3	3	3	3	3	3	2	3	54	4=
E.S	A	1	1	3	2	2	1	3	1	3	2	3	2	3	3	3	3	3	1	2	2	44	17=
	B	2	1	3	1	3	3	2	3	3	2	1	1	3	2	1	3	1	2	1	2	40	27
N.S.	A	3	3	3	3	3	3	3	2	3	2	1	2	3	3	3	2	2	2	3	3	52	6
	B	2	3	3	3	3	2	2	3	3	2	2	3	3	2	1	3	2	3	3	2	50	15=
S.S.	A	1	1	3	1	1	1	3	3	3	2	3	1	1	3	3	1	2	1	1	3	38	26
	B	3	3	1	1	3	3	1	1	3	1	3	3	3	3	1	1	3	1	1	3	42	24
L.T.	A	1	1	3	3	2	1	3	3	3	2	1	1	2	1	1	2	1	1	2	1	35	27
	B	3	3	2	3	3	3	2	2	3	1	2	3	3	2	1	3	3	3	3	2	50	15=

STREAMING FORMS A AND B/page 4

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
G.T.	A	1	1	1	3	1	1	1	2	1	2	3	1	2	1	1	1	3	1	1	2	30	32
	B	3	3	2	3	3	2	1	3	1	1	2	3	3	3	1	2	3	1	3	1	44	21=
S.W.	A	1	1	3	2	3	3	3	3	3	2	2	2	3	2	2	3	3	2	2	3	48	11=
	B	3	3	2	3	3	3	2	3	3	2	2	3	3	3	1	3	3	3	3	3	54	4=
E.W.	A	1	2	1	1	1	2	2	1	3	1	3	2	1	3	1	1	2	1	1	1	31	30=
	B	3	3	2	2	1	3	1	2	3	1	1	1	1	1	1	1	1	1	1	3	33	29=

SELECTION, FORMS A AND B

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
S.A.	A	1	1	1	1	3	3	1	3	3	1	2	1	1	1	1	1	2	1	1	1	30	33
	B	3	1	1	1	1	3	1	3	1	1	2	1	1	1	3	3	1	1	1	2	32	33
PA.	A	3	2	3	1	3	1	1	3	3	1	1	1	3	1	1	1	1	1	1	1	33	28
	B	3	1	1	1	3	3	1	1	1	3	3	1	3	3	3	3	1	1	1	2	39	23=
J.A.	A	2	3	3	2	2	1	2	3	3	3	3	2	3	2	3	1	3	2	2	2	47	7=
	B	3	1	1	1	2	3	1	1	1	3	2	3	3	3	3	2	2	3	3	2	43	19=
L.B.	A	3	2	1	1	3	2	1	1	2	1	1	2	3	1	1	1	1	3	2	2	34	27
	B	2	2	1	1	1	3	1	2	1	3	2	2	1	1	3	3	2	2	1	2	36	30=
E.B.	A	1	1	3	3	3	3	3	2	1	3	2	2	3	3	1	1	2	1	3	3	44	12=
	B	3	1	1	1	3	3	1	1	1	1	2	2	2	3	3	2	1	3	1	3	38	25=
J.B.	A	1	3	3	2	3	3	1	2	3	3	2	2	3	2	2	1	2	2	3	1	44	12=
	B	3	2	3	3	1	3	3	3	1	3	2	2	3	3	3	2	3	3	3	3	52	3=
H.B.	A	2	3	3	3	3	3	3	3	3	3	3	2	3	1	1	1	2	1	3	1	47	7=
	B	2	2	1	2	3	3	3	3	1	3	2	1	3	3	3	3	3	3	3	3	50	12
D.B.	A	2	2	1	3	1	3	2	3	3	1	2	2	1	1	1	1	3	1	1	3	37	24=
	B	2	1	1	1	1	3	1	3	1	2	1	3	2	3	3	3	1	2	3	1	38	25=
K.D.	A	1	2	2	2	3	2	1	2	3	1	1	1	2	2	1	1	1	1	2	1	32	29=
	B	3	2	1	1	2	3	2	2	1	3	2	1	1	1	3	3	1	2	2	2	38	25=
D.D.	A	3	3	2	1	3	1	3	3	3	1	3	3	3	1	1	1	3	1	3	2	44	12=
	B	3	2	1	1	3	3	1	1	1	1	2	3	3	3	3	3	3	3	3	3	46	14=

SELECTION, FORMS A AND B/page 2

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
A.D.	A	2	3	3	3	3	3	2	3	3	3	2	2	3	2	3	1	3	1	2	1	48	5=
	B	3	3	3	2	1	3	3	3	1	3	2	2	3	3	3	3	2	3	3	3	52	3=
V.G.	A	2	2	3	3	3	3	2	2	3	2	2	2	3	1	1	1	2	1	2	2	42	16=
	B	2	2	1	2	1	2	2	3	1	3	1	3	3	3	2	3	2	3	3	3	45	16=
A.H.	A	2	3	3	3	2	3	2	3	3	3	2	2	2	2	2	2	3	2	2	2	48	5=
	B	3	1	1	2	1	3	3	3	1	3	1	2	2	2	3	3	3	2	3	3	45	16=
R.H.	A	3	3	3	3	1	3	1	3	3	3	2	3	3	3	1	1	3	1	3	1	47	7=
	B	2	1	2	3	3	3	1	3	1	3	2	3	3	3	3	3	3	3	3	3	51	10=
S.H.	A	2	3	3	1	3	3	1	3	3	3	3	2	3	2	1	1	3	1	3	2	46	10=
	B	3	3	3	3	1	3	3	3	1	1	2	3	3	3	3	3	1	3	3	3	51	10=
J.H.	A	3	3	3	1	3	3	3	3	3	3	3	1	1	1	1	1	3	1	3	3	46	10=
	B	3	2	3	3	1	3	2	3	1	3	2	3	3	3	3	3	2	3	3	3	52	3=
S.H.	A	2	2	1	3	2	2	2	3	3	2	2	1	3	1	1	1	1	1	2	2	37	24=
	B	3	1	1	1	2	3	1	1	1	3	2	2	1	1	3	2	2	2	2	2	36	30=
D.J.	A	2	3	3	2	3	1	3	1	3	3	1	2	2	1	1	1	2	1	2	3	40	21
	B	3	2	1	1	1	3	1	1	1	2	1	3	3	1	3	3	2	3	3	2	40	22
J.L.	A	3	3	3	3	3	3	2	3	3	3	3	2	3	1	2	1	3	2	3	3	52	2
	B	3	1	3	3	1	3	3	3	1	3	2	3	3	3	3	3	2	3	3	3	52	3=
A.M.	A	2	3	3	1	3	2	2	1	1	1	1	1	1	2	1	1	2	1	1	2	32	29=
	B	3	1	2	1	2	2	1	2	1	2	2	1	3	3	2	2	1	3	2	1	37	29

SELECTION, FORMS A AND B/page 3

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank
S.M.	A	1	3	1	1	3	1	3	1	3	1	2	2	2	1	1	1	1	1	1	1	31	32
	B	2	1	1	1	3	3	1	1	1	1	1	2	1	3	3	3	1	3	1	1	34	32
L.M.	A	3	3	3	3	3	1	3	3	3	3	3	3	1	3	2	1	3	1	1	3	49	4
	B	3	1	3	3	1	3	2	3	1	3	3	3	3	3	2	3	3	3	3	3	52	3=
J.M.	A	2	2	3	2	3	2	2	2	3	3	3	1	2	1	2	1	2	1	2	3	42	16
	B	2	2	1	3	2	2	3	1	1	3	2	3	3	3	3	3	3	2	3	3	48	13
S.R.	A	2	2	2	2	2	3	2	2	3	3	2	2	2	1	3	1	3	1	2	2	42	16
	B	3	1	3	3	1	3	3	3	1	2	3	3	3	3	3	3	3	3	3	3	53	1=
E.R.	A	1	2	3	1	3	1	2	3	3	3	2	2	3	1	1	1	1	1	2	3	39	22
	B	1	1	1	2	1	3	2	3	1	2	1	3	3	3	3	3	2	3	3	3	44	18
L.R.	A	2	3	3	3	3	3	3	3	3	3	3	2	3	3	3	2	3	3	3	1	55	1
	B	2	1	3	3	1	3	3	3	1	3	2	3	3	3	3	3	3	3	3	3	52	3=
E.S.	A	2	3	3	1	1	1	2	1	3	3	2	1	1	1	1	1	1	1	1	2	32	29
	B	1	2	1	3	1	3	2	2	1	1	1	3	3	3	3	3	2	2	3	3	43	19
N.S.	A	3	2	3	2	2	3	2	3	3	3	3	2	1	1	3	1	2	1	1	2	43	15
	B	1	1	1	1	1	3	2	2	1	2	1	3	3	2	3	3	2	1	3	3	39	23
S.S.	A	1	3	3	1	3	3	1	1	3	3	1	1	3	2	1	1	1	1	3	2	38	23
	B	3	1	1	1	1	3	1	2	1	1	2	3	3	3	3	3	1	1	3	1	38	25
L.T.	A	1	3	3	1	3	3	2	1	3	3	1	2	3	1	1	3	3	1	1	2	41	19
	B	3	1	1	3	1	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	53	1=

SELECTION. FORMS A AND B/page 4

Initials	Qu. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Rank Order
G.T.	A	3	3	3	1	2	1	3	2	3	2	2	2	1	1	1	1	1	1	1	3	37	24=
	B	3	1	1	2	2	3	1	3	1	3	1	3	3	3	3	3	1	3	1	2	43	19=
S.W.	A	1	2	2	3	3	3	2	3	3	3	3	2	1	1	2	1	2	1	1	2	41	19=
	B	2	1	1	2	2	2	3	3	1	3	2	2	3	2	3	3	2	3	3	3	46	14=
E.W.	A	1	3	3	3	3	3	3	3	3	3	2	2	3	1	3	3	3	1	1	3	50	3
	B	3	1	1	3	3	3	3	3	1	3	2	3	3	3	3	3	2	3	3	3	52	3=

APPENDIX VII

FINAL FORM. STREAMING AND SELECTION SCALES ("WILSON/ PATTERSON) TYPE

QUESTIONNAIRE ON NON-STREAMING

FINAL FORM

The following statements are concerned with classes which have been unstreamed deliberately (i.e. put together on the basis of mixing children of different abilities instead of separating them)

If you AGREE WITH THE STATEMENT, circle YES

If you DISAGREE circle NO

If you are undecided, circle ?

A quick reaction, please - do not spend too long in considering any statement. They are written in a 'shorthand' form in an attempt to produce a quick agreement or disagreement.

Please comment on any statement you found particularly difficult to respond to.

1.	Lowers attainments	YES	?	NO
2.	Helps slower children	YES	?	NO
3.	Slower child neglected	YES	?	NO
4.	Improves voluntary staying on rate	YES	?	NO
5.	Not practicable	YES	?	NO
6.	Reduces anxiety in children	YES	?	NO
7.	Teaching pace too slow	YES	?	NO
8.	Introduces flexibility	YES	?	NO
9.	Ignores individual differences	YES	?	NO
10.	Improves teachers' expectations	YES	?	NO
11.	Able child handicapped	YES	?	NO
12.	Slower child encouraged	YES	?	NO
13.	Inefficient learning situation	YES	?	NO
14.	Untested	YES	?	NO
15.	Grading of children inhuman	YES	?	NO
16.	Increases social friction	YES	?	NO
17.	Removes stigma from lower streams	YES	?	NO
18.	Slower child accepted	YES	?	NO
19.	Unrealistic with large numbers	YES	?	NO
20.	Able child assisted	YES	?	NO

Comments (if any) over the page

QUESTIONNAIRE ON COMPREHENSIVE EDUCATION

FINAL FORM

The following statements are concerned with comprehensive secondary schools.

If you AGREE WITH THE STATEMENT circle YES

If you DISAGREE circle NO

If you are undecided, circle ?

A quick reaction, please - do not spend too long in considering any statement. They are written in a 'shorthand' form in an attempt to produce a quick agreement or disagreement.

Please comment on any statement you found particularly difficult to respond to.

1.	Educational quality for all	YES	?	NO
2.	'Levelling down'	YES	?	NO
3.	More efficient use of teachers	YES	?	NO
4.	Limits parental choice	YES	?	NO
5.	Grammar schools outdated	YES	?	NO
6.	Lose highly qualified staff	YES	?	NO
7.	More grammar schools needed	YES	?	NO
8.	Educationally just	YES	?	NO
9.	Ignores individual differences	YES	?	NO
10.	Improves pupils' attitudes to school	YES	?	NO
11.	Hinders able working class pupil	YES	?	NO
12.	Equality of opportunity	YES	?	NO
13.	Selection procedures timewasting	YES	?	NO
14.	Helps primary school curriculum	YES	?	NO
15.	Destroys good schools	YES	?	NO
16.	Encourages 'staying on'	YES	?	NO
17.	Need schools for the gifted	YES	?	NO
18.	Wastage of talent in separate schools	YES	?	NO
19.	Proven inefficiency in America	YES	?	NO
20.	Recognise individual differences	YES	?	NO

Comments(if any) over the page

APPENDIX V111

RELIABILITY COMPARISONS -
LIKERT TYPE vs WILSON/
PATTERSON TYPE

FINAL FORM

STREAMING (LIKERT)

		ADMIN. I		ADMIN. II	
		Score	Pos.	Score	Pos.
1.	S.A.	58	23	55	26
2.	P.A.	71	15	73	17
3.	J.A.	91	1	93	1
4.	L.B.	87	2	87	3
5.	E.B.	69	16	60	24
6.	J.B.	59	22	66	20=
7.	H.B.	83	6=	85	4
8.	D.B.	57	24	64	22
9.	D.D.	84	3=	84	5
10.	A.D.	77	10=	76	14=
11.	V.G.	75	12	80	8
12.	A.H.	84	3=	78	10=
13.	R.H.	82	9	88	2
14.	S.H.	84	3=	76	14=
15.	S.H.	53	26=	52	27
16.	J.H.	67	17	66	20=
17.	J.L.	77	10=	79	9
18.	S.M.	50	28	50	28
19.	L.M.	83	6=	83	6
20.	A.M.	60	21	59	25
21.	E.R.	62	19=	61	23
22.	L.R.	74	13=	78	10=
23.	N.S.	53	26=	77	13
24.	S.S.	62	19=	67	19
25.	L.T.	56	25	78	10=
26.	G.T.	65	18	69	18
27.	S.W.	83	6=	82	7
28.	E.W.	74	13=	76	14=

FINAL FORM

SELECTION (LIKERT)

		ADMIN. I		ADMIN. II	
		Score	Pos.	Score	Pos.
1.	S.A.	42	28	47	28
2.	P.A.	81	5=	75	13=
3.	J.A.	85	2=	88	2
4.	L.B.	52	24	57	23=
5.	L.B.	56	22=	57	23=
6.	J.B.	71	14	72	16=
7.	H.B.	81	5=	86	3
8.	D.B.	49	26=	60	20=
9.	D.D.	75	12	77	9=
10.	A.D.	79	8=	76	12
11.	V.G.	74	13	77	9=
12.	A.H.	82	4	80	6
13.	R.H.	85	2	89	1
14.	S.H.	69	15=	77	9=
15.	S.H.	60	20	58	22
16.	J.H.	67	17	72	16=
17.	J.L.	81	5=	81	5
18.	S.M.	50	25	53	27
19.	L.M.	88	1	84	4
20.	A.M.	58	21	57	23=
21.	E.R.	65	19	60	20=
22.	L.R.	76	11	75	13=
23.	N.S.	49	26=	71	18
24.	S.S.	69	15=	64	19
25.	L.T.	56	18	73	15
26.	G.T.	56	22=	55	26
27.	S.W.	79	8=	78	7=
28.	E.W.	77	10	78	7=

FINAL FORM

STREAMING (WILSON/PATTERSON)

		ADMIN. I		ADMIN. II	
		Score	Pos.	Score	Pos.
1.	S.A.	35	22	44	22
2.	P.A.	51	14=	48	19
3.	J.A.	58	3=	59	4=
4.	L.B.	58	3=	58	6=
5.	E.B.	42	19=	50	16
6.	J.B.	58	3=	49	17=
7.	H.B.	-	-	-	-
8.	D.B.	31	24=	34	25=
9.	D.D.	58	3=	58	6=
10.	A.D.	53	13	56	9=
11.	V.G.	51	14=	54	12
12.	A.H.	56	9	53	13=
13.	R.H.	59	1=	60	1=
14.	S.H.	55	10=	56	9=
15.	S.H.	36	21	45	21
16.	J.H.	47	16	49	17=
17.	J.L.	57	7=	59	4=
18.	S.M.	29	27	29	27
19.	L.M.	59	1=	60	1=
20.	A.M.	34	23	34	25=
21	E.R.	43	17=	42	23
22.	L.R.	57	7=	60	1=
23.	N.S.	31	24=	53	13=
24.	S.S.	42	19=	46	20
25.	L.T.	30	26	53	13=
26.	G.T.	43	17=	41	24
27.	S.W.	54	12	57	8
28.	E.W.	55	10=	55	11

FINAL FORM

SELECTION (WILSON/PATTERSON)

		ADMIN. I		ADMIN. II	
		Score	Pos.	Score	Pos.
1.	S.A.	27	27=	26	28
2.	P.A.	45	16=	37	23
3.	J.A.	57	3=	58	2
4.	L.B.	28	26	31	25=
5.	E.B.	37	21	39	21=
6.	J.B.	53	9=	46	16=
7.	H.B.	55	7=	56	4=
8.	D.B.	32	24	29	27
9.	D.D.	51	12	53	10=
10.	A.D.	50	13	53	10=
11.	V.G.	53	9=	55	6=
12.	A.H.	57	3=	55	6=
13.	R.H.	55	7=	54	9
14.	S.H.	45	16=	49	15
15.	S.H.	35	22=	31	25=
16.	J.H.	47	14	50	13=
17.	J.L.	58	2	60	1
18.	S.M.	40	19	40	20
19.	L.M.	56	6	55	6=
20.	A.M.	38	20	39	21=
21.	E.R.	45	16=	45	18
22.	L.R.	59	1	57	3
23.	N.S.	27	27=	46	16=
24.	S.S.	29	25	43	19
25.	L.T.	46	15	50	13=
26.	G.T.	35	22=	35	24
27.	S.W.	52	11	51	12
28.	E.W.	57	3=	56	4=

APPENDIX IX

PINSENT CORPORAL PUNISHMENT SCALE - LIKERT SCORING METHOD

QUESTIONNAIRE ON USE OF CORPORAL PUNISHMENT IN SCHOOLS

		Responses
1.	Teachers should have the right to use corporal punishment until conditions which cause behaviour difficulties in schools have been improved	
2.	I am in favour of corporal punishment used with discretion	
3.	More harm than good is caused by the retention of corporal punishment in schools.	
4.	Corporal punishment has not yet outlived its usefulness as a means of checking serious offences	
5.	Corporal punishment should be retained in schools because many children prefer it to other forms of punishment.	
6.	We do not understand behaviour problems in schools well enough to say definitely that corporal punishment is either harmful or beneficial to children.	
7.	All corporal punishment should be abandoned in schools	
8.	Reasonable corporal punishment is not only unharmful but actually beneficial to some children, especially boys.	
9.	Corporal punishment always demoralises and degrades a child.	
10.	Corporal punishment should not be abolished until other means of checking serious offences are discovered and made effective.	
11.	The use of corporal punishment as a last resort should be retained in schools.	
12.	All corporal punishment in schools should be made illegal.	

In the space below, please make any comments you may have on any of the mattera raised by these statements, or on the statements themselves.

APPENDIX X

OLIVER 'SURVEY OF OPINIONS ABOUT EDUCATION' SCALES WITH LIKERT SCORING KEY

APPENDIX XI

WILSON-PATTERSON C-SCALE
WITH SCORING AS EMPLOYED
BY WRITER

'CONSERVATISM' SCALE

WHICH OF THE FOLLOWING DO YOU FAVOUR OR BELIEVE IN?

(Circle "Yes" or "No". If absolutely uncertain, circle "?". There are no right or wrong answers; do not discuss; just give your first reaction. Answer all items).

1	death penalty	Yes	?	No
2	evolution theory	Yes	?	No
3	school uniforms	Yes	?	No
4	striptease shows	Yes	?	No
5	Sabbath observance	Yes	?	No
6	beatniks	Yes	?	No
7	patriotism	Yes	?	No
8	modern art	Yes	?	No
9	self-denial	Yes	?	No
10	working mothers	Yes	?	No
11	horoscopes	Yes	?	No
12	birth control	Yes	?	No
13	military drill	Yes	?	No
14	co-education	Yes	?	No
15	Divine law	Yes	?	No
16	socialism	Yes	?	No
17	white superiority	Yes	?	No
18	cousin marriage	Yes	?	No
19	moral training	Yes	?	No
20	suicide	Yes	?	No
21	chaperones	Yes	?	No
22	legalised abortion	Yes	?	No
23	empire-building	Yes	?	No
24	student pranks	Yes	?	No
25	licensing laws	Yes	?	No
26	computer music	Yes	?	No
27	chastity	Yes	?	No
28	fluoridation	Yes	?	No
29	royalty	Yes	?	No
30	women judges	Yes	?	No
31	conventional clothing	Yes	?	No
32	teenage drivers	Yes	?	No
33	apartheid	Yes	?	No
34	nudist camps	Yes	?	No
35	church authority	Yes	?	No
36	disarmament	Yes	?	No
37	censorship	Yes	?	No
38	white lies	Yes	?	No
39	birching	Yes	?	No
40	mixed marriage	Yes	?	No
41	strict rules	Yes	?	No
42	jazz	Yes	?	No
43	straitjackets	Yes	?	No
44	casual living	Yes	?	No
45	learning Latin	Yes	?	No
46	divorce	Yes	?	No
47	inborn conscience	Yes	?	No
48	coloured immigration	Yes	?	No
49	Bible truth	Yes	?	No
50	pyjama parties	Yes	?	No

Even items	Yes = 2	? = 1	No = 0
Odd items	No = 2	? = 1	Yes = 0

Low score = Conservative beliefs

APPENDIX XII

"PACKAGE" OF SCALES WITH INSTRUCTION SHEET AND NOTE TO NON-RESPONDENTS

APPENDIX XIII

PROFILE OF SCORES SHEET

ATTITUDES TO EDUCATION SCALES

PROFILE OF SCORES

YOUR SCORE IS INDICATED BY A CROSS AND A NUMBER ON THE DOTTED LINE.

Reference number .....

		Low	Mid - point	High
1.	Streaming	20	60	100
2.	Selection for Secondary school	20	60	100
3.	Corporal Punishment	12	36	60
4.	Conservatism (small 'c')	0	50	100
5.	Tendermindedness	14	42	70
6.	Radicalism	12	36	60
7.	Naturalism	10	30	50

Notes

On scales 1 - 3, a high score suggests an unfavourable attitude (i.e. against streaming, selection and corporal punishment)

On scale 4, a high score suggests an unfavourable attitude also (i.e. the holding of anti-conservative attitudes)

On scales 5 - 7, a high score suggests favourable attitudes (i.e. that you are tenderminded, radical and naturalistic)

Tendermindedness = a belief in education for its own sake, rather than say, vocational education.

Naturalism = commitment to child-centredness in education

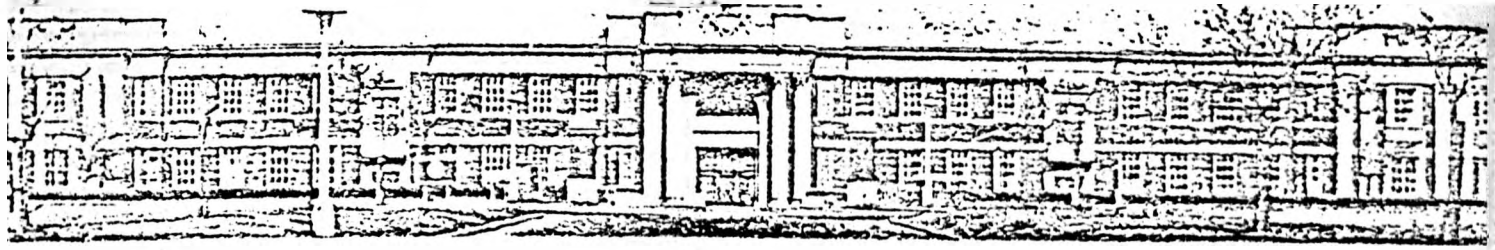
Radicalism = degree of commitment to change in education

If you would like any further information, please contact the under-signed.

T E Crompton
Edge Hill College
Ormskirk

APPENDIX XIV

COVERING LETTER TO HEADMASTERS AND FOLLOW UP NOTE



Edge Hill College of Higher Education

St. Helens Road · Ormskirk
Lancashire L39 4QP
Telephone: Ormskirk 75171

Director PKC Millins BA

Division of Pre-Service Education
Dean MW Wilkinson MA, MEd

Your ref | Our ref | Date | Extension

276

The Headmaster,

Dear Headmaster,

I am writing to ask if you and your staff would be willing to help me with some research I am undertaking for my doctorate of Keele University. The research involves seeking the opinions of teachers in secondary schools, Colleges of Education and University Departments of Education concerning educational controversies and the relationship between such opinions and teachers' value systems. The principal method of enquiry is by questionnaire: I enclose a copy so that you may judge its type and extent. In addition, however, I should like to interview a limited number of teachers (some two or three) and this would obviously involve my visiting the school. May I stress one promise made on the first page of the questionnaire: opinions given, whether as written responses or spoken, are completely anonymous. This is an absolute guarantee which covers both individuals and their school.
If you feel that some of your staff would be willing to assist me, I should be happy to bring further copies of the scales to school (so that I might, additionally, explain matters further) or send copies through the post, whichever you prefer.
Finally, may I stress that this is personal research and is not connected with Edge Hill College. Professor Eggleston and Dr Una Maguire can supply any references concerning this request.

Yours faithfully,

T.E. Crompton,
Principal Lecturer in Education

Edge Hill College of Higher Education

St. Helens Road · Ormskirk
Lancashire
Telephone: Ormskirk

Director PKC Millins BA

Division of Pre-Service Education
Dean MW Wilkinson MA, MEd

Your ref Our ref TEC/FB Date 6.11.75 Extension 276

Dear

I wrote to you recently to enquire if you might be able to assist me with some research into teachers' attitudes to educational controversies. A copy of my questionnaires was included so that you could assess the extent of work required from staff. I wondered if you had had the opportunity to consider my request? If you feel that the matter is not one in which you can help, I understand and, indeed, sympathise: the completion of the scales is quite a lengthy business. However, it would help me to know the outcome of my request, so that if your response is in the negative I can extend my sampling by approaching other schools.

Yours sincerely

T.E.Crompton
Principal Lecturer in Education

APPENDIX XV

FULL DATA AND CODING SHEET

CODING SYSTEM FOR DATA SHEETS

Cols. 1 - 5	Respondent reference numbers	
Col. 10	Sex.	Male...1 Female....2 Unknown.....3
Col. 12	Age.	<25...1 25-35.....2 36-45..... 3 46-55....4 >55.....5 Unknown....6
Col. 14	Qualification.	Graduate...1 Non-graduate....2 Unknown.....3
Col. 16	Disoipline.	Arts ....1 Science.....2 Unknown.....3
Col. 18	Length of Teaching Experience.	<5 years....1 5-15.....2 16-25.....3 26-35.....4 >35.....5 Unknown.....6
Col. 20	Type of Institution.	Comp.....1 Sec.Mod.....2 Maint.Gr.....3 D.G.Gr.....4 Indep.....5 Student....6 College "Academic".....7 College"Education" .....8 University.....9
Col. 22	Type of experience of teaching.	None.....1 Primary.....2 Secondary....3 Unknown.....4
Col. 24	Level of appointment.	Junior....1 Senior....2 Unknown.....3
Col. 26	Student teaching ability.	Successful....1 Unsuccessful....2 Median score.....3

Variables

Cols. 29,30 Streaming scores
Cols. 32, 33 Selection scores
Cols. 35,36 Corp.Pun. scores
Cols.38,39 Conservatism scores
Cols. 41,42 T. scores
Cols. 44,45 R. scores
Cols. 47,48 N. scores

University of Keele

DATA

Title TEACHERS' ATTITUDES TO EDUCATION

Page

1–4	10	12	14	16	18	20	22	24	26	29–30	32–33	35–36	38–39	41–42	44–45	47–48	51
CE02	3	4	1	3	3	8	3	3	4	53	54	25	44	39	39	27	▨
CE03	1	4	1	3	2	8	2	3	4	51	58	35	47	29	43	24	
CE04	1	4	2	3	4	8	2	3	4	80	68	30	51	56	43	31	
CE06	1	3	1	3	3	8	2	3	4	66	71	28	-1	34	38	25	
CE07	2	5	2	3	4	8	2	3	4	71	48	40	46	47	43	36	
CE08	1	4	1	3	4	8	3	3	4	46	52	23	58	51	35	26	
CE09	2	4	1	3	3	8	2	3	4	82	60	48	57	32	43	32	
CE10	2	2	1	3	2	8	2	3	4	87	76	31	74	41	46	30	▨
CE11	1	3	2	3	3	8	4	3	4	58	76	41	59	46	47	29	
CE12	1	2	1	3	2	8	2	3	4	72	68	37	62	54	40	34	
CE13	1	3	2	3	3	8	2	3	4	83	76	37	65	39	47	31	
CE15	1	3	2	3	3	8	2	3	4	76	82	26	60	34	47	34	
CE17	2	4	2	3	4	8	4	3	4	65	55	26	57	40	42	34	
CE18	2	3	2	3	3	8	3	3	4	62	55	28	52	43	49	35	
CE20	1	3	1	3	3	8	2	3	4	53	47	24	60	51	43	41	
CE22	2	4	1	3	3	8	3	3	4	68	63	43	58	50	40	36	
CE23	1	3	1	3	3	8	3	3	4	57	73	24	55	36	43	25	
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S	T	2	1	2	1	3	1	1	6	3	3	1	6	6	8	1	3	0	7	0	4	5	4	3	3	3	
S	T	2	2	1	1	3	2	1	6	3	3	1	5	6	7	4	2	6	7	3	4	2	3	9	2	9	▨
S	T	2	3	2	1	3	1	1	6	3	3	1	6	3	6	6	2	5	7	7	4	5	4	4	2	9	▨
S	T	2	4	2	1	3	1	1	6	3	3	3	5	1	5	2	2	8	5	1	4	3	4	1	2	5	
S	T	2	5	1	1	3	1	1	6	3	3	3	7	1	7	8	3	4	7	3	4	2	4	6	3	4	▨
S	T	2	6	1	1	3	2	1	6	3	3	1	5	5	5	9	3	3	6	2	-	1	3	7	3	0	
S	T	2	7	2	1	3	2	1	6	3	3	3	4	2	4	7	3	0	4	3	4	5	4	0	2	9	▨
S	T	2	8	2	1	3	1	1	6	3	3	2	6	4	7	6	1	8	7	1	4	3	5	0	2	7	
S	T	2	9	1	1	3	1	1	6	3	3	2	5	8	5	6	3	1	5	2	4	1	3	7	2	4	
S	T	3	0	1	1	3	1	1	6	3	3	1	5	6	6	1	2	8	5	3	3	7	3	6	2	8	
S	T	3	1	1	1	3	1	1	6	3	3	2	6	8	5	2	3	5	4	0	4	6	4	6	2	5	▨
S	T	3	2	1	1	3	2	1	6	3	3	2	5	7	4	9	2	0	5	1	4	8	4	4	3	9	
S	T	3	3	1	1	3	1	1	6	3	3	1	5	0	5	5	2	5	5	5	4	2	3	5	2	5	
S	T	3	4	1	1	3	2	1	6	3	3	2	3	9	5	4	2	1	5	1	2	8	3	5	2	2	
S	T	3	5	1	1	3	1	1	6	3	3	2	6	7	6	6	5	9	6	5	5	6	3	6	3	2	