The implication for pupils with special educational needs of the introduction of the technical and vocational educational initiative in comprehensive schools

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The implication for pupils with Special Educational Needs of the Introduction of the Technical and Vocational Educational Initiative in Comprehensive Schools

Abstract

This investigation was undertaken to examine the effect of T.V.E.I. on pupils with special educational needs. The features selected for particular investigation were:

a) The organisational structure of T.V.E.I.
b) Teaching style/attitude, group work, problem solving.
c) In-service provision.
d) Existing school provision for S.E.N.'s pupils.
e) The role of the tutor in T.V.E.I.

These five main concerns were examined through the literature and an empirical study. This study is in two parts.

a) a small scale pilot study was undertaken at a group 6(s) special school for pupils with moderate learning difficulties which was involved in T.V.E.I.
b) a major study which took place at a small 11-18 comprehensive, which was also within the T.V.E.I. scheme.

The results obtained have enabled conclusions to be made and issues raised concerning the benefits, if any, of including special educational needs pupils within a T.V.E.I. scheme. The main issue which has emerged during the course of this research has been the importance of the criteria by which T.V.E.I. is implemented and taught for these pupils. These aspects merit consideration for, as T.V.E.I. extension is now with us, all pupils with special educational needs will find themselves within a T.V.E.I. scheme.
The implication for pupils with Special Educational Needs of the Introduction of the Technical and Vocational Educational Initiative in Comprehensive Schools.

George Edward Kenyon


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Introduction

The initial idea for this research came from an article by Tomlinson (1985). In her review of developments in provision for special educational needs, she stated that,

"The incursion of the new vocationalism and M.S.C. (now Training Agency) activities into secondary schooling and the blurring of the education-training divide has created more dilemmas for comprehensive schools - one of which is how far "special needs" pupils will be incorporated into technical and vocational courses, or how far they will be offered palliatives of work experience and social and life skills." (p157)

As a T.V.E.I. co-ordinator in a school for pupils with moderate learning difficulties, since the scheme's inception in 1985, I was very interested to investigate what exactly was happening to S.E.N.'s pupils from mainstream who found themselves in a T.V.E.I. pilot scheme. For as the T.V.E.I. operating manual (1983) stated in its introduction to the initiatives,

"The Technical and Vocational Educational Initiative is to be across the ability range."

As the school had only a small roll of 105, all fourth and fifth year pupils were involved in the scheme. There also happened to be a very small comprehensive in the county's pilot scheme who found themselves in a T.V.E.I. pilot scheme. For as the T.V.E.I. operating manual (1983) stated in its introduction to the initiatives,

"The Technical and Vocational Educational Initiative is to be across the ability range."

With this broad aim in mind, a literature search was conducted, to investigate the background of T.V.E.I. and S.E.N. This literature search highlighted five main areas, which were likely to be influential in the examination of the implementation and responses to T.V.E.I. in special education:

a) The organisational structure of T.V.E.I.

b) Teaching style/attitude, group work, problem solving

c) In-service provision

d) Existing school policy on S.E.N.'s

e) The role of the tutor in T.V.E.I.

Consideration of these areas led to formulation of a research programme, essentially in two parts; a small scale pilot study, followed by the main study in a pilot T.V.E.I. 11-18 comprehensive. The five main areas of investigation were considered relevant to the research for the following reasons:

Page 1
a) The organisation of T.V.E.I.

The county and school organisation of T.V.E.I. is very important to its successful implementation as it will influence the curricular experience offered to the pupils. Of the three structures identified by Beattie (1986), Saunders (1986) and Barnes et al. (1987) Cumbria's organisation can be classified as Collaborative, which as Beattie states occurs when,

"the schools entering the organisation could be considered to have similar states of development with regards to the general ideas embodied within the scheme and had developed along similar lines prior to its establishment." (p9)

How the school implemented T.V.E.I. was of great interest. This again had been divided into three main areas by Saunders (1986). Both the pilot school and the main research school could be said to operate within the Adaptive Extension model which is described as,

"a strong interpretation of T.V.E.I. It has been used to change the whole curriculum." (p5)

Gleeson (1987) warns us not to look upon these models as set,

"The danger of placing individual schools at a single point somewhere along the Adaptive Extension to Containment continuum is that such a model is too static to convey the degree of past movement or future intentions." (p4)

It was important though for the research to be able to investigate the Authority's organisational structure and its effect on the implementation of T.V.E.I. and also to have the framework for school responses at hand to understand how the schools had interpreted T.V.E.I. Thus while being aware of Gleeson's caveat on excessively rigid modelling, this research finds the Saunders' analysis helpful.

b) Teacher style/attitude, group work, problem solving.

It was important to be able to investigate not only teachers' attitudes to S.E.N.'s, but also to T.V.E.I. It may be that they take one area seriously but not the other. Hegarty, Pocklington and Lucas (1987) found, when investigating classroom practices, one teacher who felt that it was right to have special needs pupils in his class in terms of social integration, "that is a good enough reason." This reinforces the concern expressed in Tomlinson's (1987) work that S.E.N.'s pupils may simply be given a watered down "vocational course".

To try to ascertain teacher's attitudes to S.E.N.'s and how they saw such pupils, Kelly's (1955) repertory grid technique was used. A full account of this technique is given in chapter three. In essence Kelly proposed that each person has access to a limited number of constructs by means of which he evaluates the phenomena that constitute his world. These can be thought of as bi-polar. A number of different forms of this technique have been developed since Kelly's first formulation. All have two common characteristics:
a) constructs: the dimensions used by a person in conceptualising aspects of his world, and b) elements; the stimulus objects that the person evaluates in terms of the constructs he employs. Using this technique it was considered possible to determine the teachers' attitudes to S.E.N.'s, though for their attitudes to T.V.E.I., data generated by interviews and observation would be relied upon.

As group work and problem solving were major features of T.V.E.I. and all pupils would be subjected to this approach, it was obvious that there was a need to research the influences they could have on the teaching of pupils with S.E.N.'s.

As Moses (1982) states,

"during class lessons the nominated slow learners do rather less work than the average child but the difference is much greater during group work." (p119)

Also, in the area of problem solving, Holt (1970) states that,

"to a dull child an unanswered question is not a challenge or opportunity but a threat. The dull child will only go ahead when he thinks he knows exactly where he stands and what is ahead of him." (p167)

It is obvious from the above that the two areas of group work and problem solving had to be investigated during the research, which was approached by means of observation and interviews.

c) In-service provision

One of the major thrusts of T.V.E.I. has been the delivery of large scale in-service training. Gipps and Goldstein (1984) when researching the best learning environment for special needs pupils, came up with four criteria by which this learning environment could be optimised. One of these four was large scale in-service training programmes. Therefore the whole area of in-service special needs provision within T.V.E.I. was investigated during the staff interviews.

d) Existing school special needs policy

It was important to find out exactly what the school's existing policy was for special needs to be able to make judgements as to how T.V.E.I. was integrated into this system, if indeed it was, and also to ascertain if T.V.E.I. had any effect on the teaching of special needs within the school.

This was achieved by three means: 1) researching the school's literature on S.E.N.'s provisions; 2) interviewing the staff concerned; 3) interviewing the head teacher to find out what exactly were his views on the school's provision for special educational needs.
e) The role of the tutor in T.V.E.I.

The role of the tutor was to be central to T.V.E.I. as the Cumbrian submission stated,

"The development of motivation, initiative and awareness in students is a most important part of the project and to ensure that these qualities are nurtured it is crucial that students receive suitable counselling, not only in the areas of pastoral work but also in the academic sphere" (p17)

This thinking is reinforced by Shilling (1987) who states,

"It is under the auspices of form teachers (or their equivalent) that students make their academic options. While the influence that form teachers may have cannot be determined precisely, it could be the causal factor in a student's option choice" (p120)

With the role of the tutor placed so centrally it was important to be able to ascertain the impact of this role in the research school. This was achieved by observation, interviews with staff, including all who acted as tutors, and interviews with all the pupils involved in the scheme.

This procedure led to a final chapter containing the main conclusions and implications of the literature search and the empirical studies, as to the appropriateness of including pupils with special educational needs within a T.V.E.I. scheme, given the constraints within which the pilot operated.
Chapter 1
The Concept of Special Educational Needs

If T.V.E.I. is to be investigated to determine its capacity to be the vehicle to deliver a broad, balanced and relevant curriculum to pupils with special educational needs, then there is initially a need to investigate exactly what is taking place at the moment in this field. This would then enable tentative conclusions to be drawn as to whether the inclusion of special needs pupils within a T.V.E.I. scheme would be of any benefit to these pupils. This will be achieved by firstly looking at the historical background of the teaching of pupils with S.E.N.'s in this country, then by looking at recent research which has focused on current practice in Local Education Authorities across the country under the heading of S.E.N.'s.

To understand the context of special education within education in general, there is a need to look at the historical background of special education teaching in England and Wales. This can be achieved by reviewing legislation relating to this particular topic, dealing with all work up to the Newsom Report (1963) in general terms, then focusing on the major changes which have taken place between Newsom and the Warnock Report (1978), and finally investigating what is happening at the present time under the heading of special education.

The concept of education for all pupils with special needs is a relatively new development in Great Britain. Much of the work carried out in this field has been done by special schools. Indeed the education of pupils with special needs, was totally separate from mainstream education. Tomlinson (1985) takes this argument a little further,

"the most likely candidates for inclusion in an expanding system were those originally classed as feeble-minded or educable defectives." (p159)

This separatist policy was due mainly to the meanings attributed to the term handicap. Pupils with a handicap were thought to have this problem for life. Therefore they were seen as different and it made sense to make separate provision for them. It cannot be said that there was a total separate provision for pupils with learning difficulties however, as there were many parents who would not give their consent for special school placement and their children were therefore taught in a mainstream setting.

There were some early moves away from total separation. The Wood Committee (1929) called for a single system for dealing with the feeble-minded and the retarded, and argue that special schools should be brought more into line with the ordinary school.

The 1944 Education Act went a little further stating that,

"they shall, so far as is practicable, provide for the education of pupils in whose case the disability is serious in special schools appropriate to that category, but where it is impracticable, or where the disability is not serious, the arrangements may provide for the giving of such education in any school." (section 33 (2))
In the ensuing years this concept was regarded as a charter for placing pupils with a handicap in the special school. This seems strange given the wording, but it may have something to do with the understanding at this time of the words handicap and disability. There is no doubt that in the ensuing years there was a large increase in the numbers of pupils within certain kinds of special schools. Every year the D.E.S. publish figures which give the number of pupils attending special schools. As always statistics rarely provide the information one needs to answer questions other than those the figures were designed to answer. However, could we assume that these pupils spent all their time in the special school, or did they spend some of their time in other establishments? As Swann (1988) states,

"During the 1960's and 1970's it was safe to assume that these pupils were segregated. More recently even this has been called into question, because some pupils who are on the roll of a special school actually spend much of their time in an ordinary school. These pupils appear in national statistics as attending special schools." (p140)

If, as Swann (1988) argued we can assume that numbers of pupils given as attending special schools in the 1960's and 1970's did in fact spend their time in these establishments, then it is possible to trace the increase in special school provision by analysing the D.E.S. statistics for the period 1955 to 1978 relating to placement in these establishments.

In 1955 there were 16,633 boys and 9,011 girls in the old style E.S.N. (M) schools, but by 1978 these numbers had risen to 33,081 boys and 21,694 girls. This represents an increase of 99% and 140% respectively. Whereas within this time scale some categories of handicap remained fairly consistent, eg. blind, partially sighted, deaf, other categories also rose enormously eg. maladjusted (over 1,000), physically handicapped (over 100%). These figures are also reinforced by Tomlinson (1985). She states,

"in 1950, 93 pupils per million were categorised as E.S.N. - M.: by 1977 the proportion had risen to 5763 per million. Similarly, in 1950, 93 pupils per million were officially maladjusted, by 1977 this had risen to 1416 per million." (p158)

These figures relate to the period of time leading up to the publication of the Warnock Report (1978) and the 1981 Education Act which followed the report. No investigation would be complete without a review of the figures for the years following the 1981 Education Act.

Swann reports that,

"the primary-aged special sector grew from 1978 to 1982, then fell back again, so that by 1986 it was almost the same size as it was in 1978. Since 1978, the size of the secondary aged special sector has hardly changed at all." (p150)

In 1985 the proportion of children segregated from primary schools stood at 90% of its 1978 figure, and the proportion of children segregated from secondary stood at 99% of its 1978 figure.
It is obvious from these figures that there had been a massive growth in separatist provision in this particular field. During the same period, however, the number of pupils with what would seem more major problems i.e. blind, partially sighted, deaf, partially hearing, remained static. The one other area that saw a very large increase in separatist provision was that of maladjustment. It would seem from these figures that it was only certain types of pupils, with certain difficulties, that needed a separatist provision.

It must be stated that at this time, following the 1944 Education Act, there was a growing impetus for change in education, and not least within special education. By the 1960's there was a great deal of debate about the reorganisation of secondary education, brought about because of the feeling that the existing system was more "fair" to some than others. Into this debate came the pressure groups for the handicapped eg. Elfreda Rathbone Society, making the point that if a new system was to be introduced to be "fair" to all, then it must provide the handicapped with as normal an environment as possible.

The recommendations of the Newsom Report (1963), which was devoted to the education of pupils between the ages of 13 and 18, of average ability, were designed to correct the inequalities of provision it found between Grammar and Secondary Modern schools. The report pressed for the raising of the school leaving age to 16 and the development of appropriate curricula and examinations, but did not significantly address the subject of segregation between Grammar and Secondary Modern, or the segregation of handicapped pupils. At this time the Government saw the answer in a change of attitude, rather than an organisational one. In many ways Newsom was looking at many of the areas of concern that T.V.E.I. was instigated to overcome:

a) Appropriate curricula

"First, our general objective is to widen and enrich the curriculum" (Lord Young 1983)

b) Raising of the school leaving age

"They should provide four-year curricula (14-18), with progression from year to year." (Annex 3 T.V.E.I. Operating Manual 1983)

c) Relevant examinations

"students should normally be preparing for one or more nationally recognised qualifications to be gained by the end of the programme. Given the wide spread of ability, a wide range of such qualifications will need to be aimed at." (Annex 3 Operating Manual 1983).
d) Record of achievement

"Boys and girls who stay at school until they are sixteen may reasonably look for some record of achievement when they leave." (Newsom Report, ch. 10)

"On completing their studies, students should be issued by the L.E.A. with a record of achievement describing qualifications gained and recording significant elements and attainments which are not readily deducible from the qualification eg. work experience and personal successes." (Annex 3 Operating Manual 1983)

It would seem from this that although T.V.E.I. has maintained all along that it was not a programme for the average and low ability, it fits very well with the Newsom Report which was specifically looking at that range of ability.

However, this concept of segregation between Grammar Schools and Secondary Modern schools came to the fore with the election of a Labour Government. In 1965 circular 10/65 was issued, asking all local authorities to submit plans for full comprehensive reorganization. In 1965 only 8.6% of the school population were in comprehensives, but by 1975 the figure had risen to 68% and by 1980 it stood at 86%. In this time of great debate, where minority groups were now being taken seriously, and thought was given to the human rights of the individual, came the Plowden Report (1967). Whereas this report is mainly remembered for its contribution to primary education, a chapter was devoted to the teaching of handicapped pupils in the ordinary school, and its main conclusion was that there was a need for a full inquiry into the teaching of handicapped pupils. There were however, to be many other reports and legislation which would affect handicapped pupils before the publication of a report specifically on the teaching of handicapped pupils; the Warnock Report (1978).

The Seebohm Report (1968) was charged with the task of reviewing the social services. Its main recommendation was that all local social services should be merged into comprehensive social services departments. It has been argued that some handicapped youngsters have suffered because their needs as individuals were swamped in these departments.

The Chronically Sick and Disabled Persons Act (1970) amongst other requirements, charged Local Authorities, when building new schools and colleges, to provide means of access and suitable toilet facilities for disabled children and adults. The Act also gave L.E.A.s the duty to inform the Secretary of State of provision they had made for deaf-blind, autistic, and acute dyslexic children and to educate them within the L.E.A. At this time government thinking was in terms of providing access to buildings, and L.E.A.s providing education for most categories of handicapped pupils within their authority.

The Education (Handicapped Children) Act (1970) finally transferred the responsibility for mentally handicapped children from local health authorities to the L.E.A.s.
Better services for the Mentally Handicapped (White Paper) 1971 concerned itself with the education of children classed as subnormal in hospital schools. It set targets for provision in residential and day care facilities, and envisaged a substantial reduction in the number of people in large hospitals.

During the next seven years there were eleven reports or pieces of legislation that could be said to affect pupils with handicaps or special needs. These were:

1972 Children with Specific Learning Difficulties (Tizard Report)
1972 Raising of the School Leaving Age Order.
1972 Report of the Committee on Speech Therapy Services (Quirk Report)
1974 Report of the Committee on One Parent Families (Finer Report)
1975 A Language for Life (Bullock Report)
1975 Circular 2/75 The Discovery of Children Requiring Special Education and the Assessment of Their Needs
1976 Education Act. Although concerned with comprehensive education, this contained a section which was never implemented, stating that "where it is impracticable or incompatible with the provision of effective instruction, or would involve unreasonable public expenditure, special education was to be provided in ordinary schools."
1976 Fit for the Future (Court Report)
1977 A New Partnership for our Schools (Taylor Report)

It would seem that between 1963 and 1978 there was a plethora of legislation concerned with some aspect of handicap, most of them in some way trying to simplify or unify varying aspects of provision for handicapped people. While many of these Acts were specific to a certain category of handicap, there were some more general Acts which could be said to include some aspects of education that were to be covered up to ten years later within T.V.E.I.

The 1972 Act was concerned with the raising of the school leaving age to 16, whereas T.V.E.I. could be said to take this further as it sees education and training continuing to 18. The 1976 Act on comprehensive education stated that special needs teaching should where possible take place in a comprehensive school. T.V.E.I. stated from the outset that it was to be across the ability range, even though a few special schools were involved in the pilot phase, each comprehensive in the scheme had to prove that their cohort did in fact cover the whole ability range. The Taylor Report of 1977 was concerned with parental involvement. T.V.E.I. stated
from the outset that in each scheme there had to be a monitoring committee consisting of specific interested parties, including parents. Therefore, from the outset, there has been parental involvement within T.V.E.I.

As Gleeson (1987) states,

"despite its sudden arrival on the education scene T.V.E.I. has its roots in wider historical debate about the nature of schooling itself." (p2)

Whereas T.V.E.I. was conceived and implemented very quickly, it is possible by tracing legislation dealing with special education provision to find some background for the need of a scheme such as T.V.E.I., but it was not envisaged as a scheme specifically for the pupil of average and below average ability.

The only area that had not been investigated was the education of these people, and the whole question of what is a handicap, and who is handicapped? This was to be covered by the first comprehensive report this century on special educational needs.


Warnock stated that it had taken note of all that had gone before and that the report contained nothing dramatically new; it was a summary and distillation of what the committee considered to be existing good practice. Something it did suggest, which had not happened before, was that statutory categories of handicaps should be abolished. This report was followed by a white paper and then the 1981 Education Act. It would seem that we have moved from a system where handicapped pupils were perceived as being different, to the extent that some of them were seen as ineducable, whilst others were educated separately from their "normal" peers, to a system which recognises that every pupil is entitled to a good education, and wherever possible that is to be with their peers. If more and more pupils with special education needs are to be taught in mainstream, what provisions are being made for them?

The 1981 Education Act had now been operational for a number of years and it requires L.E.A.s to make adequate provision for all children with special educational needs. The act itself is very vague on what is meant by adequate, and especially vague in defining which children have special educational needs. Thus a child has special needs if he or she has a "significantly greater difficulty in learning than the majority of children" or "if he or she has a disability which either prevents or hinders the child from making use of educational facilities of a kind generally provided."

Although the Act may have been vague on what constituted S.E.N.s or learning difficulties, the Warnock Report (1978) was very specific on the actual numbers of pupils involved, concluding that one child in every five at some time and one child in every six at any one time will require
some form of special help. This 20% figure is one that is often used as the baseline provision to aim for, even though it is obvious that these are notional averages and hence will vary from one part of the country to another depending on social, environmental and other factors associated with measured performance.

What had been happening prior to Warnock in the teaching of these pupils? There was a great deal of variety of provision across the country. Teachers in remedial departments had been grappling with the issue of changing models of provision since the early 1970's. Changes in education, including the move away from streaming, the breaking down of subject boundaries, and new ideas about the acquisition of reading, were making remedial teachers face up to a change in their roles. The results of all these moves has been that many L.E.A.'s have renamed their remedial teams and changed their model of provision. They have moved away from withdrawing children for specialist tuition towards supporting the class teacher with advice and resources, so that special help could be given to children in their classrooms. This is reinforced by a recent H.M.I. report on the support services (1989) which states,

"in each L.E.A. there was the expectation that the service would develop new roles and expand its field of operation." (p3)

Gipps and Goldstein (1984) sent a questionnaire to every L.E.A. in England and Wales asking about their support services for children with learning difficulties. (They had an 87% response.) They state that two thirds of L.E.A.'s reported that their pattern of provision had in fact changed over the previous five years. Of those that gave details, a move towards working with the class teacher as client, was the most common change (26%). The next most frequent change was ceasing to withdraw individual children to units outside the ordinary school. Also, the majority of L.E.A.s (79%) had made changes in their support staffing over the previous five years.

It is obvious from this research that remedial education had been in a state of change prior to Warnock, and it certainly altered in the ensuing years. Of all the systems used in the past, and those that are in place now, which give the best deal for the student? Gipps and Gross (1987) state in their conclusion that

"we know from other research that the best learning environment is one that maximises concentration, interest, time on task and higher order cognitive interactions between adult and child." (p48)

They later make the point that such a learning environment could be optimised by

"involving teachers in the development and use of assessment and teaching materials, by large in-service training programmes, and the acceptance of a particular teaching approach." (p48)

As all of these were intended to occur in T.V.E.I. as well as having a maximum class size of sixteen (another factor mentioned by the authors), this investigation would therefore hope to draw conclusions as to the importance of these criteria in the teaching of pupils with S.E.N.s.
So far we have investigated the concept of S.E.N.s, the next stage is to determine the implications, within this field for staff, which in turn will effect teacher attitude, and therefore teacher/pupil interaction. Most of the research carried out in this country on teacher attitude to pupils with S.E.N.s is concerned with integration. Numerous studies have investigated class teacher perception of these pupils and their attitude to teaching them in the mainstream setting. Reviews of these studies such as Alexander and Strain (1978), Horne (1979) and Baker and Gottlieb (1980) paint a negative picture. Attitudes reported were generally unfavourable to mainstreaming and many teachers and other professionals were found to perceive pupils with S.E.N.s in a negative light. Also a study by Panda and Bartel (1972) stated that teachers asked to evaluate pupils along various dimensions rated those with special needs lower than others on all factors. Apart from these generalizations, what of teacher attitudes in specific situations?

Hegarty, Pocklington and Lucas (1981) examined various situations relating to classroom and general contact. They advanced a number of statements as a result, and in particular found a definite pattern of attitude change emerged.

a) They found that initial reactions were frequently negative and were only gradually replaced by more positive ones. While most staff were prepared to have pupils with special needs in their classes or teaching groups, it was without any great enthusiasm for the most part.

b) That while teachers generally accepted the presence of pupils with special needs in their classes, this did not mean that they always took them seriously for teaching purposes.

c) The category of need was an important aspect, in that teachers responded more or less favourably to different groups of pupils. Pupils with moderate learning difficulties were perceived as being comparable with the schools existing slow learners, whereas the pupils with severe learning difficulties were perceived as being entirely different.

It would seem from this study that pupils with learning difficulties would be accepted as part of a class in mainstream, either with reluctance or with moderate acceptance, but usually without the will to take them seriously for teaching purposes.

One science teacher affirmed that the presence of pupils with learning difficulties in his lesson was justified “in terms of social integration .... that is a good enough reason to be there” (p460) (Hegarty, Pocklington, Lucas 1981).

Would this reluctance to take seriously pupils with moderate learning difficulties in the teaching situation occur in T.V.E.I. or would some of the seemingly unique features of T.V.E.I. help to overcome this problem? This begs many questions:

1) Would teachers’ attitudes to pupils with S.E.N.s differ from T.V.E.I. to non T.V.E.I. lessons?
2) Would the fact that it was to be across the ability range help?
3) Would the fact that S.E.N.s had been taken into account during the planning of the scheme help?
4) Would the fact that the staff had been involved in the planning of the various courses help?
5) Would the fact that the pupils would be working for a great deal of the time in groups help?
6) Would the hoped for change in teaching style to a child centred approach help?
7) Would the fact that each pupil had a T.V.E.I. tutor help?
8) Would the group size of a maximum of sixteen help?
9) Would the fact that all the pupils were following the same course and not "sunk" off help?

These are all questions that were to be answered or at least kept in mind during the research.

Having investigated T.V.E.I. and S.E.N.s, the next stage of the investigation needed to search for any links between the two. Gipps and Gross (1987) mention four criteria which would give the "best possible deal" for the pupil with learning difficulties. These are:

1) involving the teachers in the development and use of assessment and teaching materials.
2) large scale in-service.
3) the acceptance of a particular teaching style.
4) smaller classes.

If these are vital to teaching pupils with learning difficulties are they within T.V.E.I.?

In his article Bradley (1985/6) is generally critical of T.V.E.I. making the point that the government did not try to find out what was needed by consultation and evaluation. The L.E.A.s were told there was a need for change, and that this change was to bring about a curriculum with more technical and vocational relevance for 14 to 18 year olds. Other criticisms he levels at T.V.E.I. are that it is too narrow and restrictive and only provides a watered down curriculum, with the aim to keep the low ability masses socially controlled. He further criticizes T.V.E.I. for relying too heavily on "learning by doing" stating that T.V.E.I. staff must encourage students to develop their theoretical understanding. Though even from such a critical author, T.V.E.I. is given some credit. He mentions a change in teaching style, curriculum development and improved in-service. Therefore, three of the four criteria mentioned by Gipps and Gross
needed to optimise the learning environment, are said to be taking place within T.V.E.I. and the fourth is inherent within T.V.E.I. as the group size is set at a maximum of sixteen.

The four points mentioned above may well be very important for the successful teaching of pupils with learning difficulties but there is one critical area which has been omitted, and that is attitude, both of teachers and students. Teachers attitude and the self-fulfilling prophecy will be investigated at a later stage, but what of teacher and pupil attitude to curriculum change in a specific context, such as T.V.E.I. Fullan (1982) suggests that there are four patterns of student response to change, these are - indifference, confusion, temporary escape from boredom and heightened interest. It will be interesting to highlight during the research which one T.V.E.I. can be "filed" under. But what of teachers attitude to change? Bennett (1980) in his article states that

"we may consider the perception of curriculum innovation as the process of classifying, recognising and interpreting diverse stimulus, events, objects, persons and concepts associated with the innovation - however novelty creates conflict. This is because curriculum innovation imports into the teacher's world a number of new concepts about teaching and the curriculum. Moreover, conflict generates uncertainty. Such uncertainty may be expected to arouse teachers and stimulate them to react to the innovation. But in which way will they react? Will it provide an antidote to the boredom and sameness of school life, or will it provoke resistance?"

Therefore it was decided to concentrate attention upon three main issues.

1) are the four criteria mentioned by Gipps and Gross which are essential for effective learning to take place identifiable within Cumbria's T.V.E.I. scheme?

2) what are teachers attitudes to T.V.E.I. and to S.E.N.s?

3) what are pupils attitudes to T.V.E.I.?

While attempting to discover teachers' attitudes to T.V.E.I. and S.E.N.s it will have to be remembered that in one case attitudes to a curriculum innovation are being sought, while in the other attitudes to a particular group of students are being sought. Kelly's Personal Construct Theory as well as interviews and observation were used to ascertain teachers' attitudes to S.E.N. whereas interviews and observation were used for teachers' attitudes towards T.V.E.I. in general. It was first envisaged that personality types would have to be isolated, to be able to determine if the attitudes shown were due to the way that T.V.E.I. was implemented, and not down to personality traits. But this line of enquiry was abandoned when Bennett's (1980) article was investigated. In the article he investigated personality types and the work of Rokeach (1960), Eysenck (1949) and Hull, Kester and Martin (1973) and stated that:

"moreover, the dynamics of teacher attitudes to curriculum innovation seem to be such that we should not expect very strong associations between the attitudes and basic personality types." (p75)
Chapter 2
The Technical and Vocational Educational Initiative

(a) Introduction to T.V.E.I.

Having examined what has been happening under the umbrella of special educational needs, and whether the curriculum offered to special needs students was broad, balanced and relevant, there is now a need to investigate T.V.E.I. to determine if this initiative can redress the balance of curriculum entitlement for pupils with special educational needs.

The following chapter investigates the historical background of T.V.E.I., its specific aims, the procedures laid down for its implementation, and T.V.E.I.'s place in a broad and balanced curriculum.

The Technical and Vocational Educational Initiative was announced in Parliament by the Prime Minister in November 1982. The Manpower Service Commission was asked to administer the Initiative. The initiative itself may be summed up by a quote from Lord Young, the then chairman of the M.S.C., when inviting applications for participation in T.V.E.I.

"First, our general objective is to widen and enrich the curriculum in such a way that will help young people to prepare for the world of work, and to develop skills and interests, including creative abilities, that will help them to lead a fuller life and be able to contribute more to the life of the community.

Secondly, we are in the business of helping students to 'learn to learn'. In a time of rapid technological change, the extent to which particular occupational skills are required will change. What is important about this Initiative is that youngsters should receive an education which will enable them to adapt to the changing occupational environment". 28th January 1983 in T.V.E.I. Operating Manual.

In 1983 fourteen L.E.A.'s were allowed to pilot the scheme. The following year, they were joined by a further 48 L.E.A.'s.

Since its inception in schools, in 1983 T.V.E.I. has been the object of much controversy. At one level, debate has focused on the manner and mode by which the project has sought to inject greater vocational realism into the curriculum. On another, central government in the running of schools and colleges, normally through M.S.C. intervention, has drawn attention to wider changes in policy and decision making in education.

Gleeson (1987) states,

"Both government and M.S.C. have more recently sought to increase awareness about changes in the labour market via schooling. According to Youthaid (Bulletin, April 1984) the government views the M.S.C. as a means of introducing market-place realities into the world of education."
Vocational realism has become in certain quarters, the order of the day. Since the so called "Great Education Debate" (1976-9), the M.S.C. has been at the forefront of government training policy directly intervening in curriculum development, L.E.A. policy and links between school/college and work." (p3)

If this then is the general philosophy of T.V.E.I. what then are the specifics?

The scheme was, according to the M.S.C.'s operating manual:

2.1
- a pilot scheme
- within the education system
- for young people of both sexes
- across the ability range
- voluntary

2.2
Each project must:
- provide a full time programme
- offer a progressive four year course combining general
  with technical and vocational education
- commence at fourteen
- be broad based
- include planned work experience
- lead to nationally recognised qualifications

2.3
Each project and the initiative as a whole must be carefully monitored and evaluated.

2.4
The purpose of the initiative was to explore and test ways of organising and managing readily replicable programmes of technical and vocational education for young people across the ability range.

One of the features of T.V.E.I. that has contributed substantially to its apparent success has been the idea of locally devised schemes that are designed to meet nationally laid down criteria. Each L.E.A. as part of its bid to become one of the pilot projects, produced a lengthy document,
conforming, to guidelines laid down by the M.S.C. but again showing great diversity of plan and imagination, which listed the way in which curriculum would be "enhanced". These documents generally detailed the new courses to be taught under T.V.E.I. but would also cover areas such as:

a) T.V.E.I.'s place in a broad and balanced curriculum.
b) Equal opportunities.
c) Four year programme with built-in pathways at sixteen.
d) Preparation for adult life in a rapidly changing society.
e) Clear and specific curriculum objectives.
f) Encouragement of initiative, problem solving activities and personal development.
g) Balance between general and vocational elements.
h) Technical and vocational elements broadly related to potential career opportunities.
i) Planned work experience.
j) Courses linked with subsequent education and training opportunities.
k) Careers education and counselling.
l) Regular assessment and discussion of progress (record of achievement).
m) Five year involvement for any one school.

Surrounding all of this, and with some uniformity as a result of fairly rare specificity from the M.S.C., was a county management structure which involved a Project Director or Co-ordinator, to be appointed at a senior level, a management committee composed of county councillors, school heads, college principals and an M.S.C. representative and a school co-ordinator to take responsibility at school level. So far we have investigated the National guidelines laid down for the implementation of T.V.E.I. The next stage was to research the actual structures used by Cumbria to implement T.V.E.I. as there was a great deal of flexibility allowed in the ways in which L.E.A.'s actually took T.V.E.I. into the classroom. This aspect will be investigated in the next chapter, as it is obvious that the organisational structure implemented to deliver T.V.E.I. would have a great effect on the curriculum delivery and the chances of success or failure of the innovation.
(b) The Organisation of T.V.E.I.

The organisation becomes important when one realizes that it may be expected to influence the curriculum experience offered to students. As this organisation can change from authority to authority and as it may be a major factor in curricular development and presentation, any investigation should first of all cover the main systems in use in T.V.E.I. and then go on to discuss the system Cumbria has used and to formulate a hypothesis to investigate whether this may or may not have influenced the curriculum.

The first impression gained when investigating T.V.E.I. organisation across the country was one of differentiation and the amount of varying practices used in the schemes.

There was no T.V.E.I. organisation structure imposed upon the L.E.A. when funds were made available, although this was hardly surprising from an initiative that was promoting problem solving and individuality. Each local authority which sought funding had to submit a proposal setting out what it could do to promote the aims of this general education initiative. Neither the forms of the proposals nor the processes which their production involved were in any way prescribed.

It is obvious from the above that as there was no "straight jacket": each authority would produce its own scheme and this meant that there would be no one form of organisation for the implementation of T.V.E.I.

Saunders (1986) states,

"while the overall administration of T.V.E.I. has been centrally controlled, the detailed shape of T.V.E.I. curricula and the day to day operational characteristics have been more or less in the hands of the local users, i.e. a combination of L.E.A., inter school co-operation and individual school design. T.V.E.I. curricula under broad orientations offered by the M.S.C. have been devised by the senior management of schools or, in some cases, by course writing teams, amalgamated by L.E.A. and senior managers and combined into L.E.A. proposals to the M.S.C. for funding. At school level, consultation with other members of staff concerning participation is patchy. In some cases senior staff have expressed the ideas of staff in their school submission, while in other cases staff were not consulted but informed of school involvement after the decision to adopt had been made.

In most cases curriculum development, once adoption had occurred, has continued at school and project level. L.E.A.'s choice of schools varied between self-selection and strategic decisions by L.E.A. officials involving combinations of schools and reflecting different types (size, location, denomination, working or middle class catchment etc.)" (p2)

The three types of organisational structure which seem to have been identified (but with slightly varying names) by Beattie (1986), Saunders (1986), and Barnes et al (1987) are:

Central Control
The local authority sets up a structure which gives schools the task of carrying out decisions made elsewhere.

**Collaborative Control**

The authority uses its power to set up structures which encourage groups of teachers from different schools to meet together and take responsibility for instituting change.

**Diffused Control**

The authority effectively delegates power to the individual schools.

Obviously the way that the central organisation of T.V.E.I. was set up would influence the way that the project director would work. This in turn would or could effect the headteacher's style of management and organisation, which in turn would effect the school T.V.E.I. co-ordinator which in turn would effect the staff teaching T.V.E.I.

Various authors have stated that research shows that teachers' morale, motivation, commitment and job satisfaction depend, to a large extent, upon the managerial context in which they work. (Hunter and Heighway, 1980; Nias, 1980; Sikes, 1984; Measor and Woods 1985).

Likewise, motivation, commitment and efficient and relevant management and organisation are essential (although not the only) ingredients for the successful implementation of curricular pedagogical and organisational innovation. (Ball, 1981; Ribbens and Ribbens, 1984; Richardson, 1973; Shipman, 1973; Sikes, 1984; Stenhouse, 1983; Watts, 1973).

Therefore, as the managerial context and organisation are very important factors in the implementation of an innovation, it would seem worthwhile to investigate recent T.V.E.I. evaluation reports which provide evidence of the way in which the three types of organisation mentioned, namely: central, collaborative, and diffused, can and do effect the curriculum.

1) **Central Control**

This may be exerted along a number of dimensions. These may include control of curriculum content, teaching style, assessment procedure, staffing, finance, and resources. Control along one dimension does not imply control along others, although it must be remembered that there is some level of control in all schemes as all local authorities had to negotiate with the M.S.C. and appoint a T.V.E.I. co-ordinator.

Two examples of how central control can affect the scheme come from the T.V.E.I. Curriculum 14-16 Evaluation Report (1986).

"The effect of one form of central control can be seen in school 0, where a political decision to reinforce L.E.A. power by centralising control of the project led to control being exerted along
each of the dimensions mentioned above. In curriculum terms this was achieved through the appointment of a large central team, with the responsibility for curriculum decisions and for transmitting these to the teachers in the schools and training them."

"In school 0 this led to confrontation between the teachers and the members of the central team who taught in the school but who were not part of it. (The report did not enlarge on exactly what this confrontation was). This contained their attempts to influence the curriculum and made them ineffective."

Another example of unhappy results derived from central control appeared in school I. The curriculum for each of the participating schools had been centrally planned for the project. Amongst the arrangements was the time-tabling of supervised "personal assignment" time. The intention was that in specialized courses the teachers having taught the appropriate skills, would then institute projects which the students would then have the responsibility of carrying out for themselves, partly during the P.A. periods. Whether the teachers in school I were out of sympathy with the change in pedagogy, or had never understood its purpose and nature, they had not carried out the central teams' intentions, so that the periods were used for other purposes, such as "remedial English."

2) Collaborative Control

Many of the most valuable outcomes of T.V.E.I. have been generated by groups of teachers who have met to review the curriculum in a particular area of subject matter and have gone on to develop new courses and materials.

T.V.E.I. Curriculum 14-16 gives examples of this;

"School I offers two examples of this in its course in P.S.E. and its successful use of materials developed by the modular technology consortium."

This document goes on to give numerous examples of the benefits of this collective approach to curriculum planning. Cumbria was one of the first L.E.A.'s to institute curriculum planning groups and in fact stated in its T.V.E.I. submission that "T.V.E.I. is to be instigated via curriculum working groups who will prepare the outline for modules and options."

It is a fact that in Cumbria many teachers have been involved in the planning of T.V.E.I., the following section examines evidence regarding links between involvement in planning and effectiveness of teaching.

Curriculum 14-16 (1986) throws some light onto this area stating that "school K was reaping the benefits in its business studies of the fact that before the beginning of T.V.E.I. a local authority adviser had brought together a number of teachers of business studies to develop an innovative course. The business studies course from this local authority was in use in two other schools
which we have visited, though, in one it was no more than a pale imitation of the original. Teachers are most likely to put a new approach into operation successfully when they themselves have been actively engaged in developing it, and discovering how it can be put into effect."

Having investigated how the imposed structure of T.V.E.I. management may effect the curriculum delivery within T.V.E.I., it is important also to ascertain the varying effects that individual school organisation has on the delivery of T.V.E.I. Saunders (1986) identified three models of school responses. In some schools T.V.E.I. has provided an opportunity to begin to revamp the whole curriculum of the 14-18 age range, involving changes in organisation, content, assessment and teaching approaches. This option he has named an Adaptive Extension or strong interpretation of T.V.E.I. For some schools T.V.E.I. has been one of a number of competing concerns and thus its implementation is characterized by Accommodation. For these projects the potential benefits of T.V.E.I. tend to be assessed and activated slowly, with innovatory elements being introduced continuously over time.

For other schools, T.V.E.I. has offered an injection of funds, but the general implications in curriculum, organisation, time-tabling and teaching approaches have been muted, with extensions of the option choices being the principal manifestation of T.V.E.I. presence in the curriculum. Saunders has named this system Containment, or weak version of T.V.E.I.

As these three styles exists and can do so, within any L.E.A. organisational structure, it was important to look for evidence of how these three patterns of accommodation can influence the curricular experience of T.V.E.I. students within a school. At the moment the 14-16 T.V.E.I Evaluation paper based on case studies within twelve schools gives the most recent and widespread evaluation data. It must be stated that these might be the "ideal" patterns, but it is quite obvious that the lines must be blurred in many cases. Despite these difficulties the evaluation team attempted to allocate each of the twelve schools to one or another of the categories.

"We found that seven of the schools have contained T.V.E.I. while in the remaining five it had been accommodated. It is perhaps significant that we did not find any examples of adaptive extension". (p13)

Whilst this may seem like a fairly damning statement, it may well be explained by the size of the sample.

One of the 11-16 comprehensives in the Cumbrian scheme has used T.V.E.I. as an opportunity to review and reshape the 14-16 curriculum leading to a modular approach across the whole curriculum. Also the research school has because of its belief in the success of T.V.E.I., and its own peculiar problems of size, totally reorganized the 14-18 curriculum along T.V.E.I. lines.
The report goes on to give examples of schools which contained T.V.E.I. In one school it had been used to establish new courses for the low-ability pupils, whilst the mainstream academic curriculum, which catered for the vast majority of pupils, was left untouched. It would seem that this school would have a problem in showing that T.V.E.I. was working across the ability range, which is an M.S.C. criteria, for acceptance of authority T.V.E.I. schemes.

Finally on the subject of patterns of accommodation, the report cites incidences of T.V.E.I. leading to schools embarking upon significant curriculum innovations. These however were restricted to the T.V.E.I. cohort and had minimal influence on the rest of the 14-18 curriculum, therefore they were classed as having contained T.V.E.I.

Having investigated how T.V.E.I. could be, and has been, accommodated at school level, this now leads to consideration of how this would affect:

1) The teachers
2) The pupils

1) The deployment of staff in T.V.E.I. is again central to how T.V.E.I. has been accommodated within the school and must have a bearing on curriculum presentation and to a lesser degree content.

a) Are staff picked or do they volunteer?

b) Is the school co-ordinator given first choice of staff or allocated the "left-overs?"

c) Are there co-operative systems built into the school's organization eg. team teaching, cross curricular work?

All of these would seem vital to any innovation, and T.V.E.I. is no different to other innovations in this respect.

Whatever system a school had used to implement T.V.E.I. it is still possible for T.V.E.I. staff to be a separate group and could therefore feel isolated.

It has been argued that the most successful T.V.E.I. schemes have relied upon curriculum groups drawn from all the participating institutions, and that successful schools involved in T.V.E.I. have set up school curriculum groups. The T.V.E.I. Curriculum 14-16 (1986) gives an example of a school where this practice was in operation but: "although other aspects of the scheme in school R were impressive, it was the success of the individually negotiated cross curricular assignments that all students were required to complete which played the crucial part, both in generating a highly cohesive team, and enabling students to have an unusually strong
sense of ownership of their work. Against this must, however, be placed the fact that the teachers who composed this very successful group were in effect isolated from their colleagues, and felt to be so. The project submission had proposed that over the years most of the staff would be involved in teaching the T.V.E.I. groups, but the head teacher had not, in fact, put this into effect. Thus the positive results of a collaborative initiative were partly nullified by an administrative strategy that effectively isolated the teaching team" (p17).

This gives an example of how an organization can defeat good intentions. There is also the problem of an organizational set up being geared towards a certain goal, eg. linking of subjects across the curriculum. If the time is not set aside for the staff concerned to meet and discuss content, methods of teaching, etc., then the result will be two teachers teaching two separate subjects, in a different style which are linked together on the timetable. There has to be a whole school approach where all the staff know what is expected of them. If not, the students will never know what is expected of them, they will enter a classroom and begin to wonder if it is a T.V.E.I. type lesson where they are expected to contribute, or is it a "normal" lesson where they have to listen and take the relevant notes. Whereas it is obvious that both types of teaching are needed, it would help a great deal if the students knew what is expected of them in all lessons. This is an area that will have to be considered during the research. Do the students feel that T.V.E.I. is different in its teaching approach and do they know what is expected of them in all lessons?

One interesting fact emerged from the findings of the evaluation teams annual report (Newcastle University, 1988) in that:

"It is to be expected that the more able students taking more academic courses would receive more didactive lessons and the data supports this - it was the less able T.V.E.I. pupils who especially reported the least listening, reading etc.". (p16)

This would seem to suggest either;

a) streaming within T.V.E.I. to accommodate differing teaching styles

or

b) differing teaching styles within the same classroom.

c) differing teaching styles from school to school with a majority of less able or more able students in a particular establishment.
Chapter 2

(c) Cumbria's T.V.E.I. scheme

While full details of the Cumbrian T.V.E.I. submission is given in Appendix (1) it will be helpful to outline some main features which have influenced the present research.

The submission stated that the Cumbrian T.V.E.I. scheme would have five major features:

1) The submission includes a mix of rural and urban schools and colleges, which will allow developments to be extended into other parts of the county which have a similar heterogenous nature. The inclusion of two small rural schools is deliberate in that it will facilitate deliberate discrimination.

2) In the proposed areas some significant advances have been made in the development of school/industry links, microcomputing, design and technology and school college links. These provide a sound foundation for enrichment and extension.

3) In the project it is intended that the majority of the equipment will be used on a "consortium" basis by shared use and by the deployment of mobile work stations in buses. This will ensure their effective and efficient use in a mixed urban and rural area.

4) Fundamental to the submission is the development of a new teaching approach, which encourages teacher assisted learning, rather than teacher directed learning.

5) The submission includes one of the authority's special schools in Carlisle and this will foster the extension of links with schools and colleges and the opportunity for integration of staff and students.

These then were some of the general aims, but which schools, colleges and students were to be involved?

The project was to involve seven schools and three colleges in the north of Cumbria. There were to be five 11-18 comprehensive, one 11-16 comprehensive and one group (7s) special school for pupils with moderate learning difficulties. The three colleges serving this area are Carlisle Technical College, the Cumbria College of Art and Design (in Carlisle) and Newton Rigg College of Agriculture, near Penrith. 25% of student time each week was to be devoted to T.V.E.I. There were to be four features which were to be common in all the participating schools. These were -

1) Modules to develop skills.

2) Options based on project work and problem solving.

3) Work experience and an understanding of industry and commerce.
4) Active tutorial support for students.

The initial planning for T.V.E.I. was to take place in curriculum planning groups, each group consisting of a representative of each institution and on some occasions helped by an outside expert. Even with the problem of size, the special school made the decision that it would be involved in all curriculum planning groups. Obviously this meant that some members of staff were involved in more than one group. I, myself, was involved in eight groups at one time or another. Though this meant a great deal of extra work it had two major benefits in that the planning groups all had to take a whole ability range approach to planning and I was able to gain a unique overview of T.V.E.I. across all schools.

These then were Cumbria's intentions as regards the introduction of T.V.E.I. and its anticipated areas of success and development. Four years on are there any indications of its success or failure?

During this time there have been four major forms of evaluation carried out by:

1) the M.S.C. and concerned primarily with data collection.

2) Newcastle University (an M.S.C. directive, all pilots to be evaluated) which is concerned with all aspects of the innovation.

3) the Authority's Advisory Service to try and determine the value of the pilot.

4) the T.V.E.I. school co-ordinators in conjunction with the T.V.E.I. central team, which focused on particular areas of interest, eg. industry links, learning difficulties, management structure. Whereas this research will be investigating all these evaluations at some stage, the present discussion concentrates on the evaluation carried out by the team from Newcastle University.

It would seem from its submission that Cumbria had five major aims in mind for T.V.E.I. Some of these aims were mentioned as major features in the submission, others kept re-occurring in different sections of the submission. These five major aims are:

1) to facilitate a change in teaching style to a more teacher assisted mode, with more group work and problem solving.

2) to explore means of maximising use of equipment by providing mobile work stations.

3) to enhance pupil motivation and gain the support of parents.

4) to ascertain if it was possible to expand and extend the good work already carried out in the areas of C.D.T., microcomputers, industry links, school/college links and the links between the urban and rural schools.
5) to enhance links between the special school and the comprehensives and colleges in the scheme, whilst also looking at means of fostering integration of staff and pupils from the special school.

Each of the above areas will be investigated to determine the impact of the innovation within the T.V.E.I. schools. As these were the five main aims of the Cumbrian scheme it seemed appropriate to investigate these areas initially. This was achieved by investigating what conclusions, the team from the University of Newcastle came to relating to these five areas of concern. The evaluation report used is the last full report available, that being from 1987.

1) This was concerned with teaching style, problem solving and group work. The report states that:

"Several items were designed to give an indication of the extent to which T.V.E.I. style learning was taking place as against a more formal/didactic approach. Overall there were no clear differences here - but T.V.E.I. students perceived their lessons being slightly less didactic. However there does seem to have been a general fall in the use of didactic methods between Pre and Post-test with a drop in "listening to the teacher", "writing" etc. (this is encouraging and suggests that changes are occurring in the classroom)" (p16)

On problem solving the report states that,

"overall a fall in problem solving activity was reported by T.V.E.I. students between Pre and Post-test, with an increase for non T.V.E.I. students. However, although this change does seem to have occurred, there were no significant differences between T.V.E.I./non T.V.E.I., or between schools in the general level of this activity. (This fall may perhaps be interpreted as a quite reasonable response of teachers and students to the more imminent examinations and a desire to consolidate the syllabus in preparation)." (p17)

As regards group work the report states,

"some items asked how often students worked in groups and how often on their own. Since group work is generally seen as one aspect of experiential learning and is stressed in T.V.E.I. we might expect to find evidence of this emphasis. Both high and low ability T.V.E.I. pupils reported doing more group work and the amount increased over the period between the two tests, whereas for non T.V.E.I. pupils it decreased."

2) This area of the report concerned itself with the use of equipment and the mobile work stations. The report touches on this and states that,

"T.V.E.I. provided hardware and it is to be expected that there would be an initial rush to use it. This seems to have settled down. There was a general fall in the use of equipment reported although T.V.E.I. students still reported more use with the general level approaching "often". The more able and the girls reported more use." (p17)

3) This concerned pupil motivation and the support of parents. On the area of pupil motivation the report mentions that,
"there was no evidence that T.V.E.I. pupils overall found their lessons more or less interesting. On the other hand we do not know how interested they would have been without T.V.E.I." (p18)

Some teachers have observed an increased motivation in some T.V.E.I. students, and there have been several instances where teachers have admitted surprise at the amount and quality of work some previously unmotivated students have produced. There was a general fall in effort reported, but T.V.E.I. students still reported slightly more effort.

In the area of parental interest/support the report states that:

"new items in the Post test asked how much students had discussed their progress at school with their parents and their teachers. There were no significant differences between T.V.E.I. and non/T.V.E.I. or between schools but T.V.E.I. students reported more discussion with their parents, possibly an indication that T.V.E.I. has promoted or at least produced parental interest." (p19)

4) This section of the report was concerned with the extension of good work already carried out in certain subject areas and various forms of links eg. rural/urban school/industry. The school/industry link was to be expanded by various means not least of which was by the appointment of a schools/industry liaison teacher to the central T.V.E.I. team. The Newcastle evaluation team did look at work experience and preparation for work. They found that among T.V.E.I. students only 8% reported no work experience, 40% reported 1-5 days, 39% reported 6-10 days, 8% reported 11-15 days and 5% 16+ days. This compared to a non T.V.E.I. take up of, no work experience 9%, 1-5 days 83%, 6-10 days 2%, 11-15 days 1% and 16+ days 5%. As the report states, 

"clearly T.V.E.I. students have had on average more work experience, with only 8% claiming to have had none. This level of work experience is a considerable achievement and is considerably better than has occurred in other comparable L.E.A.'s and bearing in mind the difficulty of organisation, particularly in rural areas is a considerable achievement." (p20)

5) This was concerned with links between the comprehensives in the scheme and the special school and also the integration of both staff and pupils. The Newcastle evaluation team did not look specifically at special needs and though some of their conclusions will be used, most of the evaluation data will come from the two separate works carried out by the school co-ordinators and by the Advisory service.

The Authority's Advisory Service Report (1987) states that,

"the inclusion of York school with the project has demonstrated how much of the T.V.E.I. work can be enhanced to enable a wider ability range to participate. In the next phase of the project this experience both in pre and post sixteen, needs to be applied more widely throughout each of the institutions to enable an even greater integration of those children who have special educational needs." (p18)
This lack of integration of pupils with learning difficulties was highlighted by both the school co-ordinators in their evaluation of special educational needs and also by H.M.I. on their visit to the Authority to look at special educational needs within T.V.E.I.

From these reports it is clear that there has been little integration of pupils from the special school within the pilot phase of T.V.E.I. Having investigated these five major aims of the Cumbrian T.V.E.I. scheme, there was now a need to research the literature available which would enable this study to investigate the areas of concern mentioned in the previous chapters.
Chapter 3
Research Issues and Methodology

a) Review of Literature

"Research methodology in education, and in the social sciences generally, has been changing very rapidly in recent years: there are now many different models available and one of the tasks of the researcher is to identify the one which is most appropriate to the particular problem and circumstances of the research project". (Brandes, 1985) (p20)

Brandes (1985) when investigating this same area stated that,

"to simplify the procedure of comparing possible research paradigms, we will examine two styles of opposite ends of a continuum, knowing that there are many other models which fall between the two." (p21)

The two models mentioned by Nisbett, and expanded upon by Brandes were:

a) The Scientific Model

This involves isolating observable phenomena from which a clear hypothesis can be constructed. Something occurs, the scientist notices it, and seeks to explain it. Thus an experiment is devised to test the hypothesis and, as a result of the evidence gained from the experiment, the hypothesis can be refuted or verified.

b) The New Paradigm

This provides many research models which have differences between them; the factor which unites them is a much closer relationship between the researcher and the researched than is usual in the experimental method.

Parlett and Dearden (1977) comment,

"the evaluator's task is not to come down definitely in favour of or against the particular innovation scheme studied, but rather to elucidate and clarify a number of related issues that have to do with the operation of the scheme in practice, its philosophy, its perceived advantages and disadvantages and its intended and unintended consequences. It aims to provide information and insight for a wide audience of interested parties". (p46)

As this research will be seeking to describe and explain, rather than measure and predict, the second of the models above would seem to be more appropriate. What could be the strengths of this particular approach, Coffield (1980) states,

"There is no one Royal road to truth in the social sciences..... All methods have their strengths and weaknesses and all are, in varying degrees, messy and unsatisfactory because life is messy and unsatisfactory."

"The aims of illuminative evaluation are to study the innovatory programme, how it is influenced by the various school situations in which it is applied; what those directly concerned regard as its disadvantages; and how students' intellectual tasks and academic experiences are most affected. It aims to discover and document what it is like to be participating within the scheme, whether as a teacher or as a pupil; and, in addition, to discern and discuss the innovations most significant
features, recurring concomitants, and critical process. In short it seeks to address and illuminate a complex array of questions.”
Parlett and Hamilton (1972) (p9)

Parlett and Hamilton feel that characteristically in illuminative evaluation there are three stages; investigators observe, inquire further, and then seek to explain. Within this three stage framework an information profile is assembled, using data collected from four areas:

1) Observation;
2) Interviews;
3) Questionnaires and tests;
4) Documentary and background source.

1) Observation

The purpose being to build up a continuous record of on going events, transactions and informed remarks, and more specifically to collect data on the following:

a) General description of lessons.
b) Notes on individual pupils, those listed as having learning difficulties.
c) Notes on the class as a whole.
d) Verbatim notes.

However, one must be careful for, as Parlett and Hamilton (1972) point out,

"they record only surface behaviour, they do not facilitate the uncovering of underlying more meaningful features." (p20)

This could be a problem if systematic observation was used in isolation, but it will be only one of a number of strategies used to collect data.

2) Interviews

Discovering the views of participants is crucial to assessing the impact of an innovation. Therefore all pupils and staff involved in the fourth year T.V.E.I. programme were interviewed. Though informal conversations with staff and pupils will be valuable sources of information, there is still a place for formal interviewing. The importance of interviewing deserves a more detailed investigation and will therefore be dealt with later in this section.

3) Questionnaires and Test Data

The only data that was available prior to going into the research school was a copy of the schools information booklet for parents, explaining how the school reacts to pupils with learning difficulties. The staff questionnaire dealt solely with ability within their T.V.E.I. group. The questionnaire used was the one used by Moses (1982) which asks the staff, "which pupils in
questionnaire used was the one used by Moses (1982) which asks the staff, "which pupils in
your class do you feel have special educational needs?". It then lists five areas of special
educational needs. It was felt that these questions were specific enough for the teacher to
know the types of children that were of interest, but would also give them enough scope to
express their own opinions about special needs. It was important not to direct the teachers too
rigidly because their own nominations were of prime importance.

4) Documentary and Background Information

As Parlett and Hamilton (1972) state,

"Innovations do not arise unheralded. They are preceded by committee
minutes, funding proposals, consultants reports." (p23)

Thus it is with T.V.E.I. and all the historical data together with any articles or reviews written
about T.V.E.I. will be investigated prior to going into the research school.

This form of research may help people to identify those procedures, those elements in the
educational effort, which seem to have desirable results. Though the authors are at pains to
point out that illuminative evaluation is not a standard methodological package but a general
research strategy. It aims to be both adaptable and eclectic. The choice of research tactics
follows not from research doctrine, but from decisions in each case as to the best available
techniques, the problem defines the methods, not vice versa.

No method (with its own built-in limitations) is used exclusively or in isolation; different
techniques are combined to throw light on a common problem, besides viewing the problem
from a number of angles, this "triangulation" approach also facilitates the cross checking of
otherwise tentative findings. Triangulation may be defined as the use of two or more methods
of data collection in the study of some aspect of human behaviour.

It is now necessary therefore to consider whether triangulation is relevant to this particular
research. Cohen and Manion (1985) state that:

"exclusive reliance on one method, therefore, may bias or distort the
researcher's picture of the particular slice of reality he is investigating. He
needs to be confident that the data generated are not simply artefacts of
one specific method of collection. And this confidence can only be achieved
as far as normative research is concerned when different methods of data
collection yield substantially the same results". (p254)

It may well be that in the field of education, so complex and involved is the teacher - learning
process in the context of the school that the single method approach yields only limited and
sometimes misleading data. Therefore it is necessary to consider the occasions when this
technique is particularly appropriate. Cohen and Manion (1985) list six instances when this
multi-method approach is appropriate:

1) When a more holistic view of educational outcomes is sought.
2) When a complex phenomenon requires elucidation i.e. comparative study of formal/informal classrooms.

3) When different methods of teaching are to be evaluated.

4) When a controversial aspect of education needs evaluating.

5) Where an established approach yields a limited picture.

6) Where a researcher is engaged in a case study.

The research reported in this thesis contains aspects of all six characteristics listed above, thus leading to the conclusion that the triangulation approach allied to illuminative evaluation would be most appropriate. The next step was then to find relevant, or recent, or both, research articles in which the authors were attempting to look at areas similar to the proposed research, or more importantly were using methods that could be replicated in some form.

Two such authors are Kagen and Grandgennett (1987) who were researching personality and teacher pupil interaction. They start by making the point that although much research has been carried out to document the significant relationships between personality traits of teachers and their classroom behaviour - most results have been inconclusive. They had used the Myers-Biggs Type Indicator and their results showed consistent relationships between teacher personality and their preferred teaching style. This article could be of major importance, especially when some of its findings were backed by Erdle et al (1985) in that 50% of the relationship between college teacher personality and their students rating of teacher effectiveness was mediated by the teachers' classroom behaviour. But when the M.B.T.I. and all the observation schedules were investigated in more detail it became increasingly obvious, that because of the time constraint, this procedure would be of little use.

Oldroyd and Tiller (1987) were investigating change from within, stating that people cannot be changed from outside, they have to develop themselves. Whereas, within T.V.E.I. it may be argued that much of the radical change has come from within, where schools have taken up the T.V.E.I. philosophy and moved along with the speed of the converted - the initial idea, framework (including evaluation) and funding, came from outside the school and outside the L.E.A.'s and even outside the D.E.S. Two relevant points came out of this article. Firstly, when 5th form pupils were asked the question; "the best way for me to learn would be?", the three most popular answers were:

1) More time working on my own and not so much time listening to the teacher.

2) Not using booklets.

3) Doing more practical work.
Secondly the article stated:

"observation of pupil encounters with staff around the school, extended, open-ended interviews with pupils, and a pupil produced interview about how they saw the school and staff all added to the conclusion that a serious mismatch existed between the intention of the school policies and the experiences of the pupils." (p18)

Moses (1982) was interested in how teachers assess pupils with S.E.N.'s and was also involved in much classroom observation.

As the research was also attempting to find out which pupils individual members of staff saw as having S.E.N.s there was a need to find some method of investigating teacher perceptions of their pupils.

The procedure for observing was structured but the article does throw up a very interesting point, in that the nominated (by the teacher) slow learners do rather less work than the average child but the difference is much greater during group work. As T.V.E.I. promotes group work, if Moses' results are transferable, and there has been no change in teaching style in T.V.E.I. then we are making the position of pupils with S.E.N.s much more acute by involving them in T.V.E.I.

Quicke (1986) was researching a triangulate evaluation of an innovation in personal and social education in a comprehensive school. It was an innovation where there was hope of a change in teaching style and for the students to become more involved - labelling, ability coding, teacher perceptions are all featured. Quicke's research method was illuminative, involving participant observation and formal and informal interviews, with staff and pupils, although there was still a need for some specific means of obtaining teacher views/perceptions/feelings about their pupils, linked to a research system similar to that of the authors.

A survey by Croll and Moses (1985) was in two parts, the first was a survey of S.E.N.s which was not really applicable, whereas the second, a classroom focused study of children with S.E.N.s was of some use. The aim was to study in more detail the performance and behaviour of pupils identified by their teachers as having S.E.N.s and to compare these with the performance and behaviour of their classmates. In this way it was intended to relate characteristics of the children, derived independently of the teacher's assessment. Systematic observation was used and the technique was based on Moses (1982). The pupil was coded at ten second intervals, one pupil at a time for a total of four minutes, or 24 codes. They were coded on activity, interaction with the teacher and fellow pupils. Also the nature of the class activity was coded whenever it changed. The teacher was also coded every ten seconds on, content, focus of attention and also particular interactions with coded children with positive and negative comments. Once again the constraint of time ruled out this method of systematic
observation. The questionnaire devised by Moses could be relevant to this particular research, it was to ascertain which pupils the staff felt had problems of,

1) slow learning
2) reading difficulties
3) behaviour problems
4) health problems
5) discipline problems
6) any other special need

Anderson (1987) in his study of the classroom environment raises an interesting point, in that achievement is influenced by factors outside the classroom and the school. The rest of the article was not relevant because of the size of the study (nine countries) but it is important to identify the variable to try and ensure that you are measuring what you set out to measure.

Scarth and Hammersly (1987) state that O.R.A.C.L.E. is the most extensive piece of classroom research to date. Beside repeatedly observing the classroom behaviour of pupils and subjecting them to tests, the researchers also observed the classroom practice of a number of teachers. But the authors question the coding of the teachers' questions, stating that the rules they use for identifying different types of question involve levels of ambiguity and inference that threaten the reliability of the study's major findings. They also point out that the authors are not clear about what is being measured, the same point that the previous author Anderson (1987) mentioned. The authors of the O.R.A.C.L.E. study, Croll and Galton (1986), feel that the focus on the questioning is limited because it leads to failure to see the overall coherence of the results - which they believe invalidates many of the criticisms; and this may be true. It still leaves the problem of the reliability of systematic observation to measure what is meant to be measured although Scarth and Hammersly (1986) themselves make the point that all research has the problem of showing that it is the factors specified by the theory which produced the effects observed and not other variables.

In their article on research methodologies, Fox and Gillham (1986) highlight the fact that educational research is changing and they also re-iterate the feelings of Anderson (1987) and Scarth and Hammersly (1986) over the problems of controlling variables. They state that:

"The act of controlling variables in complex research situations metamorphoses the situation in ways which cannot be anticipated or replicated. These changes then doom any attempted application of results to other situations." (p31)

The authors then seem to recommend an illuminative, triangulated approach, by putting forward the following argument:
"There is an assumption that the essence of a complex situation can be captured by what is observable and measurable. Yet it is universally acknowledged that in education the important events are in the head. It is fairly obvious that what is most readily observable and measurable is often the least important, most trivial low - inference behaviour. But it cannot be seriously argued that educationalists must throw out lock stock and barrel all the work undertaken in light of unsatisfactory and simplistic notions of research. Nor, indeed can it be suggested that the essential rigour of the researchers approach to data, the core of the research process, can be, or should be discarded. It is a question of remaining open to new methodologies and approaches in which the essential problems of human investigation are not sidestepped but confronted directly. Arguably the illuminative case study tells us more about reality than that statistical abstraction 'normality'." (p31)

While these articles had proved to be very good background material and had in some instances provided some worthwhile research strategies, there was still a need to find a reliable method of investigating teachers' attitudes/opinions that would fit into the overall research method.

Postlethwaite and Jaspers (1987) in their article on the use of personal constructs in educational research, state that the personal construct theory has been used in the past for research on teachers' attitudes, and that the modification of the triadic procedure allows personal construct methodology to be used as a tool for the experimental exploration of an issue, extending its application beyond description and diagnosis.

In fact, Kelly's (1955) view of education seems to have much in common with T.V.E.I. philosophy. Education in Kelly's view, reported in Cohen and Manion (1985)

"is necessarily experimental. Its ultimate goal is individual fulfilment and the maximising of individual potential. In emphasising the need for each individual to question and explore, construct theory implies a view of education that capitalises upon the child's natural motivation to engage in spontaneous learning activities. It follows that the teacher's task is to facilitate the child's ongoing exploration of the world rather than impose adult perspectives upon him." (p316)

But what are the characteristics of Kelly's method? Kelly proposes that each person has access to a limited number of constructs by means of which he evaluates the phenomena that constitutes his world. These phenomena - people, events, objects, ideas, institutions and so on, are known as elements. He further suggests that the constructs that each of us employ may be thought of as bi-polar, that is, capable of being defined in terms of polar objectives (good-bad) or polar phrases (makes me feel happy-makes me feel sad).

A number of different forms of repertory grid technique have been developed since Kelly's first formulation. All have the two essential characteristics in common: 1) constructs - the dimensions used by a person in conceptualising aspects of his world; 2) elements - the stimulus objects that the person evaluates in terms of the constructs he employs.
Since Kelly's original account of what he called "The Role Constructs Repertory Grid Test" several variations of the tests have been developed and used in different areas of research. It is the flexibility and adaptability of the repertory grid technique that makes it so attractive. A problem that often arises in the use of Kelly's rep. grid is elicited versus provided constructs. Ryle (1975) states,

"Kelly paid rather little attention to developmental and social processes."

Ryle observes his own concern was with the personal and not the social. Ryle believes that the individuality corollary would be strengthened by the additional statement that "persons resemble each other in their construction of events." Could the practice of providing constructs to subjects be reconciled with the individuality corollary assumptions?

A review of Adams-Webber (1970) of a substantial body of research suggest a qualified, "yes." Whereas, there are authors who do not agree fully with this theory (Fransella and Bannister). There are also those who question the method of eliciting constructs and who favour a grid free systematic approach to the elicitation of constructs. Yorke (1987) states that;

"if, despite all the reservations that can be entertained, one still regards accounts as primary evidence for the state of a teacher's cognitive structure, it becomes necessary to find a systematic method of eliciting them which is as free as possible from bias." (p46)

Yorke promotes a system where teachers could be asked to recall salient events and to indicate why the events were deemed to be salient, thereby providing a set of initial constructs. Further constructs may be elicited by asking the teacher to examine the list of elements and to indicate in ways in which he or she construed them to be related. It would, of course, be open to the respondent to add any further elements and associated constructs as the elicitation progressed.

Yorke goes on to make the point that,

"while it seems clear in the light of research that individuals prefer to use their own elicited constructs rather than provided dimensions to describe themselves and others ... the results of several studies suggest that normal subjects, at least, exhibit approximately the same degree of differentiation in using carefully selected supplied lists of objectives as when they employ their own elicited constructs." (p47)

Bannister and Mair (1968) support the use of supplied constructs stating that the use of elicited constructs alongside supplied ones can serve as a useful check on the meaningfulness of those that are provided, substantially lower inter-correlations between elicited and supplied constructs suggesting, perhaps, a lack of relevance of those provided by the researcher.

Probably the most frequently quoted use of Kelly's theories in an educational context has been by Nash (1973). In this study Nash investigated teachers' attitudes towards the pupils and how this influenced their performance in school. To explore this question, he chose Kelly's repertory grid for two reasons. Firstly he was interested to find out the teachers' own constructs, to
discover the world as the teacher saw it, rather than in terms of constructs imposed by the researcher. Secondly, personal construct theory had been widely used in educational practice. As he later stated;

"I am yet to be convinced that personal construct theory is as useful as its principal research tool the repertory grid. The grid technique seems to stand very well on its own" (p40)

Kelly's work, which seemed to fit so well into this particular research, prompted a further literature search for any other work in this field which might be better suited to this particular research. One piece of work that was of a somewhat similar style was by Osgood, Succi and Tannerbaum (1967). The authors make the point that the semantic differential is a very general way of obtaining a certain type of information. It is a very generalized technique of measurement which must be adapted to the requirement of each research problem. Standardization, and hence, comparability, lies in the allocation of concepts to a common set of general factors, despite variability in the particular concepts, and scales employed. The authors state that;

"It is the nature of the problem, then, that chiefly defines the class and form of concept to be used. The problems here are no different than elsewhere - the objects judgement, ideally be both relevant and representative of the area of research interest. The researcher simply uses 'good judgement' with respect to his problem." (p76)

Later in the chapter they give a rough guide on time needed to administer this work. Although the authors state that the system can be altered to suit a particular research problem, Kelly's work (1955) would seem to fit more readily into the area of research. Some of Osgood, Succi and Tannerbaum's ideas and concepts were kept in mind during the work on Kelly's theory. For example;

1) try and ensure concepts are familiar to all subjects.
2) try to ensure concepts have a unitary meaning for the individual.
3) try to ensure there is enough scope for individual differences.

Following the general review of the literature to establish the research design best suited to enable an investigation into T.V.E.I. and special educational needs, it was decided that it would be prudent to do some background reading into the problems that may arise in doing this form of research. Firstly, to ensure that the proposed research design could elicit the information wanted, and secondly, to try and minimise mistakes during the actual research.

Dellamont (1983) states;

"classroom processes can only be understood if their context is understood. This means studying their location in time and space, and comprehending the organizational and educational background in which they are embedded. Only when these features of classroom life have been analysed,
when the stage setting has been researched, can the investigator hope to understand the events which occur behind the classroom door." (p45)

This raises a very important point. Whilst the administration of T.V.E.I. has been centrally controlled, the detailed shape of T.V.E.I. curricular and the day to day operational characteristics, have been more or less in the hands of the local users. Having already investigated the various strategies available to L.E.A.'s in the implementation of T.V.E.I., it is obvious that the way an L.E.A. sets up its T.V.E.I. organisation would effect the way a project director would work. This in turn could effect a headteacher's style of management and organisation, which in turn would effect the teachers and pupils involved in T.V.E.I. This aspect of organisation has been investigated in detail in a previous chapter.

Many of the teachers in a research school have been members of a curriculum working group, made up of teachers from the seven consortium institutions. Being a member of the group may prompt certain attitudes or feelings towards T.V.E.I. Delamont (1983) mentions;

"How a teacher thinks about the classroom, his social construction of it, is a crucial element in what he does. Both perspective and reference groups are important. (The curriculum groups could be a reference group). (p49)

She continues;

"Sizing up pupils is a continuous process. The teacher is constantly observing pupils, reacting to them, observing their reactions, and so on. The teacher's actions, are in part, decided by what he sees, or rather his understanding of what he sees, but he must act according to his perspective of the job. Thus the classroom researcher must try to understand how the teacher perceives the job - what goes on in the head of the teacher is a critical antecedent of what he does." (p49)

Delamont's comments highlight the need for teacher interviews to bring out the teacher's views on T.V.E.I. special needs and the teacher's perceived role in general.

It is obvious that alongside teacher interviews must come pupil interviews, to discover their perceptions. Research in the past (eg. Furlong, 1976; Torodes, 1976) into pupil perceptions of a good teacher has shown that a good teacher was viewed as one who makes pupils sit down and work on their own. Will pupils' perceptions of a good teacher have changed? This point must be kept in mind when interviewing pupils.

One other problem of observation that must be overcome is what Becker (1971) calls making the familiar strange, or as Woods (1950) puts it,

"Both teachers and pupils are seen as engaging in negotiations, and both are seen as having typical, normal, taken for granted strategies which they adopt so regularly that it is easy to miss them altogether." (p36)
Although the overall research design will be explained in more detail in chapter four, there is a need now to investigate two further areas of literature concerned with,

interviewing techniques

teacher attitudes and the self fulfilling prophecy.
Chapter 3

b) Interviewing Techniques

Interviewing is a powerful tool in research. As it will be used to obtain information from both staff and pupils it is vitally important to understand the background theory of interviewing, without which mistakes could be made and important data lost.

"The ability of objects of social research to converse with each other and with the scientific investigator is so vital a characteristic of the subject matter of the social sciences that it cannot be disregarded in any well rounded study." Palmer (1928) (pp.168-9)

"For the greater part of his information the investigator must find his own witnesses, induce them to talk, and embody the gist of this oral testimony on his sheets of notes. This is the method of the interview, or 'conversation' with a purpose, a unique instrument of the social investigator." Webb & Webb (1932) (p130)

The authors also make the point that in the formal interviewing much is missed by not being able to follow up interesting ideas. It would seem obvious that both formal and informal techniques are required to pick up as much relevant material as possible. But the idea that the researcher can just sit down and talk away is not correct either, as Palmer (1928) states;

"The unconstructed interview therefore assumes the appearance of a natural interesting conversation. But to the proficient interviewer it is a controlled conversation which he guides and bends to the service of his research interest." (p171)

The author states two objectives for the unstructured interview;

1) The interviewer must keep the informant relating attitudes and experiences relevant to the research,

2) To encourage the informant to discuss these experiences naturally and freely.

Palmer (1928) gives a framework to achieve these objectives;

"A few comments and remarks, together with an occasional question designed to keep the subject on the main theme, to secure more details at a given point of a narrative, or to stimulate the conversation if it tends to lag, are the usual means by which the interviewer accomplishes the first objective. Gestures, the nod of the head, smiles, facial expressions which reflect the emotions narrated are a very important part of obtaining the second objective." (p169)

He then goes on to make the point that the researcher should be able to share the culture of the informant and understand any phrases or words peculiar to that given situation - this was not a problem when dealing with staff because of the shared T.V.E.I. background. Strauss et al (1964) provides the means/methods of encouraging an informant to tell four different types of questions;
1) Devil's advocate - put forward an opposing point of view.

2) Pose hypothetical questions to find out what the informant may do in a particular circumstance.

3) The interviewer to assert an ideal position, it is then possible to discover how the informant perceives ideal persons, conditions and situations.

4) Researchers can begin to offer their interpretations of situations towards the end of a research programme. This may stimulate informants to confirm or respond with counter information.

Some researchers have used only interviews without a formal structure, some have used them with observational data. Nash (1973) then lists all the old problems of this method;

a) How can the researcher claim to know about these people?

b) How do we know this to be the truth?

c) Are they telling you what they think you want to hear?

These problems could be overcome by detailed, well conducted research with careful consideration being given to interview techniques.

"The researcher should be a thoughtful and analytical listener, or, observer, who appraises the meaning of emerging data for his problem and uses the resulting insights to phrase questions that will further develop the implications of the data." (p302) Dean et al (1967)

He then goes on to deal with the open and closed questions. Once again getting the mix right is important and as the author states;

"Regarding the mix among descriptive, evaluative and non specific questions, there is no specific answer. If the evaluator asks a high proportion of evaluative questions, he needs to ask himself whether he is really learning what has been going on. With descriptive questions the disadvantage is not so clear, because few people can report events without, at the same time, referring to their feelings about them. However, the interviewer who asks few evaluative questions should ask himself whether the informant is also providing evaluative material providing that he wishes both types of material." (p302)

Having researched the literature available on interviewing techniques it was decided that a mix of group and individual interviews for the pupils and individual interviews for the staff would produce the information needed, although the problems that may be encountered during interviewing, which were mentioned by the previous authors, would be kept in mind during interviewing sessions.
For the purpose of this research it seems that a mix of individual and group interviews would result in more relevant detail and could also give an insight into group dynamics (group work is a major aspect of T.V.E.I.) as well as obtaining information from individuals that might not be aired publicly.
c) Teacher Attitudes and the Self-fulfilling Prophecy

It would seem from investigations in earlier chapters on T.V.E.I. and on Special Educational Needs, that certain aspects of teaching play a significant part in providing a constructive and effective climate for children with learning difficulties whether they are in ordinary or special schools. The concept of teaching style/approach, linked to teacher/pupil attitudes, is seen as very important within both spheres. Therefore it is necessary to investigate pupils reaction to different teaching styles, and teacher reactions to varying responses from pupils. Whereas pupil reaction to different teaching styles has been covered earlier in this section, there is a need to look in more detail at the area of teacher expectation/reaction to, and of, their pupils. As people have expectations of each other, so teachers have expectations of their pupils, which can be generally said to be concerned with pupil behaviour, pupil ability and achievement.

Delamont (1983) summarizes the concept,

"the basic assumption is simple, that if a teacher believes a child to be stupid, they will treat that child differently, the child will internalize that judgement and behave accordingly, and a vicious circle is set up" (p64)

If this then is labelling theory, what are the criticisms levelled at it which were mentioned earlier? Hargreaves, Hestor and Mellor (1975) stated that,

"Since the 1960's social scientists have been involved in a fundamental and often heated debate about the appropriateness of 'paradigms' for the social sciences. Essentially these paradigms are about the scientific models operated by social enthusiasts and the models of man that are implicit in these scientific models. A paradigm consists of a set of assumptions. Every social scientist works within a paradigm and it is from the assumptions within it that he is able to define certain issues as 'problems', ask certain questions rather than others, adopt certain research methods rather than others, and show a preference for certain kinds of analysis, explanation and theory." (p1)

It is in this area of paradigms that the authors make an interesting point as to the criticisms levelled at "labelling".

"The critical debate between different paradigms is often sterile because each paradigm makes different sets of assumptions which permit certain questions and exclude others. So some of the positive criticisms of labelling theory are rejected by labelling theorists because such questions are not legitimate or relevant questions from within the paradigm they have adopted."

But one must keep in mind that these impressions may lead to stereotyping for as Horsley and Fitzgibbon (1987) state,

"stereotypes may arise because of the way we process information in general, whether of objects or people, i.e. through the use of the
categorization process which is naturally tied to our perception of salient characteristics." (p31)

Hargreaves (1975) states that the human mind has an inbuilt labour saving device, whereby it can categorize expected reactions, and is known as stereotyping. Teachers form stereotypes of pupils depending upon their own perceptions and the pupils' behaviour. Teachers often form judgements on pupils before encountering them, using information which can be gleaned from four broad areas. Firstly, record cards and confidential materials containing medical and social background information. Secondly, teachers may form opinions based on knowledge of a pupil's relative whom they have taught or known, and view his/her in a similar light. Thirdly a specific teacher's perception may be interpreted as being an inherent quality of that child, so where one teacher may say "I think that child is lazy" becomes "he is a lazy boy".

"Conversations between teachers about individual pupils solidifies the individual's perceptions into a reputation which travels before them into new classroom encounters" (Delamont 1983)

Lastly social class and background are powerful influences on teacher perceptions, those coming from lower social classes being seen as less likely to succeed. Morrison & McIntyre (1969) and Brophy and Good (1974) also found this relevant in American schools, and added race and sex to that list of influences. Nash (1973) emphasizes that,

"It seems that whereas social class is of dubious relationship to ability and attainment within a class of children, the way those children are perceived by their teacher certainly is not." (p31)

Teachers' perceptions then are closely related to the pupil's ability, behaviour and personality, and any other attributes that an individual finds favourable. If a favourable impression is formed about one trait of a pupil's personality, then teachers are more likely to award high marks on other traits.

Once teacher expectations have been established the self fulfilling prophecy could have greater effects if the pupils accurately perceive those parts of the teacher's behaviour that are related to expectations and understands the implications for him/her.

"In our interactions with other people we respond not so much to what the other person does but to the interpretation we place upon it, the meaning we attribute to it. The behaviour itself may be perfectly clearly perceived, but its interpretation may be ambiguous." (Rogers, 1983) (p17)

Hargreaves, Hestor and Mellor (1975) argued that,

"Deviance is not a quality of the act the person commits, but rather a consequence of the application by others of rules and sanctions to an 'offender'. The deviant is one to whom that label has been successfully applied; deviant behaviour is behaviour that people so label ... Whether an act is deviant depends on how other people react to it ... Deviance is not a quality that lies in the behaviour itself, but in the interaction between the person who commits the act and those who respond to it." (p7)
Rist (1970) argues that pupils are type cast at the onset of their school careers, according to criteria that have no necessary implications for their future levels of attainment or behaviour. But, as a result of this early grouping, future groups tend to remain the same, thus when lower ability children have low expectations placed upon them, it is less likely that these expectations will be altered, a fact noted by Hargreaves et al (1975) and Nash (1976). It is argued by Brophy and Good (1974) and Rogers (1983) that younger children are more likely to establish the S.F.P. based upon teacher expectations, so clearly the implications of an unfavourable teacher expectation may have far reaching effects on a child's attainment, behaviour and ultimately, his/her self image. Hargreaves (1972) notes the possibility of pupils reacting to expectations that the teacher may not hold or knowingly convey, but ones which, nevertheless, the pupils believe to be conveyed. Hargreaves refers to this as the "autistic S.F.P." Equally important is Hargreaves' concept of an anti-S.F.P." where the pupil is motivated not by the teacher's predication of success but of failure. This strategy depends upon an accurate prediction of the pupil's reaction.

It may not always be apparent to a pupil, from a teacher's expressed attitude, exactly what is felt about him/her, and they will perceive these attitudes in varying ways, depending upon the make up of that particular pupil,

"a child is unlikely to understand that particular actions of the teacher in relation to himself are expressions of her perceptions of him as immature, rather he will see the teacher's actions as indications that she has got it in for me." Hargreaves et al. (1975) (p21)

His reactions will consolidate the teacher's perception of her pupil and Hargreaves et al (1975), Delamont (1983) and Rogers (1983) all agree that once a child has been labelled it becomes increasingly difficult, with the passing of time, for teachers to reassess that label. Teachers convey their attitudes and expectations in many varying and subtle ways, some of which they are unaware of. Favourable expectations, may or may not be knowingly conveyed when a teacher spends more time with high ability pupils, encourages them to think, attempts to teach them more by spending more time with them, calls on them more often for responses, and permits them a second chance at learning if their first attempt was unsuccessful. Less favourably perceived pupils may not be afforded this attention. Indirect responses may also convey expectations and attitudes. One pupil may be encouraged to answer hard questions, whilst another easy questions, the teacher may be prepared to wait for one pupil's answer, whilst growing impatient with the next pupil. Clearly this can create the vicious circle referred to earlier, the pupil who is not regularly asked for responses is less likely to offer any, and so reinforces the teacher's original attitude of him. That teachers hold expectations for their pupils, which may be the establishing of the S.F.P. effect the learning and behaviour patterns, has long been established, notably by the above mentioned authors.
"We believe that teachers' attitudes affect teacher/student interaction, thus students that the teacher likes will probably begin to behave in ways that will make the teacher like them more, while rejected students will probably begin to behave in ways that will increase the teachers' degree of rejection."
Brophy and Good (1974) (p32)

The task of using discriminating ways in which to observe this possibility is not an easy one, and findings may not always show its existence. A result may reflect that the self fulfilling prophecy is not in existence in that particular situation, or perhaps that the observation techniques were not suitable for that particular purpose. During the investigation of the above work on attitudes and the self fulfilling prophecy it quickly became apparent that these aspects were to have a major bearing on the research design. For when considering any aspect of learning and teaching, it is impossible to exclude the influence of self concept, with its contributory formative process which include motivation, personality and human activity. However, having an awareness of the possible existence of the S.F.P. may go some way in attempting to understand pupil behaviour and attitude.
Chapter 4
The present study

a) Research design

This section is in four parts:

a) The brief aims of the research.
b) Methodology used.
c) Stages of research, phase 1 and 2.
d) Samples used and results.

A) THE GENERAL AIM

for this research came from Tomlinson's (1985) article (see p.1).

Following the review of the literature this generic aim was very quickly crystallized into a number of specific aims, which led to the following five main lines of enquiry:

a) The organisational structure of T.V.E.I.
b) Teaching style/attitude, group work, problem solving.
c) In-service provision.
d) Existing pattern of school provision for pupils with S.E.N.'s.
e) The role of the tutor.

Within these main aims there were some further aspects of T.V.E.I. that were investigated. The areas which were investigated were;

1) Evidence of the four criteria mentioned by Gipps and Gross (1987) which would maximise special needs teaching, taking place within T.V.E.I.
2) Teacher attitudes to T.V.E.I. and to special educational needs.
3) Pupil attitudes to T.V.E.I.
4) The match or mismatch between the school's intentions for T.V.E.I. and the pupils' experience of T.V.E.I.
5) Specific measures, if any, adopted for dealing with special needs pupils within the T.V.E.I. scheme.
B) METHODOLOGY

It was decided to generate data relating to these five issues by means of individual and group interviews, linked to background reading of relevant literature. The advantages and disadvantages of various interviewing techniques has been dealt with in a previous section, but the one vital area that these methods were unable to research was that of teacher attitude.

Various methods of eliciting teacher attitudes towards their pupils were investigated with the result that Kelly's (1955) method was selected as the main research tool because of its flexibility and adaptability in investigating teacher attitudes towards their pupils. Though Yorke's (1987) method of eliciting constructs and Osgood, Succi and Tannerbaum's (1967) concepts on the semantic differential were also used.

C) THE STAGES FOLLOWED

were;

1) Pilot using Kelly's methods in phase 1 school, firstly to become familiar with the procedure, secondly to formulate some common constructs to present to the staff of the mainstream school.

2) The procedure was repeated at a mainstream school asking the staff to rank their ten most important constructs.

3) A section from Moses' (1982) questionnaire relating to pupils with learning difficulties was given to the staff of the main research school.

4) Individual interviews with all T.V.E.I. staff in the school, keeping in mind Yorke's (1987) method of eliciting constructs by asking the interviewee to recall salient events within T.V.E.I.

5) Observation of T.V.E.I. lessons over a period of a month, the observation lasting for a full day at a time.

6) Class interviews and individual interviews of fourth year pupils designated special needs by the school staff.

7) Follow up interviews with the same pupils in the fifth year.
D) SAMPLES USED AND RESULTS

Phase One - The pilot

The School

Phase one of the research was a pilot in a school for pupils with moderate learning difficulties. The school has been open for 28 years. Initially a group 7(s), it is now a group 6 (S) with 115 pupils on roll. Pupils are admitted from a large catchment area, both urban and rural, and up to thirty pupils travel to school by taxi. The school has been involved in the pilot phase of T.V.E.I. from September 1984, one of only a handful of special schools to be included at that time. There are fourteen full time members of staff of which seven are involved in teaching T.V.E.I. There was never a T.V.E.I. "cohort" in the school as all fourth and fifth year pupils were involved in the scheme. Six out of the seven T.V.E.I. staff agreed to be involved in the research. The member of staff who refused gave no reason.

Measures Used

There was a need to obtain constructs from the staff which would show how they viewed various pupils within the school, and which would also provide the constructs to be explored in the mainstream school.

To obtain the constructs the original triad approach as set out by Nash (1973) was used. Each teacher was presented with three cards, each bearing the name of a T.V.E.I. pupil, and asked to group together the two which seemed, in some respect, to be most alike. They might for example say that two are pleasant and the third unpleasant. Thus the bi-polar construct pleasant-unpleasant is obtained. In this way 26 constructs were obtained. Each member of staff was then asked to use these 26 constructs on each pupil ranking them on scores of 1-4 on the bi-polar scale (app.2). Staff were then asked to grade the constructs 1-10 on those they would find most useful to know about a new pupil joining his/her class. There was a three way tie for tenth place, therefore by this method the twelve most popular constructs were obtained. The staff were also asked to place the twenty six constructs under the broad headings of work, social and control, thus enabling conclusions to be drawn, by examining the constructs chosen, as to where each school's T.V.E.I. staff placed their emphasis within the spheres of work, social and control.

Results from the Pilot Study

Twenty six constructs were elicited (see appendix 3). The twelve chosen as being most important to the staff of the special school, in relation to pupils moving up to them were;

1) Participant - non-participant

2) Willing to work - unwilling to work
3) Uses initiative - lacks initiative
4) Friendly - unfriendly
5) Understanding - uncaring
6) Mature - immature
7) Independent - easily led
8) Curious - non-curious
9) Sensitive - insensitive
10) Trustworthy - untrustworthy
11) Non-aggressive - aggressive
12) Stable - disturbed

As six of the twelve constructs chosen were from the section on social aspects, these results showed that the staff in the special school were concerned more with the social aspect of education than with the work ethic, this was also reinforced during interviews with the staff concerned. This led to a decision to analyse the two sets of constructs chosen in terms of main areas of concern to staff. These results are analysed later in this section.

This method of enquiry made heavy demands of the mainstream staff and it was unrealistic to expect them also to cover the triad approach on each pupil to produce the constructs needed. With the constructs at hand from the phase one school, and with a comparison needed, a decision was taken to provide the phase two school staff with the full list of twenty six constructs elicited in the phase one school, and to ask the staff to choose the ten most important to them. They were also given the opportunity to produce further constructs if they felt they were needed. In this way it was hoped to overcome the problem of provided versus elicited constructs.

Phase Two - Main Research

The School

The school in its present building was opened in 1957, and is a comprehensive school for children in the 11-18 age range. It is the smallest 11-19 comprehensive in the country and in September 1988 the number on roll was 72. As a result all fourth and fifth year pupils are involved in T.V.E.I. There are 11 full time members of staff of which 7 are involved in T.V.E.I. and all agreed to be involved in the research.
Measure Used

The sequence followed was;

a) Constructs elicited from staff
b) Questionnaire on S.E.N.s given to staff
c) Pupils and staff interviewed
d) Observation

a) The T.V.E.I. staff were presented with the 26 constructs elicited in the pilot school and asked to rate the top ten in a similar fashion to staff in the pilot school. Yorke's (1987) method of asking staff to recall salient events in T.V.E.I. lessons and asking why these events were construed as salient was also used, thus providing the opportunity for more constructs to be elicited (although none were). This enabled the problem mentioned earlier, of providing staff with irrelevant constructs, to be overcome, as the constructs were provided by fellow T.V.E.I. teachers. The seven T.V.E.I. staff were then given a list with the ten most popular constructs as chosen by their own school staff. They were then asked to rate all fourth year pupils on these constructs (App.4). As stated previously, these results will be analysed along with the results from the pilot school later in this section.

b) The staff were also given a questionnaire to complete regarding the T.V.E.I. pupils with learning difficulties and special educational needs. It was needed to ascertain which pupils had special educational needs as perceived by the staff that were teaching them. Having these results, coupled with the results of the personal constructs, enhanced the observation and investigation. In order to discover whether the school performance of individual pupils was influenced by their teachers' attitudes towards them, some measure of the teachers' attitudes to each child in the class was needed. For the purpose of obtaining the staff views on which pupils they felt had special educational needs part of the questionnaire devised by Moses (1982) was used.

The questionnaire given to the staff was as follows:

Which of your pupils, if any, do you feel have special educational needs?

Have they:

1) Problems of slow learning
2) Reading difficulties
3) Behaviour problems
4) Discipline problems

5) Any other sort of special need

c) Following this, all T.V.E.I. staff were interviewed individually whilst the pupils were interviewed as a class and in some cases individually (i.e. those nominated as pupils with learning difficulties by the staff). The results of these interviews are dealt with in detail later in this section. One day per week for the following month was spent observing T.V.E.I. modules, thus enabling six different modules and four different teachers to be observed.

Results from questionnaire

The staff at the main research school listed the following T.V.E.I. pupils as having special educational needs in the following areas. The numbers in brackets indicate how many teachers nominated that particular pupil.

Slow Learning

- student a (1)
- student b (1)
- student c (1)
- student b (1)

Reading

- student a (2)

Behaviour

- student a (5)
- student e (5)
- student c (1)
- student f (1)

Discipline

- student a (3)
- student c (2)
- student e (1)
The following information was gained about each student;

a) was nominated once for problems of slow learning, twice for problems with reading, five times for problems of behaviour, and three times for problems with discipline.

b) was nominated once for problems of slow learning.

c) was nominated once for problems of slow learning, once for behaviour problems, and twice for discipline problems.

d) was nominated once for problems of slow learning.

e) was nominated once for behaviour problems, and once for discipline problems.

f) was nominated once for behaviour problems.

Information was now available on which pupils the T.V.E.I. staff saw as having learning difficulties before interviewing and observation took place.

Of the evidence collected prior to interviewing and observation the two sets of constructs chosen by the phase one and two schools T.V.E.I. staff enabled a comparison to be carried out to investigate any similarities or differences between the two.

**Comparison Of Results Of Constructs Chosen By Phase 1 And Phase 2 Staff.**

List Of Constructs Chosen By The T.V.E.I. Staff In Phase 1 And Phase 2 Schools.

**Phase 1 school**

1) Participant  -  non-participant
2) Willing to work  -  unwilling to work
3) Uses initiative  -  lacks initiative
4) Friendly  -  unfriendly
5) Understanding  -  uncaring
6) Mature  -  immature
7) Independent  -  easily led
8) Curious  -  non-curious
9) Sensitive  -  insensitive
10) Trustworthy  -  untrustworthy
11) Non-aggressive  -  aggressive
12) Stable  -  disturbed
Some interesting points emerge when the sets of constructs are compared. Closer examination of the constructs chosen, with the original 26 constructs subdivided into areas of work, social, behaviour, reveals the following breakdown:

Table showing constructs chosen under three areas of work, social, control.

<table>
<thead>
<tr>
<th>Work</th>
<th>Social</th>
<th>Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>M5</td>
<td>M2</td>
<td>M3</td>
</tr>
<tr>
<td>S3</td>
<td>S6</td>
<td>S3</td>
</tr>
</tbody>
</table>

M (Mainstream)

S (Special)

There is no difference between the staff responses on the subject of behaviour, and very little differences on the subject of work, although the mainstream staff were a little more concerned with the work ethic than the special school staff. There is a major difference however when one looks at the area which could be put under the heading of "social". The mainstream staff used two constructs in this area, which represents 20% of their constructs, whereas the special school staff chose six constructs in this area, which represents 50% of their constructs.

The list of constructs was therefore re-examined to establish whether the qualities Cumbria T.V.E.I. are likely to foster in pupils match any of the constructs chosen, and then an investigation carried out into which constructs each particular member of staff chose.
The five major aims of T.V.E.I. in Cumbria have been listed in chapter 2c, but the means by which they were to be achieved are those that are common to all T.V.E.I. schemes, ie. problem solving, group work, negotiation, work experience and a change in teaching style to a pupil-centred approach. On close examination of the constructs it would seem that the following constructs could be said to be compatible with those aims.

1) capable - incapable
2) practical - impractical
3) participant - non-participant
4) willing to work - unwilling to work
5) uses initiative - lacks initiative
6) creative - destructive
7) helpful - unhelpful
8) understanding - uncaring
9) mature - immature
10) independent - easily led
11) curious - non-curious
12) confident - lacks confidence
13) trustworthy - untrustworthy

(Numbers 2, 3, 5, 6, 7, 8, 10, 11, 12, 13, 15, 18 and 23). A full list is provided in appendix (3).

When investigating which school staff chose which constructs, the results made very interesting reading. Of these 13 constructs, the breakdown was, mainstream T.V.E.I. staff chose 7 out of their 10 constructs or 70%, the special school T.V.E.I. staff chose 8 out of their 12 constructs or 66.6%, very nearly identical results. It would seem that even though the two schools staff had their emphasis in different areas, mainstream 50% on work, special school 50% on social, this should not make any difference to the successful teaching of T.V.E.I. This is reinforced by the fact that although only five constructs were chosen by both staff groups, four out of the five were compatible with T.V.E.I. aims. These five were:

1) participant - non-participant
2) uses initiative - lacks initiative
3) understanding - uncaring
4) trustworthy - untrustworthy

5) stable - disturbed

Therefore the argument would seem to hold good that it does not really matter where the staff place their emphasis, in construct terms, as long as they value the aims of the initiative. This point was tested by further evidence collated during interviews and observation.
Chapter 4

b) Interviews with staff

Seven staff of the comprehensive school taught some aspect of T.V.E.I. and for reasons of confidentiality they will be coded a-g. All staff were quite willing to be interviewed and the same series of questions was put to each of them. Having investigated the importance of interviewing in a previous section, it was decided that a mix of formal and informal interviewing was needed to elicit the information required, which would be used to supplement evidence obtained prior to the interviews. A number of staff did not feel at ease with a tape recorder in operation, therefore all answers given are taken from notes of these interviews. The formal interviewing took place individually either in the staff room or in the teachers own classroom, whereas the informal interviewing took place wherever appropriate eg. staffroom, corridor. This chapter in addition to listing the verbatim responses of the staff concerned, also includes a section which analyses the interviews. This leads to a discussion of the interviews in general. Whether in a formal or informal interview setting the two aspects of interviewing expounded by Palmer (1928)

a) keeping the informant talking about relevant information and

b) ensuring that they do this naturally and freely, were kept in mind.

Questions and responses from teachers.

Question.

1) How did you become involved in the scheme, and at what point in the four years of the pilot was this?

Responses

Teacher

a) New starter in September, it was part of the job description to be a T.V.E.I. tutor.

b) Was involved from the initial stages, as a fourth form tutor. It was expected that the role would expand to include being a T.V.E.I. tutor.

c) School co-ordinator was involved from the outset.

d) Came to the school halfway through the scheme and it was part of the job description to teach part of the course.

e) Involved from the outset, though had to take up a completely new subject for T.V.E.I.

f) Involved from the outset as a tutor.
g) Involved from the start but in two new teaching areas.

**Question**

2) **Were you, or are you, involved in the developmental work, and if so do you feel your views are taken into account?**

**Responses**

**Teacher**

a) Yes, even though a new member of staff feels that her views are taken seriously and that she could initiate change if the need arose.

b) As a tutor from the outset feels totally involved and was a member of the team of tutors who formulated the school's response to tutorial work within T.V.E.I.

c) Co-ordinator therefore the only person who makes decisions without consultation with the headteacher. (The headteacher verified this).

d) Joined the course halfway through but has felt consulted from the very start. Has the impression that he is regarded as the expert in his particular field and would always be consulted before any decisions were made.

e) Feels consulted, more so since she became a tutor. Knows that she could change things after consultation with other staff.

f) Having been a tutor from the outset has always felt consulted and feels it will always be so in T.V.E.I.

g) Felt involved from the outset, but has not felt part of the decision making process involved in moving the school towards T.V.E.I. extension.

**Question**

3) **How much in-service have you been involved in through T.V.E.I. If you have been involved in in-service, was any relevant to S.E.N’s?**

**Responses**

**Teacher**

a) Only involved for one year, but has had a two day T.V.E.I. awareness raising course. Felt this was very general and not specific and was more about the philosophy behind T.V.E.I.
b) Has had a three day residential on Active Tutorial Work. The course never actually mentioned S.E.N.s but he felt the style of work they were advocating would help pupils with S.E.N.s i.e. more discussion, group work, negotiation.

c) As co-ordinator had received much in-service training in areas such as management, business studies, tutorials, graphics, computer control. He felt that they all, with the exception of tutorials, were very subject orientated and never or very infrequently mentioned S.E.N.s. The tutorial though not specifically mentioning S.E.N.s was proposing a style of teaching that would help all students and S.E.N.s would obviously be among these.

d) No in-service in his area through T.V.E.I. but much in-service through the L.E.A. generally.

e) Three day in-service on Active Tutorial, plus several one day courses. Felt that there had been much in-service for tutorial work if teachers had been involved from the start. Was convinced that the tutorial style of teaching could help S.E.N.s.

f) Exactly same in-service as above, also mentioning that this style could help S.E.N.s.

g) No in-service except "learn as you go". Felt that the staff involved in computing were expected to teach themselves. (She found this strange as T.V.E.I. was about the use of new technologies).

Question

4) What do you feel is the school's policy on S.E.N.s and has T.V.E.I. made any impact on S.E.N.s teaching within the school?

Responses

Teacher

a) Does not feel that S.E.N.s are generally catered for, but feels that T.V.E.I. has helped S.E.N.s students in that they are able to negotiate to work at their own pace, although staff have to be careful not to let the students opt out.

b) Feels the school does not have the staff available to have a good remedial set up, but T.V.E.I. has good staffing levels and the tutorial element allows tutors to readily counsel pupils and this must help S.E.N.s students. He also stated that certain practical modules and the options allowed for personal development, and students do not, "have to always keep up."

c) The school does not have a special needs policy. It reacts to need, although he feels that it does not always react quickly enough, or with a specific purpose. T.V.E.I. has
benefited S.E.N.s in that it has allowed them to follow the same course and not be "sinked" off. The tutor has been able to counsel the student on choices and help them overcome certain difficulties.

d) Feels that the school does not have a special needs policy and that T.V.E.I. has not changed this. Feels counselling takes up an enormous amount of time, and does not warrant the amount of time spent on it. By virtue of the way his subject has been taught for years prior to T.V.E.I. there was no need to change as the aims and objectives seemed to be very similar. Special needs students could work on their own or in groups and at their own pace.

e) Does not really feel that the school has a special needs policy but that T.V.E.I. has had an impact on S.E.N.s students, although she does feel that tutorial work is harder for them, because in the past they have not always had to make decisions and make comments. They sometimes resorted to bad behaviour to cover their feelings of inadequacy.

f) No school policy on S.E.N.s. T.V.E.I. has made an impact, although she feels it is not a great impact. She also feels that the greater freedom of choice given to pupils in certain aspects of T.V.E.I. leads to disruption by certain students who are not capable of coping with this freedom.

g) Special needs not catered for in the school, but it is better in T.V.E.I. because students are allowed to work at their own pace, but still on the same subject areas as the rest of the class.

Question

5) Is group work used in T.V.E.I. and if so, is it in any way beneficial to pupils with special educational needs?

Responses

Teacher

a) There is considerable group work in T.V.E.I. Feels that this must benefit students with S.E.N.s but is not really clear why. Mentions the fact that other students could help them.

b) Very keen on group work, but felt that there should have been much more in-service on the role of group work in education in general. He felt that S.E.N.s students were more able to express themselves within a group, than make an opinion in a class situation. Thought special needs students generally worked better in groups.
c) There was much group work prior to T.V.E.I. but feels that more thought is given to the use of group work now. Feels everyone benefits from this approach, special needs no more or less so than anyone else.

d) Always did group work prior to T.V.E.I. and feels that T.V.E.I. has made no difference at all in this aspect of teaching. As everyone should benefit from group work then S.E.N.s students should benefit too.

e) Felt too much group work was done, and that pupils, especially those with S.E.N.s could hide during group work. Felt that the aims, objectives and content of group work had to be more clearly defined, not just for the staff, but especially for students - "they like to be told what to do".

f) There has been a great deal of group work in T.V.E.I. and she now feels much more confident to tackle this kind of work. It is very good for the students, but much more difficult for the teacher to organise than a "normal" class lesson. Had never thought of group work as being of any greater benefit to one particular section of the school population, but if all were to benefit then this would be true of S.E.N.s students.

g) Can lead to problems giving certain pupils too much choice and freedom. Although group work has led to a greater feeling of "togetherness" in the class.

Question

6) What is your view of the role of the Tutor in T.V.E.I.?

Responses

Teacher

a) Could be very important but felt that it all came down to the tutor's interpretation of his/her role. There are so many different areas to cover (careers, residential, counselling, active tutorial etc.) that a tutor may decide to concentrate on a particular area.

b) Essential to the success of T.V.E.I. The fact that a tutor has non-contact time alongside T.V.E.I. modules and options, to allow for withdrawal or work alongside the students, was seen as very important. Very beneficial to S.E.N.s students as they could be counselled before making decisions. Also the tutor could work alongside the student and act on his/her behalf if needed.

c) Central to T.V.E.I. The tutor can get to know all the students in his/her tutor group, can see them working in other settings and can withdraw them if the need arises. The tutor spends a weeks residential with the pupils. This also must help them to get to know the
students. Special needs students must benefit as there is now a member of staff who
knows them very well and can help them overcome problems and liaise with other
members of staff if there are any problems.

d) Does not see that the tutor system is cost effective as far as time allocation goes. Too
many of the lessons are interrupted by pupils being withdrawn. Feels it has had no
impact on any area of the school.

e) Expressed the view that pupils do not like it because there is too much talk, and they
don't really know what they are supposed to do. "You get to know the pupils better, but it
takes a lot of time working out what to do next in tutorials”.

f) Same as above but with the added emphasis that they are told what to do during the rest
of the week, therefore it confuses them to have this freedom. This freedom leads to
discipline problems.

g) Very important, central to the success of T.V.E.I. It must help S.E.N.s students as all
pupils now have a tutor who knows them well and can help them and work with them and
liaise with other staff when the need arises.

Conclusions from staff interviews and comments

Staff were positive about their part in consultation and planning. Most felt that the tutorial
aspect of T.V.E.I. was extremely important, and that it helped special needs pupils in general.
There was a feeling from the staff that the freedom of choice and decision making for students
in T.V.E.I. could and did lead to behaviour problems with certain students, who could not cope
with this freedom, although there was a great deal of support for group work within T.V.E.I.

There was also a strong feeling amongst the staff that special needs students were not catered
for within the school: "the woman who used to do it left". It may well be that the work carried
out in T.V.E.I. with S.E.N.s students had highlighted this fact. There was a great deal of
support for in-service education specific to special needs. Staff mentioned a great opportunity
missed with all the in-service education that had been provided by T.V.E.I. without the special
needs element being sufficiently taken into account.

All staff mentioned the problems of being a very small school within a very tightly knit
community and the fact that the parents and students had very limited ambitions: "you don't
need exams to go down the mine or work on the roads" (the two biggest employers in the
region).

Discipline problems were mentioned far more frequently than special needs. This fact was
supported by the questionnaire that was completed by all the T.V.E.I. staff, and was repeatedly
mentioned in general discussion with staff. Four students were mentioned once, each as being a slow learner. One student was mentioned twice as being a poor reader, whereas under behaviour two students were mentioned five times and two further students mentioned once. Under discipline one student was mentioned three times, one twice and one once.

One omission that was noted was that no member of staff mentioned profiling/records of achievements which is part of T.V.E.I. and its implications for each student.
Chapter 4

c) Pupil Interviews

As with the staff interviews it was decided that there was a need for a mix of formal and informal interviews. The formal interviews took place as group (whole class) whereas the informal interviews took place as small group (no more than three pupils) interviews within the classroom situation. The whole class interviews were tape recorded, though the more individual interviews were not as it was important for pupils to discuss information freely and naturally as they were working and to have to keep interrupting to ask permission to use a tape recorder would have defeated the object of the interview. Therefore, all following answers are not verbatim but collated from interviews which are in the main recorded.

Results of pupil interviews

Pupils felt that they were encouraged to speak their minds during T.V.E.I. but only with certain teachers. This point about “certain teachers” occurred time and time again. One student even remarked that some teachers did not seem to know what T.V.E.I. was about, although by stating this the pupils were reinforcing earlier impressions picked up during observation, that they, the pupils, were very clear on what T.V.E.I. should mean.

They felt that to spend a full day on T.V.E.I. was too long and that they did not get enough choice concerning modules. Some modules “felt just like other English lessons”, whereas some of the students felt that many of the modules were irrelevant to them and their future plans.

The group as a whole (and this was reinforced in individual interviews) stated that tutorials were a waste of time, and that teachers were trying too hard to keep the tutorial “games” going. They would rather have the time to themselves, especially in the fifth year, for revision. The pupils response to their tutors was positive: they felt at ease with them and able to discuss problems. They would have liked more time to plan their residential “we wanted to go camping, the teachers did not”, although they felt the idea of a residential was a sound one. Three boys were not going because “it would be boring”.

When questioned as to whether they felt that if they were having problems in T.V.E.I. they would be able to receive help, more easily or not, than in non T.V.E.I. lessons, there were two answers; which were reinforced during observation,

1) From a group consisting mainly of the girls who scored low on Kelly (which meant they were viewed favourably by staff), came a view that it is much easier to give someone simpler work in a “normal” lesson than in T.V.E.I. As one girl put it, “How do you make creative and performing arts easier for someone?”.
2) From a much smaller group consisting of the boys who scored high on Kelly (which meant that they were perceived as having problems by the staff), there was evidence that they did not like T.V.E.I. No one would help them and they would not ask for help in any case.

The group as a whole felt that some teachers still did not listen to them, or let them get on with a project. The two examples given were of teachers asking what they were going to do during a meeting, without first checking the agenda, or asking questions in a different way to try and get the answer they wanted. They also felt that although they were often told to work on their own or in groups, at some stage the (certain) teacher would come along and remark "That's not bad, but I feel that you should have done it this way".

Conclusions from pupil interviews and comments

The group was very articulate and obviously used to discussion. Some important issues that they generated were:

a) There was a strong feeling of T.V.E.I. becoming "normal" after a bright start, and of tutorials being just about playing games.

b) They were encouraged to question and try out new ideas, but were not allowed to make mistakes.

c) The three pupils who scored high on Kelly were very anti T.V.E.I. whilst also stating that they did not mind school in general. These pupils did not like being questioned or being put into situations where they had to make decisions. They seemed as if they would much prefer being told to sit down and get on with the work that had been set. During observation they always stayed together and tried to do different work from the rest of the group, whereas the remaining pupils just seemed pleased to be rid of them.
Chapter 5
General Discussion and Conclusions

The initial aim of this research was to examine five lines of enquiry using the responses of pupils with special educational needs and teachers to T.V.E.I. Of course this was a very broad and bald statement and there was a need to concentrate on certain aspects of T.V.E.I. and the teaching situation. The particular issues that were examined have been listed in an earlier chapter, though the main issue that has emerged during the course of this research, has been the importance of the criteria by which T.V.E.I. is implemented and taught for pupils with learning difficulties.

These criteria were:

a) The organisational structure of T.V.E.I.
b) Teaching style, group work, problem solving.
c) In-service provision.
d) Existing patterns of school provision for pupils with learning difficulties.
e) Role of the tutor.

The five areas listed above are now examined in the light of evidence collected.

a) Organisational structure of T.V.E.I.

The model of organisational structure that Cumbria chose was one of a small central team (5) and a co-ordinator in each school. This could be classed as collaborative control using Saunders (1986) method of classification. Most of the teaching in the T.V.E.I. modules and options was to be covered by the schools staff, with the central team being seen as outside experts to be called in when needed. This structure has meant that in a small school, such as the main research school, some members of staff have had to take on two or more areas of T.V.E.I. This has led to a feeling of involvement by the staff and a definite "team" approach to planning in T.V.E.I., a point supported by the fact that when interviewed all staff stated that they felt involved in the planning of T.V.E.I. The formation of curriculum planning groups at the initial stages of T.V.E.I. was highlighted by the staff as being of great importance. They mentioned this in two specific instances. Firstly that it helped them to build up contacts in other schools, and secondly, that having a representative of a special school in nearly every group helped them in their planning for special educational needs within their option or module. The training agency document Curriculum 14-16 (1986) supports this, stating that one of the major benefits observed in Authorities using the collaborative approach has been the work carried out in the curriculum groups.
This structure meant that the staff who knew the pupils well were the ones, who in the main, were teaching them. This could be a major benefit in tailoring courses to individual needs, although it could lead to problems if there were any personality clashes between certain teachers and pupils. But it must be stated that no feeling of "antagonism" towards members of staff was observed, though the pupils did keep referring to the fact that T.V.E.I. was just like any other lesson with "certain" teachers and that "certain" teachers did not seem to know what T.V.E.I. was about.

b) Teaching Style

The investigation of teaching style also facilitated an examination of teacher attitudes to S.E.N.s and T.V.E.I. The research design chosen to investigate these issues has been discussed in detail in a previous chapter, but the importance of the personal construct theory to enable teacher attitudes to be investigated must again be emphasised as Nash (1973) stated in his conclusions that,

"to a considerable extent the success of the study has been due to the power of the repertory grid techniques to reveal meaningful dimensions of teacher perception which could be significantly related to children's ability and to the formation of their friendship groups." (p119)

The 1987 evaluation report (Newcastle University) stated that there did now seem to be less "listening to teacher" which seemed to indicate a change in teaching style. This point was not fully supported by pupil interviews in the research school. They stated that "certain" teachers talked just as much in T.V.E.I. as they did in "normal lessons". This may re-inforce the point made by Kagan and Grandgennett (1987) in that teacher personality has a major part to play in teachers preferred teaching style. Therefore the fact that it was a T.V.E.I. lesson would have no impact on that teacher's style of delivery. During observation at the main research school there was, however, strong evidence that the teaching style observed was pupil centred and not didactic. One case in particular highlighted this. The pupils were given general tasks to do in groups but the specifics were left to the group to decide. One of the boys, who scored high on Kelly, and who was not very keen on T.V.E.I., decided that he wanted to change groups, so he approached the teacher and asked permission to change. He was then directed to the group leaders and told to explain to them why he wanted to change and that if he could not persuade them then he could not change groups. The boy mentioned above most certainly did not like the idea of having to explain to his peers why he wanted to change. He just wanted the teacher to make the decision. It could be argued that the pupils with learning difficulties were being given more problems than they might come across in a "normal" lesson. When questioned this boy stated that he did not like T.V.E.I. because he had to work with people he did not like and he always had to work out what to do next. He felt that the teacher should be telling him what to do, but he was not really bothered anyway because there was no examination at the end of
the course. This point is made by Furlong (1976) and Torodes (1976) in that pupils classify teachers as being good teachers if they make them sit down and work.

c) In-service Provision

Most of the staff questioned had experienced varying amounts of T.V.E.I. in-service, from the co-ordinator who had spent a large amount of time on numerous courses, to the new member of staff who had been on a two day induction course for teachers new to T.V.E.I. The one answer that was common to all the staff was that although the courses themselves were reasonable there was never any mention of pupils with learning difficulties.

Gipps and Gross (1987) state that one of the criteria for success in teaching pupils with learning difficulties is large scale in-service. T.V.E.I. has most certainly involved large scale in-service though none of it was specific to learning difficulties or indeed was the subject of learning difficulties mentioned. There has been some small scale in-service for post 16 tutors who may find pupils with learning difficulties in their tutor group, a gap of provision highlighted by H.M.I. (1989).

Therefore conclusions about the effect of large scale in-service on the teaching of pupils with special educational needs can not be made from this research, as the in-service in question was not specific to special educational needs. It may seem strange that a pilot scheme which was to be across the ability range did not make specific provision for in-service relating to pupils with learning difficulties. It may be that it was felt that with a representative from the special school on each of the curriculum groups, the courses that were designed would cater for these pupils. A point reinforced from earlier authors that the collaborative approach to T.V.E.I. implementation is beneficial to curriculum planning, and also re-inforcing the same point made by the T.V.E.I. staff at the school.

d) School's Existing Special Needs Policy

The main research schools' information for parents states that,

"It is hoped that children who have learning difficulties within the normal curriculum can be identified early, and additional help given to them, where our resources permit. In the first and second years this might be achieved by putting additional staffing into mixed ability groups. In the third year it might be achieved in working in two sets by ability in as many subjects as our resources permit. In the fourth and fifth year, most core and option subjects will be aiming at G.C.S.E but for a very few children for whom public examinations are not appropriate, a third set in basic English and Mathematics and a modified option system may be provided, depending on our staffing allocation"

All of the staff questioned stated that they felt that the school did not have a special needs policy, but rather that it reacted to need. Various reasons were put forward for this from "The woman who did it left" to the fact that there was not the staffing to warrant specialist remedial
help. However, the Head did state that he did not want a separate remedial set up and that if at all possible help would be given in mixed ability classes. The strong feeling from all the staff interviewed was that they were aware of pupils with learning difficulties within their T.V.E.I. groups and that they were very sympathetic towards this problem. They saw it as a serious issue and stated that it was not acceptable to have S.E.N.s pupils in the class for social reasons only, which would put them at odds with the science teacher mentioned by Hegarty, Pocklington and Lucas (1981). There was most definitely a great deal of goodwill towards the problem of pupils with learning difficulties, and it seems as if T.V.E.I. had highlighted this. However no special provision had been made for S.E.N.s pupils within T.V.E.I. even when the problem was highlighted. There was no feeling in the school that any individual programmes were needed, either within T.V.E.I. or within the general curriculum. This feeling may change with the introduction of the Education Reform Act, and the introduction of every pupils individual entitlement to a broad and balanced curriculum.

e) The role of the Tutor

This is one area where there seemed to be a split in the views of the staff, from one extreme, where one member of staff felt that it was central to the success of T.V.E.I. to another member of staff who felt that it was not at all cost effective, and that pupils spent too much time away from lessons being interviewed by their tutor. In between were the members of staff who felt that it was a good idea and those who thought that it was not really working because the pupils did not really know what to do. One benefit that they all seemed to agree on, was the tutor having non contact time alongside the options and modules and being able to go in and work alongside their tutor group. They could then see them in a different work situation which was very beneficial. Also there would be a strong bond between the tutor and his/her group and this is where problems could be sorted out.

In practice, when interviewing the pupils they felt that tutorials in general were a waste of time with the teachers trying to keep the tutorial "games" going. This is an area where there seemed to be a serious mismatch between the intention of the school's policies and the experiences of the pupils.

The group as a whole felt able to go to their tutor if they were in need of help or advice. On examining this group consensus more carefully, the boys who made up the bulk of the pupils with learning difficulties stated that they did not feel able to discuss problems relating to learning difficulties with their tutors. The tutors would not help and they did not really expect them to anyway. Once again an area, where on the surface, it seems as if it would benefit pupils with learning difficulties, but on examination these were the pupils that were not being helped.
POINTERS FOR THE FUTURE

Of the four criteria mentioned by Gipps and Gross (1983) for effective teaching in the sphere of special educational needs, all are present in T.V.E.I. There has been large scale in-service, though not specific to S.E.N.s. There has been a stated preferred teaching style, though it has been seen that some teachers did not seem to understand what this teaching style was to be. Class sizes have been small (16) and teachers had been involved in the production of teaching materials. The evidence of this research would seem to suggest that even though these four criteria were present in some form within T.V.E.I., they do not seem to have been of any great benefit to the pupils with S.E.N.s. It must be stated that too much emphasis must not be placed upon the four criteria mentioned by Gipps and Gross (1983). The four criteria, if adhered to, would very likely increase the effectiveness of special needs teaching, but they must not be looked upon as a panacea for all the problems of special educational needs teaching.

Teacher attitudes to T.V.E.I. and to S.E.N.s have been investigated and in the main have been shown to be positive, although the fact that some teachers did not seem to understand fully the intentions of T.V.E.I. would seem to negate the fact that they were positive towards it. It is important that all teachers involved have a unity of meaning, a point mentioned by Osgood, Succi and Tannerbaum (1967) backed up by the perceptions of the pupils who stated that "some" teachers did not seem to know what T.V.E.I. is about.

Pupil attitudes towards T.V.E.I. have also been investigated and found to be in the main positive, although there was a feeling that it might interfere with their exam work in the fifth year. It may be that this feeling did not emanate from within school or from within their own class, for as Anderson (1987) states pupils are influenced greatly by outside factors.

The pilot scheme has been researched to ascertain if there were any serious mismatch between the schools intentions and the pupils perceptions. This seemed to occur in the area of tutorials. The staff saw this area as being central to the success of T.V.E.I. whereas the pupils felt that the staff were trying to keep the tutorial "games" going. This mismatch is important for new initiatives to overcome; it was mentioned in an evaluation carried out by Quicke (1986).

It would seem from evidence collected during interviewing and from observational diaries that too many assumptions have been made by the staff about what will help students with learning difficulties in T.V.E.I. These being:

1) That problem solving will help because it is real and not too academic.
2) The tutorial system will help because of the close relationship between tutor and pupil.
3) Negotiation will be of benefit because the pupil will be able to negotiate his/her own work.
4) Group work will help because the pupils can help one another.
The present study, though small scale, suggests that in the main research school,

a) The aims of T.V.E.I. have been implemented.

b) The staff were fully aware of the aims of T.V.E.I. and worked as a group.

c) The pupils were fully aware of the aims of T.V.E.I.

d) The pupils worked in groups, covered problem solving and were used to negotiation.

These factors would seem to suggest that T.V.E.I. had been successfully implemented in the comprehensive school. The question remains, however, would these four specific themes of T.V.E.I. listed above, improve the educational experience of the pupils with S.E.N.s? The evidence would seem to suggest no.

1) During observation the pupils with S.E.N.s tried to change groups rather than solve the problem set.

2) The S.E.N.s pupils stated during interview that they would not ask their tutor for any help regarding learning difficulties.

3) During observation the S.E.N.s pupils showed their dislike at having to negotiate with their peers, though they seemed quite happy at letting the teacher make decisions for them.

4) Again during observation the S.E.N.s pupils tried to "stick together", a legacy from the S.F.P. that T.V.E.I. has not yet overcome.

If we are to learn anything from the T.V.E.I. pilot as regards pupils with learning difficulties, it would seem that;

a) the organisation must be correct.

b) the most suitable members of staff must be used.

c) the in-service provision must take into account learning difficulties within subject areas.

d) all staff must be aware of the teaching style/approach to be used.

e) careful thought and evaluation must take place, so that assumptions are not made what "must" help pupils with learning difficulties.

f) any new initiative fits into the school's existing special needs structure.

 g) there is no mismatch between the school's intentions and the pupil's experiences.

T.V.E.I. extension will soon be in all mainstream secondary schools it is therefore important that the effect of T.V.E.I. on pupils with special educational needs should be investigated. Some of the central planks of T.V.E.I. such as group work and individual negotiation, did not seem to
enhance the education of pupils with special educational needs within this study. This may be due to particular circumstances unique to this study, such as the size of the school or the very remote area that the school is based on. On the other hand if the problems encountered by the students in this study are to be found elsewhere then T.V.E.I. as it is envisaged, may be detrimental to pupils with special educational needs.

The whole area of T.V.E.I. and special educational needs is worthy of a much wider, more detailed and rigorous investigation than was possible in this study.
APPENDIX (1)

CUMBRIA'S T.V.E.I. PILOT SUBMISSION

GEORGE EDWARD KENYON
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SECTION 1 THE BACKGROUND TO CUMBRIA'S SUBMISSION

1. INTRODUCTION

A rapidly changing industrial society asks of its young people not only competence in traditional intellectual and practical skills, but also a knowledge of recent innovations, an awareness of developing technologies and the ability to apply them. It also requires that young people are flexible in their outlook, willing to respond to change and able to learn and apply new skills more frequently than has been the case in the past. The reduced prospect of employment has highlighted these requirements and increased some young people's disenchantment with the appropriateness of the present educational provision.

In any consideration of these issues the nature and size of Cumbria needs to be taken into account. The county is sparsely populated and has only 51 secondary schools scattered over an area stretching from Morecambe Bay to the Scottish Border and from the Irish Sea to the Pennines. These schools are widely dispersed and range in size from under 200 to over 1700 students. Cumbria is a county of contrasts with urban centres of population on the Eden estuary and coastal strip at Carlisle, Whitehaven, Workington and Barrow. Large manufacturing and service industries are significant employers and a wide range of small businesses are important to the economic life of the county. Agriculture and related industries are major employers, as are the many aspects of tourism.

In the Cumbrian context, a particular benefit of TVEI would be the strengthening of links between rural and urban schools and between these schools, F.E., industry and commerce. Effective and flexible use of teaching expertise would be possible and greater educational opportunities would be available to all students in the scheme.

Pathways at 16 would be clearer and students would receive academic
and pastoral support over a 4 year period. The need for a liberal and outward looking education for young people is as pressing as ever and changes must be evolutionary rather than revolutionary. Any educational initiative, if it is to succeed, must gain the support of parents and the local community and attract students of the full ability range. Parents and employers must be convinced that the initiative extends the scope of education and training and builds on the broad foundations of the existing pattern. It is important that the educational service helps young people to develop the skills, motivation and self reliance to enable them to take advantage of new opportunities as they occur in the rapidly changing world of industry and commerce. The fundamental requirement of motivating young people in their own education needs to be tackled by emphasis on a change of teaching style in which students are supported in their work by teachers, local employers and the community rather than by teacher directed learning. Much in service support is needed to help teachers and others involved to adapt to this approach and the consequences will make a considerable impact on the curriculum as a whole. The timing of TVEI coincides with a period of significant discussion on 14 to 19 provision in Cumbria. A working party of officers, advisers/inspectors, heads and principals is currently examining the possible nature of change in the pattern, provision and style of education and training over the next ten years and the relationships between the worlds of education, commerce and industry. The Cumbria submission for a Technical and Vocational Education Initiative has five significant features which are identified in this introduction and developed throughout the proposal.

1. The submission includes a mix of rural and urban schools and colleges, which will allow developments to be extended into other parts of the county which have a similar heterogeneous nature. The inclusion of two small rural schools is deliberate in that it facilitates positive discrimination.
2. In the proposed area some significant advances have been made in the development of school/industry links; microcomputing; design and technology and school/college links. These provide a sound foundation for enrichment and extension.

3. In the project it is intended that the majority of the equipment will be used on a 'consortium' basis, by shared use and by the deployment of mobile work stations in buses. This will ensure their effective and efficient use in a mixed urban and rural area.

4. Fundamental to the submission is the development of a new teaching approach, which encourages teacher assisted learning rather than teacher directed learning.

5. The submission includes one of the Authority's special schools in Carlisle and this will foster the extension of links with schools and colleges and the opportunity for integration of staff and students.

2. SCHOOLS AND COLLEGES

It is intended that the project will include 7 schools and 3 colleges in the north of Cumbria. The nature of the area which the project will cover reflects the rural and urban mix which makes up the County. The area of the project provides a geographical transect from the north eastern fells of the Lake District, across the broad lower River Eden plain, including Carlisle, to the northern Pennines, including Alston (as indicated on the map on page 5). The schools participating in the project serve parts of this diverse area and it is the variation in the areas they serve and in their size and nature which makes the project attractive, as the following details indicate.

2.1 Caldew School, Dalston, is an 11-18 comprehensive school, admitting approximately 6 FE and serving a scattered rural catchment area.

2.2 Harraby School, Carlisle, is an 11-18 comprehensive school, admitting approximately 6 FE from an area to the south east of the City of Carlisle.
Map showing the disposition of schools and colleges in the project area.
2.3 Newman School, Carlisle, is an 11-18 Roman Catholic Aided School, admitting approximately 4 FE which in addition to serving Carlisle, includes an extensive rural area around the City in its catchment area.

2.4 St Aidan's School, Carlisle, is an 11-18 comprehensive school, admitting approximately 8 FE serving the south and south west area of the City.

2.5 Lochinvar School, Longtown, is an 11-16 comprehensive school admitting approximately 2 FE, north of Carlisle, which serves Longtown and the rural area along the Scottish border to the northern Pennines. At 16, pupils transfer to the Carlisle Technical College or 11-18 secondary schools in Brampton or Carlisle.

2.6 Samuel King’s School, Alston, is a 1 FE 11-18 comprehensive school some 30 miles south east of Carlisle. It serves the Alston Moor area, which over recent years has suffered significantly by the loss of local employment and public transport facilities. (Unlike other schools in the project, it is intended that the TVEI opportunities will be provided for all students, forming a part of their curriculum at 14+).

2.7 York School, Carlisle, is a 5-16 ESN(M) Special School with 120 pupils which serves Carlisle and the surrounding area.

2.8 With this diversity of schools, both in size and type, the project will provide the opportunity of developing an innovative and cost effective approach to curriculum development in the area of technical and vocational education. This will proceed in the framework of the aims set for the project and the Authority’s draft statement on the school curriculum.

2.9 There are three Colleges serving students from the area and further afield; Carlisle Technical College, the Cumbria College of Art and Design (in Carlisle) and Newton Rigg College of Agriculture, near Penrith. Each College already has links with some of the schools in the area and the project will present the opportunity to extend and strengthen these contacts.
2.10 The County Council has recently approved proposals for the creation of a sixth form college in Carlisle, with all the present 11-18 schools becoming 11-16. This change requires the approval of the Secretary of State, but would not impede 16+ developments identified in this paper. An academic board would be established to co-ordinate provision between the 3 colleges i.e. Sixth Form College, Technical College and College of Art and Design.

2.11 The existing contacts with Carlisle Technical College are through link courses for students beyond the age of 14 and at 16+ by co-operation in the provision of joint courses for B.E.C. General and City and Guilds Foundation in Community Care. At Newton Rigg there have been discussions on the development of a City and Guilds Foundation course in Agriculture and Agriculture Industries and this preparatory work will lead to an extension of the concept to other schools in the groups.

2.12 The Cumbria College of Art and Design, while having no formal links with schools of the type identified above, is developing rapidly and is currently proposing a D.A.T.E.C. course in Craft and Design which will key into project proposals beyond 16.

In all cases, the heads and principals meet on a regular basis to discuss curriculum issues in 14-19 education, through the Area Forum. Contacts also take place on an individual basis between teachers in all the establishments.

3. CURRENT DEVELOPMENTS ON WHICH TO BUILD

Within the area of the proposed project and further afield, there have been a significant number of developments over the last two or three years which relate to the nature of the Authority's proposal and which can be enriched to support a successful initiative in vocational and technical education. Some of these are outlined below to give an indication of their extent.
3.1 **Microcomputers**

- the Authority has run in-service courses for all Heads on microcomputer developments;

- each school in the area of the project has one teacher (or more) who has attended a one year, part-time in-service course on the potential of microcomputers in school. These teachers are not specialists, but are senior members of staff who, with the support of head teachers, have a co-ordinating role for computer assisted learning across the curriculum;

- the Authority provides support for schools in the area by the secondment of teachers on full-time and part-time release to encourage computer developments in schools;

- the Authority, in addition to the Department of Industry M.E.P. support, has helped all schools in the purchase of computers;

- under the umbrella of the Technical College, an I.T.E.C. is being developed in Carlisle;

- schools taking part in the project have experience of sharing microcomputer equipment for courses in computer appreciation and control for 11-13 year olds;

- the organisation and distribution of software to schools in Cumbria is arranged through a seconded teacher attached to the schools library service. This encourages the co-ordination of resources throughout the education service.

3.2 **Technology and Design**

- support from the National Centre for School Technology, Trent Polytechnic, has helped local initiatives. This has led to the development of teacher training and to the introduction, in some schools, of Technology at C.S.E. and 'O' level; - increasingly schools are adopting a design based, problem solving approach to workshop activities;
2.10 The County Council has recently approved proposals for the creation of a sixth form college in Carlisle, with all the present 11-18 schools becoming 11-16. This change requires the approval of the Secretary of State, but would not impede 16+ developments identified in this paper. An academic board would be established to co-ordinate provision between the 3 colleges i.e. Sixth Form College, Technical College and College of Art and Design.

2.11 The existing contacts with Carlisle Technical College are through link courses for students beyond the age of 14 and at 16+ by co-operation in the provision of joint courses for B.E.C. General and City and Guilds Foundation in Community Care. At Newton Rigg there have been discussions on the development of a City and Guilds Foundation course in Agriculture and Agriculture Industries and this preparatory work will lead to an extension of the concept to other schools in the groups.

2.12 The Cumbria College of Art and Design, while having no formal links with schools of the type identified above, is developing rapidly and is currently proposing a D.A.T.E.C. course in Craft and Design which will key into project proposals beyond 16.

In all cases, the heads and principals meet on a regular basis to discuss curriculum issues in 14-19 education, through the Area Forum. Contacts also take place on an individual basis between teachers in all the establishments.

3. CURRENT DEVELOPMENTS ON WHICH TO BUILD

Within the area of the proposed project and further afield, there have been a significant number of developments over the last two or three years which relate to the nature of the Authority's proposal and which can be enriched to support a successful initiative in vocational and technical education. Some of these are outlined below to give an indication of their extent.
in some of the schools in the project, curriculum links have been established to integrate curriculum initiatives in Science and Craft and Technology;

working groups of teachers producing supporting papers for the Authority's response to the D.E.S., on the school curriculum have identified ways in which science courses can be extended by the inclusion of technology links.

3.3 School/Industry Links

two years ago, the Authority established a SATRO which covers the County and is based in Whitehaven. The development of T.V.E.I. will allow its influence to be extended into the Carlisle area. SATRO has organised courses for heads and teachers with industrialists on current curriculum and industrial issues;

during the summer vacation SATRO arranged for a schools library vehicle to be temporarily converted into a mobile computer control workshop which toured villages in North East Cumbria gaining wide support from the local communities;

County activities in this area have included involvement in the C.B.I. Secondment scheme, Young Enterprise, Challenge of Industry Conferences and local in-service courses supported by U.B.I. (Understanding British Industry project);

schools within the proposed project have individually developed school/industry links by bringing industry and industrial issues into school. These have ranged from discussions in schools to the development of a "school and working life" project which produced a wide range of materials for use in schools on a variety of local industries;

for assessment of career potential, the Careers Service is developing JIG CAL on an experimental basis. This incorporates staff/student discussion, student assessment of employment interests, a computer profile for a student on job
Aided by counselling, a student will have the opportunity to visit a range of potential employers to sample work. The use of this scheme will be incorporated in the project.

3.4 Curriculum Development

- the local teachers centre in Carlisle and Higham Hall provide major foci for in-service training and teacher study groups on curriculum areas;
- the Authority's 14-19 working party is currently examining the ways in which approaches to learning will change in the next 10 years and their philosophy underlies the T.V.E.I. curriculum approach.
- arising from a DES Sub Regional course on management issues, two of the schools have examined and modified their 4th and 5th year curriculum patterns, with the help of the Authority.
- local teachers are preparing curriculum support papers related to the 5-16 Curriculum Document.

SECTION 2 CUMBRIA'S TECHNICAL AND VOCATIONAL EDUCATION INITIATIVE

4. CUMBRIA'S NINE AIMS

These are intended to create an educational and vocational framework, for the development of intellectual and practical skills which will be applicable in the world of work into the 1990s and are relevant to students of both sexes and all abilities;

(ii) which is responsive to change and based on the development of fundamental and transferable skills;

(iii) which extends students' understanding of commerce and industry and community service by participation;

(iv) which allows access to developing technological skills and their application to industry, commerce and the community with particular regard to small businesses;

(v) which provides the opportunity for students to develop and plan their learning activities assisted by their teachers;
(vi) to develop initiative and problem solving skills through group and individual project work linked as far as possible with commerce, industry and the community;

(vii) to develop links across the curriculum through problem solving and project work and so begin to influence what is taught throughout the curriculum and, more importantly, how it is taught;

(viii) which provides the opportunity to develop teaching styles and foster teacher assisted learning;

(ix) which provides technical and vocational initiatives in rural and urban areas.

5. THE CURRICULUM PATTERN AND HOW IT WILL BE ACHIEVED

In presenting proposals for the T.V.E.I. project, Cumbria would wish that the following factors are taken into account:

- the Authority's aims for the project;
- the requirement of a balanced curriculum for students;
- the opportunity for students to have a range of skill experience which can be related to the broad occupational training families;
- the intention of heightening students' awareness of the world of commerce and industry to which many will move on their departure from the project.

The curriculum proposals which are outlined below have been developed in discussion with the schools and colleges that will participate in the project and with representatives of industry and commerce in the area that the project will serve. The intention of the proposals is to encourage, in the participating schools and colleges, a change in the approach to 14-18 education, within the framework of the T.V.E.I. aims, which creates a synthesis of the world of work, education and training.
5.1 Years 1 and 2

The existing curriculum pattern in secondary and special schools in the project gives all students a balanced education in the context of the Authority's draft curriculum statement. The support papers on curriculum and phases of education which relate to the draft Cumbria 5-16 curriculum document are being developed and written mainly by representative groups of teachers assisted by LEA staff. These and similar working groups would be used to prepare the outline for modules and options in the TVEI course. This approach encourages co-ordination and co-operation between teachers involved without undue emphasis on central direction.

5.2 Teaching Approach

One major intention behind the introduction of this scheme to Cumbrian schools is the provision of a means for development of styles of teaching. The draft Cumbria 5-16 Curriculum Document (statement 10, page 13) refers to the need for balance, not only in curriculum areas covered, but in the teaching approaches used across the curriculum. The emphases throughout the T.V.E.I.—component are related to teacher-assisted learning, the development of students' study skills, the support by tutors for academic and pastoral work and a project-based approach to problem-solving. The involvement of teachers from the whole school, in tutorial and consultative roles, will encourage the spread of this approach across the whole curriculum. The in-service programme will concentrate on the development of these skills in school and college as well as providing specific support for teachers involved in modules and options.

For the equivalent of 75% of each week, students within the project will have the opportunity of following courses to examination level in G.C.E. and C.S.E. with the possibility of taking up to seven examinations, in English (Language and Literature), Mathematics and four option subjects of which one must be a science based subject and another a humanities based subject. Additionally, their curriculum will include religious education and physical education.
In addition to this pattern, 25% of student time each week will be devoted to the T.V.E.I. element. This contains four main features which will be common to all schools within the project.

1. Modules to develop skills
2. Options based on project work and problem solving
3. Work Experience and an understanding of industry and commerce
4. Active Tutorial Support for Students

This aspect of the Authority's proposal represents a significant departure from the present style of secondary education and presents an opportunity for students not only to draw on and use skills and experiences gained within the modules but also on those gained within the whole education programme.

The development of work will be characterised by three factors:
- teacher assisted learning
- a low syllabus content
- a project based approach

5.2.1 Modules to Develop Skills

It is recognised that students require a range of skills in the later years of statutory education and into further education to prepare themselves for work. These skills should reflect the significant technological changes which are occurring and will continue to occur, reflect the requirements of a broad based commercial and industrial community as found in the area of the project, and provide skills for students to adapt their approach to learning.

It is important that these skills should be available to all students on the course and be presented in such a manner that the students are able to use them across the range of their work within the T.V.E.I. and in their general education. Eight areas have been identified as being most relevant to the programme and it is envisaged that these will be provided throughout the course on the basis of modules, each occupying approximately 18 hours.
The eight areas are -

**Problem Solving and Study Skills** - Problem solving and project work is fundamental to the whole scheme. This module will serve as a general introduction to the course by encouraging participants to become involved in a range of problem solving situations led by the personal group tutors. The range of problems will be largely process dominated so that any lack of practical skills will not hinder the development of ideas. This module will develop the process of problem solving from the identification of the problem, through the stages of research and development, to testing and evaluation.

**Word Processing and Keyboard Skills** - This will give students the skill to use the work processor as a tool in other aspects of their work and to develop the necessary keyboard skills to operate efficiently.

**Computer Appreciation** - This module will lead to an understanding of the use of computers and develop appreciation of the potential and limitations of computers in their various applications.

**Control Systems** - This will develop the use of the computer as a method of controlling machine operation. The module will demonstrate and give practice in controlling a range of devices as well as giving opportunities to produce individual systems.

**Graphics** - This module will develop visual awareness and communication using a wide range of relevant materials and processes. While the more formal processes of technical drawing will provide an element, more importance will be attached to conveying ideas in a visual form and using these skills to help thinking and decision making within a problem solving base.

**Creative and Performing Arts** - This module may rest upon drama to develop inter-personal, communication, and movement skills through the use of improvisation and thus the production of a performance to explore a theme relevant to the course. This work could lead to the
use of video for the presentation of a dramatised documentary upon a theme, or to a staged performance, both introducing the students to a greater awareness of the technology involved in that work. Associated art work will be an additional possibility. Time for this work could be increased by encouraging parts of the project as an extra curricular activity.

Electronics - This module will concentrate on the processes that electronic devices are able to perform. Emphasis will be placed on the uses of electronic devices rather than the physics behind their operation. Students will be asked to design or make simple electronic devices to perform a variety of functions.

Business Management and Studies - This will seek to explain the place of industry and commerce in society and to develop understanding of ideas such as time and money, production line methods, control and distribution, and the effects of technology on production and manpower. Role playing and simulation exercises with a problem solving base will be a feature of the module. This will lead to a consideration of the problems associated with running a small business.

5.2.2 Options based on Project Work and Problem Solving

In this area of the T.V.E.I. curriculum, it is intended that students will have the opportunity of taking one option, or at most two, during the course of the first two or three years. Within the scope of the options, it will be possible for students to work on group and individual projects. As a broad framework, each project may contain the following: - Vocational elements; Social development; Communication development; Practical and numerical skills; Decision making; Evaluation; Guidance.

Options available to schools will be:

Technology This may include work in electronics, structures, mechanisms and pneumatics and lead to broad based practical project work involving these and other systems.
Environmental/Agricultural

This will be a broad based course covering a range of environmental issues and land usage (e.g. agriculture, machinery, horticulture, forestry). The course will be based on work being developed in several schools leading naturally to courses at 16+ in either school or college.

Design

This will include work with a range of materials although their variety and complexity will to a large extent depend on the ability of the students. The work will be project based throughout. Typical work might include aids' for the disabled, the local community or items to satisfy a personal need.

Business Studies/Tourism

This option will be developed on the assumption that the impact of information technology will affect every business and all forms of employment.

It will be based on courses being drawn up by the Micro-electronics Education Programme in conjunction with the Royal Society of Arts and the National Computing Centre.

The course will consider the use of technology in businesses of different size and type relevant both to urban and rural Cumbria.

Where existing syllabuses are unsuitable through over emphasis on content, schools in conjunction with colleges may develop examinations associated with these options to meet the requirements of the course. Discussions have already taken place with the Colleges involved in the project to ensure continuity at 16+. The experiences and expertise gained through the modules and options will be considered for credit and exemption for entry into B.T.E.C. courses and phased City and Guilds Agricultural and Related Subjects courses.

In those cases where appropriate examination syllabuses are available, schools will be able to enter students for these e.g. G.C.E., C.S.E. Technology and Design.
5.2.3 Work Experience

The industrial/commercial element of the proposal will run across the scheme throughout each year and both supplement and support work in the active tutorial groups.

In the first year, the emphasis will be on industrial simulation exercises, visits and talks by local industrialists, parents and other members of the community. This work will be closely associated with the pastoral and social development programme. The work of the student's tutor is important as there will be an opportunity during tutorial periods to discuss with the individual students their employment aspirations. Counselling and the use of JIG CAL will be introduced in the first months of the project.

In the second year, by which time a student's aspirations will have become clearer, there will be at least one week's full-time experience in a local industrial/commercial establishment. This will usually be linked to the student's main interest area. The tutor will encourage the student to make all the preliminary arrangements and the framework will have been established by the project's Industrial Liaison Officer who will consult with the Careers Service, school tutors, students and local industry and commerce on the opportunities for placements.

5.2.4 Tutorial Support for Students

The development of motivation, initiative and awareness in students is a most important part of the project and to ensure these qualities are nurtured it is crucial that students receive suitable counselling, not only in the areas of pastoral work but also in the academic sphere. It is critical that the tutor assists the student by suggesting possible means of developing projects, how to make use of skills which have been developed in the modules and which opportunities exist on the vocational front. The intention is that the tutor will be responsible for counselling each of his students on a regular basis throughout the year, not only individually
but also within groups through active tutorial work. The tutor will also have two further main responsibilities, one in connection with the assessment of the student's academic and life skills development and the other for the supervision of work experience and post experience assessment with the employer. Features of the industrial placement will be included in the student's profile.

Tutorial work will not be confined to those staff who take on the specific responsibilities outlined above. It is intended that other staff in the school will take on a tutorial role by acting as 'consultants' for students in helping to develop their project work or where some specific knowledge is required to extend a project.

By this means, it is hoped that the ethos and impact of T.V.E.I. will be extended within the schools which participate.

Tutorial support and guidance will be assisted by local industrialists and parents, who will have identified themselves as being prepared to assist in developments within the school. Each school will develop its own register of community participants in the project.
### Work Experience of at least 1 week in Year 2

#### Work Familiarisation, Simulation and Business Management in Year 1

**Residential Experience**

- **One Week in First Two Years**

For some students, extended into Years 3 and 4.

These options may also be

to cover the 2 year period.

For AS or 2 options may be chosen

in Year 2 of the course.

Students may spend all 4 sessions

on one option leading to an exam.

#### Options (4 periods concurrent)

<table>
<thead>
<tr>
<th>Number of Periods</th>
<th>Module 1</th>
<th>Module 2</th>
<th>Module 3</th>
<th>Module 4</th>
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<tbody>
<tr>
<td>4</td>
<td>Options</td>
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<td>Options</td>
</tr>
<tr>
<td></td>
<td>(a) Business</td>
<td>(b) Design</td>
<td>(c) Environmental</td>
<td>(d) Technology</td>
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<td>Physicists</td>
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- **First Year: Problem Solving and Study Skills**

#### First Term: 4 periods concurrent

- **SUMMARY OF PROGRAMME FOR YEARS 1 AND 2 OF THE I.E.I.**
5.3 Years 3 and 4

Continuity at 16 is seen as a high priority for all students, so that routes can be clearly identified by students entering the scheme at 14. It is recognised that at 16 the routes for students will diversify within the existing educational framework.

Students who remain at school will have two main routes; courses leading to 'A' level examinations in existing subjects and those introduced as a result of T.V.E.I. (e.g. Technology and Design); or a mixture of 'A' level and vocationally orientated courses, including a continuation of courses associated with Years 1 and 2. These are already being developed in conjunction with colleges. Tutorial support to students will follow the pattern established in the first two years.

Students will also have the opportunity of continuing their education at one of the three colleges, Carlisle Technical College, Cumbria College of Art and Design and Newton Rigg, with the range of courses available identified on the accompanying diagram. Additionally, the possibility of including College based Y.T.S., including the area of special needs, as an extension of the T.V.E.I. project is being considered. The Authority will also liaise with Y.T.S. managing agents in the private sector on the inclusion of T.V.E.I. elements.

Where students continue their education in a new establishment, positive pastoral co-ordination will be developed between the school and college tutors at the time of transfer and will be maintained on a termly basis. Each student will be a member of a T.V.E.I. tutorial group. In schools and colleges two further features of the initiative will be extended.

- the project based approach which will be incorporated into courses;

- work experience in 'specific' employment areas. On a day per week, industrial placement for post 16 courses will build on
experiences gained in year 2 and incorporate those skills already developed by the T.V.E.I. scheme. This period will also give an opportunity for practising skills within the restraints of a real working environment.

6. **VOCATIONAL GUIDANCE**

The existing pattern of careers advice through the Careers Service is an important element of the scheme. It will be supported by the increased emphasis which is placed on counselling and vocational guidance through the tutorial support which will be available to the students from sources within the school and the community. This emphasis is on broad based support and covers all the facets of the scheme, which needs to be well co-ordinated. The Careers Service, the tutor and the Industrial Liaison Officer will all be involved in this support.

6.1 **Assessment and Profiling**

In a number of schools in the project area and beyond, development work is being carried out on the assessment and profiling of students' progress. It is intended that this will be formalised in the project area and a standard form of assessment developed within the project. This will be co-ordinated by a working party of representatives from the schools and colleges which will draw on existing expertise. Profiling will be a continuous part of each element of the course and the student and all staff working with each student will contribute.

In the case of the project based option, each student will keep a diary of project development.

Work experience will again be recorded by the student in a diary; the employer will provide a record and assessment of the student's work within a framework agreed in advance between the tutor and employer. The tutor will keep a record of student counselling.
Alternative T.V.E.I. Routes at 16+

All Students will follow A and B

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<tr>
<th></th>
<th>A</th>
<th>B</th>
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<tbody>
<tr>
<td></td>
<td>Personal tutor attachment for active tutorial work, profiles, and assessment, coordination of personal and social development, liaison on project based work connected to main study area.</td>
<td>Industrial experience including information on small business management.</td>
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<table>
<thead>
<tr>
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<th>Examples of Alternatives Available</th>
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<tbody>
<tr>
<td>(a) In School</td>
<td>(1) A level subjects, 2/3 from normal curriculum possibly enhanced by another supported by T.V.E.I. e.g. Technology, Design, Electronics, Business Studies</td>
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<tr>
<td></td>
<td>(2) Continuation of work on options and modules, either non-exam or leading to exam at end of year 3 ('O' level, C.P.V.E.).</td>
</tr>
<tr>
<td>(b) College of Art and Design</td>
<td>(1) D.A.T.E.C. Design and Craft Courses.</td>
</tr>
<tr>
<td></td>
<td>(2) College based Y.T.S. followed by full-time courses.</td>
</tr>
<tr>
<td>(c) Newton Rigg College of Agriculture</td>
<td>(1) Range of one-year Y.T.S. courses in land usage including agriculture, horticulture, forestry, machinery and rural services, followed by one-year full time course.</td>
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<tr>
<td></td>
<td>(2) City and Guilds</td>
</tr>
<tr>
<td>(d) Technical College</td>
<td>(1) Range of Vocational Preparation Courses leading to B.T.E.C. 1 and 2, B.T.E.C. General, R.S.A., City and Guilds, e.g. General Catering, Nursery Nursing, Building Studies, Secretarial Studies, Computer Technology</td>
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<tr>
<td></td>
<td>(2) Courses in conjunction with I.T.E.C. and Training Workshop</td>
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<td></td>
<td>(3) M.S.C. sponsored courses for those with special needs will be developed</td>
</tr>
<tr>
<td>(e) Different combinations of the above.</td>
<td>Courses involving more than one institution.</td>
</tr>
</tbody>
</table>
At the student's departure from the T.V.E.I. course, a portfolio will be provided which will include - (i) a record of examination results and qualifications gained from the age of 14, including a Cumbria T.V.E.I. Certificate; (ii) a profile including records of course work, work experience, voluntary activities and vocational guidance given.

7. SPECIAL NEEDS

The Authority's proposal is intended to cover the whole ability range and as such will include the opportunity to involve the 20% of the schools' population which can be described as having special needs. In addition, the inclusion of York School, an E.S.N. (M) Special School, presents the opportunity for teachers in all the establishments to share experiences on the development of enrichment courses for lower ability students. Much of the work which is currently being followed at York School for 5th year students lends itself to involvement in the initiative. The school has become a focus for microcomputer work for the less able. In the area of community, industrial and commercial involvement, the school has developed an extensive work experience programme, a good system of LINK courses with the Technical College and a community service programme. The school's work has extended beyond 16 including discussions on the development of a special needs course and placements on Y.T.S. courses. These are features which can be incorporated and developed in the framework for the Authority's initiative.

More importantly, the inclusion of York School will allow an opportunity for further integration of its staff and students into a broader educational development.
8. **RESIDENTIAL EXPERIENCE**

It is considered important for all students to have a period of residential experience in the first year of the project. This will provide an opportunity for students to develop socially by living together and by undertaking individual and project work. Students will act as members as well as leaders of a group. The work will also provide a stimulating and challenging introduction to outdoor education, e.g. canoeing, mountaineering, orienteering and sailing. Students will work in groups with tutors and specialist instructors.

9. **EVALUATION**

The Authority places great emphasis on a thorough evaluation of the initiative, particularly when developments in other parts of Cumbria are considered. Preliminary discussions have therefore taken place on how evaluation could be carried out. If the submission is successful, it is intended to engage the University of Newcastle Department of Education to evaluate the initiative. J J C McCabe, Dean of Education, has already been of great help to the Authority in evaluating long course in-service training in primary science and micro-computer work.
Three forms of evaluation are envisaged:

1. The keeping of a summary record of the development and progress of the project in relation to the aims of the Authority and the M.S.C. with notes of the problems encountered, of procedures adopted and effective mechanisms.

2. The collection of evidence for an illuminative and formative series of reports which sample attitudes and opinions, encourage the assessment of achievement and progress, look at the ways in which presentation matches needs and interests and show what difficulties occur.

3. The production of more summative reports, at the end of the second and fourth years, making suggestions and recommendations for subsequent development, based upon the evidence accumulated.

The annual cost of this evaluation is £13,000, which includes a part-time research associate, part-time secretarial help and on costs. It is understood that the Northumberland Authority in its submission is considering a similar pattern of evaluation and if both are approved a common approach will be adopted.

SECTION 3 HOW THE INITIATIVE WILL BE MANAGED AND SUPPORTED

10. ORGANISATION AND MANAGEMENT

10.1 The Target Group

In the first year of operation, it is expected that approximately 270 places will be required for students from the full ability range. When the course begins in September 1984, they will be drawn from the Fourth Year group of students in each of the seven schools and they will represent about 30% of the age group, with the exception of Samuel King's School, Alston and York School where all the fourth year group are expected to participate.
In succeeding years, it is anticipated that a similar number of students will join the project and the size of each year group will be constant as they progress through the project. It is recognised that at 16+ and 17+, some students may leave the project but it is intended that students will be able to join at these stages.

Decisions on student participation within the schools will be made in the early spring of 1984 as a part of the normal procedure for determining pupils' 4/5th options. Arrangements which will be made include:

(i) the provision of a handbook for parents outlining the opportunities offered;
(ii) within school discussion with parents and students, including career aspirations and the suitability of the courses.

10.2 Co-ordination

The project will be managed by the co-ordinator who will be responsible to the Director of Education (or his representative) and the Chief Adviser/Inspector and the Assistant Director, NE Division of Cumbria.

The project co-ordinator will meet the heads of schools and colleges and the school/college co-ordinators every month to monitor the development of the project.

Twice a year the project co-ordinator will report to a support group on the project's progress. The membership of this group will be drawn from industrial and commercial interests in the area, the Careers Service, M.S.C., schools and colleges, their governors and the LEA. Any matters relating to the salaries and conditions of service of project staff will be considered through the Authority's existing arrangements.

The existing links between the participating institutions were identified above. These will be strengthened by the schools' and colleges' involvement in a common approach to provide continuous technical, vocational and educational pathways for students.

The monthly meetings indicated will provide an opportunity for
detailed discussion on the management and development of the project. It should be stressed that the existing informal links involving the sharing and rotation of equipment, 16+ link course development and 'co-operative teaching' provide a sound base on which to introduce a T.V.E.I. consortium pattern.

One further area which will help to consolidate the project, and where initiatives have already been taken by some schools in the project, is a co-operative approach to the development of courses associated with the use of microcomputers and control devices. In the last 18 months, important developments have taken place in this area and programmes are operating successfully in schools. The T.V.E.I. project will allow this opportunity to be extended and create a coherent range of experiences for students.

10.3 Premises and Equipment

The following equipment and premises items will be required to bring about a successful development of the initiative:

- 3 mobile units (2 to be provided in Year 1 and one the following year)
- 12 computer networks for use in the options and modules work of the project
- 6 temporary classrooms for schools and colleges where there is not sufficient space available for adaptions
- Alterations and adaptions to 12 rooms in schools and colleges to provide computer rooms for work associated with the modules.

Discussions have already taken place with the schools and colleges to identify the most efficient and cost effective methods of using equipment. This will be a combination of the following:

1. Each school will have a network system of computers which will be used for computing, word processing and control systems.
2. The rotational use of networks so that up to three groups may be taught at any one time.
3. Mobile units (single decker buses), each containing 16 work stations for work on computing, control, word processing and
technology. These mobiles will travel to each of the schools on a timetabled basis to support work in the schools. This will allow schools to have equality of opportunity in teaching and equipment. Additionally by their presence in the area the vehicles will be an indication of the Authority's active interest in promoting technological development.

The vehicles will be manned by teachers who will both help directly in teaching and assist staff development. In addition a technician/driver will be available to service equipment in the vehicles and in the schools and assist with technological developments where appropriate.

It is anticipated that during the second and subsequent years of the project, the sharing of resources between schools will decrease as individual school and college use increases.

11. STAFFING

To allow for the successful development of the project, the following additional appointments are required:

11.1 Project Co-ordinator -

(a) who will be responsible to the Director of Education for the smooth development and delivery of the project;

(b) who will lead the project through liaison with the heads of schools/principals of colleges and the school co-ordinators.

The role of the co-ordinator is seen to equate to that of an Authority adviser/inspector who would become a member of the Authority's staff with responsibility for the T.V.E.I project.

While the principal role is for the project's successful development, it is anticipated that the co-ordinator would become involved in examining possible routes by which the approaches developed in the initiative could be extended within the Authority.

11.2 Industrial Liaison Tutor

An industrial liaison tutor would be appointed to work with the schools and colleges involved. This person would not only liaise with SATRO Cumbria but also be responsible for co-ordinating the
whole industrial interface within the scheme. The tutor will be expected to;

(1) Assist with the co-ordination of cross curriculum links which can help establish closer communication between teachers and industrialists and consider relevance and content.

(2) Identify and negotiate community and industry related projects which can be included as part of a four year programme.

(3) Develop work experience programmes which relate as far as possible to student interest and skills developed on the programme.

(4) Liaise with the careers service and careers teachers in school.

11.3 Teaching and Ancillary Staff

The following staff will be required to allow a successful development of the initiative and will be recruited during the project as indicated in Annex D

- 2 Administrative/Clerical staff to support the work of the Project Co-ordinator and the Industrial Liaison Tutor.
- 3 Teachers based on the mobile units.
- 3 Drivers/Technicians based on the mobile units.
- 24 Teachers to work in the schools and colleges.

The number of teaching staff is based on full-time equivalents. In some cases full-time appointments will be made in schools and colleges and in each school one member of staff will be given responsibility to co-ordinate T.V.E.I. within the school.

In other cases, staff from schools and colleges will assume a part-time role within T.V.E.I. and their time within the normal school curriculum will be covered by new appointments.

It is expected that in the first year, there will be a core T.V.E.I. staff who will assist in a number of the schools but in the second year there will be a move to basing staff in individual schools.
12. IN-SERVICE PROVISION

In this proposal there is an emphasis on teaching approach and problem solving. It is therefore essential that a pattern of in-service training is developed to support these objectives and the main areas to which attention will be given in the early stages of the project are:

(i) problem solving approaches to teaching;
(ii) micro developments and applications;
(iii) information technology;
(iv) pastoral and academic counselling;
(v) profiles and assessment;
(vi) technology

Courses covering these aspects will be mounted through the Teachers' Centre in Carlisle and at Higham Hall, the Authority's Residential Centre. In addition, the possibilities of mounting courses through Brathay Hall, (MSC's Accredited Training Centre), St Martin's College, (Lancaster), and Charlotte Mason College of Education, are being pursued. In all cases it is anticipated that courses will include inputs from schools, further education, industry and commerce.

The experience gained from this in-service will be of use to the Authority in developing in-service for schools and colleges outside the scheme.
Cumbria is the second largest county in England with an area of 6,809 square kilometres. One third of the area is in the Lake District National Park, one thirtieth is part of the Yorkshire Dales National Park.

However, only six of the 46 English counties have a smaller population, the latest estimate being 482,500. Second only to Northumberland in the sparsity of its population, it has only one person for every 1.41 hectares of land. This compares with one person for every 0.28 hectares in England as a whole. Cumbria is also one of the least urban counties with only 44% living in towns of over 20,000 population. At the other extreme about 25% live in villages of less than 1,000 population.

Cumbria has an ageing population. In 1971 17.4% of the population were of pensionable age. By 1981 this had risen to 19%. Conversely the numbers of children aged under 16 fell from 25% to 21.7% of the total population.

Cumbria is expensive to service because of its scattered population. With the seventh greatest length of road among the English Shire counties, there are 15 metres for each person and 39 metres for every domestic rate payer. Additional difficulties are created by the topography and climate with approximately 60% of the County lying at or above 600 ft.

Agriculture is one of the County's major industries. It directly engages 16,450 farmers and workers or about one in thirteen economically active persons. Indirectly it employs many more. Cattle and sheep outnumber the human population five-fold. Nearly 70% of the County's area is agricultural land.

54,450 hectares or 8% of Cumbria's land and inland water area is woodland. Four tenths of this is owned by the Forestry Commission and the rest by private interests, 65% is mainly coniferous high forest and 25% mainly broadleaved high forest. The rest is coppice, shrub and cleared land.

One in every three employees works in manufacturing industries. In the west, Allerdale, Copeland and Barrow, this is nearer one in two. One in every two employees works in service industry. In the east, Carlisle, Eden and South Lakeland, this is nearer two in three.

In October 1983 over 22,000 persons, or 11.4% of the work force, were claiming unemployment benefit in Cumbria. This is half a percent lower than at the same time last year. Although Cumbria's level is below the national average of 12.8%, the Workington area is well above with 17.5%.

In 1982, 920 dwellings, 663 private and 257 public, were completed, a marked decrease on the 1,291 completions of the previous year. At the present rate, it would take over 200 years to renew the County's building stock without the need for additional dwellings. In addition, 2,287 public and private dwellings were renovated with the aid of grants or subsidies.
Almost six in every ten households live in their own house. In 1977, this was one in two. One in every four households live in a house rented from the local council.

In 1981 there were still 37% of households without a car. In 1982/83, almost 35 million journeys were made on bus services in Cumbria, an average of 73 journeys a year for every man, woman and child in the County. Even so this was 2 million less journeys than in the previous year.

An estimated 3 million British and 200,000 overseas tourists visited Cumbria in 1981. They stayed for 14 million nights in the County and spent over £125 million. The latter figure represents an increase over 1980 but the other figures are similar to the previous year's.
<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Energy &amp; Water</th>
<th>Manufacturing</th>
<th>Construction</th>
<th>Distribution &amp; Catering</th>
<th>Transport</th>
<th>Other Services &amp; Non-Specified</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlisle City</td>
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<td>700 (4%)</td>
<td>5,020 (23%)</td>
<td>2,110 (12%)</td>
<td>3,060 (17%)</td>
<td>2,520 (14%)</td>
<td>4,160 (23%)</td>
<td>17,290</td>
</tr>
<tr>
<td>Carlisle Rural</td>
<td>1,620 (19%)</td>
<td>160 (2%)</td>
<td>1,320 (16%)</td>
<td>1,010 (12%)</td>
<td>1,240 (15%)</td>
<td>620 (7%)</td>
<td>2,330 (28%)</td>
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<td>110 (24%)</td>
<td>10 (2%)</td>
<td>30 (7%)</td>
<td>100 (22%)</td>
<td>80 (18%)</td>
<td>50 (11%)</td>
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<td>6,450</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,840 (7%)</strong></td>
<td><strong>870 (3%)</strong></td>
<td><strong>6,370 (24%)</strong></td>
<td><strong>3,220 (12%)</strong></td>
<td><strong>4,380 (16%)</strong></td>
<td><strong>3,190 (12%)</strong></td>
<td><strong>6,550 (25%)</strong></td>
<td><strong>26,580</strong></td>
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<th>Construction</th>
<th>Distribution &amp; Catering</th>
<th>Transport</th>
<th>Other Services &amp; Non-Specified</th>
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<td>20 (0%)</td>
<td>120 (1%)</td>
<td>2,790 (21%)</td>
<td>220 (2%)</td>
<td>3,890 (30%)</td>
<td>210 (2%)</td>
<td>5,710 (44%)</td>
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<td>Carlisle Rural</td>
<td>250 (6%)</td>
<td>50 (1%)</td>
<td>470 (11%)</td>
<td>90 (2%)</td>
<td>1,240 (28%)</td>
<td>90 (2%)</td>
<td>2,100 (48%)</td>
<td>4,370</td>
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<tr>
<td>Alston</td>
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<td>0 (0%)</td>
<td>10 (5%)</td>
<td>10 (5%)</td>
<td></td>
<td>0 (0%)</td>
<td></td>
<td>200</td>
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<td><strong>TOTAL</strong></td>
<td><strong>270 (2%)</strong></td>
<td><strong>170 (1%)</strong></td>
<td><strong>3,270 (19%)</strong></td>
<td><strong>320 (2%)</strong></td>
<td><strong>5,220 (30%)</strong></td>
<td><strong>320 (2%)</strong></td>
<td><strong>7,880 (45%)</strong></td>
<td><strong>17,660</strong></td>
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<th>Construction</th>
<th>Distribution &amp; Catering</th>
<th>Transport</th>
<th>Other Services &amp; Non-Specified</th>
<th>Total</th>
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<td>50 (2%)</td>
<td>70 (3%)</td>
<td>520 (20%)</td>
<td>590 (22%)</td>
<td>450 (17%)</td>
<td>200 (8%)</td>
<td>780 (29%)</td>
<td>2,660</td>
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<tr>
<td>Carlisle Rural</td>
<td>30 (5%)</td>
<td>20 (3%)</td>
<td>130 (20%)</td>
<td>60 (9%)</td>
<td>100 (15%)</td>
<td>10 (2%)</td>
<td>310 (47%)</td>
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<td>60 (40%)</td>
<td>40 (27%)</td>
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<td><strong>TOTAL</strong></td>
<td><strong>80 (2%)</strong></td>
<td><strong>90 (3%)</strong></td>
<td><strong>710 (20%)</strong></td>
<td><strong>690 (20%)</strong></td>
<td><strong>560 (16%)</strong></td>
<td><strong>210 (6%)</strong></td>
<td><strong>1,130 (33%)</strong></td>
<td><strong>3,470</strong></td>
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<th>Manufacturing</th>
<th>Construction</th>
<th>Distribution &amp; Catering</th>
<th>Transport</th>
<th>Other Services &amp; Non-Specified</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlisle City</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>160 (16%)</td>
<td>20 (2%)</td>
<td>300 (29%)</td>
<td>20 (2%)</td>
<td>520 (51%)</td>
<td>1,020</td>
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<tr>
<td>Carlisle Rural</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>30 (9%)</td>
<td>0 (0%)</td>
<td>60 (18%)</td>
<td>0 (0%)</td>
<td>250 (74%)</td>
<td>340</td>
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<tr>
<td>Alston</td>
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<td>0 (0%)</td>
<td>30 (38%)</td>
<td>0 (0%)</td>
<td>30 (38%)</td>
<td>0 (0%)</td>
<td>20 (25%)</td>
<td>80</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>0 (0%)</strong></td>
<td><strong>0 (0%)</strong></td>
<td><strong>220 (15%)</strong></td>
<td><strong>20 (1%)</strong></td>
<td><strong>390 (27%)</strong></td>
<td><strong>20 (1%)</strong></td>
<td><strong>790 (55%)</strong></td>
<td><strong>1,440</strong></td>
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</table>
**EDUCATION DEPARTMENT - TECHNICAL AND VOCATIONAL INITIATIVE**

**SELF-EMPLOYED AS A PERCENTAGE OF PERSONS WORKING AND POPULATION DENSITY BY DISTRICT**

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>SELF-EMPLOYED/ PERSONS WORKING</th>
<th>PERSONS/HA</th>
</tr>
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<tbody>
<tr>
<td><strong>CUMBRIA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allerdale</td>
<td>13.4</td>
<td>0.76</td>
</tr>
<tr>
<td>Carlisle</td>
<td>10.6</td>
<td>0.98</td>
</tr>
<tr>
<td>Copeland</td>
<td>8.1</td>
<td>1.00</td>
</tr>
<tr>
<td>Eden</td>
<td>24.8</td>
<td>0.20</td>
</tr>
<tr>
<td>South Lakeland</td>
<td>18.0</td>
<td>0.53</td>
</tr>
<tr>
<td>Cumbria Rural</td>
<td>14.0</td>
<td>0.61</td>
</tr>
<tr>
<td>Barrow-in-Furness</td>
<td>6.2</td>
<td>9.77</td>
</tr>
<tr>
<td>Cumbria Urban</td>
<td>6.2</td>
<td>9.77</td>
</tr>
<tr>
<td><strong>LINCOLNSHIRE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boston</td>
<td>13.4</td>
<td>1.67</td>
</tr>
<tr>
<td>East Lindsey</td>
<td>20.3</td>
<td>0.59</td>
</tr>
<tr>
<td>North Kesteven</td>
<td>11.6</td>
<td>0.85</td>
</tr>
<tr>
<td>South Holland</td>
<td>17.9</td>
<td>0.84</td>
</tr>
<tr>
<td>South Kesteven</td>
<td>11.9</td>
<td>1.03</td>
</tr>
<tr>
<td>West Lindsey</td>
<td>12.4</td>
<td>0.55</td>
</tr>
<tr>
<td>Lincolnshire Rural</td>
<td>14.6</td>
<td>0.80</td>
</tr>
<tr>
<td>Lincoln</td>
<td>8.0</td>
<td>21.17</td>
</tr>
<tr>
<td>Lincolnshire Urban</td>
<td>8.0</td>
<td>21.17</td>
</tr>
<tr>
<td><strong>NORTH YORKSHIRE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Craven</td>
<td>19.6</td>
<td>0.39</td>
</tr>
<tr>
<td>Hambleton</td>
<td>14.8</td>
<td>0.53</td>
</tr>
<tr>
<td>Harrogate</td>
<td>14.7</td>
<td>1.03</td>
</tr>
<tr>
<td>Richmondshire</td>
<td>15.8</td>
<td>0.31</td>
</tr>
<tr>
<td>Ryedale</td>
<td>21.5</td>
<td>0.52</td>
</tr>
<tr>
<td>Scarborough</td>
<td>17.8</td>
<td>1.21</td>
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<tr>
<td>Selby</td>
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<tr>
<td>North Yorkshire Rural</td>
<td>15.7</td>
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<tr>
<td>York</td>
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<td>32.92</td>
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<tr>
<td>North Yorkshire Urban</td>
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<td>32.92</td>
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<tr>
<td><strong>NORTHUMBERLAND</strong></td>
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<tr>
<td>Alnwick</td>
<td>15.2</td>
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<td>Berwick</td>
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<td>Castle Morpeth</td>
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<tr>
<td>Tynedale</td>
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</tr>
<tr>
<td>Northumberland Rural</td>
<td>13.9</td>
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<tr>
<td>Blyth Valley</td>
<td>4.9</td>
<td>10.76</td>
</tr>
<tr>
<td>Wansbeck</td>
<td>4.6</td>
<td>9.07</td>
</tr>
<tr>
<td>Northumberland Urban</td>
<td>4.6</td>
<td>9.24</td>
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</table>
NUMBER OF WORKERS IN PLANTS AND ESTABLISHMENTS BY SIZE OF ESTABLISHMENT EXCLUDING AGRICULTURAL WORKERS (INCLUDING AGRICULTURAL WORKERS IN BRACKETS)

<table>
<thead>
<tr>
<th>Size of Establishment</th>
<th>Carlisle City No. of Workers/Percent</th>
<th>Carlisle Retail (Including Alston) No. of Workers/Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9</td>
<td>4,545/12.3% (4,635/12.6%)</td>
<td>1,148/18.2% (2,643/34.0%)</td>
</tr>
<tr>
<td>10-49</td>
<td>10,216/27.5% (10,216/27.4%)</td>
<td>1,713/27.2% (1,713/22.0%)</td>
</tr>
<tr>
<td>50-99</td>
<td>5,029/13.6% (5,029/13.5%)</td>
<td>656/10.4% (656/8.4%)</td>
</tr>
<tr>
<td>100-199</td>
<td>5,466/14.7% (5,466/14.7%)</td>
<td>601/9.5% (601/7.7%)</td>
</tr>
<tr>
<td>200-499</td>
<td>5,945/16.0% (5,945/16.0%)</td>
<td>812/12.9% (812/10.4%)</td>
</tr>
<tr>
<td>500-999</td>
<td>3,594/9.7% (3,554/9.7%)</td>
<td>1,365/21.7% (1,365/17.5%)</td>
</tr>
<tr>
<td>1,000+</td>
<td>2,293/6.2% (2,293/6.2%)</td>
<td>0/0% (0/0%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>37,088/100.0% (37,228/100.0%)</td>
<td>6,295/100.0% (7,795/100.0%)</td>
</tr>
</tbody>
</table>

1 PERCENTAGES MAY NOT ADD TO 100 BECAUSE OF ROUNDING
APPENDIX (2) PHASE ONE SCHOOLS PUPIL RESULTS (EXAMPLE)

T = TEACHER

NAME ________________________________________________

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<tr>
<th>T(A)</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
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### APPENDIX (3) LIST OF THE 26 CONSTRUCTS CHOOSEN BY THE PHASE ONE SCHOOLS T.V.E.I. STAFF

1 to 4

<table>
<thead>
<tr>
<th>Construct</th>
<th>Antonym</th>
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<td>CONSCIENTIOUS</td>
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<td>DESTRUCTIVE</td>
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The following ten constructs were the most common ten highlighted by your schools T.V.E.I. staff. Could you please score the pupils on the enclosed list on the Scale 1 - 4, 1 being the statement on the left. As always answers are strictly confidential.

<table>
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<tr>
<th>Construct</th>
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<td>Destructive</td>
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<td>Understanding</td>
<td>Uncaring</td>
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<td>Lacks Confidence</td>
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<td>Misbehaves</td>
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<tr>
<td>Stable</td>
<td>Disturbed</td>
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