AUTHENTIC AND ECCENTRIC ADOPTERS.

An Enquiry into Different Perceptions of a Curriculum Development, the Schools Council 16-19 Geography Project, among Heads of Geography.

by

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SUMMARY OF RESEARCH.

The Schools Council Geography 16-19 Project was used as a case study to investigate the project perceptions of a sample of Heads of Geography who had adopted the scheme. The department heads were sent a questionnaire containing a multiple-choice section which offered different interpretations of the project's philosophy, aims and methods. Each question was followed by three answers one of which was a statement taken from Geography 16-19 dissemination literature and supported by statements from a project team member.

The answers chosen by the Heads of Geography were scored for project-congruency. The total scores were ranked and a small sample of three Authentic Adopters (with the highest project-congruent scores) and three Eccentric Adopters (with the lowest scores) were identified. These six teachers were then interviewed with the intention of discovering which reference groups they used. The interviews were semi-structured in order to gain relevant data with which to test five hypotheses.

Hypotheses.

1. Heads of Department who choose nonmembership reference groups are more likely to be Authentics.

2. Members of the Project Pilot Team are more likely to be Authentics than other project-adopting Heads of Geography.

3. Heads of Department who are engaged in Anticipatory Socialisation are more likely to be Authentics.

4. Heads of Department who have seldom been involved in major curriculum change are more likely to be Eccentrics.

5. Heads of Department belonging to Type B and D of Runciman's Relative Deprivation Typology (i.e. those dissatisfied with their own status and/or that of their profession) are likely to be Authentics.

From the small sample of six geographers, one Authentic and one Eccentric were selected for a further in-depth study. The purpose was to shed light on the institutional settings in which these innovating heads of department were working and to uncover factors which may have influenced their decision-making or their own perceptions.
The aim of the research design was to triangulate evidence from the three stages of the enquiry (questionnaire, semi-structured interviews and institutional case study) and to achieve further rigour by the use of both scientific and naturalistic research methods.

The multiple-choice section of the questionnaire proved to be sufficiently discriminating to allow the confident selection of Authentics and Eccentrics. Good data relevant to most of the hypotheses was acquired from the interviews and institutional case studies.

In the final analysis, hypotheses 1, 3 and 4 were accepted. Authentic Heads of Department chose nonmembership reference groups, were involved in anticipatory socialisation and had more experience of major curriculum change than Eccentrics.

Hypotheses 2 and 5 were rejected. The Project pilot team contained both Authentics and Eccentrics. This was largely due to the deliberate selection of conservative as well as innovative department heads for the piloting phase. Some conservative attitudes were retained despite dissemination and direct involvement in the project's development. Authentics could not be exclusively linked with Type B of the relative deprivation typology because all the teachers interviewed were dissatisfied with the relative position of their profession. As for the second part of Hypothesis 5, research evidence was not strong enough either in quantity or quality to connect Authentics with Type D deprivation, that is dissatisfaction with personal positions.
CHAPTER 1

INTRODUCTION.

1. General Aims of the Research.
2. Definition and Significance of Terms.
3. The Importance of Research into Dissemination.

1. General Aims of the Research.

The general area of interest for this research is the interpretation of curriculum development projects by teachers in schools and colleges. Since this is a vast topic a decision was made to concentrate on one large scale scheme. The scheme chosen for case study was a national project, the Schools Council 16-19 Geography Project.

One central problematic question soon emerges from studying past large-scale, top-down dissemination, particularly those launched under the aegis of the Schools Council. Why have well-prepared curriculum innovations, offering clear explanations of their philosophies, aims, contents and methods become distorted by the time they are practiced in the classroom?

If the innovation relies on a centrally devised message then some causes of these distortions may be found in the type and quality of dissemination offered, i.e. what can be termed the transmission-side of curriculum development. Corrupting influences may also be found in the receiver-side of curriculum development. Intermediaries between the project team and the teachers, as well as the teachers themselves may perceive a project, its ideas, purpose and emphases in many different ways.

Logically there can be two general explanations for variant interpretation amongst teachers apart from faults in the transmission i.e. the dissemination process. Either they have failed to ingest full and accurate information because of faulty reception, or they have subsequently changed their ideas. Either way there will be many different reasons for such behaviour but the frames of reference which teachers apply to the disseminated message will be one important factor. The norms, attitudes and values which teachers apply to new ideas will shape their perceptions and will depend on their chosen reference group. Their reference groups can be membership groups like
staffroom colleagues or non-membership groups such as the LEA advisory service.

The project team for the Schools Council 16-19 Geography Project began trialing its teaching units in 1977. Schools in several LEAs were recruited. They operated at three levels. Pilot establishments had most direct contact with the central Project Team. Linked Associate schools consorted with the pilot schools and had some contact with the Project Team, while Associate schools operated independently. All schools were free to adopt the project after general dissemination began in 1983-84. This research focuses on the teachers responsible for adopting the Schools Council 16-19 Geography Project, in particular Heads of Department. It seeks to identify those teachers who have authentic interpretations of the project, that is teachers whose perceptions closely match those of the project-devising team, and those teachers whose perceptions are most at variance with the project team's. Teachers' perceptions were categorised by analysing responses to a questionnaire.

The research sought to evaluate factors which affect perceptions, dissemination and adoption, and which may have brought about differences of implementation. Hypotheses were then set up relating variations in perception to reference groups chosen by Heads of Department.

The hypotheses were that teachers who held the most authentic perceptions of the project, belonging to the Authentic Perceptual Congruency category, would have nonmembership reference-groups whereas those whose perceptions were less project-authentic, Eccentric Perceptual Congruency, would choose membership reference-groups.

HODs who were members of the Project's Pilot and Associate Schools are more likely to be Authentics.

Heads of Department who are engaged in Anticipatory Socialisation are more likely to be Authentics.

Heads of Department who have seldom been involved in curriculum change are most likely to be Eccentrics.

The final hypothesis tested states that those teachers who are happiest with the status of their profession within society and with their own position within the profession are more likely to hold project-authentic ideas.
2. Definition and significance of terms.

Bolam (1975) makes the valid observation that there are "a bewildering variety of models and theories" relating to innovations in education. These variations can lead to "terminological and conceptual overlap and confusion". In this research an attempt is made to avoid these problems by defining, as clearly as possible, the key terms used. Some key definitions are given here, because they are used from here on in the introduction as well as in subsequent chapters.

A useful definition of INNOVATION is provided by Adams and Chen (1981). They state that an innovation is any "persisting" change in the "behaviour" of members of a discrete social system. The word "behaviour" is taken in a broad sense so that in an educational setting it could encompass change of study brought about by simply altering course content as well as more fundamental shifts of teaching or learning practice. The definition also acts as a reminder that teachers and students are part of social systems and not independently reacting to a new ideas.

Adams and Chen define innovation from an assumed objective and sociological standpoint. Since this research is concerned with individual perceptions of a new curriculum project, a definition which is more individual and subjective in nature is required. Rogers and Shoemaker (1971) provide this viewpoint by concentrating on what constitutes novelty for the individual.

"An innovation is an idea, practice or object perceived as new by an individual. It matters little, so far as human behaviour is concerned, whether or not an idea is "objectively" new as measured by the lapse of time since its first use or discovery. It is the perceived or subjective newness of the idea for the individual that determines his reaction to it. If the idea seems new to the individual, it is an innovation".

(Rogers and Shoemaker 1971; p.19)

Whilst the initial sentence of this definitive paragraph is useful in clarifying the scope of innovation, the remainder helps only when the researcher wishes to see a curriculum project from the point of view of an interested teacher. As an illustration of why the Rogers and Shoemaker
cannot be wholly accepted in this context, it is possible to imagine a very traditional school somewhere which has just decided to relax its rule that teaching staff should wear full academic dress including mortar boards. The notion that the wearing of suits without academic regalia is an innovative practice according to the perceptions of the headmaster is entirely consistent with the Rogers and Shoemaker ideal. However the educational researcher would be hard-pressed to justify this new practice as an innovation worthy of serious study. It is safer to use the term innovation to refer to the introduction of ideas, practices or objects which, at the time of their introduction, are new to the vast majority of people within an educational system. According to Adams and Chen (ibid.), an innovation becomes a REFORM when "it is in widespread use throughout a specific target population". Therefore the mothballing of mortar boards should properly be seen as the belated implementation of reform in this day and age.

There are other terms which slide about the deck of the educational research ship and which are in need of tying down. McDonald and Walker (1976) notice that the word DIFFUSION which they define as "the natural social process of proliferation" has given way to the term DISSEMINATION. Dissemination has been described as an activity which is "designed to communicate" new ideas to a "wide audience" (Schools Council 1974), but McDonald and Walker (1976) themselves provide a stronger definition. For them dissemination refers to the "planned pathways" for transmitting new educational ideas and practices to any location of "potential implementation".

The latter definition is preferred because it gives more weight to the conscious planning of change, thus better differentiating between diffusion, or undirected communication of ideas, and dissemination which is organised and structured. It also implies a more precise target group within its social system; in this context mainly teachers in their schools and local areas.

The replacement of the term "diffusion" by "dissemination" seems to be part of a general trend. As more becomes known about the process of dissemination and more of its associated problems are recognised, so a greater variety of factors are taken into account when planning strategies. These strategies tend to become more complex and the basic terminology used to describe them becomes less adequate. New terms are developed which are refinements of old ones.
With the realisation that "adoption" of project materials did not necessarily mean the proper absorption of its philosophy and methods, the ideas of "implementation" and even "institutionalisation" gained acceptance.

For Pratt (1980) the term ADOPTION means the clear acceptance of an innovation, with an "implicit and explicit commitment" to implement it.

Rogers (Rogers and Shoemaker 1971) admits that he has changed his ideas about the term "adoption". In his publications during the 1960s, he meant a decision to "continue full-scale use" of an innovation. Adoption therefore must have been preceded by trial use. Now the authors agree that adoption is a decision to "make full use of" a new idea which is seen to be beneficial, thereby presenting no contradiction with Pratt's statement.

IMPLEMENTATION of an educational innovation is taken to mean that the school has put the new programme into use in a recognisable and systematic way. This definition is preferred to that of Pratt (1980) namely "the realization of intended change" which begs the question, "Whose intentions?".

INSTITUTIONALISATION is taken to indicate that the innovation with, where appropriate, its philosophy and methodology, have become interwoven into the school's curriculum and into accepted teaching approaches.

Whether adoption, implementation or institutionalisation form the key terms in a research project, is an indication of the level of evaluation being undertaken. This research concentrates on adoption and implementation.

Another dimension of this research which requires precision of meaning is PERCEPTION. The term can mean different things in different contexts e.g. psychology, fine art, literature and common usage. Of these the psychologists' definitions may be a useful starting point. Confusingly, English and English (1970) list seven definitions of the term, most of which refer to two basic linked elements. Perception is:

(i) "awareness" through sensory processes, which is
(ii) influenced by "set and prior experience".

Hilgard and Atkinson (1967) agree that perception is something more than a "passive registration of stimuli" which impinge on the sense organs.
It is this point which has most significance for educational research. The point is amplified by Mouly (1970) who observes that perception must be considered with "emphasis on the selectivity" with which an individual recognises and emphasises certain variables but minimises others in his or her interpretation of a situation.

For the most part, educational innovations are not simple additions to existing practices, but require substitution and restructuring both within the mind of the individual teacher and within the organisational framework of the school. The unwillingness or inability of these units to change gives rise to "barriers" against innovation. Taking these points into account, it is possible to arrive at a working definition of perception in the context of large scale curriculum development.

"Perception" is taken to mean the teacher's awareness, interpretation, judgement or ideas gained;

(i) through the mental selection and emphasis he places upon its different elements, and

(ii) through his individual conception of the meanings of received communications, be they written, illustrated, spoken or demonstrated.

It may be helpful to illustrate the definition by inventing extreme examples, beginning with part (i). A project team may have, as its primary aim, the introduction of a new teaching method. In order to support this aim they may design new texts and resource material for students. However a teacher may perceive, from the disseminated information, that the new text is central to the innovation and he or she may relegate the suggested change in teaching method to a peripheral option. So perceptions held by the project team and the teacher differ radically in this case. So too will the implementation differ from that desired by the team; so, hopefully, will researchers' perceptions of the project in theory and the project in practice.

The clarifying example for part (ii) of the working definition concerns the widely differing classroom situations which may result from teachers seeking to fulfil a project's aim to use, say, "open discussion often". Apart from the probable divergence in interpretation of the required frequency and duration of the activity, what constitutes "open discussion" is likely to vary dramatically. Some teachers will consider the task completed after little more than a short question and
answer session, or a few words from selected students who can be relied upon to pick up the implied direction of the argument given in the teacher's own preamble. To other teachers, "open discussion" may be interpreted as unchaired, unstructured debate involving the whole class with no directed effort at seeking lines of enquiry, pooled knowledge, consensus or conclusion.

Although these variations may express extremes of behaviour in all probability, any major project will encounter a similar spectrum of perceptions amongst teachers. It is therefore not sufficient for research into project dissemination, merely to establish whether or not teachers have "heard of" and remembered elements of a curriculum innovation. The enquiry must go beyond this to indicate the degree to which the individual teacher's concepts of the innovation are coherent (being without contradiction or vagueness) and consistent with those of the project team, over the full range of the project's philosophy and ideals.
3. The Importance of Research into Dissemination.

In any society, other than one wishing to remain static, there must be not only an organised system of education but a facility for changing that system. There are good arguments for this process of change to be organised in some way. Organised dissemination can increase the speed of change, can promote efficiency, can ensure cohesion in the education system and can be an effective means of in-service training. It can, thereby, allow the education system to respond usefully to changes in society and the economy.

Each new generation of children will need to know about current technology and social organisation, and acquire skills and knowledge relevant to these. Each new generation of teachers will need to know the latest developments in educational principles and in pedagogic methods, for application to both new and traditional elements in the curriculum. So for the effective progress of society as a whole, the education system should act as a major agent of organised change, while at the same time, it should be a major recipient of change. "Education", therefore should be plugged into both ends of the continuous innovation process.

The importance of innovation to a nation is emphasised by Brown (1981).

"Accounts of the rise, relative prosperity and fall of mankind's various civilisations are replete with references to the critical role of innovations." (Brown 1981; p.1)

From the early 1980s, British Governments have recognised that education is at least important to the future of industry and commerce. In pursuit of its 'supply-side economics' policy, it has sought through legislation to assist 'management' in several ways including the recruitment of suitably qualified labour. This spawned several Government-backed training and retraining schemes, and in supposed response to industry's criticisms of the attainments of school-leavers, it has taken on an active, independent and ever more central and supreme role in the development of education in general. The culmination of this trend was the Education Reform Act which
set up and centralised control of the National Curriculum.

One effect of this strategy was that educational innovation itself changed dramatically. The Governments of the 1980s introduced educational changes with greater frequency, with shorter notice, and allowed less time for reorganisation but above all they shifted the origin of major change from LEAs and schools and into their own DES. This has had the effect of substantially increasing the importance of large-scale top-down innovations and hence there is an immediate justification for researching the methods and problems associated with them.

Further, the choice of the Schools Council Geography 16-19 Project can be justified in terms of its position in the history of curriculum development. Its conception in the mid-1970s and its development between then and the early 1980s place it chronologically on a watershed. It lies at the tipping point between the time when schools were largely free to pick and choose which curricular developments to adopt and the current predominantly government directed innovations or reforms: between first and second generation curriculum development.

All nationally launched curriculum developments must face the same basic problems even though they may be promoting different innovations, by different strategies and with different powers of authority. Research into one will therefore shed light on all. The National Curriculum with the backing of a parliamentary Act, sets the curriculum for schools but does not dictate the pedagogy. The Schools Council Geography 16-19 Project set new curricula for sixth-formers and suggested a style of pedagogy, enquiry-based learning. In both cases interpretation is possible. Teachers are not required to replicate schemes of work for which impact and take-up studies or classroom observation would be appropriate research methods. Instead research can legitimately concentrate on the transmission of messages and their interpretation by teachers.

This throws up interesting issues. How true to the original is the received message? What freedom for interpretation do teachers have? Here reference group theory can be used to explore the points at which information is distorted and can provide explanations for individual interpretations.

The educational history of England and Wales has been liberally punctuated by reports from government committees and commissions but concerted efforts to organise the processes of educational change are themselves
comparatively recent innovations. There is evidence to suggest that early developments of planned change met with patchy and often short-lived success. One major attempt at curricular advance, the Nuffield Science Project, aroused much interest, some adoption but, as later investigation showed, little real implementation. It was realised that dissemination strategies which went beyond simple salesmanship i.e. getting schools to buy teaching packs, would be needed if large scale changes were to be effected.

After the creation of the Schools Council in 1964, more organised effort was directed to the processes of change but within a few years the council's own working parties began to report the singular lack of impact of its curriculum projects. Jean Rudduck, herself a prolific writer on educational change, cites (Rudduck 1973) a telling passage from Herron (1971) which underscored these emergent misgivings.

"For nearly two decades now, we have seen large amounts of capital invested in the production of a variety of new curricula. Unfortunately evidence is beginning to accumulate that much of this effort has had relatively little impact on the daily routine of the average classroom teacher. Why?"

(Rudduck 1973; p.143)

Herron's remarks and question refer to a broader context than Britain alone. Writing in a later decade Pratt (1980) passes terse judgement on past failure in the U.S.A. but his censure are equally applicable to the British experience. He reminds us that those educators who seek to introduce innovation inherit "a legacy of ill-managed efforts at change."

How can this be rectified? Some authors have made useful suggestions which point investigation away from the study of innovations per se and towards enquiry into the ways in which they become implemented. This is expressed by Vielle (1981), who notes that the impact of research depends on the mechanism of dissemination. He sees innovations as influencing four areas in teaching; (i) knowledge (ii) the process of decision-making, (iii) instruments and (iv) behaviour of education agents (researchers, administrators, teachers and students). He concludes that the traditional taxonomy of basic and applied research, experimental development and support activities is irrelevant to educational research. The concern in this research is with 'knowledge' and the perceptions of it. Vielle's strictures
are useful in that they save us from a futile march down the wrong road but they do not provide us with anything more than the most basic of alternative route-maps.

For positive direction it is rewarding to consult Rudduck and Kelly (1976). They recognise that researchers will need to find answers to several major questions before past failures in disseminating change can be reversed.

"The questions requiring answers involve fundamental issues of communication; how much, and what kind of, information actually gets to teachers?"

(Rudduck 1976; p.110)

These basic lines provide an implicit model upon which this research project was constructed (see Chapter 3). Additional approaches are required though. It is all too likely that teachers will accept some innovations, such as new teaching materials, but be chary of more radical changes, such as implementing new classroom methods and behavioural patterns. So numerous reports of successful innovations may not be proof of successful change procedures. They may merely reflect the superficial nature of the innovation. Some commentators are inclined to the view that such superficies form the bulk of what passes for curricular advance.

"Growing experience of and research into curriculum development strongly suggests that projects have often dealt with symptoms rather than the deeper processes affecting curriculum decisions and outcomes: and hence have neglected some of the processes bearing directly on the quality of the students' actual learning experience".

(O.U. 1972; p.80)

The authors go on to criticise research projects for focusing on the influence of teaching materials, of single teaching methods and on traditional areas of student learning. The inference is that it would be better for researchers to choose radical projects which seek to influence more than course content and to discover how these can be transmitted more effectively. The advice is taken and this Ph.D. research consequently investigates aspects of innovation through study of efforts to introduction of one such radical project, Schools Council 16-19 Geography. This approach was thought to be more useful than the other interpretation of Rudduck and Kelly's
advice (Op. cit.); finding out which sort of disseminated material is most often and easily accepted.

Returning to Rudduck and Kelly's theme of communication, the most effective ways of informing and interesting teachers must be found. Research must then go on to discover the best ways of assisting those teachers who make positive decisions about projects, to implement the changes required. This as Rudduck and Kelly (Op. cit.) rightly say involves a wide range of enquiry involving the reference groups used by teachers.

"There are ....... issues concerned with schools as institutions and the activities, personal relations and attitudes of teachers within them ......."

(Rudduck and Kelly 1976; p.110)

It follows that even when schools have been assisted to adopt a project, real curriculum development may not take place. Potentially a whole minefield of highly sensitive anti-project devices, each capable of stopping any curriculum advance dead in its tracks, is hidden within even the most promising educational institution. It behoves researcher and curriculum developer alike to uncover as many of these dangers as possible. Furthermore success for a project is not guaranteed even with the assistance of all influential parties within the institutional framework.

"If teachers simply buy the kit and use it without 'reading the rules' then it is unlikely that they will implement project strategy except by chance."

(Whitehead 1980; p.21)

Whitehead notes that sales figures of a project's materials do not indicate the degree of its use, nor, if use of materials can be assumed, do they show how many teachers are properly applying the project philosophy. He says that the success of a curriculum development project is difficult to measure and implies that qualitative analysis must follow the initial acquisition of quantitative data before sound judgements can be made. It is therefore worth considering what such qualitative analysis should entail.

Curriculum innovators in education have become increasingly aware of the disparity between the style of course tuition which is planned by a project team, and that which is practiced by teachers. Some justifiably regard this problem
as the major obstacle to curriculum development.

"There is a wide gap between the ideas of a project held by its central planners and the realities of its implementation, if that is even the word, in the classroom by teachers. The existence of this gap between policy and practice is viewed by Lawrence Stenhouse (1972) as the central problem for curriculum development and indeed of the advancement of education itself."

(Shipman 1975; p.205)

It follows that, on a broad scale, successful curriculum development will depend on feedback of information from schools which are attempting full implementation of a new project. The process will be confounded by the failure of researchers to recognise partial implementation when assessing outcome data. Even when widespread implementation defects can be recognised, they may make the situation so complex that the researcher can draw no useful conclusions about the success of the project or any of its elements. It is far easier to evaluate the effectiveness of the constituent parts of a project when full implementation can correctly be assumed.

This is not an argument for the standardisation of curriculum development. Hybrid implementations can be educationally superior to the one planned by the project team. The argument is merely that lack of uniformity between users of a project must be discovered and taken into account when evaluations are made. This research uses data from geography departments which have adopted the whole of the Project's A level course.

For the most part, written examination assessment of students following a new project course, will not reveal much about the manner in which the course was operated in the classroom. Often traditional teaching methods can be substituted for the desired innovation procedures without noticeably affecting the students' examination performance. The reasons for marginal differences in results would be difficult to pick out against a background of variables extraneous to the project. On the other hand, many valuable educational outcomes produced by the project may not be assessed by examinations at all.

An alternative line of enquiry into project implementation is through the assessment of teacher perceptions of the main innovative ideas of a project. Perceptions are
important in two ways. Expressed in general terms, a great idea becomes of value only when those who have the power to implement it, can see its potential. Herron (1971) sees teacher perception of the structure, goals and basic philosophy of a new scheme as the "problem root of resistance to change."

Secondly, even when these agents can be persuaded of the merits of adopting the idea, its value may be reduced by misunderstanding or misapplying its basic tenets.

"Any project will have failed if its ideas are not in the end understood whether or not the materials are being used." (Whitehead 1980; p.22)

Within the field of education, a proposed curriculum development may potentially be a great step forward, but the intrinsic excellence of the innovation's ideas will not necessarily ensure this. It is how the innovation is perceived by its potential users, such as L.E.A. advisers, headteachers and teachers, which will ultimately decide whether any adoption takes place, even on a trial basis. Secondly, the user's perception of the curricular innovation will influence its implementation in the classroom. In fact perceptions can affect the natural history of adoption and implementation in different ways at different points. Also the teacher-user's perception of the philosophy and ideals of the project may be markedly different from that of the innovator-project team. In such cases, what happens in the classroom will, in all probability, be at odds with the wishes of the project team.

Therefore, a useful method for researching the adoption and implementation stages could be to compare the perception of the project held by the central team with that held by individual teachers. If the comparison shows wide differences, then it is unlikely that the teacher will be implementing the course as intended. Conversely, if there is congruence of perception (of the project's offer) between the central team and the teacher, then it is only practical difficulties which will prevent faithful initial implementation. Thereafter, the passing of time will increase the possibilities of perceptions shifting.

A convergence of perceptions may be achieved between two parties working together, but, as previously noted, it is unlikely that the central project team and the individual teacher working independently, will reach precisely the
same conclusions about changing the curriculum. We must therefore assume that congruence of perception about a curriculum development is due to an effective dissemination process; disparity in perception being the result of faulty or incomplete dissemination. The more radical a project is the more change it will require in teacher attitudes and hence the more efficient the dissemination must be.

Curriculum development would undoubtedly benefit from improvements to dissemination process and planning. This research is therefore undertaken for the purpose of shedding light on dissemination through the study of project perceptions and their relationships with implementation patterns.

Three basic reasons to justify the study of implementation have been suggested by Revicki (1981);

a) the documentation of features of innovation.

b) the identification of important variables associated with the installation of a programme.

c) the determination of which features are related to which outcomes.

The research outlined in the following chapters is related to the second of Revicki's reasons.

From the discussion so far it can be seen that the quality and consistency of a dissemination programme are important to accurate perception of an innovation, particularly for a national curriculum development. Other factors influence perceptions too. Teachers' attitudes and values derived from their chosen reference groups will also substantially affect their interpretations. An investigation of the professional environment of individual teachers may be rewarding. This will illuminate the local 'climate' for innovation, its institutional pressures and its provision of role models or reference groups.

Expressed more succinctly, an attempt is made to relate variations in the perception of a project;

(i) to variations in the dissemination programme,

(ii) to the reference groups chosen by teachers adopting the project,

(iii) to differences in school organisation and local innovation 'climate'.

This research uses the Schools Council 16-19 Geography Project as a case study. The basic research methods used are questionnaires, semi-structured interviews and in-depth case studies. Questionnaires were the best way of gathering a large quantity of data about project adopters and their
backgrounds. They can also be used to test the basic perceptions of a large sample of project users. More subtle means had to be employed to find the reference groups adopted by teachers. For this interviewing was thought necessary. Both questionnaire and interviews were used to gain data about teachers' working environments but observations from visits to schools and discussion with other staff were a means of enriching the description.

From the information gained in this enquiry it is hoped that some useful conclusions can be drawn to assist dissemination programmes in general.
CHAPTER 2

REVIEW OF LITERATURE.

1. Generalised dissemination strategies and models.
2. Factors affecting dissemination and adoption.
3. Development and dissemination of the 16-19 Geography Project.
4. Description of the 16-19 Geography A level course.
5. The Geography 16-19 Project in the context of recent curriculum development.
7. Research Theory.

1. Generalised dissemination strategies and models.

There has been much debate, as yet unresolved, about how much change in schools' curricula is the result of hasty adjustment to the wishes and directives of authorities outside the teaching profession; how much is desultory and confused response to individual perceptions and corporately felt needs amongst school staff; and how much is organised, planned action of teachers and educationalists, working upon clearly understood concepts.

Gray and Coulson (1982), for example, say that "change is often not expected, planned or controlled" and in particular "recent change has not been 'natural'" but has had its origins in external forces.

Whatever proportion of change each of these explanations accounts for, it must be acknowledged that many recent changes have been brought about by planned educational projects, notably the introduction of GCSE and the National Curriculum. It is true that where research into projects shows anything comparable, it reveals an extremely varied pattern of success and failure. Despite these mixed attainments, it must be argued that planned change is fast replacing other methods of curriculum development.

What has motivated the great concern and effort over recent decades in curriculum development, itself? Richmond (1971) was able to list some of the conditions which induced change.

1. The declining demand for unskilled and semi-skilled labour.
2. The growing demand for occupational adaptability.
3. The exponential growth of knowledge.
4. The increase in the amount of time available for leisure activities.
5. Greater expectations of life (longevity and high standard of living).
6. Earlier physical (and probably emotional and intellectual) maturity.
7. A marked decrease in the distinctions between the roles of sexes.
8. The increase in the lateral transmission of knowledge and information (e.g. via mass media) and the corresponding decrease in vertical transmission (i.e. instruction of young by parents and teachers).

Perhaps it is not only feminists who would consider the seventh of Richmond's change inducements optimistic or premature or merely suspect. Nevertheless, we must agree with Richmond's general thrust that pressures on the curriculum largely emanate from social and technological change outside our schools and universities. This is not to deny that teachers as members of society play some part in changing its attitudes.

There are in addition some changes which are largely generated from within the profession itself. Educational research, empirical experience and educational literature have influenced school practices. New knowledge of how children learn (small insights and few at present), how resources (particularly new technology) can be developed for classroom use, how school organisation can be improved and how members of the profession can better communicate with each other are examples of internal initiatives. All in all, the pressures for change have steadily increased, forcing schools and the education system as a whole to seek new ways of coping with new demands.

"As schools have become more flexible in changing to suit externally imposed organisational changes or internally felt needs to respond to pupils and the world, there has been large if uneven move towards greater consultation and participation in decision-making".

(Marland 1982; p.130)

The degree of teacher participation in 'national' projects, but not necessarily their influence, has undoubtedly increased. But before discussing developments in dissemination, further consideration must be given to why
national strategies were thought to be necessary or advantageous. To reiterate a little, the answer must be that, initially, advocates of the planned change process in education, believed that it could improve the curriculum with greater speed and efficiency than unsystematic or ad hoc arrangements. Before the arrival of the new Education Reform Act and the National Curriculum, these advocates came to believe in additional benefits from dissemination. They thought that dissemination could, amongst other things, improve the curriculum by providing schools with increased choice, rather than imposing a new uniformity; provide an effective two-way line of communication between project teams and schools, thus allowing the development and perpetuation of a project; and act, itself, as a didactic system for encouraging teaching staff to continue in-school curriculum development interdependently.

The increasing belief of the Schools Council, and later the government, in the benefits of organised dissemination procedures went hand in hand with the development of procedures themselves. Development in dissemination strategy can be structured so that some broad progression over the last few decades can be seen even without resort to rose-coloured spectacles. However progress has not been uniform, either in its general pace, or in the application of available knowledge to concomitant projects. In general, research has continued to reveal an increasing diversity of problems associated with innovation. Inevitably, planners of projects have responded by further refining their dissemination strategies. The Geography 16-19 Project represents a turning point in the evolution of dissemination. Before it came a series of Schools Council projects which were marketed like any consumer product. Geography 16-19 was one of the first to budget for INSET and other after sales services.

To prepare the ground for developing hypotheses, some influential dissemination models are evaluated. For a time, the most frequently quoted were from Schon (1971) and Havelock (1969). A brief critique of their typologies is used as a foundation for further discussion.

Schon (op.cit.) describes three basic models of dissemination and diffusion for social change, although he uses the term diffusion exclusively. Two of these models are well-defined; the 'Centre-Periphery' and the 'Proliferation of Centres'. The third is an attempt to summarise the main elements of the less well-ordered and less definable diffusion, typified by recent social 'Movements'.

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i. The CENTRE-PERIPHERY model relies on three assumptions:
   a) The innovation exists, complete, before dissemination starts.
   b) There is outward movement from the centre to the user only.
   c) This direct process of dissemination is centrally managed.

Schon adds two variations to this model. "Johnny Appleseed" describes the situation where a proselytising mendicant travels around spreading his message of change. It is doubtful whether any educational 'Appleseeds' have ever taken root let alone borne much fruit. The second variant, the 'Magnet' model, depicts a central institution, for example a university, attracting and training agents who disperse to relate their learning. It is hard to think of charismatic educational institutions, although new ideas may ripple out from specific conferences on occasions.

Schon believes that success with projects based on this model will depend on three factors;
   a) the level of resources and energy at the centre,
   b) the infrastructure technology relating to communication and the maintenance of quality of disseminated material over distance and numerous contacts, and
   c) the generation and management of feedback.

For either the main model or its variations, any one of Schon's three factors for success can be viewed negatively as a possible reason for failure. The factors are difficult to attain in the simplest of cases, so, the larger the scale of the educational project, the more likely it is to fail if this model is adopted. It is only when the power/coercive strategy categorised by Bennis, Benne and Chin (1969), can be employed that success is likely. Even when the possibility of sanctions is implicit, central government have deployed Central-Periphery dissemination ineffectively, as when introducing comprehensive schooling or a new curriculum for students kept on when the school leaving age was raised. At the present time it is too soon to judge the success of the ERA. Educational change which relies on persuasion and yet seeks to use this Schon model, will run great risk of being extinguished as soon as the centre's organisation is disbanded or its personnel engage in other work i.e. when the pressure stops. Further predictable problems associated with this model are given later as they also apply to Schon's second type.
A recent development is worth adding. With the rapid advance in information technology, control from the centre has become more feasible. Vast quantities of data can be sent, received, sorted, monitored and stored with minimal delay. So 'keeping tabs on' peripheral parts of an organisation and providing them with back-up has become easier.

ii. The PROLIFERATION OF CENTRES model describes dissemination through the central management of several peripheral centres. The main centre trains trainers, often in the method of dissemination as well as the content of the innovation itself. The centre therefore, perpetuates or develops the doctrine and methodology, trains agents, selects new territories, supports these with resources and information, and monitors progress using its own criteria. (There are many parallels here with the planned introduction of TVEI and GCSE). Schon believes that failure of dissemination can result from the setting up of an inadequate communication network or from new technology outdating the network. Further problems arise with the expansion of the network, placing multi-role demands on leadership and management, splitting its effort between organising and training, for example, and presenting the new problem of maintaining impetus as opposed to generating it. Further problems occur through the friction caused when the rigidity of the central doctrine fails to accommodate the needs of regional diversity. This can have a demoralising effect on the regional agents, so reducing the effectiveness of the dissemination process. These problems seem highly relevant to nation-wide educational innovation.

iii. Recent steps in the evolution of diffusion systems have developed with the growth of MOVEMENTS for social reform. Schon notes that they have some common characteristics, including:
   a) no clearly established centre,
   b) no stable centrally established doctrine,
   c) diffusion is not from the centre,
   d) movements become learning systems.

Modern infrastructure technology means that problems of distance and time are less important to the process, but its instability allows systematic distortion of the innovation. It can be argued that educational changes are really movements, including perhaps; child-centred education, mixed-ability teaching, modular curricula, multi-cultural education and the move away from cricket to other summer sports.
Late in his book, Schon (ibid.) lists several obstacles to diffusion in modern society. He asserts that there is a tendency;

a) to substitute slogans for analysis,
b) to repress failure and amplify success,
c) to generalise from specific findings and situations,
d) to dilute and rigidify the message,
e) to compress the time allowed for diffusion,
f) to develop concern for control via monitoring, evaluation and enforcement,
g) to overlook the 'Hawthorne Effect', the effect of participation by the project team which improves the initial results,
h) to overlook the 'Rashomon Effect', whereby success is reported by people at certain levels of the operation, while at other levels the same situation is interpreted as failure.

Examples of each of these Schonian obstacles can easily be found and condemned in recent educational dissemination. However item f) is contentious because many educationalists would want to see some control, monitoring and evaluation of a project, local or national. Such concerns could be viewed as proper and praiseworthy, although the nature and degree of control would inevitably be debated fiercely.

Beyond educational institutions control of innovations is perhaps less laudable, less necessary. Individuals, groups or companies should have the freedom to adopt a new idea in whatever form they choose. Accountability for taxpayer's money, the future of the young and the need to compare like with like (as with certification) are normally not such pressing considerations for domestic and commercial undertakings.

Schon's answer to the problems created by the fluidity of present social conditions is to develop learning systems which prepare individuals for coping with instability and change. He favours repeated testing and refinement of processes.

We must acknowledge that Schon's Movement model has assumed greater relevance to education with the rapid growth of LEA advisers/inspectors, teacher advisers and school-orientated television programmes, particularly those with intentional pedagogic messages. Programmes presented as 'introductions to' or 'discussions of' or 'case studies of' new ideas, to
a large degree allow individuals to draw their own conclusions. The message is therefore, neither stable nor centrally directed but its communication is far and fast.

Stenhouse (1975) has criticised the use of the Movement model as an approach to curriculum development. From his viewpoint, there is one major barrier standing in the way of progress in the education system, and he does not see how Schon's model can help to remove it.

Stenhouse wrote that a central problem in the progress of education is the divergence between accepted policy and practice. Those formulating policy are too often out of touch with reality. In the case of movements, the learning capacity is mainly instrumental. The direction of the movement is assumed and any learning is largely that of learning tactics. Its loose structure denies the opportunity, on a systematic basis, for critical development of either its central message or its practical implementation in classrooms.

While it is true, by definition, that an educational movement has no systematic basis to its structure, it is a point of contention as to whether it should have one. Stenhouse implies here that the lack of coordination inherent in its process, disqualifies the movement model. This desire for systematic progress sits uneasily with Stenhouse's often-quoted preference for school-based curriculum development.

Turning now to the other Guru of dissemination model-making, we find that Havelock's contribution was the categorisation of ideas about the social diffusion of 'knowledge'. He did not deal with the diffusion of either 'policy' or 'resources'. Havelock (1969) grouped past theorists according to three perspectives: Social Interaction; Research, Development and Diffusion; and Problem Solving. He then attempted to integrate their ideas through linkage procedures.

1. The SOCIAL INTERACTION MODEL is, in effect, a definition of diffusion. Its characteristics are a lack of formal organisation and strategy. Information about the innovation is passed from the research organisation through reference groups to the users who accept or reject the innovation on its perceived merits. Both Stenhouse (1975) and Kelly (1982) see this model as commensurate with Schon's Centre-Periphery category. However, since social interaction does not involve the innovator or central
innovation team in any managerial or monitoring function, there can only be a loose association between the two models. Stenhouse (ibid.) correctly notes that the Social Interaction model "stresses not the marketing of products but the flow of messages from person to person". While messages are relevant to this research, most curriculum development incorporates new resources as well, so the model has limited use in education generally.

Through social interaction, there is no guarantee that an innovative idea will be adopted correctly. Individual adaptations will be made but general, coordinated development cannot normally take place. Within this model, no mechanism exists for overcoming barriers to adoption or for assisting interested members of the undefined target group with the process of implementation. In the context of modern curriculum development this model must be seen as defining a relatively inefficient approach, at best only useful for easily-defined, easily-understood and mostly minor changes. For example the remark, "We have changed to a Continental Day."

Conversely it will require considerable time for a complex or major innovation to infiltrate and assume widespread use, if it relies solely on the ramification of manifold contacts. Present conditions are such that infant innovations follow hard on the heels of each other and require competitive dissemination strategies to speed them to maturity if they are to stand an even chance of survival in the Blackboard Jungle of current reform.

ii. The RESEARCH, DEVELOPMENT AND DIFFUSION model (R.D.& D.) provided by Havelock is a true dissemination strategy. It has the merits of the empirical/rational method described by Bennis, Benne and Chin (1969) and has been widely used in this country as well as the U.S.A.. Its stages, in their expanded form, seem logical and beyond criticism: first basic and applied research, then development and testing of prototypes, mass production and packaging, planned mass dissemination and finally adoption by users. Yet in its practical application for the expedition of educational change, the R.D.& D. process has not met with much success. Careful consideration of the model's theory can throw up some possible explanations. To begin with, basic and applied research lose their distinction within education, or at least they should do. The autonomy and variety of school user-systems and their rapidly changing social environments militate against the
effectiveness of marketing an innovation which has undergone a single development and testing stage. Practical application of the model's method will also suffer from the problems predicted for Schon's Centre-Periphery scheme.

iii. The PROBLEM-SOLVER model has a virtually self-explanatory title. Its theory has been usefully refined into three sub-divisions by Bolam (1975). It is suggested by Bolam that:

a) the User may apply problem-solving techniques involving a cyclical strategy of identifying need, diagnosing problems, searching out resources, finding solutions, applying them and evaluating outcomes,

b) a Task Consultant, acting as an outside change agent, may be drafted in to solve a specific problem, or similarly,

c) a Process Consultant may be called upon to facilitate the procedures of decision-making and problem-solving within a school.

These ideas seem to be gaining acceptance as credible development techniques, although they may result in conditions akin to those of Schon's 'Movements' rather than, as Kelly (1982) suggests, to those of the Proliferation of Centres model.

iv. LINKAGE or two-way interaction between innovator and user is emphasised by Havelock. He asserts that this is the key to successful dissemination. Moreover, he lays great store by the development of relationships of trust between interactors within the system. This belief seems to ally him with the phenomenologists championed by Barr Greenfield (1975) rather than with the functionalists. Reliance on the development of personal trust relationships may prove unwise if frequent staff changes are likely to occur at either end. On further scrutiny, the model shows itself to be both centralist and eventually functionalist. Once the project becomes widespread, then direct, personal communication between innovator and user must either become perfunctory or be replaced by indirect communication through some organisational hierarchy. From then on, dissemination formatted on this model will be associated with the centralist problems listed by Schon.

If we can assume that the 'Linkage' dissemination scheme will only be used in manageable circumstances, then we must allow that it has a unique advantage over other designs. Basically this approach begins with the problem or the situation 'on the ground' and tries to develop strategy to
deal with things as they are. The other approaches begin with an imposed innovation, one which may well have arisen in direct response to conditions, anxieties or needs felt 'on the ground' and may be accepted as a rough fit but cannot be professionally tailored for the customer. In this respect, Havelock's Linkage model really does resonate with the views of Barr Greenfield (ibid.), namely that the role of theory is to tell us how things are, not how they might be or we would like them to be. So there is little point in studying organisations separately from the people in them and diversity of interpretation is assumed.

"This notion of organisations as dependent upon the meanings and purposes which individuals bring to them does not require that all individuals share the same meanings or purposes."

(Barr Greenfield 1975; p.75)

Both Schon and Havelock deal with similar aspects of dissemination, and it is perhaps for this reason that even a summation of their work does not produce a complete picture. Basically the two authors deal with the physical and tangible routes through which new information must pass. They are concerned with two main themes.

i. The relative locations of innovator and potential user or target group when communications are made. Expressed in the interrogative this becomes, "Does the innovator deliberately choose to go amongst his target group or operate mainly at a distance?".

ii. The structure of the disseminative organisation and the relationship between its members and the innovator. This can be put as a series of questions; "Does the innovator preach directly to the target group member or pass information through one or more intermediaries? If there are intermediaries, are they chosen or do they choose themselves? Are they automatons or autonomous? Are they administrators or people with specialist knowledge, or will any interested party do? Is anyone responsible for receiving feed-back and applying consequent formative action? Are the various functions associated with dissemination divided and delegated to different people or does each person perform virtually the same role?".

A glance through the questions listed above, reveals the two aspects of dissemination covered by the authors. They
address themselves to the fundamental questions of "Where?" and "Who?". The question of "How?" is not central to their theories and remains largely unanswered.

Considerations of this nature are less tangible but nonetheless important. How is the information to be relayed and in what form? How are problems, expected and unexpected, to be overcome? In short, when contact has been made with potential users, how can they best be won over to the innovation, be supported so that they continue to use it and be advised so that they may use it correctly? This is no longer a question of choosing the best physical route, across distance or through chains of people. It is a separate prerequisite for success, the effective organisation of ideas, information and materials which are to be passed along the chosen dissemination route.

Literature on strategies relating to the presentation of innovations can have one or more of the following purposes:

a) To classify previous approaches to change management.

b) To guide and assist current dissemination.

c) To provide direction for further research into innovation strategies.

The different purposes lead to a great variety of writing but there is some truth in the assertion by Grey and Coulson (1982) that although the literature on organisational aspects of educational change is extensive, it is "either too general or too specific". They imply that the "too specific" is of limited use because "no situation repeats itself".

The purpose of the exposition usually determines the approach. More often than not, authors who are attempting classifications, use highly generalised criteria, whereas others who are writing on current innovations, tend to be specific to their educational niche. Where Grey and Coulson are undeniably correct is in reference to the majority of writers who refer to just one or two specific problems, often identifying single barriers to successful implementation. Research papers may, permissibly, focus on a single issue but literature which seeks a guiding role for its raison d'être, should offer to supply keys to all doors along the corridors of administration. In the ambitious hope that this research thesis may have some practical influence, the 'closed doors and keys' to educational change are identified in the next section (Factors Affecting Dissemination).
The remainder of this section is restricted to a review of general classifications and models which are designed to illuminate the change process, and of which there are few. Amongst these, an early and well-known classification of innovation strategies is that devised by Bennis, Benne and Chin (1969). Their insight reveals to us three basic 'ways and means' of inducing change. Briefly paraphrased they are as follows.

a) Power/Coercive strategies which ultimately rely on sanctions or rewards from political, legal, administrative or economic sources.

b) Empirical/Rational strategies which are meant to appeal to people's logic and good-will, persuading them by explanation and demonstration.

c) Normative/Re-educative strategies which seek to organise and direct or proselytise a widely-acceptable solution to a commonly held wish for change in the system.

The categorisation may help us to label the levers which either have been used or should be used to achieve effective change. In reality though, the three strategies cannot be regarded as discrete options. Certainly within the world of education, even those in positions of power, such as headteachers, LEA officials or even Secretaries of State, would be unwise to rely on coercion alone to achieve their aims. At least in the first instance, they are more likely to promote campaigns of persuasion using empirical/rational and normative/re-educative harbingers, with the option of sanctions unstated but understood. However, Fullan's (1986) observation is a little too pessimistic for a generalisation.

"Effective change, even if voluntarily pursued, rarely happens unless there is pressure and support."

(Fullan 1986; p.28)

Moving now from the manner in which communications are made, to the form in which they are passed on, it is again worthwhile looking at classifications. Hull et al (1973) identify three categories which are of relevance to this theme: (i) information documents, (ii) training materials, and (iii) installable systems. As will be shown later, there has often been debate within project teams as to which of these items should be provided for teachers.
Steadman et al (1978) found that, for teachers, the eight most important sources of information about projects were: (i) teachers in the same school, (ii) teachers' centres and special resource centres, (iii) T.V. for schools, (iv) short courses and conferences, (v) the headteacher, (vi) teachers in other schools, (vii) book exhibitions, (viii) research journals and general books on education. The inference from this rank ordered list is that information gets into schools because someone wants to put it there and not because teachers search for new ideas or stumble upon them. Moreover, looking at the two most important methods of passing information, it seems that teachers imbibe new ideas most easily when they are presented by their peers. The two least effective methods, according to Steadman, appear to be those involving dissemination through literature. Nevertheless, it is probably true to say, that an effective dissemination overture will incorporate more than one of the above approaches and must at some early stage provide definitive literature.

Attempts have been made to describe the phases of involvement through which members of a target group are likely to pass, following their introduction to an innovation. Borrowing from the work of rural sociologists, Rogers and Shoemaker (1971) envisage the following sequence of five stages.

(i) Awareness.
(ii) Interest.
(iii) Evaluation.
(iv) Trial.
(v) Adoption.

Mindful of the fact that evaluation is not a single event but an ongoing process, Whitehead (1980) modifies the sequence to three stages.

(i) Awareness.
(ii) Trial and Evaluation.
(iii) Adoption or Rejection.

He also asserts that it is necessary for a project team to differentiate between interested groups; teachers, headteachers, tutors and wardens, and to consider separately the needs of these potential adopters at each of the three stages.
Wisely, other authors have seen the need to extend these progressions through two further stages i.e. Implementation and Institutionalisation. Ruddock and Kelly (1976) list 'implementation' but define their phasing from the standpoint of the project team. Namely:

(i) Receptivity; providing the organisation to prepare teachers for change.
(ii) Adoption; when the team work to get the project taken up.
(iii) Implementation; when they help teachers to put the project into practice and, at the same time, continue the innovation process.

In similar vein but with more concern for the permanency of an innovation, Fullan (1986) sees three broad stages: Initiation, Implementation and Incorporation (his preferred word for Implementation). He recognises that this procedure may be a lengthy business, say three to five years, and that it will need collaborative planning between change agents and teachers. These two groups will need to permit "mutual adaptations" if success is to follow. Rigid enforcement of "teacher-proof change" is seen as a recipe for failure by Fullan (1982).

It is worth returning to and emphasising the contribution of Rudduck and Kelly (1976) for several reasons. To begin with, unlike Rogers and Shoemaker, they are talking specifically about education. Considering the express aims of this research, their change-agent orientation supplies a further useful dimension to the enquiry. They provide advice on strategies of change, whereas others merely define theoretical stages in an assumed course of development. The authors also identify four major 'conceptual components' in the dissemination process and it is pleasantly surprising to find, despite this academically esoteric sub-title, that their contribution is eminently practical. Moreover, Rudduck and Kelly intend the praxis of their 'components' counsel to operate in tandem with the directives of their dissemination 'phases'.

Rudduck and Kelly define the four conceptual components as:

(i) Translocation. People and materials needed to implement the curriculum change are moved to a suitable location. Decisions are taken on who should visit schools or put on courses, and how materials should be distributed.
(ii) Communication. Decisions are made as to what form the innovation should take, through what media it should be transmitted, whether personal contacts should be made, and whether there is need for organised support after adoption is achieved.
(iii) Animation. Here, ways of creating interest amongst teachers is the main concern as it will be necessary to change teachers' attitudes, motivate them and provide them with incentives.

(iv) Re-education. The means by which teachers are given regular training plus opportunities to experiment in cooperation with each other. Since "considerable understanding and commitment" are required from the teachers, they must also be encouraged to develop good relationships with the project team.

Putting together 'conceptual components' and 'phases', it can be seen that Communication and Animation are complementary to the Receptivity stage, while Re-education goes with Implementation. This is all exemplary if one accepts the Centre-Periphery/R.D. and D. stratagem as the best method of bringing about change. If one does not, then there is a need to search on for less didactical dissemination formulae. This research concentrates on the above stratagem because of its current importance but makes no value judgement about its suitability.

A slightly more liberal approach is offered by Hall and Loucks (1977). They wanted to establish five fixed stages or 'levels of use' between current practice and desired end-points. Their first level of use, albeit a negative one, is total non-use and ignorance of the proposed change. Levels progress through 'mechanical' use, to 'refinement', 'integration' and finally 'renewal' of the innovation. All the sequenced dissemination schemes discussed so far have been variations on the same theme. The merit of this one, which makes it worthy of inclusion, is its implicit recognition that some teachers lack competence and confidence when using an innovative project for the first time. Faced with any major pedagogic change, a teacher will, for some time, rely heavily and undeviatingly on the instruction manual. This methodological painting-by-numbers will continue until the teacher feels that he or she has the measure of the new praxis. Hence, Hall and Loucks's level of 'mechanical use' is appropriately named. As the authors seem to acknowledge, once teachers feel that they have assimilated philosophy and method, they will then make changes. Initially these may be minor, but eventually they could challenge the new authodoxy. Is this a desirable outcome, or could it lead to curricular anarchy? Hall and Louck's ideas were taken into consideration during the planning of research method.
At least a partial solution to this problem is advanced by Leithwood (1981). In doing so, he abandons universally-applicable fixed-stage formatting and replaces it with an 'innovation profile' consisting of nine curriculum dimensions.

(i) Platform, the basic assumptions about what is possible and desirable, established by interaction with teachers.

(ii) Objectives.

(iii) Student entry behaviour (i.e. their level of attainment).

(iv) Assessment tools and procedures.

(v) Instructional material.

(vi) Learner experiences.

(vii) Teaching strategies.

(viii) Content.

(ix) Time needed for learning.

Leithwood has borrowed substantially from the many models intended to be used for internal school-based curriculum development and, like so many of them, his dimensions are sequenced in a flow diagram indicating the best order for their consideration. However, with Leithwood, we have moved away from Centre-Periphery rigidity while, at the same time, we have not allowed a free-for-all. The platform's function of defining basic ideas gives some guidance to teachers as to what is fundamental to the innovation. Once teachers understand and accept these, adaptations can be made in the less critical areas of the innovation without subverting its essential purpose. By this means, adaptations may be prevented from reaching, what is sometimes called, the level of 'drastic mutation' after which the mutant project no longer merits its original title. These ideas are crucial to the design of this research and are used to discover project-authentic behaviour. It can be inferred from Leithwood's paper, that the author believes the ideas of the project team are always best without substantial modification. This cannot be a valid assumption, particularly for the long term. However, for the purpose of initial dissemination, his platform dimension, defining an inviolable project core, can give some guidance on the troublesome issues of how much autonomy an adoptee can be allowed or how much central standardisation and coordination is necessary.

Another valuable component of Leithwood's scheme, is its insistence on an assessment of 'student entry behaviour'. An habitual fault of curriculum developers is their failure to find out where the students are. The organisation of transport and route, however well done, counts for little
if the majority of students are unable to catch the bus. Projects which falsely assume too much or too little previously acquired knowledge and skill, or even a uniform level of attainment, are doomed to bore or bewilder a large proportion of their students.

A caveat must be added to this assessment of Leithwood's Innovation Profile. The author makes several references to authoritative 'policy-makers', yet his model for aiding curriculum innovation lacks mention of communication between them and the project teachers. His model, therefore, may be best suited to school-based, school-generated curriculum development where good communications between innovating staff can be properly assumed.

An overview of innovation from a very different standpoint is proffered by Bolam (1975). His conceptual framework is a multi-purpose model for organising literature references, providing heuristic parameters and guiding the management of change. The model combines three basic elements (systems) of innovation, namely, the change agent, the innovation per se and the user, with three stages in time. First all three exist separately in the 'antecedent stage', then combine in the 'interactive stage', then separate again in the 'consequent stage'. By then, though, the change agent's opinions, the teacher's methods and the innovation material may all have been modified.

Bolam's model works well for organising literature, using the three systems as categories. Perhaps its temporal stages may provide guidance for research but it is only through reference-organisation that it provides any guidance for change-management. Even if it does not do all that its author claims, Bolam's model has the saving grace of simplicity.

The design of innovation models can become so intricate that they shed no light on a complex problem, but merely reflect the reigning confusion. Theodossin (1983) makes a valuable summary of theories on planned educational change but concludes with a labyrinthine model which seeks to combine Bolam's temporal dimension with a systems-analysis/phenomenology continuum and a scale-of-activity continuum. The Theodossin model is not meant to be a plan for organising and facilitating educational change but, at best, it is an elaborate information storage system. At worst, it is Spaghetti Bolamnaiso.
It is rare to find generalised models for multi-phase strategies of dissemination which cover the crucial areas of communicating information, introducing materials, maintaining interest and assisting practice. Schools Council publications provide some procedures and these are reviewed in a later section. For the most part, they and many other sources of information simply recount the reasons for project failure, on occasions including suggestions for overcoming the specific problems identified. To date, a comprehensive scheme for dealing with commonly recognised and well-documented problems has not been attempted. As a step towards this, the following section is a compendium of barriers to innovation which can become aids to dissemination. The major concern of good dissemination models and the practices derived from them, should be that they anticipate barriers. Forewarned of obstacles, the project team should be in a better position to negotiate, circumvent or remove them.

It is unlikely that a single generalised innovation stratagem could ever emerge. The best we can hope for is a number of off-the-peg schemes which with intelligent selection are likely to give success in a particular situation. The best fit solution will depend on a number of variables such as the scale of the project, the type of innovation, the coercion which can be brought into play, the reason for change and even the change process starting point. The Secretary of State for Education introducing the National Curriculum will perforce employ many different methods from those used by the Head of Geography introducing the Geography 16-19 Project.
2. Factors affecting dissemination and adoption.

"... I believe a more structured approach to innovation could avoid the pitfalls which the curriculum programmes of the 1960s and 1970s fell prey to. Provided that targets are set and obstacles anticipated and planned for, a coherent framework should result, in which positive innovatory contributions will emerge."

(Marshall 1987; p.85)

In this section, an attempt is made to categorise and describe some of the main barriers which may impede the progress or corrupt the purpose of an innovation on its course from source (innovator, project team or governmental organisation) to destination (adoption in schools). At whatever stage pedlars of change join the trail and share the portage, they can anticipate problems. It will never be possible to draw up a comprehensive, general manual of dissemination for their assistance. By definition, all innovations are unique and therefore will encounter unique problems. On the other hand, evaluation studies and the accounts of past curriculum pioneers reveal many common hindrances and much sage advice for dealing with them. Since these studies refer mainly to the freer period curriculum development before National Curriculum was announced, they are dated in that period i.e. the 1960s to the early 1980s.

Drawing on the experiences of those who have travelled the curriculum frontier, it has been possible to catalogue more common obstacles. Some of these occur as 'natural' phenomena, others are premeditated responses to dissemination and as such can be seen as 'artificial'. For each of these identified barriers, selected extracts from recorded disseminative wisdom are presented together with proposals for obstacle-avoidance or barrier-busting or, better still, forestalling barrier-construction by unfriendly forces.
Geographical Barriers.

In a series of publications over a period of more than twenty years Hagerstrand has made a significant contribution to our understanding of the geographical spread of innovations. He, himself, would prefer the adjective 'spatial' rather than 'geographical' in this context. His concepts, models and observations often refer to physical obstacles, such as lakes, mountains and forests, which he sees as 'diffusion barriers'. It has been argued that the use of modern communication technology easily overcomes such obvious barriers, a notion most succinctly expressed in Marshall McLuhan's perhaps over-optimistic concept of the 'Global Village'. For Hagerstrand, the communication of innovations is a more pedestrian affair. So 'personal contact', he believes, remains the paramount means by which innovations are spread.

"Dissemination through private or group conversation easily outbalances other means of communication. Even today we are very neolithic in that respect, I am sure."

(Hagerstrand 1965; p.12)

Interestingly, Hagerstrand observes regularities in diffusion patterns and suggests a 'hierarchy effect', whereby the large urban centres are the first to have adopters (Diagram L1). In turn, these are followed by their surrounding smaller towns, and so on down the settlement hierarchy. In combination with this pattern, he also suggests a 'neighbourhood' or 'contagion effect' which produces a wave-like spread of adopters out from the origin. So the neighbourhood effect operates within a hierarchy of spatial scales and networks; national, regional and local.

National

Regional

Local

I.D.C.

I.D.C. = Innovation Dissemination Centre.
While Hagerstrand sought and found impediments to the dissemination process in specific geographical barriers, other researchers saw physical distance as a major hindrance. For example Whitehead (1970) investigated the adoption of 'New Geography' by University Departments in the U.K.. Using copies of Finals Papers as evidence, he concluded that there was a spatial pattern to the spread of adoption. Acceptance of the new ideas was seen to correlate well with distance measured from an axis through Cambridge and Bristol. The Universities in these two cities believed themselves to be the innovation centres for the New Geography. Oxford, virtually on the centre of the axis, was a notable anomaly in the pattern, perhaps giving rise to a notion that the barrier of academic pride/pique is more durable than mere distance.

Whitehand and Pratt (1975) made similar findings when studying the charity 'Contact'. They stressed the importance of the proximity of existing adopters to the success of further approaches. In other words, spatial considerations are interlinked with those of personal contact.

Before further analysis of the influence of Geographical Barriers, it may be useful to separate the dissemination and implementation stages. Successful dissemination results in the potential user receiving full and accurate knowledge of an innovation, whereas implementation is the step beyond where the user puts knowledge into practice. It has been suggested that to achieve success, the change agency may require completely different approaches at each of the two stages.

Rogers (1962) draws this distinction and claims that personal contact is more important at the later (Trial and Evaluation) stages than in the earlier ones (Awareness and Interest). Again, in a more generalised observation, he states that,

"Mass media channels are relatively more important at the knowledge function, and interpersonal channels are relatively more important at the persuasion function in the innovation-decision process. Cosmopolete channels are relatively more important at the knowledge function, and localite channels are relatively more important at the persuasion function in the innovation-decision process."

(Rogers and Shoemaker 1971; p.255)
Evaluation studies by the Schools Council suggest that forms of mass communication can be used effectively to make teachers aware of an innovation. For the purpose of achieving widespread implementation, evidence for the advantage of personal contact between potential user and change agent (or existing user) is well established. Given the limited time, manpower and funding which is the norm for most innovation projects, such face-to-face meetings are bound to be reduced in proportion to distance. Bearing in mind Hagerstrand's evidence of impermeability to change caused by some geographical features, it may be more accurate to conclude that it is the time/cost factor involved in personal travel which is the geographical barrier, rather than considerations of mileage.

If the validity of Hagerstrand's Hierarchy and Neighbourhood Effects are accepted, then it is possible for a project team to speed the process of implementation on a large scale. This could be achieved by giving assistance to teachers in a number of strategically selected urban centres. The scheme then begins to sound very much like Schon's Proliferation of Centres model for dissemination and may thus suffer from the predicted problems of friction with the central project team and diminution of impetus. However, these are problems which occur over time, so it may be advisable to aim for rapid nation-wide uptake by this means, while the project team is still in existence and has funding. After the demise of the central project team, it is to be hoped that the innovation has sufficiently secure regional toe-holds. From these proliferated centres either LEAs will take up the duties of dissemination, or diffusion will occur by means of social interaction. The experiences of the Keele Project suggest that planned dissemination would be more effective.

After its intended cellular development, the Keele Integrated Studies Project was meant to diffuse outward from its 38 pilot school centres. Jenkins (Shipman 1974) observed that "the project, like most first-generation curriculum projects, made little more than gestures in the direction of dissemination." His assessment of the project's diffusion was that it was more significant within the trial schools than beyond them. Shipman's final analysis was that the project should have planned "more time to define team thinking on objectives" and "a much better diffusion campaign."
The suggestion is that, once recognised, Geographical Barriers can be overcome, in greater part, by organisation. The recommended strategy may add to any Organisational Barrier, such as the difficulty of getting people with the right training and skills to meet with teachers who may wish to implement the innovation. This is a definable management problem which a project team may well prefer to the vagaries of dilution by distance. Certainly the Geography 16-19 Project team had definite strategies to disseminate their new A level course through England, Wales and Northern Ireland, and to enlist professional assistance (see section iii. of this chapter).
Socio-cultural Barriers.

A culture is, in essence, a system of beliefs, values and norms, a norm being a legitimate means of achieving an objective. Criteria used to define the term society include the requirement that its members should have a common culture and a means of transmitting this culture, so that it survives beyond the lives of the present members. A society must also have a geographical location, be capable of reproducing itself and develop a system which binds its members together by accepted legitimised sanctions.

Having established the meaning of the sectional rubric in an excusably perfunctory way, the brief definitions can be used to define the scope of investigation. It follows that it is proper to talk of a Western Society, comprising many countries, or a local community supporting a single school. As a general statement, differences in cultural and social environments will be at their greatest on an international scale. Such a statement may seem to have little relevance to this research, based as it is in England and Wales. However, the international dimension may have some consequence in areas of the country which have absorbed substantial numbers of immigrants during the Post-War period. It is not only the expression of cultural values through the representative political power of local ethnic minorities which can influence educational decision-making, but also the perceived wishes of parents and children in the minority groups. But, whether we are considering views of immigrant or indigenous populations, the conceptions and misconceptions formed of them by Education's decision-makers can be formidable barriers to innovation.

So one element of the problem is the accuracy with which socio-cultural information is reported. This is exacerbated by another element, the increasingly dynamic nature of our society. Those who seek to adjust educational aims and practices must accommodate accelerating changes in social values, needs and expectations, and must necessarily start with an ill-defined premise. These two elements are compounded by a third. Even within the most homogeneous of our social groupings, there will be some difference in values, in the understanding of accepted values and in the importance attached to accepted values. The realisation of the complexity of the situation prompted Dalin (1973) to give 'value conflicts' as the first of his barriers to innovation.
Dalí asserts that changes in educational, social, political and economic objectives will always be the driving force for major innovation. These changes are brought about by changes in social values and will create value conflicts in society. He believes that some interested educationalists will have more or less clearly formed opinions about the new values which accompany innovation. But for the majority of the population these value conflicts are not properly understood and are only "vaguely felt". It follows that much of the reaction to innovation will therefore not be clear and will be only "vaguely communicated" and thus poorly understood by the decision-makers.

Commenting on Dalí's observation, Stenhouse (1975) ascribes value conflicts in Britain to the irreconcilable desires for consensus and diversity. Whatever the causes of value conflicts are and however poorly understood they are, many will give rise to resistance to change, at least in the short term. In times of uncertainty there is a temptation for people, teachers amongst them, to fall back on tried and trusted methods. In this research, values, changing values and conflicts of values are seen as a central issue. Hence Section 5 of this chapter homes in on Reference Group Theory and looks at the sources of values and attitudes.

On a national level, teachers as part of society, are under certain pressures to conform to what is expected of them. The teaching profession itself also exerts influence, particularly over student and probationary teachers. Such influences and pressures tend to be conservative in nature and to stiffen resistance to innovation. Gray and Coulson (1982) suggest that teachers resist change because of:

(i) their perception of public expectation,
(ii) traditional notions of what schools are like or ought to be like and
(iii) the knowledge that schools will always exist regardless of their 'quality of provision'.

They cite Taylor (1969) who claimed that most teacher training, both initial and in-service, socialises teachers into current orthodoxies. However Butcher (1965) and McIntyre and Morrison (1967) found that radicalism increased during teacher training. Finlayson and Cohen (1967) found that radical attitudes amongst student teachers reached a peak in their second year and then declined in the third. Researchers such as McIntyre and Morrison (1967) and Shipman (1967) reported a shift back towards conservative attitudes during the first year of
teaching. It was therefore anticipated that a fair amount of conservative attitudes would be encountered even when the case study chosen is a radical project like Geography 16-19.

After training, the newly qualified teacher may return to the classroom with attitudes and values similar to those of other staff and even the general public. If remarks by Tawney (1921) are true of the average Englishman, then it will be difficult for the would-be innovator to break the conservative inertia.

"They are incurious as to theory, take fundamentals for granted, and are more interested in the state of the roads than in their place on the map."
"Most generations, it might be said, walk in the path which they neither make nor discover, but accept; the main thing is that they should march."

(Tawney 1921; p.29)

Tawney's remarks about the complacency of his fellow countrymen, receive some support from research by the DES (1970). In a survey of the readership of Schools Council publications amongst their target groups, it found generally low percentages of readership. In particular it found that information of a practical, everyday nature was read by more teachers than theoretical or general literature. Teachers did more partial than complete reading. Picking up on this point, the research method outlined later seeks to discover how Project-adopters came to hear about Geography 16-19. The research also focuses on perceptions of the Project's aims and philosophies, not the practicalities of its classroom implementation.

The failure of some past project teams to get their innovations adopted may have been partly due to their failure to see the social consequences for the teacher, status being a key factor here. The teacher's social environment and post-adoption relationships with colleagues are important and are investigated in this research. Hoyle (1969) noted that schools are living organisms upon which any attempt to transplant innovations will lead to "tissue rejection".

Schools as micro-societies, have their own cultural influences which may help or hinder the teacher-innovator. Some of these influences may emanate from
socio-environmental variables external to the school, such as rural or urban, rich or deprived areas. The inhabitants of the areas around the school are part of a teacher's role set but how much influence do they have. Stenhouse (1975) noted that one "limitation on a school is parental and social opinion" but that "traditionally British schools are rather independent of parental opinion" with the exception of middle-class parents. Recent legislation has strengthened the role of governors and particularly those from the local community. The probability is that their influence will be conservative based on values they admire and remember from their own school days. It was thought advisable to visit some schools whose geographers had adopted the Project in order to find out something of the social environment and add depth to the study.

Teachers are also influenced by their colleagues and there is some evidence to suggest that this influence may vary from one type of school to another. Oliver and Butcher (1968) reached the conclusion that grammar school teachers had more conservative attitudes and were less innovative than either secondary modern or comprehensive school teachers. The questionnaire used in this research was therefore constructed to ask for a basic description of each respondent's establishment.

Many teachers see themselves primarily as subject teachers and so their departmental colleagues are often an influential reference group. Musgrove (1968) thought of a subject as a social institution with a sense of identity and loyalty extracted from its members. Foreseeing a diffuly later encountered by the Keel Integrated Studies Project, he doubted whether the elaborate organisations called 'subjects' would give much ground to new arrivals. He attributed this more to the properties of subjects as social rather than intellectual systems.

His predictions also held true for the National Curriculum. He suspected that curriculum changes, at least in schools, would occur within traditional subject boundaries rather than across them.

"Subjects' can be regarded as bureaucracies, ........ hierarchically controlled, deciding conditions of membership, staunchly maintaining their boundaries...." (Musgrove 1968; p.7)
In recognition of the power of the department this research is department orientated and concentrates on the perceptions of its HOD.

Aitken and Hage (1971) quantified variables within an organisation and correlated them with innovative activity. One of their variables, professionalism, which they equated with the amount of training received, was found to have some correlation with innovativeness. However a much higher degree of correlation was discovered for the variable which estimated the degree of extra-organisational professional activity e.g. attending conferences, writing articles. Using these guiding ideas, an effort was made to find the qualifications and professional activities of HODs contacted during the course of this research.

An older but equally useful idea was taken from Gouldner (1954) who divided employees into 'cosmopolitans' and 'locals'. Cosmopolitans were characterised by their having; (i) a low level of loyalty to their employing organisation, (ii) a high commitment to their specialised role skills and (iii) a greater inclination to use an outer reference group. Locals were their opposites and, according to the research, were more likely to be promoted to the upper echelons of power within the organisation. It is then often the case that the innovating cosmopolitan must sell his or her ideas to a more conservative local.

It has been noticed (OU 1972) that early adopters are likely to be younger, perform more specialised functions, respond to the more impersonal sources of information and be opinion leaders. Late adopters rely more on the personal opinion of their colleagues. To assimilate this point, results in this research distinguish between early and late adopters.

It may be the case that in schools the younger teachers who are well-qualified (high professionalism) and who keep themselves informed of educational developments (high extra-organisational professionalism) will be most receptive to innovations. Harking back to previous references, their opportunity for innovation is likely to be strictly within subject boundaries. Geography 16-19 provides a suitable case study for testing these ideas but it was thought unwise to ask HODs their ages in a questionnaire or interview.

Other factors affect the social climate within schools but some are more related to aspects of organisation. These are discussed in later paragraphs.
Linguistic Barriers.

It is clear that the language used to disseminate an innovation is crucial to the perceptions of the innovation in the minds of potential adopters. The language used in the project resources is vital to its successful implementation. However in this research neither the language of the dissemination materials nor of pilot resources were analysed. What was analysed was the HODs perceptions of the Project derived from any sources. Effort was made to establish what those source were.

Hagersrand saw linguistic barriers mainly as a restriction on the international spread of educational ideas. The foreign language barrier is not the only one. It is possible for written dissemination material to be couched in obscure technical terms or simply badly written. In such cases these self-constructed barriers would frustrate the aims of the project team. This was not the case with Geography 16-19.

The question addressed here is whether the project team over-estimated the time and mental energies available to teachers trying to comprehend the full meaning of the Project. With reference to both the pilot schools and later adopters, did they avoid the key pitfall described by Fullan (1982)? He considered the main reason for failure was simply that developers were able to go through a process of acquiring their own meaning of a curriculum change. But once it was presented to the adopting teachers, no provision was made for them to work out the meaning for themselves.

Rudduck (1986) raises the same issue, the problem of providing adopters with occasions when they can dedicate their energies to an innovation and properly come to terms with it. Her comments refer specifically to pilot school staff working with a project team but have relevance for all methods of curriculum innovation. Talking about the strategies for curriculum change developed in the 1960s and 1970s, she thought that, generally speaking, they had overlooked "the complexity of the task of building new meanings" with working groups. She thought this to be particularly important when a working group must continue its tasks "within a context which is reminiscent of past habits" and when the group must try to introduce change without facility for "withdrawing from its cycle of productivity."

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Turning now to the student target group, there was a possibility that Project materials originally hatched in London University and home county schools might not be suitable to all regions. Since initiatives like "language across the curriculum" most of those who work on curriculum development take care to select appropriate language. However this can be miscalculated and there are still some students at sixth form level who retain symptoms of Bernstein's "restricted code". Geography 16-19 A level examination papers have been criticised for inaccessible language (as have other boards) but this topic is left to further research.

Organisational Barriers.

Many individuals and groups can be involved in the transfer of an innovation from its design team to the classroom teacher. Each can present either a barrier to progress or a source of distortion. There are many references to the influences of organisations on dissemination in education literature. Some of these are discussed below and for convenience are grouped in three categories; (a) Project Team Organisation, (b) School Organisation and (c) The LEA.

(a) Project Team organisation.

Second generation Schools Council projects took care to design dissemination programmes for specific target groups. Even so, there was always the possibility that Bolam (1975) noted. Although innovations are aimed at a particular target group, this may not be entirely coincidental with the eventual set of users.

There is also the question of when, where or even whether the project team should involve teachers in the process of change. Before National Curriculum, in the heyday of independent and semi-independent curriculum development, project teams coopted teachers to work on the design of the innovation, on trialing and evaluation and on dissemination. Geography 16-19 involved teachers in all these activities. Shipman (1975) believed that involvement should go even further; that the continued use of a project in a school is determined by the level of teacher in-put. One of the remedies for overcoming past failure put forward by Steadman (1978) was to involve teachers from the outset.

On the other hand and on the other side of the Atlantic, the view of the American author Leithwood (1976) is
contradictory. He believed that it was misleading to assume that teacher involvement in curriculum development would necessarily have a beneficial effect on curriculum implementation. The "unqualified assertion" that this was so had led to methods of work which were not only "wasteful of time and human resources" but were probably "counter-productive" too.

Leithwood's argument seems to have triumphed over here in recent years.

Problems have arisen when project teams try, understandably, to present their innovations in the best light. Teachers can be left with the impression that the proposed change would be a relatively simple and effortless operation. The disparity between expectations and reality is seen by Stenhouse (1975) as another major barrier to innovation. During his time with the Humanities Project, Shipman (1975) found a similar problem. Teachers volunteered to take part in piloting and developing the project but several dropped out or continued with their own independent version as the pressure of work grew. This research into Geography 16-19 planned to survey adopters to discover their implementation problems.

Sarason (1970) reporting on a 'new maths.' project in the USA, observed that the project team showed little sensitivity to teachers' dilemmas. Teachers were required to learn new vocabulary, procedures and concepts which conflicted with over-learned attitudes and ways of thinking. The team did not understand that teachers were not just learning something extra, but unlearning old, often ingrained approaches while simultaneously learning new ones.

Fullan's (1986) aphorism, "change = learning" is apposite in this context. So too is Bolam's (1986) advice that two sorts of support are needed for teachers. They should have "management training within which the management of change is a significant component" and "specific training directly related to a particular innovation". This research looks at the levels of both sorts of training amongst selected Project adopters. It also looks for the effects of previous experience in curriculum development on the adoption of Geography 16-19.

In its conclusions, the James Report (DES 1972) also criticised the over-simplification of the change process in respect of its range of implications. The report observed that those responsible for introducing change were liable
to underestimate the full complexity of the innovation process. Change agents tended to focus on the "substantive or main innovation" and paid too little attention to those innovations which, "although subsidiary", were nonetheless "crucial to the success of the main innovation."

It is clear that research into the perceptions of project adopters must enquire into more than just the central theme of the project.

At the time Eraut (1976) could say that project teams always underestimated the need for INSET. He regarded INSET both as a means of getting teachers to implement new strategies and as an assistance for them to adapt projects to their own needs. Some investigators see the cognitive adjustment required from project-adopting teachers as something which requires much more time than an introductory or short-term INSET programme. According to Rutherford (1978) American teachers who applied an innovation through a one-year course only produced the old curriculum plus slight modifications to some of its elements. He thought that three years were needed for full implementation. To avoid problems of partial implementation he extolled the virtues of short new courses, say of one-term duration, which can then be implemented in one year. Longer courses with a modular structure would allow the teacher to become familiar with philosophy and method by repeated application. The modular structure of Geography 16-19 seems to have similar aims.

A potential barrier which appears so obvious that it should not occur in reality is the unavailability of the resources needed to teach a project. In their time, Gross et al. (1971) saw this problem as all too common. Later the Schools Council Working Paper (1976) felt it necessary to emphasise the need to have printed project materials ready for the dissemination phase rather than have a year of dissemination before interested teachers could study the actual resources. At the time of Geography 16-19 national dissemination in 1983/84 there were only a small quantity of resources in print and some photocopied trial materials of varying quality.

Perceptions of the scale of change required by a project team are also important to the success of dissemination. Hull et al. (1973) claim that the magnitude of a proposed change is a major barrier. If the adoption of a project involves changes which are of a fundamental nature or on a large scale, then the risks may appear too great for teachers, particularly if the decision rests on an
'all-or-nothing' choice. Rogers and Shoemaker (1971) cite research evidence to show that rates of adoption are positively correlated with trialability (i.e. the opportunity for experimenting on a limited basis) and observability (i.e. the opportunity to see the result of the implemented innovation). They are negatively correlated with perceived complexity.

The research method described in chapter 4 aimed to discover whether Project adopters spent much time pondering their decision, whether they began by adopting all or part of the project and whether they intended to implement the whole course.
(b) School Organisation.

Sometimes the conclusions of authoritative North American academics do not offer much insight to curricular problems in UK because the organisational setting is so different. However Fullan (1982) makes many useful points which are directly transferrable. He warns that all too often we see change as being the sole responsibility of the teacher but there are many others in the locality who are implicated and who should accept some responsibility in their roles. Fullan believes that, in this context, the school principal is the "most powerful potential source" of assistance or hindrance to the innovation adopting teacher, largely because of his or her "closeness to the classroom situation".

The headteacher at the top of the school's management structure, normally has the final word on policy, notwithstanding the increased powers of governors. The head's personality, policy preferences and style of management can, and often do, determine the character of a school as a whole. His or her influence is felt in many ways, not least, as Hoyle points out, because it is the head who plans the organisational structure itself. The responsibility for innovation affecting either internal organisation or the curriculum may be delegated to a deputy head. Groups of staff may be consulted but, even so, the head usually provides the final endorsement to any significant change. So, more than any other, it is the head's attitude to innovation in general as well as any particular change, which sets the tone for the school. This is not to say that the head is free from checks and balances or can always impose personal bias, that conservative or radical.

In many instances the perceptions of staff are influenced by the assumed values of the head and the SMT. Various typologies have been drawn up to describe management styles used by heads. One which is nearly always identified is the authoritarian style. Guskin (1969) found that authoritarianism was not only detrimental to innovation but was a 'difficult to change' characteristic. He considered that other barrier-forming characteristics found in schools, such as the sense of threat felt by staff, could be more easily removed. This could lead to open-mindedness conducive to innovation. He found that innovation prospered better under heads who were more democratic, more open-minded themselves and who allowed a greater degree of autonomy through delegation. Shipman (1974) thought that
the chances of successful implementation were improved when
the head supported the innovation but did not insist on
being personally involved.

A school's radical reputation can induce a momentum for
change. Bernbaum (1973) drew attention to the revolutionary
decision of the first head of Countesthorpe College who
somewhat perversely used the power invested in him as a
Head to "divest himself" of his hierarchical pre-eminence
within the organisation of the school. For this and other
reasons Countesthorpe tended to attract radical teachers
who were especially keen to innovate and who together
introduced an exceptionally wide variety of new ideas.

These circumstances are exceptional. According to Gray and
Coulson (1982) most headteachers see themselves as the
supreme, central decision-making authority thereby tending
to create dependent teachers and to stifle the innovative
spirit in them. In similar vein, Steadman (1978) rated
school policy as a more important adoption factor than the
availability of information on a new project.

In most schools, the head's attitudes and values are the
basis of the social climate. Shipman (1974) regarded
negative social climate as the main problem frustrating
innovation. The term is however very nebulous,
incorporating the sum total of all the roles,
relationships, attitudes and values of the whole staff. For
the purpose of research into Geography 16-19 the social
climate was assessed by reference to the head of geography,
his departmental colleagues and the SMT.

The internal organisation of a school can assist or baulk
change. With reference to the complexity of
an organisation, Aiken and Hage (1971) found that
formalisation and specialisation of function was not
related to innovation. Their explanation was a paradox. The
desire for change was greatest where there was great task
differentiation (itself leading to conflict, e.g.
demarcation disputes) but the bureaucratic environment
prevented change being implemented.

With specific reference to schools, Caston (1970) was in
favour of greater job specification and the use of
auxiliaries in teaching. He wanted us to abandon the belief
that one teacher can do everything for all children. This
would allow teachers time to "think more about what they
are doing" and hence provide scope for innovation. The
slowness to differentiate function was due to the large
number of teachers on roll in a school which caused complex
organisational problems.

An investigation into medical schools by Caroll (1967) indicated that innovation was greatest where there was greatest occupational diversity. Differential growth rates amongst departments forced changes in the school organisation. Aiken and Hage found positive correlation between innovation and communication, both inter-departmental and intra-departmental, when suggestions moved from low to high status staff. Downward communication was negatively correlated. It seems important for research into adoption to study the management struture of project-adopting schools and to assess the facilities for communication. The factor was investigated in this research.

Not all schools or teachers can cope with radical changes at any given time. Shipman (1974) found that destabilising factors such as high staff turnover and reorganisation of local schools were linked to project failure.

Often curriculum change is seen to imply other changes both in the school as a whole and inside the classroom. One stumbling block for curriculum change is the school timetable. Stenhouse (1975) referred to the timetable as a focal point in "the battle for innovation." It is not only that a new project will replace an existing course, or even reshape the curriculum, it may also require timetable time even before implementation starts. This is why Shipman attached great importance to the readiness of a school to reorganise its timetable to provide planning time for teachers involved in the Keele Project.

"Curriculum innovation requires change in the internal organisation of the school. Change in the internal organisation of the school is a major innovation."

(Hoyle 1972; p.230)

Stenhouse (1975) reminded us that organisation and stability within the class can be affected. It is therefore essential to consider "the problem of control" at classroom level when planning innovation. One of the aims of the Geography 16-19 Project was to involve students more actively in the learning process. This may have been perceived as a threat by some teachers but perhaps few because the students involved are sixth formers, i.e. voluntary learners.

Anxieties about change could be reduced by training but
Harding (1990) found in her survey, mainly conducted in the West Midlands, that only 53% of middle managers in schools have received job-specific training compared with 81% in industry. She (Harding 1990; p.36) concluded that "middle managers are responsible for a large portion of the management change in an organisation and they, as much as headteachers, need to possess the skills and attitudes they themselves..." recognise as essential.

The most favourable starting point for successful change is where staff already recognise a problem and wish to implement some solution. McDonald and Rudduck (1971) observed of the pilot schools in the Keele Humanities Project that an experiment or an innovation settled best in schools where teachers were already confronting a problem in that area and were contemplating action. The experiment could then be used to extend the range of their strategies for dealing with the problem. Bolam (1986) makes much the same point but extends the prerequisites for success.

"We can say with reasonable confidence, for example, that innovations are more likely to succeed if they are perceived as relevant and beneficial, are adaptable, are seen as congruent with existing values and are feasible in terms of cost and resources."
(Bolam 1986; p.314)

The questionnaire survey of Project adopters in this research tries to establish why schools were dissatisfied with their existing A level geography courses and what benefits they foresaw in the adoption of Geography 16-19.
(c) The LEA.

With respect to dissemination, Derrick (1972) suggested that there were four influential groups at that time: the Schools Council, curriculum development teams, publishers and LEAs. The influence of the LEA advisers on the curricula of local schools declined rapidly through the 1980s but at the time of Geography 16-19 dissemination it was thought to be still in evidence.

LEA advisers were the originators of some innovation. More often, as in the case of Geography 16-19, they were the communicators of a project team's ideas, some acting in tandem with the project team, providing financial and logistical support in their areas during and after the dissemination phase. The support of LEA advisers or inspectors was thought to be vital to the success of a national project. Adviser/inspectors were sometimes referred to as the 'gatekeepers' for new ideas. However securing the cooperation of these local officers did not always guarantee success.

Whatever innovation the adviser seeks to promote, he or she will encounter a basic problem of role-conflict. In his relationship with teachers he has to be an administrative superior, a professional colleague, an external consultant or a mixture of all these (Bolam, Smith and Canter, 1975). Teachers' perceptions of his role will affect their response to the innovation. For the adviser there will be conflicts of duty between advising and assessing, similar to those anticipated in the James Report (DES 1972) for teacher-advisers.

The relative independence of the local advisers poses a problem for project teams planning national dissemination. Even when the value of a project is recognised, the extent of assistance in any locality cannot be predetermined. So the Keele Humanities Curriculum Project, for example, only worked where LEAs provided systematic help for teachers. Steadman (1978) recorded that no uniform pattern of LEA assistance was discernible for the Keele Project. Variations in the number and local status of advisers, together with their work-loads and the funds which they administer are likely to affect the quality of their assistance. In the case of Geography 16-19, this led to a patchy up-take of the project. It may also have influenced the perceptions of adopting teachers.
The position of LEA officers may have some parallels with education administrators in the USA. Pratt (1980) identifies five likely reasons why they reject innovations.

i. For reasons of administrative ease they may wish to retain a steady-state in the system.

ii. When personally endorsing new schemes they may feel exposed and vulnerable.

iii. Money may be the determining factor.

iv. Professional pride may be offended. If an innovation is worthwhile, they should have thought of it first. (In the case of Geography 16-19, they should have promoted it first).

v. When outcomes are measured, failure can be quickly seen, whereas apparent success only leads to demand for more measurement.

The Project team attached great importance to the role of LEA adviser in the early stages of project development in trial schools. This research makes specific enquiry into their influence on HODs from both pilot schools and schools adopting after dissemination.

The development of Geography 16-19 is disclosed in "The contribution of a curriculum project to 16-19 education" a book written by three of the Project team, M. Naish, E. Rawling and C. Hart (1987). Much of the material for this text had already appeared in Project News, a series of broadsheets published from November 1976, circulating to pilot schools and interested individuals. The text by Naish and his co-authors can be regarded as the standard reference for the Project and most of the following section derives from it.

The chronology of the Project is interesting. It stands at or near the highest tide mark of radical geography, a point where the tide turned and began to run in favour of the more traditional values of the subject's conservatives. Geography 16-19 turned out to be the last of the major curriculum developments sponsored by the Schools Council. It therefore had the benefit of the expertise which had been built up by the Council and a chance to avoid mistakes made in previous projects. It was a time too when the 'great debate' into the future course of education was in full session and for the Project team it was a chance to examine the divergent views of the industrial utilitarians and the social environmentalists.

From its inception the Project had radical and optimistic aims which went beyond setting up a new course. It was also meant to encourage curriculum development itself.

"The initiative for the proposal to establish such a project stemmed from Professor Norman Graves and Michael Naish at the University of London Institute of Education in 1974. The Project commenced work at the Institute of Education in 1976 with a brief to reconsider the geography curriculum of England, Wales and Northern Ireland. The brief was expressed in two broad aims. These were (1) to involve teachers and lecturers in a reconsideration of the objectives, content and teaching methods of geography courses for the 16 to 19 age group, and (2) by means of this involvement, to help them to appreciate their role as curriculum developers." (Naish 1987; p.vii)

The original Project team of Naish, Rawling and Kent did involve teachers and lecturers (as well as two HMI and the Humanities Adviser for Sheffield) from the outset by
creating a consultative committee.

The Project team justified their radical ichnography by pointing out the changes which had occurred in the nature of school sixth forms over the previous decade. They argued that there had been a significant widening of the target population which required a shift away from the narrow academic courses basically designed to provide university entrance qualifications. New courses with new approaches and new qualifications were needed to cater for the 'new sixth form' in relevant and interesting ways. The proposals for N and F levels and CEE were under consideration at the time as possible answers.

"The reorganisation of schools into a more comprehensive system after 1965 led to the creation of the open access sixth form. The significance of this was that more students now had the opportunity to stay on........... the range of ability and motivation of students in Advanced-level sets was extended." (Op. cit.; p.2)

Geography also came under pressure for curriculum renewal through a general shift in educational theory. The argument for increasing conceptual learning and the understanding of principles was at the time in the ascendancy. So too was that for increasing the emphasis on providing students with a wide range of skills and abilities through school and college work. Factual knowledge was seen as raw material from which this learning could be fashioned. Naish mentions other pressure sources: advocates of the 'one-world' approach, multicultural education and the environmental movement.

The research phase of the project was thus conducted against a background of education in flux. It was seen as imperative to anchor the project on some firm structure. This was done with a statement of "broad aims for 16-19 geography" and a "curriculum framework" for guiding project construction. These arose out of an analysis of 16-19 student needs and an analysis of the nature of the subject and its potential contribution as a medium for education.

An overall plan for development was published in Project News Number 2 March 1977. It included a timetable for key stages in development up to trialing the new course in the school year 1978/79 (Figure 1). This initial plan compares favourably with the retrospectively refined plan included in Naish's 1987 book (Figure 2).
Figure 1. A Plan for Development (from Project News March 1977).

GEOGRAPHY 16-19: A PLAN FOR DEVELOPMENT

1. Identify Needs of 16-19 Year-Olds
2. Identify the Contribution of Geography to the 16-19 Curriculum
3. Survey the Current Situation in 16-19 Geography
4. Outline the Broad Aims for 16-19 Geography
5. Define the Framework for a Core Geography Curriculum in Terms of Concepts, Skills and Values for all 16-19 Year-Olds
6. For the One Year 'New Sixth Former'
   - Outline Criteria for Selection of Objectives and Content for Units of Work
   - Devise Appropriate Teaching and Learning Approaches and Materials
7. For the 'A' Level Group
8. Teach and Evaluate in Schools and Colleges
   - Either As Sample Units Within Present Syllabuses
   - Or As Part of New Examination Courses Giving Scope for Development of Assessment Techniques

SURVEY
AIMS AND OBJECTIVES
DEVELOPMENT
EVALUATION
AUTUMN 1976
AUTUMN 1977
AUTUMN 1978
AUTUMN 1979
SUMMER 1980
Figure 2: Geography 16-19 Process of Curriculum Development.

(Haish 1987)
The team had taken to heart the lessons and strictures of earlier Schools Council programmes. Emphasis was put on continuous evaluation and INSET throughout the development programme. The development of aims, a curriculum framework, specific objectives for units, resources, course construction, trialing and national dissemination were all to be evaluated. The Project team realised that with just three full-time members and no specific funds for evaluation a "realistic self-evaluation strategy" had to be formed and made known to all participants.

In practice this meant setting up, with the help of LEAs, a network of teachers in linked schools and colleges to discuss, offer suggestions and ultimately trial units of work. Their work was backed up by the Project's Consultative Committee, a sub-committee of the GCSE boards and coopted individual specialists.

After a trawl of all LEAs eleven pilot groups were established, as [supposedly] indicated in Figure 3.

"In selecting schools and groups, care was taken to ensure that all types of establishment would be represented, including state selective and non-selective schools, independent schools, sixth form colleges and further education colleges. Teachers and schools with no experience of curriculum development in geography were included, as well as those who had already worked with the 14-18 Project, or Geography for the Young School Leaver (Avery Hill 14-16) Project. Urban and rural establishments were included and an effort was made to involve schools and colleges across a range of sizes from very small to very large." (Op. cit.; p.16)

Two things spring to mind when reading this part of the Project's reviewed development. The first is that with only eleven LEAs showing an interest the team were lucky to get the claimed wide range of educational establishments. Secondly, if the new course was to benefit the 'new sixth-former' then trials would have been better concentrated where many such students could be found. In a manner of speaking, these individuals were unlikely to be thick on the ground in independent and selective schools. It might have been more consistent to stress the wide range of abilities and backgrounds of pilot students.

Pilot establishments were defined as those with a "full commitment to the work". Those with linked associate status had the choice of joining in or simply holding a watching brief with a view to greater involvement in the future. The
Figure 3. LEAs with Formal School and College Project Links. (Naish 1987)
volunteer LEAs provided funds and usually one of its advisers acted as "facilitator and link person." Each group had a coordinator who acted as catalyst and communications link and who was usually in Higher Education.

After this network was in place other LEAs were approached and a system of sixteen separate schools and colleges acting as associate establishments was formed. The distribution of Pilot and Associate Authorities is shown in Figure 3. The aims for enlisting these extra LEAs were: a greater spacial dissemination and a counterbalance to the possible effects of group dynamics i.e. comment from individual establishments.

"As time went on, more schools and colleges were drawn into the network, normally to take up specific courses such as CEE or the B/TEC module. In Sheffield, for example, a group of schools was established directly through interest in the A level course." (Op. cit.; p.19)

During the development phase about 100 schools and colleges had some organised form of contact with the Project team which saw a number of advantages accruing from what they describe as "a learner-centred model" of curriculum development.

"Firstly, new proposals for change were rooted in classroom practice and advice from teachers. This made them more likely to be practical and acceptable to other teachers. Secondly, the teachers and the team were involved in a continuous form of in-service activity, acting to enhance understanding and improve performance for all those participating. It is significant that this work was undertaken under the auspices of a national curriculum development project, providing justification and some prestige for teachers needing to explain their activities to headteachers, teacher colleagues or local education authorities.

Thirdly teachers and students who formed part of the pilot network were able to play a critical role in dissemination throughout the life of the Project, and particularly the 24 major dissemination conferences held in 1983-84." (Op.cit.; p.230)

The venues for the conferences were spread wide over England plus one in Wales and one in Northern Ireland (Figure 4). Here catchment areas were designed to cater for the many schools, more than a thousand, who replied to a letter advertising one-day Project conferences. There was a standard format for the conferences but detail varied. The
Figure 4. Venues and Contributory Regions for Project Conferences. (Naish 1987)
Project's guiding principles, its courses and examples of work units were presented sometimes with the assistance of students as well as teachers. Amongst handouts of basic information there was a sheet designed to assist schools and LEAs with their next adoptive steps (Figure 5).

"The teachers now form the nuclei of Geography 16-19 groups working in various parts of the country to take forward continuing curriculum development." (Op. cit.; p.19)

This undoubtedly happened at least until attentions were deflected by a centre-periphery dissemination which was more pressing i.e. the National Curriculum. The Project is a success in terms of commitment and uptake. It must follow therefore that the early dissemination phase (a mixture of Schon's Proliferation of Centres and Havelock's Research, Development and Diffusion dissemination models) was also a success. Success was evident too in the later dissemination phase when the Project acquired a fixed syllabus and became nationally available as a London University A level geography course. This part of the dissemination could truly be called centre-priphery. The Project received praise from many quarters and has had effect beyond its age and subject parameters. Examination Boards, the Geographical Association and "at least one university department" have acknowledged the Project's influence.

The Project's A level course has grown to become the most widely used of all geography A level syllabuses. Its modules and courses have been offered at A/S level, CEE, BTEC and TVEI. Regional coordinators were appointed but were not generally regarded as having much effect on consolidation or further dissemination. A national coordinator working from the University of Bath was also funded. Annual conferences are held regionally to review the most recent A level examination papers and to communicate any course changes. Judged by attendances, these are successful.

Part of the interest for this research lies in a comparison between the two phases of dissemination, one when ideas were still developing, the other when the message was fixed. Teachers in the original piloting network were, at one and the same time, developing the project, evaluating it, helping to disseminate it and receiving INSET. Even with assistance and good organisation there was a heavy workload. Combine this effect with the fragmented nature of Project development due to its multi-centred work-force and there was a distinct possibility that some establishments,
Figure 5. Adoption Steps Information Sheet. (Naish 1987)

GEOGRAPHY 16–19 YOUR ROUTE FOR INVOLVEMENT

PARTICIPATE IN Geography 16–19 Dissemination Conference

CONSIDER individually: Departmental context

CONTACT local 16–19 ‘Futures’ Personnel/LEA


EVALUATE opportunities for own school/college

MAKE DECISION to take up:

<table>
<thead>
<tr>
<th>A-LEVEL</th>
<th>17+</th>
<th>BTEC</th>
<th>USE OF 16–19 APPROACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact: 1 Project team 2 School Examinations Officer, University of London School Examinations Department, Stewart House, 32 Russell Square, LONDON WC1B 5DN</td>
<td>Contact: 1 Project team especially, for CPVE developments and provision through SREB 2 Your own CSE Board for details of regional 17+/CEE provision for 1984/5</td>
<td>Contact: 1 Project team 2 Ms Diana Davies, Administrative Officer, BTEC National Awards in Business Studies, Central House, Upper Woburn Place, LONDON WC1 (for BTEC option module)</td>
<td>1 Write to Project secretary to order internal publications 2 Purchase Longman ‘16–19’ materials and Project book</td>
</tr>
</tbody>
</table>
particularly the associate members, would fail to keep up with events. In fact there was an admission of a related problem. Possibly of greatest concern to the Project team at this time was their inability to ensure consistent and adequate commitment to 16-19 in-service work from all participating local education authorities. There was a "patchy" response to requests for regular teacher release and financial help with working expenses.

Things were more straightforward for those who were not in the development phase. They received the finalised package in the second phase i.e. during national dissemination and so by contrast would have had none of the recently out-dated conceptual baggage to dump before taking up the Project ideals proper. Later adopters therefore had the advantage of clearly focussed INSET but only a short time to absorb it. Would there be any demonstrable difference between the two groups?

The research outlined in the following chapters was aimed at identifying different perceptions of an innovation and then trying to discover reasons for those differences. Inevitably the findings of the enquiry will reflect the success or otherwise of Geography 16-19, the project chosen for case study. Measured by two criteria, student numbers and curriculum influence, the Project has already been judged a success. However it is important to remember that its success could be assessed at several different levels and from more than one viewpoint. For example judgement could be made by reference to any of the following questions.

i. How many teachers have heard something about the project?

ii. How many teachers/departments have adopted all or part of the project or have bought materials for it?

iii. How many teachers have a reasonable understanding of the main philosophy, aims and methods of the project?

iv. How many of those teachers who have adopted the project are using it in the way the project team intended?

v. Does the properly or partially implemented project yield nett educational advantages for students when compared with other courses?

vi. Is any educational improvement as a result of the properly implemented project, cost effective in terms of project team and teacher effort, money spent or resources committed?
vii. Is the specific curriculum development instigated by the adopted project, the first step in a valuable progression, a red-herring or a cul-de-sac?

viii. Does the process of adopting the project lead to general on-going school-based curriculum development?

Research described in the following chapters is concerned with finding answers to question iii. on the list above, using assessment of teachers' perceptions of the 16-19 Geography Project as an indicator. This will be, by the nature of the data gathered, an evaluation of one aspect of the Project but it is an essential element without which other indicators of success are devalued. It seems most fundamental that teachers have a clear idea of what the Project is all about.

It was assumed that an answer to question ii. could be gained from the records of the Central Project team or, later, the Examinations Board of the University of London which undertook certification. The intention to acquire this information was seen as a necessary step towards answering question iii.
4. A Brief Description of the Geography 16-19 A Level Course.

The aims and principles of the Project are key items in the research and are therefore produced in full in Figure 6. The sheet formed part of the conference papers given to teachers who attended Project dissemination conferences in 1983-84.

The Geography 16-19 A level syllabus is based on a simple structure of four major themes. Within each theme there are a number of modules, some compulsory (Core Modules), some optional. A module is intended to provide about six weeks work focussed on particular questions, issues or problems interrelating human and environmental aspects of geography. A combination of the six prescribed Core Modules and three Option Modules chosen from a total of 24, must be studied (Figure 7). The Option Modules must be taken from different themes.

Resources for the course were originally photocopied trial materials. Gradually Longmans, the publishers, produced a series of booklets for the core units and for some of the Option Modules. There was delay which created problems for early implementers. Some booklets were more motivating for students than others. Some covered only part of the relevant module syllabus. Later a variety of suitable textbooks became available, ones with case studies of real world issues which lent themselves to enquiry-based learning. London Examination Board then issued a recommended list of texts.

Assessment is partly by two examination papers, set and marked by the board. The papers are taken at the end of the two-year course and account for 65% of the assessment. Paper 1 is a decision-making exercise. Paper 2 is based on the Core Modules and has a choice of questions each incorporating some data response.

The three Option Modules are assessed by items of coursework marked by teachers and then moderated by the Board. Three different tasks are set: an extended essay, two short essays under test conditions and a techniques application exercise. In addition each candidate must submit an Individual Study using fieldwork research methods. These are marked by teachers then Board moderated. Originally it was intended that each candidate would be
The General Principles of the Framework
1. An awareness of certain important ideas in three areas:— in physical geography; in human geography; in the interface between physical and human geography.
2. An appreciation of the processes of regional differentiation.
3. Knowledge derived from a study of a balanced selection of regions and environments, linked with a broad understanding of the complexity and variety of the world in which the student will become a citizen.
4. An understanding of the use of a variety of techniques and the ability to apply these appropriately.
5. A range of skills and experiences through involvement in a variety of learning activities both within and outside the classroom.
6. An awareness of the contribution that geography can make to an understanding of contemporary issues and problems concerning people and the environment.
7. A heightened ability to respond to and make judgements about certain aesthetic and moral matters relating to space and place.

Since it was intended that these principles should form criteria against which all 'A' level syllabuses should be evaluated, the Report then proceeded to elaborate each point and to examine, in more detail, problems of interpretation and implementation. Thus the problem of which important ideas in physical and human geography is dealt with in the expansion of point 1, and the question of selection of regions and areas for study is covered under point 3.

Finally, the Report concluded with a section on implementation of this framework by the examination boards. The wish was expressed that the framework should be seen as a valuable guide to the common basis of the subject's contribution to education, and not as a restrictive set of rules. "Any development that inhibits innovation and discourages a continuous dialogue between examination boards, schools and subject specialists is to be deprecated."
Figure 7: Geography 16-19 A Level Syllabus Structure.

Theme 1. Natural Environments – The Challenge for Man

Core Modules
Landforms and Environmental Management
Man and Ecosystems

Option Modules
Climatic Change and Uncertainty
Man’s Response to Difficult Environments
Man and Natural Hazards
Pollution of Natural Environments
Man and the Geological Challenge

Theme 2. Use and Misuse of Natural Resources

Core Module
The Energy Question

Option Modules
Water for Man
Minerals for Man
Land as a Resource
Soils and the Future
Managing Woodland and Forest
Potential of Oceans and Seas

Theme 3. Man-Environment Issues of Global Concern

Core Module
The Challenge of Urbanisation

Option Modules
Global Limits to Growth
Feeding the World’s Population
Political Systems and Environments for Man
Migrations of People
Alternative Approaches to Development
The Communications Revolution

Theme 4. Managing Man-Made Environments and Systems

Core Modules
Impact of Manufacturing Industry
Changing Agricultural Systems

Option Modules
Changing Tertiary Activities
Demand for Recreation and Leisure
Regional Disparities
Changing Urban Environments
Problems of Rural Management
Mobility and Man’s Environments
Policy, Planning and Man’s Environments
interviewed by assessors but this notion was quickly abandoned for reasons which are not hard to guess.

From the outset teachers who were considering project adoption were given proforma to assist them in their planning for implementation. These included a timetable for an exemplar course (Figure 8) and matrices to encourage a breadth of scale and regional coverage when selecting case study examples (Figure 9).

To foster enquiry-based learning, which is central to the Project's teaching method, a 'route for enquiry' (Figure 10) was and is still recommended for all units of work given to students.
Figure 8. Course Sheet Planning Exemplar

**EXEMPLARY COURSE YEAR 1**

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<td></td>
<td>a Resource</td>
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<td>Ecosystems</td>
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<td>Changing Agricultural systems</td>
<td>17</td>
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<td>Fieldwork: Internal Examinations and Second Timed Essay</td>
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<td>Biodiversity</td>
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<td>Biodiversity</td>
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<td>Fieldwork: Internal Examinations and Second Timed Essay</td>
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<td></td>
<td></td>
<td>Biodiversity</td>
<td>37</td>
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</table>

(Year 1 Module-teaching time - 29 weeks
Individual Study time - 3½ weeks
Exam. & revision time - 4 weeks (incl. fieldwork) 37 weeks)

(1/S - Individual Study)
Figure 9. Proformae for Coursework Planning of Scale and Regional Coverage.

<table>
<thead>
<tr>
<th>THE CURRICULUM MATRIX/SCALE</th>
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<tr>
<td>ENVIRONMENTS AND SYSTEMS</td>
</tr>
<tr>
<td>THEMES</td>
</tr>
<tr>
<td>SCALES</td>
</tr>
</tbody>
</table>

The main emphases of any teaching syllabus based on the Advanced Level Syllabus should be plotted on the Curriculum Matrix so that coverage of scales can be identified and considered.

NOTE: SMALL SCALE = Small scale case study, e.g. town, farm, factory, village. Local Study
GLOBAL = world patterns and distributions.

Figure 2(b)  THE CURRICULUM MATRIX/REGIONAL COVERAGE

<table>
<thead>
<tr>
<th>REGIONAL COVERAGE</th>
<th>THEME 1</th>
<th>THEME 2</th>
<th>THEME 3</th>
<th>THEME 4</th>
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<tr>
<td>'WESTERN' DEVELOPED AND U.K.</td>
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<tr>
<td>COMMUNIST COUNTRIES</td>
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<tr>
<td>DEVELOPING COUNTRIES</td>
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</tbody>
</table>

This matrix should be used to examine coverage of regional examples as set out in the syllabus, p. 9. In this case, the row titles of the matrix indicate 'WESTERN' DEVELOPED AND U.K.; COMMUNIST COUNTRIES; and DEVELOPING COUNTRIES.
**A ROUTE FOR ENQUIRY FOR 16-19 WORK**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>FOR ENQUIRY</th>
<th>KEY QUESTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCEPTION</td>
<td>ACHIEVE AWARENESS OF THE CHARACTER AND DISTRIBUTION OF PHENOMENA IN THE NATURAL AND CULTURAL ENVIRONMENTS,</td>
<td>WHAT?</td>
</tr>
<tr>
<td>OBSERVATION</td>
<td></td>
<td>WHERE?</td>
</tr>
<tr>
<td>DEFINITION</td>
<td>OUTLINE THE TOPIC, PROBLEM OR HYPOTHESIS, SELECT, COLLECT, DEFINE AND ORGANISE INFORMATION, DESCRIBE THE CHARACTER(s), LOCATION(s), DISTRIBUTION(s) OF PHENOMENA.</td>
<td>WHAT?</td>
</tr>
<tr>
<td>DESCRIPTION</td>
<td></td>
<td>WHERE?</td>
</tr>
<tr>
<td>ANALYSIS</td>
<td>ANALYSE INFORMATION AND MOVE TOWARDS PROVIDING ANSWERS TO QUESTIONS POSED, SOLUTIONS TO PROBLEMS, ACCEPTANCE OR REJECTION OF HYPOTHESES.</td>
<td>WHY?</td>
</tr>
<tr>
<td>EXPLANATION</td>
<td></td>
<td>HOW?</td>
</tr>
<tr>
<td>EVALUATION</td>
<td>EVALUATE - ATTEMPT TO MAKE GENERALISATIONS ± PREDICT FUTURE TRENDS AND POSSIBILITIES.</td>
<td>WHAT WILL?</td>
</tr>
<tr>
<td>PREDICTION</td>
<td></td>
<td>HOW OUGHT?</td>
</tr>
</tbody>
</table>
5. The Geography 16-19 Project in the context of recent curriculum development.

Since the passing of the first Education Acts in the mid-19th. century, government has exerted varying degrees of centralised control over schools and their curricula. Governments' foci of interest have shifted too.

In recent decades the trend has been towards greater government involvement in both in the administration of schools and in the curriculum. Teacher, LEA and even parental freedom to influence curricular matters has been largely removed. The State or at least the Secretary of State has assumed almost full control. His control may not yet be complete for various reasons; a resentful tardiness in implementing all aspects of the National Curriculum in some quarters; a genuine ignorance of what his wishes are in others; as well as many of the problems associated with centre-periphery dissemination already mentioned.

With this general trend in mind, it is possible to divide the recent history of curriculum development into four phases.

1. Pre-1964: The village market.

The earliest attempt to raise standards came with the Revised Code introduced in 1862. It set up the experiment of 'payment by results' in the three Rs. Acts of 1870 and 1880 made primary education first available then compulsory for all. More relevantly the Act of 1868 laid down a nine subject curriculum for Public Schools. In 1902 a new secondary sector was established with a four-year course based on that devised for Public Schools but with a broader curriculum offering eleven subjects.

Despite the radical 1944 Education Act which introduced tripartite secondary education, Goodson (1983) saw that no fundamental curricular change had taken place for many decades. He found it interesting to note that for those "boys" who stayed on beyond compulsory leaving age the subject-based curriculum had remained almost the same "for the 60 years following the 1904 Regulations".

For curriculum innovation it is fair to say that, in this phase, there was little more than a village market. Those with new curriculum developments to offer met those
prepared to consider new ideas on a local basis. Innovations diffused through the education system slowly. Ideas took root in a hit-and-mainly-miss fashion. The impact of was patchy and small.


With the coming of the Schools Council in 1964, (or perhaps the Nuffield projects from 1962) both the packaging and the marketing of educational ideas became more professional. The idea of dissemination superseded that of diffusion. The post-1965 introduction of comprehensive secondary education and ROSLA created a need for curriculum reform. Non-examination classes, mixed-ability teaching and child-centred teaching widened demand for development. This helped to maintain the momentum of S.C. work. However a critical insight is provided in a parenthetich question by Jenkins (1975). It follows his assertion that in classic traditions, cultural change conforms to the centre-periphery model. He suggests too that many of the Schools Council curriculum development projects may have "unconsciously" adopted this model.

The picture emerges of centrally-devised curricular developments retailing in a standardised form at local venues like teachers' centres. Their launching was coordinated centrally by the Schools Council but their uptake was decentralized. Advertising the new products was important and so too was the sale of resources. However no after-sale service was provided and adoption was assumed rather than investigated.

Under these circumstances it is not surprising that many S.C. schemes were only partially implemented in adopting schools although there were outstanding successes such as the GYSL project. This project was one of 21 Young School Leaver projects (Dalton 1988). It was launched in 1970 and initially conformed to a centre-periphery dissemination model but later developed support-strategies. These included publishing teacher guides and student resources, establishing local curriculum groups to develop materials and securing accreditation for GYSL courses from examination boards. It was an important precursor of the 16-19 project.

There were positive aspects of this phase. Teachers were free to make decisions about adoption according to their judgement of the benefits to students and their assessment of their own abilities and work-load. Diversity was
accepted and was part of Council philosophy. Schools bought a package and used it how they wished. Some projects were cooperatively developed with groups of teachers e.g. the Integrated Studies Project and the Humanities Curriculum Project. Thus market research was built into R.D. and D.. In conclusion it is fair to say that the aggregate influence of Schools Council projects during this period was extensive, even if many of their schemes were dismembered and then implemented in a fragmentory fashion.


Prime Minister Callaghan's Ruskin College speech in October 1976 signalled a change in governmental attitude to education. Ideas of developing the individual were replaced by notions of education in the service of industry and the economy. The focus of discussion was shifted from consideration of quantities of teachers, schools and resources to concern about their quality. Previously in the same year (The Yellow Book, 1976), the DES had directly criticised the Schools Council for approaching curriculum problems in a piecemeal fashion, for its supposed lack of success and for allegedly succumbing to the political influence of teachers' unions.

It is not surprising that later in September 1978 the Council's composition and role underwent a major revision. Lay, industrial and government representation on its committees was increased. Prominence was given to value for money and demonstrable change. Matters of assessment, evaluation and educational process moved centre-stage.

"After 1978, the emphasis of the Schools Council's work changed from the large scale team projects (such as GYSL and HCP) to local development projects and small scale initiatives. Five new programmes focussed on the curriculum development process, for example purpose and planning in schools, the effectiveness of individual teachers, meeting the needs of individual students. Two projects were specifically directed to school curriculum renewal - guidelines for review and internal development in schools (GRIDS 1984)."

(Dalton 1988; p.26)

In this phase the curriculum goods on offer (with some
exceptions) were no longer created or modified according to consumer demand (assumed or real). Increasingly the state decided what is to be made available. Consumer sovereignty was not dead but was looking frail. Schools still had the freedom to reject involvement in any scheme although pressure from LEA officers was increasing in some areas.


With the demise of consensus politics immediately after the 1979 General Election and the emergence of radical and directive government, the Schools Council was a certain target for change. In the event, that change was its closure in 1984. Despite an orchestrated campaign against the existence of quangos, its functions were replaced by two government-appointed bodies, the Schools Curriculum Development Council and the Secondary Examinations Council.

Shortly afterwards in the White Paper 'Better Schools' (1985), schools were damned by faint praise. They were credited with "important changes in the curriculum" and with coping with changes in their communities. They were also directly criticised using selected items from HMI Reports such as the observation that the range of quality and variations between schools was "wider than is acceptable." However the most telling comment was that "among the many aims" which schools had set for themselves or which others had set for them, there had been "neither clarity nor agreement".

Having broadcast to the country that schools did not know where they were going, there was a contrived justification for government to provide the missing directions and directives. This they did by first raising parental expectations of more choice and governance of schools, beginning with the 1980 Education Act; then encouraging schools to 'opt out' of LEA control with the aid of the statute in the 1986 Education (No. 2) Act; but finally establishing control of the curriculum for the government itself through the 1988 Education Reform Act.

During this time, schools received a steady stream of orders through the post. In basic curricular matters there is now no choice. Schools are kitted out by a quartermaster-general. It remains to be seen whether this entirely 'top down' innovation and centre-periphery dissemination can cope with the demands of accelerating economic and social change that, with some understatement
the 1985 White Paper declares, "has added to the pressure of a daily life which has become more precarious and sometimes more turbulent."

As mentioned in section iii of this chapter, the Geography 16-19 project comes in at a time of fundamental change in the social climate. It was conceived in the first phase of Schools Council work (1964-78) and hence its scope and aims are typical of the large-scale curriculum developments of that time. It was developed during the Council's second phase (1978-84) and responded to the pressures of the time to ensure successful implementation in schools. It has survived and grown in the Post 1984 phase benefitting from the combined good fortune of National Curriculum being implemented for the younger years first and the continued indecision of government over what to do with A levels.

"Sociologists, social psychologists and cultural anthropologists have always operated on the fundamental principles that an individual's attitudes and conduct are shaped by the group in which he has membership and that self-appraisal and the correlative feelings and behaviour flow from the individual's location in a particular group within a social hierarchy." This complex sentence is used by editors Hyman and Singer (1968; p.1) in their introduction to one of the few texts available on the subject of Reference Group theory.

It provides a promising area of existing theory which could be used to provide linkage between this and previous research. Reference Group theory asserts that attitudes and behaviour are shaped by group norms. Most teachers will have more than one referrand group competing for their affiliation. It is probable that for each individual one or more of these groups will have a significant influence on their perceptions and hence on the quality of their interpretation of a curriculum development.

It is largely from the one textual reference that useful concepts from Reference Group theory are first extracted and then applied to the process of dissemination.

a. Extractions from Reference Group Theory.

In brief, the theory suggests that the behaviour of individuals is greatly influenced by the behaviour of the group of people with whom they choose to identify.

People do not always model their behaviour on the groups with which they have most contact and with which we would, at first sight, consider them to have most affinity. In other words, a person's reference group is not always the same as his membership group. Nonmembership groups may influence the individual although such influence may not be through direct personal communication or social contact. It follows that a person choosing a nonmembership reference group voluntarily accepts the norms and attitudes of that group. The power for conformity is the power of empathy. On the other hand, membership groups whether they are chosen
by the individual as a reference group or not, have powers of punishment and reward with which to bring about socialisation. Authors Hyman and Singer suggest that this may, in the case of some individuals, lead to duplicity. The researcher is thereby warned.

They also develop the hypothesis that the attitude held tends to reflect the reference group whereas the attitude expressed tends to reflect the membership group.

Reference groups from which an individual derives his or her norms, attitudes and values are classified as normative. Although some theorists, Newcomb (Hyman and Singer, 1968), believe that normative reference groups may be used by some individuals as negative behavioural models. Such people would then adopt attitudes contradistinctive to their reference group.

According to Kelly (Op. cit.) reference groups have another function in addition to their normative one. They can be comparative: used by individuals to work out their own social positions. It may be possible to categorise (Relative Deprivation Typology) a person according to the level of satisfaction he has with the status of his own membership group in relation to other groups and the level of satisfaction he has with his own status within the group.

Another interesting concept is that of Anticipatory Socialization where the chosen reference group is the nonmembership group to which the individual aspires. Here the person is changing his attitudes before he is 'required' to do so. Conversely residual attitudes may linger on after a person has changed his reference group. Herein lies a problem for the small scale researcher because it has to be accepted that some individuals may use both old and new reference groups or perhaps more than two. Since these people will have a supply of different attitudes and norms on which to draw, it may prove difficult to ascribe the misconception of a curriculum development to any particular group influence. Conclusions may have to be tentative where an individual's reference groups are not reasonably obvious.

Theorists and researchers have speculated and tested hypotheses relating to how and why a person chooses a particular reference group. This research into factors affecting the perceptions of a curriculum project does not need to concern itself with how or why an individual chose a reference group but only with which group was chosen and
what, if any, affect this had on his perception of the project. From the above selection of reference group theories and assertions it is now possible to construct some parameters for the investigation.

b. Reference Group Theory and Dissemination.

i. Like the pupil, the teacher is not a tabula rasa and so information disseminated to him is interpreted in the light of attitudes and values already held. Even when essential meanings contained within the dissemination are negotiated between the change agent and the teacher, these meanings may not be transacted because the teacher has time to revise them before implementing them in the classroom.

There is a link here with theories of hermeneutics debated by scholars of literature (Marino 1983). In the view of classical hermeneutics a text is autonomous, its language has one meaning set by the author and it is the duty of those who seek to interpret the book to get as close as possible to this fixed meaning. Modern hermeneutics allows and expects each reader to extract his or her own individual meaning from the text. Modernists believe that this is inevitable. The experiences of the reader will interact with the language of the text to create a different interpretation for each individual. School-based curriculum development is allied to modern hermeneutics. The centre-periphery dissemination model assumes the position of classical hermeneutics. There is a fixed message in project literature and INSET programmes which is sacred and has only one true meaning. Whether dissemination based on this assumption is at all practical or legitimate is a matter for debate. The design of this research may allow the testing of this assumption.

ii. The essential meanings contained within the innovation will be transmuted, to a greater or lesser extent, by the individual teacher as a result of his definition of the situation. How he sees the situation will be a consequence of his choice of normative reference groups.

There is a link here too. Personal construct theory acknowledges that individuals act according to their own personal theories. These theories grow out of interaction
with other people. When, after thought, a person makes an error it may be that the individual's mental model of the situation is faulty. Different responses are be due to different personal constructions of information received.

iii. Individual teachers have a wide choice of reference groups from which to select values and norms (see Chapter 3 part 4). They may or may not choose their membership groups, the school staff and their subject teachers' groups as reference groups although such membership groups have powers (French and Raven 1959) to exert conforming pressures upon them. These pressures may be resisted giving rise to negative attitudes and norms (Newcomb 1968) which may influence perception of a curriculum development.

iv. The choice of nonmembership groups as reference groups may be explained by the concept of Anticipatory Socialisation (Merton and Rossi 1968) and may be relevant to ambitious teachers confidently or hopefully preparing for promotion. On the other hand, external reference groups may be chosen by anxious teachers wishing to enhance their self-regard by identifying with groups which have comforting sets of values, i.e. ones which are seen as fulfilling personal needs (Hartley 1960). Either of these conditions may affect a teacher's attitude to an innovation and hence his perception of it.

v. By revealing an individual's choice of comparative reference groups, it should be possible to throw a great deal of light on his general level of satisfaction with the teaching profession. One useful theoretical tool is the Relative Deprivation Typology (Runciman 1968) which categorises an individual's level of satisfaction, positive or negative, with his perception of his position in his membership group and of the position of his group within the social structure.
Diagramatic representation of the Relative Deprivation Typology.

Satisfaction with position in own group

+               -

Satisfaction
with position
of own group +
in social
structure

A       B

-       C       D

It has been suggested that Type A individuals may be labelled as "orthodox" since they are neither personally ambitious nor dissatisfied with existing social structures. A knowledge of the status of an A Type individual within his society, may classify him as "deferent" if that status is low or "boss" if that status is high. Runciman (op cit.) also includes the "altruist" and the "prosperous radical" in this type. He borrows the term "striver" to describe Type B, seeing him as a person less satisfied with his role but with ambitions for advancement. Type C may have less personal resentment but is unhappy about the status and rewards given to his own group. Type D may be resentful about the position of both himself and his group.

A teacher's receptiveness to curricular innovation may well be influenced by the level of satisfaction he gains from either his own status and that of the teaching profession; by the comparisons he makes between himself and other teachers or the comparisons he makes between teaching and other occupations. It therefore seemed worthwhile to invite comment on status issues in the research interviews.
7. Research Theory.

Before beginning work on this enquiry in 1984, the researcher attended an induction course for higher degree education research students at Leicester University (September 1983). R.M.Appleyard of the University's School of Education gave a useful series of lectures on research method. The approach was strictly scientific with emphasis on systematic observation and intrusive data collection (questionnaires, interviewing and testing) followed by statistical analysis.

The fieldwork for this research was initially planned on a scientific basis and standard texts useful to social or behavioural scientists were consulted. The main references chosen were Blalock (1972) and Kalton (1968) for general reference and ideas, Moser (1971) for method and Siegel (1956) for statistical analysis.

When later the researcher registered with the University of Warwick's Arts Education Department a different research perspective was encouraged. Here naturalistic methods were thought to be more appropriate for an enquiry into project adoption in schools.

This view would no doubt be endorsed by Guba and Lincoln (1981) who mount a powerful proselytising argument for naturalistic methods. Their reading of the history of evaluation is that it developed from the narrow measurement of attainment last century into the objective-orientated evaluation of the 1930s and 1940s. From that time it has evolved into 'multi-foci evaluation'. The authors were clearly writing before the advent of UK National Curriculum SATs.

They also recognise the split between scientific and naturalistic research methods implying the superiority of the latter over the former at least for social science. One wonders whether this dichotomy has its roots in the 'two cultures', arts and science, of which C.P.Snow spoke. Those brought up on the arts side are uncomfortable with statistics and so avoid them, those on the science side are uncomfortable without statistics and so take refuge in them.

One of the undeniable strengths of the naturalistic method is its "low constraint on variable antecedents and outputs" compared with scientific method. This allows a divergence of thought and a recognition of the interrelationship of
phenomena. It is undeniable too that naturalistic techniques can provide "responsive evaluation" relevant to the requirements of the audience and can be used to discover data of "worth" to it rather than merely of "merit". The section in the book (idem) concerning 'reliability' contains some useful guidance for planning research. The value of applying triangulation to an enquiry and of aiming for quality and richness in the data to be collected is well noted. So too is the need to increase self-awareness and to know one's own values although the end result of such efforts may still be unreliable.

Generally Guba and Lincoln's book avoids proper criticism of naturalistic evaluation. An unconvincing section of the book (p. 105) paradoxically entitled 'Improving Credibility' gives advice on how to overcome some fundamental problems of fieldwork. For the problem of bias in the fieldworker or the subject, the solution offered is "special effort". Again to overcome possible distortion in data gathering techniques, the solution is "cross-checking". While these maybe the best answers yet available they should still be acknowledged as weak.

Guba and Lincoln conclude that the naturalistic method is best for educational research. They believe that the "epistemological assumptions" of science are "not appropriate to the phenomenology of human behaviour." It may be truer to say that the application of traditional scientific methods to social science is of limited value by itself. The authors state that scientific research normally works towards nomothetic conclusions whereas naturalistic methods are idiographic. While this appears to be generally so, there is no reason why scientific method and analysis cannot be used to assist idiographic study. In fact if relevant data is available or easy to obtain in a scientifically processable form it would be foolish to ignore it. A statistical 'truth' lends extra weight to an assertion.

A combination of the two approaches was adopted by the researcher not for reasons of compromise but with the intention of strengthening the structure of the investigation. There is value in both approaches, may be more value in a creative mixture. Data collection involving the focussed rigor of quantitative method and the broad discovery objectives of qualitative method can be made to complement each other. A selective synthesis can give one the best of both worlds.
CHAPTER 3

HYPOTHESES.

1. Geography 16-19 and the Centre-Periphery Dissemination Model.

2. Variables Affecting Project Adoption.

3. Authentics and Eccentrics.


5. Setting up Hypotheses.

1. Geography 16-19 and the Centre-Periphery Dissemination Model.

One important and obvious reason for selecting the Schools Council 16-19 Geography Project was the researcher's involvement with it as both a teacher and a local disseminator. However the Project has more merit for research than this. To begin with Geography itself is a subject of special curriculum interest. Since the subject first gained a small and insecure foot-hold in the school curriculum of this country, its educational protagonists have felt the need to justify and defend its inclusion. As part of this effort, Geographers have been keen to keep school Geography up-to-date in both content and pedagogy. Curriculum changes within the subject have gone on apace and particularly in the last few decades.

The 16-19 Project formed part of this process, having its inception in the mid-1970s and finally advertising its A-level course to schools and colleges generally in late 1983. In its early trial stage, the dissemination of the Project did not conform to any one of the theoretical models outlined in the literature review, although it displayed the characteristics germane to Havelock's
Research, Development and Diffusion and Linkage models. Once the Project became established as GCE A-level course with a set syllabus and with common examination papers then it must be accepted that the dissemination process was the Schon Centre-Periphery type. It is important that a Centre-Periphery dissemination example be chosen since its genesis is in a fixed message. This provides a central point from which to measure perceptual deviation.

In a sense this research is opportunistic. It is an attempt to bring conceptual order to problems which have been intuitively understood from participating in both adoption and dissemination.
2. Variables Affecting Project Adoption.

The Geography 16-19 Project has been chosen as a good example of centre-periphery dissemination. The reasonable assumption has been made that this process was not one hundred percent effective. In an effort to understand why, this research should go on to enquire into cases where problems, disparities and failures have occurred. Conversely cases where dissemination has been successful should be identified and studied for comparative reasons. Armed with this knowledge it may be possible to suggest ways of overcoming some of the "barriers" to innovation.

It was thought useful at the outset of the enquiry to list the variables which might be associated with problems of project adoption. From teaching experience and innovation literature (see Review of Literature), it was possible to draw up the catalogue of variables given below. The intention was to give breadth to the study by incorporating as many as possible into the research programme. A special focus would then be made on one particular item from the list to provide depth.

a) Variables relating to dissemination:
   i. Quantity of material seen by a teacher.
   ii. Form of dissemination; literature, conference, etc..
   iii. Contact with project team i.e. status of school in the scheme: pilot, associate, trial or ordinary.
   iv. Length of time since adoption of project.

b) Variables relating to implementation:
   i. Acceptance or rejection of the project.
   ii. Partial or full implementation.
   iii. Trial or permanent implementation.
   iv. Adaptation or straight adoption of the project team model.

c) Variables in the user-system:
   i. Location of school.
   ii. Type of school.
   iii. Size of school and department.
   iv. Size and number of teaching groups in age-range 16-19.
   v. Previous courses operated for 16-19 age groups.
vi. Lower school Geography syllabuses, especially for
   the 14-16 age group.

vii. Teacher characteristics; age, experience, qualifications.

d) Variables in perceptions:
   i. Individual ideas about education and pedagogy.
   ii. Individual ideas about Geography and its teaching.
   iii. Differences in perception of the project along
        the chain of dissemination e.g. project team,
        adviser, head of department, teacher.
   iv. Teacher's perception of the likely effects of
       introducing the project on self in terms of time
       for preparation, difficulty of work, compatibility
       with own style of teaching.
   v. Teacher's perception of the likely effects on the
      students in terms of motivation, attainment and
      educational benefits.
   vi. Evaluation of the project by influential parties;
       governors, school hierarchy, head of department,
       teachers, students or parents.
   vii. The individual teacher's frame/s of reference
        derived from his/her choice of reference groups.

It was anticipated that some of these variables would
assume little importance but the intention was to
incorporate as many as possible into planning the enquiries
in order to avoid prejudging the issue. The last listed
item concerning reference groups is discussed in more depth
in the following section. Other items from parts a), b) and
c) of the list were incorporated into the Part A of the
questionnaire. Items in part d) of the list were used in
the design of the semi-structured interviews planned as the
next phase of the research. Results from the questionnaire
returns were also to be used to provide a broad format for
choosing interviewees as well as to provide useful data for
further analysis. A copy of the final questionnaire
appears in the appendices and the semi-structured
question list is given in the method chapter.
3. Authentics and Eccentrics.

An assumption is made at this stage that even after a well-presented dissemination launch, a new curriculum development will not be universally understood by its audience. The resulting misconceptions will have a variety of causes and will vary in their severity.

Accepting this assumption, it should be possible to categorise teachers according to the degree of congruence between their perceptions of the project and the perceptions held by the Project Team. As a working theory it was anticipated that there would be at least two perceptual congruency types emerging from questionnaire data, Authentics and Eccentrics.

A. Authentics. Those teachers whose interpretation of the Project's philosophy and aims most closely match that of the Project team.

B. Eccentrics. Those teachers whose interpretation of the project was significantly different from that intended by the Project Team.

Authentics are those teachers who have made a genuine and largely successful attempt to assimilate all the ideals of the new project. They have then allowed the philosophy and ideals of the curriculum development to shape their practice. They have accepted the project's values in the same way as a new member accepts the rules of the club which he has joined. In terms of Reference Group theory, they have changed their membership reference group.

It is possible to conjecture sub-groupings for the Authentics according to the motives of individual teachers. It may also be possible to discover these or other motives through interview. It is probable that there will be at least three main sub-types.

a) Idealists i.e. those who are impressed by the project, see it as a good curriculum development in its own right and are committed to making it a success.

b) Trialers i.e. those who consider the project to have sufficient value and potential to be worth trying out, will conform to its directives but are consciously evaluating the scheme and will make a definite decision to adopt or reject it after a suitable time.
c) Authentic Affectors i.e. those who have adopted the real project but whose motives are less to do with the impression the project has made on them; more to do with the impression their adoption of it is likely to make on superiors. The ulterior motive may centre on the acquisition of extra resources or kudos.

It can be assumed from the above tentative definition of project-adopting Eccentrics that some of these teachers adapt the project, either consciously or unwittingly, to suit their perceived needs. Therefore, in practice, it will differ substantially from what was envisaged by its originators. As with the Authentics, the project Eccentrics can provisionally be sub-divided according to motives.

a) Ideological Conservatives i.e. those who are steeped in philosophies which are incompatible with those of the new project. They accept whole or part of the new curriculum but transmute it either in erroneous good faith or by "corrective" design.

b) Institutional Conservatives i.e. those who believe that adapting national developments to suit local conditions is a valid response. As with the previous sub-group, these teachers may regard their own judgement as best (in this case within the context of their own school) and therefore accept no obligation to implement the ideas of others wholesale. Thus they may be said to be governed by a situational morality.

c) Pragmatic Conservatives i.e. those who can accept the ideas and content of the project but prefer to stick to traditional methods of teaching OR those who are unsure of their ability to implement the whole project in what they see as especially tricky circumstances. They may "play safe" and substitute tried-and-tested routines for those advocated by the Project Team.

d) Eccentric Affectors i.e. those who join the new scheme in name but not necessarily in spirit for reasons similar to those suggested for Authentic Affectors.

e) Elliptics i.e. those who have a confused ideology or who have a consistent but unusual set of ideals which colours their interpretation of the project.

In the event, the research data gathered was not sufficiently strong to allow investigation of the sub-groups presented above. However others may make use of this classification.

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The assumption has been made that the Project will have identifiable examples of authentic and eccentric adopters. A list of possible variables which could have influenced the success of the dissemination scheme has also been drawn up. Lines of enquiry were planned to incorporate the variables and to give breadth to the research. The next step was to provide depth to the enquiry; to choose a variable for special attention and to find a suitable approach for its study.

For two reasons item d (vii) teachers' frames of reference was chosen as the variable. In the first place it seemed an interesting and neglected area of study. Secondly it provided linkage with an existing body of theory, Reference Group Theory. Although it no longer seemed to attract much academic study or research itself, it contained useful ideas from which hypotheses could be drawn and a structure for explaining different perceptions of the same curriculum development. Further focussing was achieved by narrowing the enquiry to heads of department as change agents within schools and concentrating on the variations in their perceptions of Geography 16-19.

The Project provided an opportunity to study these perceptions against a background of several conflicting influences any of which may form a referent source for the values and attitudes of the individual head of department. Some of the most likely normative reference groups with which the Project adopter may identify are:

a) the Project Team,
b) the Local Geography Teachers' Project Development Group,
c) the School Staff,
d) the School Geography/Humanities Department,
e) Local Geography/Humanities Heads of Department,
f) Other School Heads of Department,
g) the School Headteacher or Deputy Head,
h) the Local Geography/Humanities Adviser,
i) Traditionalist Geography Teachers or the individual's memory of his/her own Geography Teachers,
j) University/College Staff who taught the individual for degree or PGCE courses.
k) a Pressure Group or Interest Group from inside or outside school or education.
l) perceptions of Self, measure of self-esteem derived from choice of comparative reference groups.
Other dimensions have added to cross-pressures experienced by individual teachers. To begin with, the Project has spanned two decades during which there has been a change of government, bringing with it a change in educational ideals and management styles. This has established new frames of reference for teachers. Employment prospects have changed both for students and teachers, giving rise to radical replotting of routes for advancement amongst the ambitious and a reorientation to the new status quo amongst the unambitious. These changes common to all teachers when taken together with the subject-specific changes mentioned before have imposed or impinged upon the world of the Geography teacher perhaps to a greater degree than upon teachers in other areas of the curriculum. It is therefore particularly interesting to pursue an enquiry into perceptions and how they are formed, against a background of rapidly shifting frames of reference.
5. Setting up Hypotheses.

In part 2 of this chapter numerous variables which could affect adoption were listed. Methods for investigating them were devised and these are outlined in the next chapter. This approach provided a breadth of enquiry for the research. To add the dimension of depth to the investigation, hypotheses were formulated and these are recorded in the following section.

The hypotheses are an amalgamation of ideas presented in the two previous sections, parts 3 and 4 of this chapter. They combine Reference Group theory with the categorisations devised to describe project perception i.e. Authentics and Eccentrics.

The aim was to discover whether the normative and comparative reference groups chosen by teachers influenced their perceptions of the Geography 16-19 Project. In all five hypotheses were selected and are stated here, each preceded by its formative rationale.

Teachers who always choose their staffroom, departmental or local Geography teacher colleagues as their reference group seem unlikely to accept the norms and attitudes of a new nonmembership reference group such as a curriculum project team. The contrary may be true for teachers who display an independence of attitude and have the ability to identify with groups beyond their immediate social environment. This suggests the following hypothesis.

Hypothesis 1.

*Project adopting Heads of Department who choose nonmembership reference groups are more likely to be Authentics i.e. belong to the Authentic Perceptual Congruency category.*

Conversely:

*Project adopting Heads of Department whose membership groups are also their reference groups are likely to be Eccentrics i.e. belong to the Eccentric Perceptual Congruency category.*
It would be natural and comforting for the project team which creates a particular curricular development to assume that the teachers involved in piloting it would become steeped in its philosophies and practices. This group of teachers will have had by far the greatest exposure to the processes of dissemination. It is tempting to assume that their perceptions of the project will therefore be significantly more accurate than those of teachers who adopt the project shortly after its pilot phase and who are given less project INSET. May be the putative argument can be extended to suggest that late adopters will have the least project congruent perceptions. Testing the former argument should create an interesting development for research. Do individuals in the piloting team which is a discrete membership group, always come to accept the project team as their reference group? Is this trait more noticeable in the piloting team than in later adopters? In this context the piloting team comprises Heads of Geography in Project and Associate schools.

Hypothesis 2. 
Members of the Project Pilot Team are more likely to be Authentics than other Project-adopting Heads of Geography.

Teachers who are unsure of their normative reference groups or who pick and choose their norms from a number of different groups within the Education Sector are unlikely to have a sufficiently stable perceptual framework to accommodate a new set of norms and attitudes with any high degree of accuracy. They are therefore likely to be Eccentrics. It is possible to form a hypothesis to express this supposition e.g.

A project adopting Head of Department whose choice of reference group is confused or who has multiple reference groups is likely to be an Eccentric Perceptual Congruency Type.

It is unlikely that research on this scale could unravel the complex affiliations of such individuals and so this interesting line of enquiry had to be rejected. However there was a potentially more fruitful line to pursue.

Some ambitious Heads of Department will be attempting to assimilate the norms and values of people who are on, what they perceive as, the next career 'rung' above them. If this is their goal and they have attempted some advanced socialisation, it may not be possible or prudent for them to behave like their immediate superiors. But they may
express views and display attitudes which are consistent with those of their superiors. Furthermore the senior management positions to which they aspire require, in part, the ability to organise policy, people and resources towards new objectives; to cope successfully with change. The ambitious will have, in all probability, a great incentive to prove their capabilities in this respect. Thus making a good job of a curriculum innovation would be entirely compatible with their general aim. But do ambitious Heads of Department interpret curriculum innovations more accurately than their colleagues?

Hypothesis 3.
Heads of Department who are engaged in Anticipatory Socialisation are more likely to be Authentics.

The Stepping Stone Reference Orientation Theory submits that an individual makes the transition from one reference group to another less traumatic by using both present and future groups. This is a danger for centre-periphery disseminators of an innovation. Some norms and attitudes acquired and ingrained over many years may be deliberately or unconsciously retained and may block the correct perception and adoption of newer ones. If an individual has experienced few curricular changes during his or her teaching career then their old ideas are likely to be deeply ingrained. Are such Heads of Department more likely to be eccentric project adopters?

Hypothesis 4.
Heads of Department who have seldom been involved in major curriculum change are more likely to be Eccentrics.

A further hypothesis can be proffered connecting an individual’s perceptual congruence group with his comparative reference groups. According to Runciman’s Relative Deprivation Typology, a person may be dissatisfied with his position within his own membership group (Typology category B or D). He will therefore consider himself to be perfectly capable of executing his present duties and worth promotion to a higher position. An argument can be made similar to that postulated for Hypothesis 3. Conversely a teacher (Typology category C) may identify strongly with his peers, regard them as equals and be satisfied with his position within the hierarchy but be resentful of the undervaluation of his membership group e.g. teachers or
Heads of Department. This teacher may well be less ambitious, less well-disposed to do the extra work involved in curriculum development and less likely to accept the new norms and ideas of a project team.

Hypothesis 5.

Heads of Department belonging to Type B and D of the Relative Deprivation Typology are likely to be Authentics.

Conversely:

Type C Heads of Department are likely to be Eccentrics.

A final point of logic remains. Are Authentics identical to teachers who take the project team as their reference group? Does it follow that teachers who have interpreted a project accurately from the point of view of its initiators, necessarily accept their values? The researcher thought not. It may be possible for the intelligent teacher to congruently adopt a project while disagreeing with some of its ideals or methods. Much as some teachers at present intellectually reject the National Curriculum and its SATs but nevertheless do all in their power to deliver it successfully.
CHAPTER 4.

METHOD.

After several restructuring plans the research evolved into a five stage operation.

STAGE 1. ACQUISITION OF AUTHENTIC PROJECT DATA.

STAGE 2. QUESTIONNAIRE SURVEY OF A LARGE SAMPLE OF PROJECT-USING INSTITUTIONS.

STAGE 3. SEMI-STRUCTURED INTERVIEWS IN A SMALL SAMPLE OF INSTITUTIONS.

STAGE 4. CASE STUDIES OF TWO DIFFERING INSTITUTIONS.

STAGE 5. ANALYSIS AND CONCLUSION.

The chapter is concluded with a diagrammatic summary of research method.

STAGE 1. DIGESTION OF THE 16-19 GEOGRAPHY PROJECT.

In order to judge the degree of authenticity with which the 16-19 Project had been implemented in any school or college it was first necessary to discover the exact nature of the innovation as understood by its creators at the time of its main dissemination drive in 1983-84. Fortunately a good deal of standard reference material written by central Project team members was available in pamphlet, booklet and book form. Of particular value in this respect were the mail sheet Project News, issued three times a year from November 1976 until the main dissemination phase, a series of four booklets Geography 16-19 Occasional Papers and later the book The contribution of a curriculum project to 16-19 education, Naish, Rawling and Hart (1987). These publications covered aspects of the Project's conception, evolution, aims, philosophies, content and teaching.
methods.

However the mere fact that the Project had undergone an evolutionary process meant that some of its earlier ideas had been modified by the mid-1980s. Although it was possible to ascertain the authentic Project picture at that time from the above literature, further sources were sought to add validity to the interpretation. These included:

- conducting a lengthy interview with Michael Naish of the University of London Institute of Education, a co-founder of the initiative (with Professor Norman Graves) and shorter interviews with Project team members Clive Hart and Eleanor Rawling (all during Winter Term 1983 and Spring Term 1984).


- attending some of the Regional Annual Meetings which are held late in the Summer Term and provide a forum for dialogue between examiners, moderators and teachers (Birmingham 1988, Leicester 1988, Birmingham 1989 and Coventry 1990).

- taking part in LEA Project INSET courses (Coventry Nov. 1983 and North Wales May 1985).

- reading the London University Geography 16-19 Syllabus and Teacher's Guide.
STAGE 2. QUESTIONNAIRE SURVEY OF A LARGE SAMPLE OF PROJECT- USING INSTITUTIONS.

a. The Sample

The questionnaire was sent to 100 schools and colleges. The sample was chosen to provide a wide geographical distribution of replies including Wales, Northern Ireland and most participating regions of England. The sample was also chosen to attract replies from three categories of establishment; (i) Pilot, Linked Associate and Associate schools, (ii) schools which adopted Geography 16-19 before its national dissemination in 1983-84 and (iii) schools which adopted the Project after the main dissemination drive.

The initial batch of questionnaires was sent out at the end of schools' Summer Term 1985. They were timed to arrive in schools and colleges after the end of formal tuition for final year A level students when, it was hoped, their teachers had more 'free' time, were possibly in more reflective mood and hence would be more amenable to completing a questionnaire.

Reminders and replacement copies of the questionnaire were dispatched at intervals over the subsequent twelve months. A few responses came in as late as the end of 1986. An initial analysis of the data was undertaken during 1987.

b. The Questionnaire.

The questionnaire was designed in two parts. In order to minimise the time required for its completion and hence maximise the response rate, a 'tick-in-the-box' answering system was incorporated into the question sheets. The first, Part A, was addressed to the Head of Department. Questions 1 to 9 sought to gain basic background information such as;

- type of school,
- its present and past certificated Geography courses for students in the 14 to 16 and 16 to 19 age ranges,
- the Department's years of decision and adoption of the Geography 16-19 A level course.
- and the number of students on the first 16-19 A level course.
Questions 10 and 11 sought to establish the main reasons for the adoption of this new A level course. Here the 'tick-in-a-box' system was expanded into a four-part scalogram to allow a gradation of replies indicating the importance of a series of factors to the adoption decision.

Two copies of Part B of the questionnaire were sent to all sample schools and colleges. One copy was addressed to the Head of Department and the other was to be completed independently by another member of staff involved with the teaching of Geography 16-19 A level.

In the first section, Part B (i), the respondents were asked to provide information about their experience of the Project's dissemination and implementation. Dissemination questions asked referred to:
- the means by which they became aware of the Project,
- their opportunity for INSET,
- and their perceived level of understanding.

A four-part scalogram was then provided so that teachers could indicate the degree of difficulty they had had with ten tasks fundamental to successful implementation of the A level course.

Part B (ii) comprised a series of 19 multiple-choice questions (three optional answers in each). The questions referred to the curricular aims and teaching philosophies of the Geography 16-19 Project. Most of the questions were designed to test the teacher's understanding of the Project. For each these, one of the answers provided most closely coincided with the ideas of the central Project team (identified and garnered in Stage 1). The other optional answers were expressions of views expressed by geographers in a variety of text books of various ages. These distractors were not necessarily contradictions of the preferred answer but were worded to be significantly less Project-accordant.

For a few questions, the answers provided could not be securely defined as Project-congruent and non-Project-congruent. These were not used to differentiate between authentic and eccentric perceptions. It was hoped to learn about Project-adopting HODs from their answers to them. Possibly Project-congruent HODs would prefer one answer in each case with some degree of consistency.

In both parts of the questionnaire the final questions were open-ended invitations for teachers to provide further information by adding comments.
c. Consideration of Multiple-Choice Questioning.

The first part of the questionnaire was aimed at discovering a wide range of information about the project-adopting schools and their geography teachers. The method chosen was a two part questionnaire. Part A asked for background information on the school, its geography curriculum past and present and on the individual's perceived reasons for the adoption of the new project. In Part B (i) information was sought concerning how individual teachers came to learn about the project and what difficulties they experienced. The objective of Part B(ii) was essentially different. It was to assess how close each respondent's perception of the project was to that of the Project Team. It was essentially seeking to establish the degree of accuracy with which teachers had interpreted the philosophy and aims of the Project. It required a different instrument but in order to gain a good response, it also had to involve as little time and writing as possible for the respondent.

Examination boards had been faced with a similar problem in the 1970s when they wished to discriminate accurately between a large number of candidates, tested on a wide syllabus but in a short examination. The reduction of marking time and hence the cutting of costs was no minor motivation either. For a solution they had turned to multiple-choice questioning and found that its results had correlated well with those from established assessment methods. A good deal of theory had been generated in a short time by those pioneering boards which favoured this approach. Given the time and cost constraints of small-scale research, multiple-choice objective testing seemed to be a useful means of assessing the interpretive accuracy of Project teachers.

For guidance in setting Part B (ii) of the questionnaire, an advisory text was needed. There are many such texts but one of the most concise came from the South-East Regional Examinations Board. The Board produced a number of units on multiple-choice objective testing including a theoretical outline of "The Qualities of a Good Item", directives for "Item Writing" and "Recommended Steps in Reviewing and Editing Multiple Choice Questions". Most of their advice was heeded in the setting of the final part of the questionnaire, in particular that only one option answer, the key, should be correct from the Project team's point of view. However the questions were aimed at an
intelligent and educationally sophisticated audience and so some modifications to advised practice were thought to be justified.

The usual four to five option answers for each item were reduced to a standard three. More could have been devised but it was difficult to make several plausible distractors for teachers who themselves were probably well versed in the arts of multiple-choice questioning. It was not thought possible to trial items and select those which "evoke correct responses from about 50% of the candidates" or alternatively to compose a bank of items of graded difficulty. (However results showed an approximation to the latter.) But the advice that the "Key must be unequivocally correct" and "the distractors must be just as unequivocally incorrect" was followed. To make this a more reliable supposition many of the phrases used in the key options were lifted directly from Project literature.

In general each item in the multiple-choice section had one Project-valid key answer, one piece of previously accepted Geography-teaching wisdom as a distractor and one further distractor which sounded plausible to the compiler but was nevertheless out-of-phase with Project thinking. In case this pattern should be discovered, it was determined that some items in the earlier part of the section would not conform to this rule, nor would they follow general advice on multiple-choice testing. They were to be questions of interest to the research from which it was hoped to discover something of the attitudes and beliefs of Project teachers. In the final document there were 15 Project-congruency testing items and four pattern-breaking items.

Each question was a discrete item. Subject matter was not repeated but was as wide ranging as was possible within the boundary of relevance to the innovation.
STAGE 3 SEMI-STRUCTURED INTERVIEWS IN A SMALL SAMPLE OF INSTITUTIONS.

Part B (ii) of the questionnaire was designed to differentiate between those teachers who had a wide, consistent and accurate understanding of the Geography 16-19 Project and those teachers whose ideas were less faithful to the new curriculum development.

These groupings of teachers were dubbed Authentics and Eccentrics according to their scores of Project-congruent answers for Part B (ii). From the rank order of scores three of the highest-scoring, most Authentic Project adopters and three of the lowest-scoring, most Eccentric adopters were selected for further research. These teachers were individually subjected to lengthy taped interviews which were focussed around five broad topics.

These semi-structured interviews were for the purpose of relating the values of the individual Head of Department to Reference Group Theory. The aim of the interviews therefore was to discover from what group or groups the individual was taking his or her values. Since little was known about the individuals, it was thought best to invite the interviewee to comment on a wide range of possible reference groups. In essence this part of the research concentrated exclusively on the perceptions of the individual teacher.

The invitation to comment on groups of people in education may possibly have yielded consistently positive statements thus foiling any attempt to categorise the teacher. However it was thought that this problem might be overcome by assiduous questioning and the semi-structured form of tape recorded interview was considered to be the most suitable method of enquiry.

Organising reference group possibilities into some sensible order was difficult. Broad areas of enquiry which might throw light on the origins of individual values were considered first, then refined into possible prompts or questions. In the interview, these were introduced for comment in a conversational manner with follow-up prompts when the interviewee had eluded the real purpose of the question and provided weak data or had alluded to something interesting. The interviewer tried to adopt the role of interested listener rather than cross-examiner and hence aimed to play a minor and low-key bit part, a provider of cues.
Topics covered by the semi-structured interview.

The teacher's attitude towards and opinions about:-

A. Education generally, the teaching profession and its career structure.
B. Their school's ethos and LEA priorities.
C. The progress, purpose and status of Geography.
D. Innovations in Education.
E. Own status.

For each of these broad topics a series of prompts was devised with specific objectives. There was a need to ensure breadth in the interviewee's answers and at the same time to generate data relevant to the central hypotheses of the research.

Bank of possible questions for each topic.

A. Education and the teaching profession.
   1. Is the provision of education improving generally?
   2. What are the major problems in education?
   3. Have these problems changed over the years?
   4. Is there sufficient scope for advancement in teaching? What is the status of teachers?
   5. What sort of teacher gets promoted?

B. School and LEA.
   1. What image does your school present or wish to present?
   2. What are the main concerns of the Senior Management Team?
   3. What are the strengths and weaknesses of your school's system?
   4. Are the staff supportive and well-integrated?
   5. What do you consider to be the priorities of the LEA?
   6. In your experience is the LEA active, supportive or low-profile?
C. Geography.
   1. What is the status of Geography within the school curriculum?
   2. How has Geography evolved recently at sixth-form level?
   3. Where is the trend taking Geography teaching?
   4. Is this evolution a good thing?
   5. Do you meet with other Geography HoDs regularly?
   6. Are you a member of the Geography Association?

D. Innovation.
   1. What is the best way of making changes in Geography?
   2. Do you welcome change?
   3. Does your school welcome curricular change and experiment?
   4. How important are the risks, rewards and extra efforts involved in innovation to you?

E. Self.
   1. What influence do you have on the Geography curriculum? To whom do you refer when making changes?
   2. From where do you get your ideas?
   3. How much pressure is there in your job?
   4. What will be your next career move?

The semi-structured interviews were conducted in the latter part of the Summer Term 1989.
STAGE 4. CASE STUDIES OF TWO DIFFERING INSTITUTIONS.

The two cases chosen for in-depth study were drawn from the six institutions whose Heads of Geography had been selected for the Stage 3 semi-structured interviews. That is, one was a good example of Authentic, the other Eccentric Project adoption.

Other criteria used for selection were the institutions' geographical proximity to Warwick University and evidence of spontaneous cooperation shown at the previous visits. These favourable conditions allowed several visits to be made to both institutions and were conducive to effective and fruitful research on each visit.

The purpose of the case studies was to illuminate the settings in which the innovating Heads of Department were working and then to highlight factors which may well have influenced their adoptive decisions or even their personal perceptions.

To do this it was thought expedient to amass a thick description of the institution, a fuller account of its functioning, which would give greater plausibility to any research findings. Deliberate attempts were made to discover details about the institution's formal organisation, its development and recent history, its resources and their allocation, its ethos, characteristics and idiosyncracies, the personalities of the major players in curriculum development, their interpersonal relationships and the institution's micro-politics in general. In addition to this directed research, time and opportunity was created to absorb incidental detail or to follow relevant trails provided by serendipity.

To this end, visits specifically arranged for research were made on two days to both of the chosen institutions. On these occasions interviews were arranged with members of the Senior Management Team. The interviews were not structured but questions, observations and issues were put forward to guide the interviewee towards fertile research ground. Some of the prompts (given below) were intended to guide the conversations towards topics equally relevant to both institutions. Some prompts referred to information given by the Head of Department during interview and were specific to that institution. A taperecorder was not used but notes were taken during interview.
Prompted topics.

1. Organisation of the institution and of change. Methods of introducing new courses and of terminating courses.
2. Role-players in curriculum change and their interrelationships. The role of the Head of Geography.
3. The place of Geography in the curriculum and in curriculum development.
4. History of the institution and of the curriculum. The curricular aims of Senior Management.
5. Ethos of the institution and its special characteristics.
6. The structure of the institution, its facilities and the allocation of resources.
7. Access to relevant printed material about curriculum change.

Other visits were made to these institutions for purposes not directly related to this research but nevertheless were valuable opportunities for accumulating background data. Observations were made of buildings, teaching areas, staffrooms and workrooms. Teaching resources were seen although Project lessons were not observed. These observations were recorded immediately after each visit.

Valuable and relevant documents from two sources were used. In recent years (1983 and 1988) both institutions had received HMI inspections and reports. Both institutions had produced booklets for prospective students and their parents.

The research-specific visits were arranged late in the Summer Term 1990. Other visits were undertaken over the preceding year.
STAGE 5. METHOD OF ANALYSIS AND CONCLUSION.

The structure of the research programme (Diagram M1) required that analysis began at the end of Stage 2. Some work had to be done on the questionnaire returns in order to identify authentic and eccentric Project adopters so that a sample from each group could be interviewed (Stage 3). In theory this could have been achieved by analysing part B (ii) alone but it was thought safer to process all parts of every return in case the descriptive information in the earlier sections disqualified any individual.

London Examination Board provided a list of schools participating in the Project's A level course. However it was thought advisable to include in the final sample only those Heads of Geography who had themselves been involved in the adoption process. Department heads who admitted in answer to question 12 in Part A of the survey sheet (Copy in Appendix) that they were not at the school during adoption were excluded. There is more than one justification for this. Where questions ask for reasons why the department chose the Project, answer from these individuals could only be second-hand. Again difficulties experienced during adoption, B (i) Q.5, could not be directly recalled by these new heads of department. Whether they were authentics or eccentrics would in some way depend on the relayed perceptions of their new colleagues.

Early Project literature identified schools who had Project and Associate status i.e. those which were involved to a greater or lesser extent in the pilot phase. Changes had out-dated this list and careful checking was needed to categorise schools according to their proper status.

Presentation of the research findings was organised into three chapters. In the first, headed 'Results', extracted data was organised, recorded and statistically processed. No attempt was made in this chapter to interpret or select information. The reader is thus presented with the results in toto, unexpurgated and uncontaminated by opinion or bias. In the 'Discussion' chapter, the data is sieved and analysed. Meaning is debated and evaluated but is still presented in the three separate fieldwork sections outlined in the Method chapter i.e. questionnaire survey, interviews and two case studies. In the 'Conclusion' evidence is gathered from all sections and regrouped to facilitate evaluation of the five hypotheses.

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As a preliminary to the presentation of results, raw data from the questionnaire returns was coded and entered onto a large matrix. The final sample was checked to ensure that it incorporated a wide range of types and sizes of school. Schools were grouped according to the dates when they associated with the Project. Project and Associate schools were classified as Category A, pre-1984 implementers were Category B and late implementers Category C. Again the distribution across these groupings was checked to ensure that each category was adequately represented. Whether the membership reference group formed by Category A teachers had any different ethnographic characteristics or were any more authentic in adoption could then be assessed from this classification.

The data for each question in Part A of the questionnaire (background information about schools, departments and their reasons for adoption) was tabulated and the distributions across the variables were grouped into the three defined categories. The Spearman Rank correlation technique was used to assess differences between the categories and any differences were tested for significance.

Data from Part B (i) of the questionnaire relating to Project INSET received by departments and their initial adoption problems, was processed in similar fashion. From responses it was possible to rank the variables listed as problems of implementation (Q.5) according to their mean scores. scores derived from enumerating the levels of difficulty over the tick-in-a-box columns. Details of this process are given in the Results chapter.

Responses to the multiple-choice section were tabulated and totalled. The marking system employed scored plus one for choosing the Project-congruent answer, minus one for the choice of a distractor and zero for an omission or where more than one choice was selected by the respondent. A justification of the scoring is given in Stage 2 of this chapter. A distribution of individual scores is presented graphically and a table showing the percentage of congruent answers to each question is also included.

The complete transcripts of the six taped interviews are not printed. A verbatim account would have been too lengthy. A condensed version is recorded in the results with key quotations included. Care was taken not to omit or distort any project-relevant item of the interviewee's discourse. The text for each interview is organised under the topic headings developed in Stage 3 of this chapter.
The descriptions of the two case study institutions are recorded separately but cover the same topics i.e. those designed in Stage 4. Value judgements are avoided except where they are attributed to individuals or documents. All material relevant to the predetermined topics was used but a good deal of information about curricula and people extraneous to the topics was omitted.

As stated the 'Discussion' chapter is subdivided according to the three fieldwork stages: questionnaire, interviews and case studies. In the first section explanations are sought for the processed data from the questionnaire. Interpretations are made and evidence is stored for synthesising in the conclusion. Discussion of the interview data begins with a comparison of answers given by all six Heads of Department to each of the prompts in turn. Patterns are sought and differences between Authentics and Eccentrics are noted. These are recorded in a summary at the end of the section. The last section discusses the two case study institutions and their staff. Information which was thought to be pertinent to the five hypotheses is lifted out and interpreted. Comparisons are made between the two Heads of Department and their professional environments.

The Conclusion is used to summarise the discussion in relation to the five hypotheses in turn. After an evaluation of the evidence available the hypotheses are accepted or rejected and comment made on the significance of each determination. The second section is a retrospective critique of the research method. The final two sections discuss the possible uses of the results and possible routes and objectives for other studies in this area.
Summary of Research Method.

The broad area of research concerns individual perceptions of a centrally planned and disseminated curriculum development project. As a case study the research focuses on Heads of Geography adopting the Geography 16-19 Project A level course. The main thrust of the fieldwork is to discover authentic and eccentric adopters of the Project, from a sample of these to detect what reference groups they use and then to reveal any connections between the individual's chosen reference group and the accuracy of his or her Project perception.

The research required a 'route for enquiry', to borrow a phrase from the Project itself. The linear development of the research programme is shown as a flow diagram (Diagram M1) overleaf. The programme leads through to an examination of five hypotheses Linking Reference Group theory with Authentic and Eccentric Project-congruency perception. Since it seeks to discover general patterns and laws relating to project adoption through the acceptance or rejection of hypotheses the research must be classified as nomothetic.

The data gathering process is a mixture of both scientific and naturalistic methods. A questionnaire survey of Project-adopting Heads of Geography was designed and the results analysed statistically. The information gained was used on the one hand to test one of the hypotheses directly and on the other to identify authentic and eccentric Project adopters for study by naturalistic methods of interview, general observation and document analysis.

Prompts were designed for semi-structured interviews and information gathering was targeted through pre-determined topics. Since a wide range of variables was incorporated into these instruments which were then focussed on a small sample of Project-adopting staff the research can also claim an idiographic and ethnographic dimensions.

Triangulation, the recommended device for improving the reliability of data was employed when gathering single items of information. But it was envisaged that the whole research structure would become a triangulated design whereby data gained through one method e.g. questionnaire, could be cross-checked and supported by data for another e.g. interview or case study. This is shown in Diagram M.2 at the end of this chapter.
Stage 1. Acquisition and Digestion of Project Knowledge.

Study Project literature.

- Attend Project Team Dissemination Courses.
- Interview Project Team Members.

Stage 2. Questionnaire Survey of Project-Users.

Design Questionnaire.

- Pilot Questionnaire.
  - Distribute Q. to Target Schools.
  - Analyse Q. Results.

Stage 3. Interview Small Sample of Authentics & Eccentrics.

Identify Authentic and Eccentric Heads of Geography.

- Select a Small Sample from Each Category.
- Design Semi-Structured Interview.
- Conduct Interviews.

Stage 4. Case Studies of Two Institutions.

Select One Authentic & One Eccentric from Interview Sample.

- Visit Institutions.
- Interview SMTs.
- Make Observations & Collect Literature.
Diagram M1 (Continued)

Stage 5. Analysis and Conclusion.

Record & Analyse Data from Semi-Structured Interviews.

Record & Analyse Data from Case Studies.

Triangulate Data from Three sources.

Accept/Reject Hypotheses.
Diagram M2. Triangulation of Research structure.

Semi-structured Interview Data.

Hypotheses Testing.

Questionnaire Data.

In-Depth Case Study Data.
CHAPTER 5.

RESULTS.

1. Results of Questionnaire Survey.
2. Extractions from Semi-Structured Interviews.
3. Case Studies of Two Differing Institutions.

1. Results from Questionnaire Survey.

According to literature circulated by the University of London Institute of Education 177 schools and colleges would be teaching the Geography 16-19 Project A level course at the beginning of the academic year September 1985, a substantial increase on the previous year's figure of 116. It was decided that a return in excess of 50 completed questionnaires would provide a suitable sample size. The sample would then be 30% or more of the total. The initial plan was to contact about half of the schools which had adopted the new A level course while at the same time getting a representative sample from the predetermined categories. To this end 95 sets of the questionnaire were dispatched in three batches; 25 to Pilot, Linked Associate and Associate (Category A) Schools, all of which had become officially involved with the project by spring 1978; 35 to early, pre-1984 implementers (Category B) and 35 to later, 1984 and post-1984 implementers (Category C). Although this was apparently accomplished, information received with the returns necessitated some reclassification of schools.

Reasons for redistribution were varied. It was discovered that one school had received two sets of the questionnaires because it appeared in the Project literature under two different names. Another school categorised as a later implementer actually taught 16-19 Geography in consortium with another school which had implemented the Project earlier. Yet another returned the uncompleted questionnaire claiming to have considered adopting the Project but to have decided against doing so. In three cases, schools listed in the Project literature respectively as pilot, linked associate and associate had abandoned the Project in its early stages and then returned to it in 1985. Staff in these three departments seemed to have had only a short exposure to Project dissemination and development. There followed a period of six years before reintroduction, time enough to forget or distort what little had been assimilated. For these reasons the three schools were reclassified as later implementers.

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The effect of all this was marginal. Fewer Category A schools were sent questionnaires than had been intended and this taken in conjunction with their slightly lower than average response ratio gave a smaller than hoped for sample group for that category (Table R1).

After reminders and replacement copies were sent, there were precisely 60 usable returns, a large enough sample for some statistical operations. It was fortunate too that the returns were relatively well distributed across the three categories, so it was thought unnecessary to engage in a further round of questionnaire issuing.

Table R1. Sample Distribution.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>SENT</th>
<th>RETURNED</th>
<th>% RETURN</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Pilot.</td>
<td>12</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Linked Assoc.</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>&amp; Assoc.</td>
<td>6 22</td>
<td>3 13</td>
<td>59</td>
</tr>
<tr>
<td>B. Early Implementers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(pre-1984)</td>
<td>35</td>
<td>24</td>
<td>69</td>
</tr>
<tr>
<td>C. Later Implementers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>92</td>
<td>60</td>
<td>65</td>
</tr>
</tbody>
</table>

The Head of Departments' replies to Part A of the questionnaire were analysed and the results extracted in sequence. Question 1. of the survey asked for details of the type and size of the respondent's school. Dividing the responses between the three implementation categories (Table R2) shows a preponderance of Comprehensive schools in all, as expected. It is not surprising either that Sixth Form colleges make up the second largest group but there is a difference in the timing of adoption between these two types of institution. Although the numbers in the category groups are too small to enable standard non-parametric statistical tests to be done, there is a suggestion that Comprehensives were quicker to adopt and implement the Geography 16-19 Project than were Sixth Form colleges. Using only the truly voluntary categories (B and C), some 61 per cent. of sampled Comprehensives were Category B
early implementers, 39 per cent. later implementers. By contrast 78 per cent. of Sixth Form colleges were later implementers.

Senior High Schools which are favoured by some LEAs were quite well represented but only one Independent school occurred in the sample. An overwhelming portion of the sample i.e. 88 per cent. were mixed sex schools and colleges. As expected, the largest institutions were the Tertiary and FE colleges. More than half of the Comprehensive schools had over 1000 on role whereas fewer than one third of Sixth Form colleges surpassed this number of students. However there was no correlation between the size of institution and the number of students following the new A level course.

Table R2. Types of Institution and Implementation Category.

<table>
<thead>
<tr>
<th>Categorised</th>
<th>Frequencies.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A) (B) (C)</td>
</tr>
<tr>
<td>Total</td>
<td>13 24 23 60</td>
</tr>
<tr>
<td>Comprehensives</td>
<td>8 17 11 36</td>
</tr>
<tr>
<td>F.E. Colleges</td>
<td>1 2 0 3</td>
</tr>
<tr>
<td>Senior High Schools</td>
<td>2 1 3 6</td>
</tr>
<tr>
<td>Sixth Form Colleges</td>
<td>1 2 7 10</td>
</tr>
<tr>
<td>Grammar Schools</td>
<td>1 1 1 3</td>
</tr>
<tr>
<td>Technical Colleges</td>
<td>0 1 0 1</td>
</tr>
<tr>
<td>Independent</td>
<td>0 0 1 1</td>
</tr>
<tr>
<td>Mixed School</td>
<td>12 21 20 53</td>
</tr>
<tr>
<td>All Girls</td>
<td>1 2 1 4</td>
</tr>
<tr>
<td>All Boys</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td></td>
<td>13 24 23 60</td>
</tr>
</tbody>
</table>

Answers to Question 2 revealed the previous Geography courses taken by 16 to 19 year-old students in the sample schools before the adoption of the Project. The results given in Table R3, show the distribution of the 'old' courses across the three implementation categories. Many institutions offered more than one course of Geography to this age range. Colleges allowed more variety than schools, four of them offering four different Geography course options. Schools of less than 1000 on role usually restricted themselves to one course or at most two.
At the time, that is before 1985, the sample departments' most popular additional option to an A level Geography course was an O level. Surprisingly most Sixth Form colleges ran O level courses.

Table R3. Pre-Project 16-19 Courses in Geography.

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>Number (A)</th>
<th>(B)</th>
<th>(C)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CSE</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>O Level</td>
<td>7</td>
<td>12</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>CEE (not Geog.16-19 CEE)</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>A/O</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>A Level Wholly Systematic</td>
<td>9</td>
<td>11</td>
<td>12</td>
<td>32</td>
</tr>
<tr>
<td>6</td>
<td>A Level 2/3 Systematic</td>
<td>5</td>
<td>9</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>7</td>
<td>A Level Mainly Regional</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>No answer given</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

There were 12 other courses not coded in the table. They include 2 BTEC modules, 2 Environmental Studies course elements, a CEE Environmental Studies course, a TVEI Unit and some Mode 3 Schemes.

Responses to question 3 of the survey shed light on the types of course followed by the schools' 14 to 16 age group before they adopted the Project. The most popular 14 to 16 course amongst the sample was the GYSL/Avery Hill scheme (Table R4) which was itself a pioneering project of the previous decade and which shares many of the aims and philosophies of the 16 to 19 Project. GYSL schools form an exceptionally large proportion of the early Project implementing group (Category B) but are less well represented in the other groups. Another curriculum development of similar vintage, the Bristol 14-18 Geography Project, occurred less frequently in the sample. Mode 3 schemes at CSE had traditionally represented an area of curriculum development although some had fossilised over the years and CSE Conceptual syllabuses were considered innovatory.

If the totals for these 'progressive' courses are summed (45) and compared with the summed figure for traditional courses (24) then the sample appears to have a definite progressive inclination. National totals for centres using these types of course are difficult to accumulate but they would seem to indicate a pronounced bias towards the traditional.
Seven institutions did not reply to question 3. All but one of them were in the tertiary sector of education and so did not run courses for secondary level students.

Table R4. Pre-Project 14-16 Courses in Sample Schools.

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A) (B) (C) Total</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>GYS/AvHill 14-16</td>
<td>3 14 5  22</td>
</tr>
<tr>
<td>2</td>
<td>Geog.14-18.</td>
<td>3 2 4  9</td>
</tr>
<tr>
<td>3</td>
<td>Traditional O Level</td>
<td>6 3 8  17</td>
</tr>
<tr>
<td>4</td>
<td>Traditional CSE</td>
<td>2 0 5  7</td>
</tr>
<tr>
<td>5</td>
<td>CSE Mode 3 (not GYS)</td>
<td>1 1 4  6</td>
</tr>
<tr>
<td>6</td>
<td>CSE Conceptual</td>
<td>1 0 0  1</td>
</tr>
<tr>
<td>7</td>
<td>No answer given</td>
<td>1 4 2  7</td>
</tr>
</tbody>
</table>

Other uncoded courses:

(A) 2 courses comprising an East Anglia/Cambridge 16+ and 1 CSE Environ. Studies.
(B) an E. Anglia/Cam. 16+
(C) 5 new 16+ courses, including 1 E. Anglia/Cam. 16+

Question 4 of the survey asked what new 16-19 courses were provided by the sample schools and colleges to augment 16-19 Geography. When compared with information about the old courses from questions 2 and 3, data on the new courses given in answer to questions 4 and 5 should give insight into the effect of the Project on school curricula.

Results presented in Table R5 show that a total of seven institutions chose to run both the new 16-19 Geography and their old A level Geography course simultaneously. Not surprisingly these were all large tertiary sector colleges. Apart from this near complete switch from the established A level Geography courses to the new Project, there was a complete abandonment of CSE Geography and a 31% reduction in the number of departments offering an O level course. Nine departments chose to offer the Project's CEE course along with its A level although only one of these represents a change from an established CEE. Most old CEE courses were retained.

Of the 12 departments which had offered three or more different Geography courses for 16 to 19 year olds, eight reduced the choice given to students.
Table R5. Post-Project Implementation 16-19 Courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>Categorised frequencies.</th>
<th>(A)</th>
<th>(B)</th>
<th>(C)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CSE</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>O Level</td>
<td></td>
<td>4</td>
<td>4</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>C.E.E. (not G.16-19 C.E.E.)</td>
<td></td>
<td>3.</td>
<td>4</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Geog. 16-19 C.E.E.</td>
<td></td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>A/O Level</td>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>A Level Wholly Systematic</td>
<td></td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>A Level 2/3 Systematic</td>
<td></td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>A Level Mainly Regional</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>No answer given</td>
<td></td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>17</td>
</tr>
</tbody>
</table>

Other uncoded courses:
(A) 1 BTEC course with Geography component.
(B) 5 other courses; 2 C & G, CEE, CPVE, BTEC.
(C) 7 courses; CEE Environ. Studies, CEE Soc. Studies, 3 16+, 2 Environ. Studies A level.

Analysis of the replies from question 5 (Table R6) reveals the popularity of 14-16 courses with departments after they had introduced the Geography 16-19 Project. A comparison with Table R5 points to a noticeable decrease in the number of traditional O level courses on offer (-35%) and of traditional CSE courses (-71%). A small and unexpected fall in the popularity of the GYSL/Avery Hill course is also apparent although in Category B schools, the early implementers, its total increased by one. The other "progressive" O level or 16+, the 14-18 Project, increased its representation as did the conceptual-style CSE.

Table R6. Post-Project Implementation 14-16 Courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>Number</th>
<th>(A)</th>
<th>(B)</th>
<th>(C)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GYSL/Avery Hill 14-16</td>
<td></td>
<td>5</td>
<td>15</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>Geog. 14-18</td>
<td></td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>Traditional O Level</td>
<td></td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>Traditional CSE</td>
<td></td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>CSE Mode 3 (not GYSL)</td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>CSE Conceptual</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>No answer given</td>
<td></td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

Other uncoded courses:
(A) 2 courses; an East Anglia/Cambridge 16+, Local Mode 3.
(B) 2 courses; Geog. 16+ and O Level Environ. Stds.
(C) 4 new 16+ courses & an O level Environ. Studies.
Questions 6 and 7 relate to the years in which departments took the decision to adopt Geography 16-19 and the years in which they actually implemented it. The years of decision for the three groups of schools listed in Table R8 show that all of the Pilot and Associate schools in the sample decided to adopt the new University of London A level course for the Project in the year it was announced. However two of the schools in the category did not implement this decision at the earliest opportunity, that is, the following year 1980 (Table R8) but waited until 1981.

Table R7.  Project_Decision_Year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A)</td>
</tr>
<tr>
<td>1979</td>
<td>13</td>
</tr>
<tr>
<td>1980</td>
<td>0</td>
</tr>
<tr>
<td>1981</td>
<td>0</td>
</tr>
<tr>
<td>1982</td>
<td>0</td>
</tr>
<tr>
<td>1983</td>
<td>0</td>
</tr>
<tr>
<td>1984</td>
<td>0</td>
</tr>
<tr>
<td>1985</td>
<td>0</td>
</tr>
</tbody>
</table>

Table R8.  Year of Project Implementation.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A)</td>
</tr>
<tr>
<td>1980</td>
<td>11</td>
</tr>
<tr>
<td>1981</td>
<td>2</td>
</tr>
<tr>
<td>1982</td>
<td>0</td>
</tr>
<tr>
<td>1983</td>
<td>0</td>
</tr>
<tr>
<td>1984</td>
<td>0</td>
</tr>
<tr>
<td>1985</td>
<td>0</td>
</tr>
</tbody>
</table>

Among Category A schools, in most cases (11) of implementation came in the year immediately following the decision to adopt. There was a two year gap between adoption and implementation in two cases.

For Category B schools, there were six cases where adoption and implementation occurred in the same year. In fifteen
there was a one year gap, in two cases two years and in one case three years.

There were four cases amongst Category C schools of adoption and implementation in the same year, 19 cases where this occurred in consecutive years but no cases of longer deliberation.

Considering the sample as a whole, some 17% of schools adopted and implemented the Project within the same year, while 75% chose to implement in the year following their decision to adopt.

An analysis of the results from question 8 (Table 9) showed that nearly all departments intended to institutionalise the project from the outset. A very few planned to assess the course in practice before internalising it. Only one department was dissatisfied with the scope given in the Project's core and option modules and wished to submit a module of its own devising. Eight departments in the sample were teaching courses which used just part of the new scheme but, in all cases, this was in addition to a full implementation of the A level course. No one felt the need to change the suggested teaching and learning methods, that is the route for enquiry.

Table R9. Methods of Implementation.

<table>
<thead>
<tr>
<th>Categories</th>
<th>(A)</th>
<th>(B)</th>
<th>(C)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>whole course &amp; institutionalise.</td>
<td>13</td>
<td>24</td>
<td>22</td>
<td>59</td>
</tr>
<tr>
<td>whole course for trial.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>but modify course.</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>part only.</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Modify suggested teaching method.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

There was a pleasingly even distribution of group-size frequencies (Table 10) for the first cohort of students in the sample. As expected, results from question 9 showed that frequency declined for the really large student groups but it was surprising that two Heads of Geography in comprehensive schools could or would not enumerate their tutees. On the evidence, it can be said that the research takes in a fair sample of departments with respect to size.
Table R10. Initial Student Numbers for Geography 16-19.

<table>
<thead>
<tr>
<th>Group Size</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A)</td>
</tr>
<tr>
<td>5 or less</td>
<td>2</td>
</tr>
<tr>
<td>6 to 10</td>
<td>3</td>
</tr>
<tr>
<td>11 to 15</td>
<td>1</td>
</tr>
<tr>
<td>16 to 20</td>
<td>3</td>
</tr>
<tr>
<td>21 to 25</td>
<td>2</td>
</tr>
<tr>
<td>over 25</td>
<td>2</td>
</tr>
<tr>
<td>No answer given</td>
<td>0</td>
</tr>
</tbody>
</table>

Question 10 listed 14 factors which were thought likely to influence a department’s decision to adopt a new course. The question tried to draw out the main reasons why Geography departments were dissatisfied with the A level course they were offering prior to the adoption of 16-19 Geography. To get an indication of which factors concerned Heads of Department most, only the first option box answers were initially extracted, that is those answers showing the factor in question was considered a "very important" one. An overall rank order for all sample schools was then tabulated. This can be compared with the group rank orders for the three categories of implementers (A, B & C).

Table R11. Decision Factors Q.10 in Rank Orders of Importance.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
<th>All</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>Aims of dept.</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>f</td>
<td>Teaching methods.</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>k</td>
<td>Internal assessment.</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>c</td>
<td>Too knowledge-based.</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>n</td>
<td>Relevance to students.</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>d</td>
<td>Content overload.</td>
<td>6</td>
<td>1</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>a</td>
<td>Suiting student ability.</td>
<td>7</td>
<td>11</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>e</td>
<td>Restricted approach.</td>
<td>7</td>
<td>4</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>i</td>
<td>Subject development.</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>j</td>
<td>Staff stimulus.</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>g</td>
<td>Student interest.</td>
<td>11</td>
<td>13</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>l</td>
<td>Course balance.</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>m</td>
<td>Academic narrowness.</td>
<td>12</td>
<td>9</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>h</td>
<td>Resourcing.</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>13</td>
</tr>
</tbody>
</table>

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Using the total number of ticks in the "very important" box for each factor as raw scores and Pearsons Product Moment correlation technique the following results were obtained.

Table R12. Correlations between A, B and C Raw Scores for Question 10.

\[
\begin{align*}
  r &= +0.76 \text{ significant at 1}\% \\
  &\text{AB} \\
  r &= +0.67 \text{ significant at 1}\% \\
  &\text{AC} \\
  r &= +0.82 \text{ significant at 1}\% \\
  &\text{BC}
\end{align*}
\]

From Table R11 it can be seen that the appropriateness of a syllabus to the aims of departments or schools is the most important factor overall, although the categorised results show that Pilot and Associate schools found this less fundamental than other schools. Whilst on average schools gave a high priority to the opportunity for employing modern teaching methods within a course, Category C schools were less definite about this. Along with this factor the Pilot and Associate schools also gave their highest priority to solving curriculum overload and reducing factual content. Other schools in the sample were not so concerned with curriculum overload. The related problem of overload restricting the choice of teaching and learning methods also seemed to trouble Pilot and Associate schools more than the other schools.

In general the correlations (see Table R12) between the three groups of schools are good and highly significant. This is particularly true for the Category B and C schools which agree remarkably well about the most pressing factors for change. Looking again at individual factors there was a high level of agreement that resourcing the old syllabuses was not a major problem. Schools too were generally reluctant to criticise their old syllabuses for lack of balance but were quite critical of these courses for their narrow academic nature although few went so far as to give this as a "very important" reason for seeking change.
The same analytical technique was used on the data extracted from answers to question 11 of the survey. This question was designed to discover the features of the Geography 16-19 A level course which appeared most attractive to Heads of Geography. The features of the course were ranked (Table R13) according to the frequency with which they were chosen as "very important" factors.

Table R13. Decision Factors Q.11 in Rank Orders of Importance.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
<th>All</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>Enquiry approach.</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>a</td>
<td>Man-environ. approach.</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>i</td>
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As with results to the previous question the total number of ticks in the "very important" box for each factor was used as a raw score. Then Pearson's Product Moment correlation technique was applied to two lists of Category data at a time producing the following results.

Table R14. Correlations between A, B and C Raw Scores for Question 11.

\[ r = +0.82 \] significant at 1%
AB

\[ r = +0.83 \] significant at 1%
AC

\[ r = +0.90 \] significant at 1%
BC
The most popular feature of the Project was its student-centred approach which emphasises individual and group enquiry as a learning technique. Some 74% of department heads thought enquiry-learning was very important. Over 60% selected both the Project's combining of human and environmental matters in all parts of the course and its provision for developing a wide variety of general skills. The expressed aim to develop student values and attitudes found great favour with half of the department heads.

Of the factors given, respondents seemed least concerned with pragmatic departmental issues. Very few thought the degree to which their existing resources could be used in the new course was a crucial factor. There was little support either for the Project's facility to develop linked courses within the department whereby a module and its resources could be used for A level and for CEE, BTEC or other schemes.

An examination of the categorised responses shows little differentiation. Compared with other institutions, Project and Associate schools attached less importance to a consistent man-environment linkage through the syllabus. Elsewhere there was a marked similarity in ranking. So it is unsurprising that cross-category correlations of the raw scores for each factor are very high.
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- 130 -
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Key to Question 1:
1. Project Literature. 2. Educational Press. 3. Project Team Conference. 4. LEA Adviser. 5. Another Teacher. 6. Other.

Key to Question 2:
+ Attended INSET course. - Did not have INSET.

Key to Question 3:
1. Staff of another school. 2. LEA Adviser. 3. Project team member. 4. Other.

Key to Question 4.

Key to Question 5.
Questionnaire returns Part B (i). (H.O.D. replies.)

Heads of Department were asked by what means they first heard of the Project. The rubric informed readers that some questions were preceded by the letter 'M' meaning that more than one answer might be given. For this, the first question, no 'M' was printed and hence it was intended that a single answer should be selected from the options provided. However six respondents selected more than one option each. Logically, there could only be one occasion and method by which the Project first came to their notice. While it may have been possible for an HOD to attend a briefing where both Project Team and LEA adviser were present, jointly presented dissemination did not occur. Hence these replies were excluded from the processed data.

When the whole sample was analysed, it was found that Project conferences had been the most frequent means by which awareness was achieved (Table R15). More than one quarter of department heads claimed that they had first learned of 16-19 Geography this way. Project literature and LEA advisers had also been effective disseminators, each accounting for 20% of the sample. Some 16% first heard of the development from other teachers but only one teacher discovered the Project by reading the educational press.

Table R16. Categorised Sources of Project Awareness.

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Categorising the results (Table R16) revealed that Project literature and conferences appeared to be the most important sources of initial information for Category C schools. Although the number frequencies in each tabulated cell were too small to be statistically reliable, there
seemed to be a difference between the categories. As might be expected, Project literature was unimportant to Category A, Pilot and Associate school department heads for whom the LEA advisers were paramount. Conferences and talks seemed to have been the chief means by which Category B schools were first informed. Literature and other methods were less important.

While the processes bringing about awareness were the subject of the first question, the next two questions focussed on dissemination proper. Department heads were asked whether they had had any INSET (Table R17) and if so who had provided this training. The survey showed that 78% of the sample had received at least one Project induction course although some teachers were keen to stress that their INSET was for just one day.

Table R17. Categorised INSET Reception.

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</table>

All Category A and more than 80% of Category B department heads had received in-service training courses. This figure declined to 67% for Category C.

Multiple answers were invited for the third question which sought to discover who had been the most important disseminators. As with the promotion of awareness, the Project team were the salient group accounting for over half of all the dissemination courses, reaching 70% of all departments and 89% of INSET receivers (Table R18). Over a third of department heads had acquired training from staff outside their own institution and one fifth had benefitted from courses given by LEA advisors.
Table R18. Categorised Project Disseminators.

<table>
<thead>
<tr>
<th>Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>1 Other Staff.</td>
<td>2</td>
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</tr>
<tr>
<td>2 LEA Advisers.</td>
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<tr>
<td>3 Project Team.</td>
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<tr>
<td>4 Other Disseminator.</td>
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<td>14</td>
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</table>

Categorised results (Table R18) confirm the Project history that the Project team were virtually the sole disseminators in the early stages of the scheme. Later, sources other than the team become more important.

Question 4 asked teachers how well they felt that they understood the aims and methods of Geography 16-19. The objective of the question was to assess the confidence with which teachers were delivering the new course. Out of 57 respondents, 32 (56%) believed they understood the nature of the Project very well, 22 (39%) fairly well, 3 (5%) admitted that they understood the basic ideas only but no one considered themselves unclear. What was surprising was that three of the Pilot and Associate school heads of department classified themselves as only fairly well acquainted with the aims and methods. Nevertheless with 9 of their members claiming to understand the Project very well. Category A appeared to be the most confident group. In the other categories less than half claimed to understand things very well. The three with only basic understanding belonged to Category C schools.

A list of implementation tasks was provided in Question 5 and teachers were asked to indicate the degree of difficulty they had encountered with each. Four grades of response were provided from which to choose. Unfortunately heads of department infrequently chose the extreme grades, "very difficult" and "no difficulty" and consequently the preponderance of mid-column responses ("fairly difficult" and "minor difficulty") led to a bunching of results. Raw results appear in Table R15 but individual tasks have been ranked according to their mean scores of graded difficulty in Table R19. In order to calculate the mean scores a weighting of 4 was given to "very difficult" responses descending to a weighting of 1 for "no difficulty".

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There were four heads of department who avoided answering all parts of this question and two who were uniformly consistent in their gradings.

Table R19. Implementation Tasks Ranked according to Difficulty.

<table>
<thead>
<tr>
<th>Task</th>
<th>Rank</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiring Project resources.</td>
<td>1</td>
<td>2.79</td>
</tr>
<tr>
<td>Acquiring additional resources.</td>
<td>2</td>
<td>2.57</td>
</tr>
<tr>
<td>Incorporating route to enquiry.</td>
<td>3</td>
<td>2.55</td>
</tr>
<tr>
<td>Acclimatising students to enquiry.</td>
<td>4</td>
<td>2.52</td>
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<tr>
<td>Translating resources into tasks.</td>
<td>5</td>
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</tr>
<tr>
<td>Assessing course-work standards.</td>
<td>6</td>
<td>2.42</td>
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<td>Devising internal assessments.</td>
<td>7</td>
<td>2.39</td>
</tr>
<tr>
<td>Adjusting teaching style.</td>
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<td>2.22</td>
</tr>
<tr>
<td>Assimilating and implementing aims.</td>
<td>9</td>
<td>2.18</td>
</tr>
<tr>
<td>Organising field work.</td>
<td>10</td>
<td>2.14</td>
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</table>

It is interesting that practical concerns about resourcing were unimportant to department heads when they were considering the adoption of a new course (Table R11) but when implementing it, resourcing becomes the knottiest of problems (Table R19). The recommended idealistic "route for enquiry" which can appear rigid and complex, was identified as "fairly" or "very difficult" by more than half the respondents. Similar levels of difficulty were experienced acclimatising students to purposeful enquiry-based learning. A general overview of the results indicates that most heads of department had multifarious difficulties of differing magnitudes although seldom acute. A few experienced little difficulty at all.
Questionnaire returns Part B (ii).

In Part B (ii) of the survey sheet (see appendix), multiple-choice questions were posed in order to discover which teachers were most accurate in their interpretation of the Project. Answers which were Project-congruent were given a mark of +1, while those which were not Project-congruent were marked at -1. Where a teacher failed to respond to a question or selected more than one answer, then no mark was awarded. The total score was calculated for each individual teacher (Table R20).

Example.

B (ii) Question 11.

Each section of the Geography 16-19 course-work should allow:

(a) The introduction of a new skill or the revision of a skill insufficiently practiced.  [ ]

(b) Use a variety of skills.  [ ]

(c) the use of skills as and when they are appropriate to the task.  [ ]

Here the Project-congruent answer is (c) which, as in several cases, is a direct quotation from a Geography 16-19 Project document. A teacher who chose one of the distractors, as in the example, scores -1.

Table R20. Heads of Department Responses to Multiple-Choice Questions B (ii).

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</table>

Key to Table R20:
1 denotes a Project-congruent answer.
-1 denotes a Non-Project-congruent answer.
na indicates that either no answer was given or that the response was invalid because the respondent chose more than one answer to an individual question.
Figures in the Total Column (Tot.) are the row sums i.e. the excess of congruent over non-congruent answers.
As there were 15 questions, it follows that a teacher who was completely in sympathy with the ideals of the Project team would have achieved the maximum score of +15. In fact the highest total was +7, a score achieved from 10 congruent, 3 non-congruent and 3 invalid answers. If all teachers had followed instructions to the letter, then totals would have been confined to odd integers. The occurrence of nil and invalid responses introduced even number scores. Most totals were either small positive or negative numbers indicating a tendency towards a normal (Gaussian) distribution (Figure R1). There was only a very slight skewing of the distribution towards the negative scores around a mean total score of -0.24. In all there were 27 positive totals, one zero and 29 negative totals with two scores of -7 at the lower extremity.

Some multiple-choice questions gave much higher Project-congruent scores from the total sample than others. Choice of areal example for teaching (Question 7), the purpose of the man-environment approach (Question 9), the skills which a student should ultimately achieve (Question 15) and the purpose of questioning (Question 19) were all topics where the Project philosophy achieved popular support exceeding 70% of the sample. There were other topics where the consensus opinion was in disagreement with that of the Project team and, it could be argued, dissemination had not been effective. The purpose of teaching guides (Question 12), classroom organisation (Question 17), class management (Question 21), the political dimensions of teaching (Question 22) and the focus of skill training (Question 23) were topics which fell into this category. Which parts of the new curriculum are most important to the success of the Project and which should be disseminated first are associated issues left for consideration in the Discussion chapter. There too the implications are drawn from questions which did not engender a consensus. Here the subject matter for each question is given (Table R21), together with frequency and congruency of answers.
Figure R1. Distribution of Multiple-Choice Scores.
<table>
<thead>
<tr>
<th>Topic</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tr>
<td>6. Basis for student decision making.</td>
<td>29</td>
<td>26</td>
<td>2</td>
<td>+3</td>
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<tr>
<td>7. Selection of areal examples for teaching.</td>
<td>44</td>
<td>13</td>
<td>0</td>
<td>+31</td>
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<td>9. Purpose of man-environment approach.</td>
<td>44</td>
<td>13</td>
<td>0</td>
<td>+31</td>
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<tr>
<td>11. Planned use of skills in coursework.</td>
<td>35</td>
<td>20</td>
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<td>+15</td>
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<td>12. Purpose of teaching guides.</td>
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<td>13. Development of course content.</td>
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<td>15. Ultimate purpose of skill training.</td>
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<td>16. Degree of teacher guidance to enquiry.</td>
<td>27</td>
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<tr>
<td>17. Classroom organisation.</td>
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<td>3</td>
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<tr>
<td>18. Teacher guidance with resource material.</td>
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<td>31</td>
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<td>19. Purpose of questioning.</td>
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<td>+37</td>
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<td>+12</td>
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<td>21. Class management.</td>
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<td>-26</td>
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<td>22. Political dimensions of teaching.</td>
<td>8</td>
<td>49</td>
<td>0</td>
<td>-41</td>
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<tr>
<td>23. Focus of skill training.</td>
<td>12</td>
<td>39</td>
<td>5</td>
<td>-27</td>
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</table>
Table R22. Categorised Scores to Multiple-Choice Questions.

<table>
<thead>
<tr>
<th>Project &amp; Associate Schools</th>
<th>Early Adopters</th>
<th>Late Adopters</th>
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<tbody>
<tr>
<td>Category A.</td>
<td>Category B.</td>
<td>Category C.</td>
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<tr>
<td>4</td>
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<td>81</td>
</tr>
<tr>
<td>41</td>
<td>-1</td>
<td>82</td>
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</tbody>
</table>

No. in group 13
No. of B ii returns 12
Range -7to+5
Mean score -1.17

No. in group 24
No. of B ii returns 22
Range -5to+5 10
Mean score +0.32

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Grouping the individual scores according to the three categories (Table R22) shows that there are Heads of Department with authentic and eccentric tendencies in each of the categories. However Category A seems to have the most deviance especially when the smallness of the group is taken into account. The two -7 scores show an extreme eccentricity not matched anywhere else in the sample. Having noted this it is not surprising that a comparison of mean scores for the three groups indicates that Category A members are less project-congruent in their perceptions than the others.
2. Case Studies from Semi-Structured Interviews.

Introduction.

The following section contains the abridged and paraphrased transcripts of taped interviews with Heads of Department. Six were chosen from the rank of scores obtained from their answers to questions in Part B (ii) of the questionnaire. Three represent the highest scoring Authentics and three are Eccentrics with extreme negative scores. Pseudonyms have been substituted for the real names of teachers and their institutions.

The six interviews were conducted between 3.7.89. and 20. 7.89.. The chosen Heads of Department were told of the nature and purpose the interviews by 'phone a few days beforehand. The interviews proper were managed by introducing a broad topic; then using questions for the purpose of generating lengthy but relevant responses (see Method Stage 3). Prompts were added when this was thought likely to elude further useful information although the aim of the researcher was to interpose as little as possible and to adopt the role of interested listener once the topic had been set. This adopted role sometimes slipped to that of Agony Aunt especially with respect to the then impending National Curriculum Key Stage 3. But generally responses were pleasingly direct and to the point.

Furthermore in each of the six cases interviewees were confident and articulate in their responses and seemed unaffected by the presence of a tape recorder. All gave as much time as was required for the agreed agenda and in all but one case informal discussion continued after the taped conversations. Even in that exceptional case informal discussion had taken place prior to taping and the termination of proceedings was for the benefit of the researcher's travel schedule.

In order to reduce travel time, three of the Heads of Department chosen were from schools within the West Midlands. Fortunately all three met with the selection criteria. They were all high scoring Authentics or Eccentrics, came from different LEAs and had had no contact with each other either for Geography 16-19 INSET or development meetings.

All responses given in the interviews are recorded in this section without interpretation, except for the purpose of paraphrasing and without comment. It is presented as true
and fair record of teachers' statements against which later analysis can be checked. Paraphrasing has only been employed to reduce the length of the text.

To assist analysis, some parts of their replies have been taken out of sequence and relocated under the relevant category headings preordained in the research design. Hence these interview notes are grouped under broad topic headings and enumerated to accord with the narrower areas of questioning outlined in the Method section.

INTERVIEW No. 1 This interview was with Authentic, Andrew King, a HoD and Head of Faculty at Scholefield Sixth Form College, a city college in the West Midlands (Research Code No. 74) on 3.7.89. Andrew King scored +7 for answers to questionnaire Part B (ii).

A. Education and Teaching.
1. Andrew believed that the situation in education was "diabolical". "We are not recruiting the right quality of teachers." Teachers were largely overworked.

2. He was worried that he would not be able to get the right staff for the posts which need to be filled within his faculty. Andrew was in favour of the National Curriculum, if resourced properly. He believed that there were lots of innovations going on in education, "some beneficial some short-sighted." Scholefield college had a policy of getting in on innovations early because "creative subversion" was the best way to influence them for the better.

3. & 4. Andrew believed that the bad state of education was not recent in origin. He cited as evidence; lack of status, finance, opportunities. He thought that there were two types of people coming into teaching i) the committed, ii) "those not picked up by other employers". This worry was based on recent interviewing. Andrew said that there were plenty of ideas for change among teachers particularly in Geography but ideas had to be channelled. Too often teachers had to do too much. He was envious of other institutions whose department staff had time to confer. Scholefield college had two Geographers with little time. Curriculum development had low priority and was done "on the hoof". Andrew would like to employ a young, enthusiastic, energetic MPG teacher. People were getting
jaded with innovations. He quoted the Principal as saying that in his 30 years of teaching there had been 10 major initiatives, 8 of them in the last five years.

5. Andrew thought that successful teachers, meaning those who gained promotion, had to have ability and luck but they also had to be prepared to move. The longest he himself had been in any job was 5 years. He saw himself primarily as a manager but also as a "versatile" teacher of Economics, A level Sociology and Geography, plus an examiner for General Studies. Andrew, a man in his mid-thirties, was both Head of Faculty and Head of Geography.

B. Institution and LEA.

1. Andrew King was a member of Scholefield College Publicity and Marketing Group. He was concerned by the poor image which Scholefield had in the city, an image partly derivative of its location in a run-down, inner city area. However it was noted that the area was undergoing some redevelopment and urban renewal. Another identified problem was the persistence of the institution's poor reputation after its transformation from a Secondary school with a bad academic record to a new SFC. It was also thought to suffer because 70% plus of its intake was Asian. "Whites avoid this college"...owing to its... "negative image and racism." Despite these handicaps he believed that the college genuinely aimed to serve its local community. Students, many of them mature, often joined the Language Centre, then progressed to GCSE and some to A level. So that, although the college was ostensibly for students of 16-19, some stayed 5 years. By choice the college was moving towards Tertiary status and was adopting BTEC. In the process Andrew thought "Geography is losing out". Geography had not been popular with students either in the city as a whole or within Scholefield but the college had retained the subject in order to meet National Curriculum requirements.

2. Referring to the priorities of the Senior Management Team, Andrew thought that they wanted to promote the image of a caring institution serving the community. They were also keen to improve academic standards and to become the city centre SFC, but one of the major constraints was the problem of conveying the message to over 60 feeder schools.
3. Andrew thought that one of the chief strengths of the college lay in its Performing Arts which had "a national reputation" and which had "a trickle-down effect" on the whole institution. The college was also strong in Asian languages. Its weaknesses were its many small, single-teacher departments which required a great deal of energy to make them successful. These were particularly evident in Humanities with its nine departments. Some of them were under threat due to the small numbers in their teaching groups. They included Geography, History, Law and Sociology all of which met with consumer resistance, being perceived by local students as "White, middle-class studies".

4. Andrew believed that an integration of departments would soon take place because of the need to accommodate CPVE and BTEC courses. Reorganisation had started in late 1988 with the formation of three faculties; Science, Arts and Social Science/Business Studies/Pre-Vocational Education. Since then Pre-Vocational Education had become a separate faculty but with responsibilities for teaching across departments. Thus decisions about the curriculum were made by a committee comprising the four Heads of Faculty, the Principal and the two Vice- Principals. Andrew believed that administration was well integrated at this, the senior management level. The Senior Management Team of Scholefield liaised with the other city FE colleges to avoid duplication of specialised courses.

5. & 6. When asked about LEA support, Andrew said that they maintained "a low profile generally, except when called on". The LEA liaised with the college SMT when official visits and deputations were to be received. He thought that there was "not much money coming into college" although there were "some extra funds last year as a result of HMI Report".

C. Geography

1. Andrew said that there was "a poor response to Geography" in the city. He did not know why but added that his predecessor "someone who was well up in geography" and who "was writing textbooks on it" could not get students. He himself, as a "non-geographer would possibly find it more difficult. There were 3 students in their L.6th, none in
the U.6th. and 17 following a GCSE course which had been "quite successful". He had allowed "low quality students" on to the GCSE course in the hope of building up numbers and recapitulated that there was a low up-take for Geography in all Inner-City colleges. Open days saw little interest in geography courses. He knew that colleges in suburbs attracted more students to the subject. The solution was to approach and liaise with the feeder schools. "We will actually go out into the schools in the 4th. and 5th. Years and we will bring them in and try and teach them."

3. & 4. The trend in A level Geography followed by Andrew had been from studying the new Cambridge syllabus, as a student, to teaching JMB Syllabus B, then to Geography 16-19 in the pilot form in 1980. He saw this as a natural progression. "So to me geography hasn't changed that dramatically. I have never done regional geography. I hate the thought of doing regional geography." Andrew saw a "trend evolving into more political awareness, economic awareness, environmental awareness". "I think that's a good thing". He was not sure whether that was geography or even whether geography existed as a subject. He offered a polemic, "History is a tool. Geography is a tool. But neither of them are subjects."

Moving to the organisational aspects of delivering the course, he said that the two staff split the teaching of Geog. 16-19 between them, one teaching Physical aspects the other Human.

5. Andrew was not aware of any local Geography teachers meetings. Geography teachers "met on an informal basis". There were occasional meetings of well-established GYSL teachers but "if you are new to it, it is quite difficult getting in". "Certainly there is a very great argument for some kind of support for Geog. 16-19" including resource sharing but teachers "get very possessive of what they have and are not willing to share unless they get something in return". By this system "new institutions lose out because they have got nothing" to offer in exchange.

6. He was aware that a branch of the Geography Association existed in city but he had only been to one meeting "which was diabolical" and so did not go again.
D. Innovations.

1. Andrew agreed that teachers were a little weary from repeated innovations but welcomed change. He "would be bored stiff" if he were "not teaching a new course every year". Before coming to Scholefield in the previous year, he had not done any geography teaching for four years, that is since teaching Geog. 16-19 in an earlier post. He believed this rapidity of change was good but added that there should be time for evaluation and appraisal. He would have liked to have had a more systematic development. "One of the things with 16-19 certainly in this institution is the fact that we have no real framework. Its on the hoof."

Having inherited the course, he had no option but to teach it and admitted that he was frequently "literally only one step ahead of the students". This ad hoc development of the course would be likely to continue for at least two years. Outside assistance would be welcomed. The reason for retaining the course was that three students wanted to do it rather than studying JMB Syllabus B at the nearby FE college. Andrew "would have preferred to have lost the A level at that stage and restarted it" after a one year break "or possibly not at all". They wished to keep a broad curriculum. To this end they had tried to introduce a scheme whereby the start of A level Geography was alternated annually between Scholefield and the local FE college "but for various political reasons....that hasn't proved feasible".

2 & 4. When asked why he was prepared to undertake a considerably greater work load in order to innovate, Andrew listed "professionalism, satisfaction of the students, examination results" and the opportunity to learn new things himself and learn with the students. Referring to Geog. 16-19 he welcomed the greater opportunity to look at current affairs, specific issues and environmental concerns which made the course more enjoyable. "I'm interested in applied geography." Decision-making exercise appealed to him as did the variety of areal study. He felt this was important for the predominantly Asian clientele of the college whose geographical knowledge was eccentric. "Students need to know something about their local area which they very rarely leave unless they're travelling four or five thousand miles.......They don't travel within Britain." Returning to the reasons for innovating, Andrew professed a liking for doing new courses. "It's masochism but it's to give them [the students] the best. We are very much as an institution very student-orientated and we will switch courses at relatively short notice to satisfy the demands of the students....... Too often, perhaps, we switch
too quickly and have too many balls in the air.... We should get things a bit more under control." Despite his wish, Andrew saw little chance of this happening. He believed that the greater competition for the 16-19 age group would lead to even speedier changes to the department's curriculum.

3. A similar argument held true for the college as a whole spurred by strict staff to student ratios. "Unless we get students through the door in September, we lose one member of staff per ten students." However the process of change had to go through a fairly formal decision-making process. To begin with, there would be discussion within departments, followed by consultation with the Head of Faculty. The proposal for change would then be taken to the Heads of Faculty meeting and, if successful, from there to Senior Council. "our sovereign body", which was made up of senior management, middle management and staff representatives. The Principal need not accept the decision of council but, in practice, almost always did. Andrew thought the system was very democratic.

Cases for change tended to be brought to council by Heads of Department although if change were thought to be necessary the Curriculum V.P. or Head of Faculty could suggest ideas to a department and leave them to do further research. The department would then submit its final ideas through the formal process.

Andrew was planning a review of humanities and wished departments to have time for a considered response. "I have warned my Heads of Department that I am going to have a curriculum audit." He had not, at the time, formulated its precise framework but expected to include such questions as "What course are you doing? Why are you doing it? How are you doing it? What's its aim? Are there alternatives? Then linking in perhaps to entitlement curriculum. What are you doing about race and gender? What are you doing about economic awareness? And increasingly so under LFM and LMS, how much does your course cost per student and is it economically viable?"

Innovative ideas came from "all directions" within the college. They could come from department members or from other departments or faculties but usually came from the Head of Department. The criteria for their acceptance varied but it was hoped that a balance between academic freedom and practical economics was struck. Andrew himself thought that change should be curriculum led according to
the demands of students but saw justification for financial control and for providing courses which employers wanted.

E. Own Status.

1. Andrew had a degree in Geology and so did not feel qualified to teach all aspects of A level Geography. One reason for his liking for Geog. 16-19 was its modular format which allowed him to contribute to the course in those areas where he felt competent.

He recognised that he had a position of influence but did not wish to be autocratic, preferring cooperation and informal discussion of change, whether suggested by himself or others, and allowing Heads of Department a veto. "I am not an expert in nine different subjects and therefore I accept what they say."

2. His ideas came mainly from Heads of Department but also from contact with advisers from whom he channelled ideas into the college.

3. He quoted meetings and paperwork as his main pressure points. "We have a lot of meetings because we have a lot of change going on and one of the problems with democracy... democracy involves a lot of conversations and a lot of talking .... and I have a 70% timetable which is excessively high compared with many other institutions." He did not think he had the same stresses as those in secondary education and did not want to return there. "....the pressures are very different. Our pressures are very much seasonal.... we can have as many as five meetings in one day.... a lot of that is informal conversation at this time of year, either up the line or down the line and this is where the curriculum initiatives come." He covered for colleagues on INSET or liaising with other institutions. There were no extra areas of pressure. "...admin. which 16 to 19 has far too much of."

4. Andrew thought that his next career move would be to a post of Vice Principal in an FE college. He did not wish to remain in the city. He and his family had proscribed three cities in the country of which this was one but he had come as the post seemed too good to miss.
INTERVIEW No. 2.

Barry Masters, the Head of Geography at Parklands Sixth Form College (Research Code 89) in a West Midland town was classed as an Eccentric project adopter having scored -5 on the multiple-choice test for congruence of perception. He was interviewed on 4.7.89.

A. Education and Teaching.
1. Barry regarded the general education scene as "somewhat confused. There are a lot of good ideas around which seem as though they could work if the time was put towards them." He doubted that the necessary time would be allowed. "A lot of good ideas; a lot of half-baked ones as well."

2. He identified the National Curriculum as the main problem facing schools and seemed to welcome its introduction. "I have long thought that there were too many odd ideas wafting around in education." He also made the point that his job in the Sixth Form College would become easier with standardisation of curricula in feeder schools.

"In many cases, schools did not seem to know quite where they were going and as a result it's been very noticeable in a S.F. college that the students we get come with such a hodge-podge of backgrounds and ideas..... we end up trying to sort out the mess at the end of it. It's the wide range of syllabuses the schools have chosen....." at GCSE. Although, "It goes much further back than that.....much of the problem is from primary level. Education in many cases has failed at the bottom." Secondary schools could not overcome these basic difficulties. "and from what the secondary schools teach I begin to wonder what the teachers were ever taught!" S.F. colleges were at the end of the line. "Often you get intelligent students with big deficiencies which have never been picked up." Barry quoted students' inability to do mental arithmetic as an example.

3. He had experienced these problems during his seven years at Parklands but had not found them quite so obvious when teaching in a comprehensive. "Mind you even when I was in 11 to 18 education I used to feel that the primary schools weren't doing their job properly."

4. When asked about the status of the profession, Barry replied, "Unfortunately, at the moment very much under-valued..... although I don't really know why." He seemed to be including primary and comprehensive school teachers in this evaluation. "Certainly the teaching
profession doesn't have quite the standing that it ought to have or perhaps which it had ...... twenty odd years ago."

When invited to comment on the scope for advancement and sort of teachers who gained promotion, Barry had this to say. "There is a lot of scope for con artists to get on. Those who can use all the jargon in the right places. For those who want to concentrate on teaching sometimes it's not quite so easy...... It depends on the individual and on how mobile they are." He thought that a person did not necessarily have to be a good teacher to gain promotion. He said that he tried to be a student-centred teacher and added, "I wouldn't mind promotion but I don't go out of my way to hunt it down."

B. School and LEA.
1. "We're in a bit of a turbulent stage at the moment, in that the nature of the college has changed in the last four or five years. It was a very...... traditional sixth form college, open access, taking anything that came and trying to improve its (sic) education but because of falling roles and other things we've moved to being community-oriented but have not been allowed to become a full community college. So we're half way between everything, trying to fulfil a whole host of roles, none of them particularly successfully." Barry believed that the Principal was trying make Parklands serve the community more comprehensively whilst at the same time trying to set high academic standards of entry for students and gain a higher academic reputation in the locality. "As he's moving on now the future is uncertain anyway."

2. Barry quickly adjudged the main concern of the S.M.T.. "In the past few years it's been the numbers game, getting as many bodies through the door as possible." The locality did not have a good image within the LEA area and it was therefore difficult to attract students from other parts of the borough. "Some of them for all the wrong reasons." Students "particularly from what you might call the white parts of the borough." He estimated that some 60% of intake was Asian but only 3 or 4% West Indian "despite the fact that within less than half a mile there is the biggest West Indian community within the borough......They just don't like education."

3. Barry identified the main strength of Parklands as its pastoral care and its staff-student relationships. "There is a very friendly relationship between staff and students. It's one of the ways that we do succeed and try and sell the place because the staff as a whole try to get the best
for their students. We do also get good results. On various yardsticks that have been used, I think they call it the 'value-for-money analysis', which is the improvement in results between the time when someone arrives at the place and the time when they leave we're regularly coming out top in the borough."

4. Besides his Geography Department responsibilities, Barry also taught economics, business studies and "almost anything else that gets thrown my way." Parklands was organised on faculty lines and so it was common for teachers to take more than one subject within their faculty. A few worked for more than one faculty. "On the whole just about everybody mucks in together anyway. It's a very friendly and cooperative staff. There are one or two odd bods but you get those everywhere." In Barry's opinion the staff were well integrated and mutually-supportive. He cited instances of resource sharing and advice seeking.

5. When asked of the role of the LEA in his work, Barry's immediate response was the solitary word, "tight-fisted." Prompted to comment on the wider, non-monetary aspects of their permit he confided that the subject adviser did not often visit. "She has worn too many hats and therefore never really gets time to spend with anybody." The LEA adviser was responsible for humanities and art within the borough. "Basically our biggest problem is money." The LEA "are a bit tight with money." Barry said that the adviser had been willing to help when asked but could not grant much extra funding. He suspected that she had only a small budget but conceded that the LEA would willingly fund teachers to attend INSET courses.

Barry was unsure of LEA general policy. "I don't know that the LEA knows what it wants, especially at the moment. It is in the throws of getting reorganisation underway for the whole of the 11 to 18 sector because at present there are two systems in operation in the borough." The southern half was reorganised over a decade ago. The northern half was still a mixture of 11 to 16 and 11 to 18 schools. Barry saw this as procrastination and evidence of the LEA's inability to determine policy.

Barry noted with chagrin that when he was introducing the Geography 16-19 Project, the LEA adviser had shown interest but had given no support, financial or otherwise nor had she monitored the project.
C. Geography.
1. On the question of how the status of geography compared with other subjects in the curriculum, Barry admitted "not very highly really. We've found this a problem for several years. We don't seem to get enough bodies. There's too much competition." He thought that students were "seduced" by subjects on offer at Parklands which were new to them. One of the reasons for introducing the project was in the hope that it would appear different as well as being more vocationally relevant but the change had made little difference to numbers enrolling in geography.

2. 3 & 4. Asked for his views on the recent evolution of geography Barry remarked, "In one sense I suppose, (for) those who have gone for 16-19, it's been revolution rather than evolution in that it was so different." He thought other examining boards were moving in the same direction but more slowly and that the pressure from GCSE would force change at A level. One of his reasons for changing to 16-19 Geography was to relieve the tedium of "teaching the same old thing" in J.M.B. Syllabus B and to move away from a "lecturing" delivery. He would not return to the old ways.

5. "Not a lot. There's no strong organisation within the borough." The adviser had tried to maintain a "vague" association of geographers but it had been difficult to get teachers to meetings and "it had generally foundered on apathy. The industrial action flattened it for three years." It was difficult to get even basic information such as which syllabuses were followed by other local schools. The adviser would not pass on this data.

6. There were according to Barry Geographical Associations in nearby cities but not locally. He was not a G.A. member nor was he a member of the the local Geography and Geology Teachers' Association which he deemed fairly inactive.

D. Innovation.
1. In Parklands "Very broadly Heads of Departents are left to their own devices. Obviously the principal wants some justification of why you want to change." In the case of 16-19 Geography Barry had discussed the change with his geography colleague "but his attitude was that it was my decision and he was happy to teach whatever I wanted him to." In theory the Head of Faculty should be consulted but Barry would only refer a very radical proposal to him. In practice he chose his own syllabuses. In recent years the principal had "been tighter .... with GCSE syllabuses in particular" and had wanted departments to justify their choices.

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2. Barry generally welcomed change and varied what he taught from year to year.

3. He also believed the principal to be in favour of innovation, perhaps even experimentation if he was convinced that it was "in the interest of the students."

4. Asked to comment on the risks and rewards associated with innovation Barry reiterated his reasons for changing to 16-19 Geography including relief from repetition, relevance of content and technique to student lives and avoidance of isolated theory learning. The previous syllabus had been more appropriate as a preparation for Higher Education and thus inappropriate for most Parklands students.

E. Self.
1. For reasons given above Barry felt that he had considerable influence on Parklands geography curriculum.

2. Barry was a little unsure of the sources of his ideas for change. "Basically it's taking notice of what's doing the round." He suggested that the changes he made from year to year in 16-19 Geography were as a result of his interest in current affairs.

3. "Trying to get enough bodies through the door to justify the subject on the curriculum" was Barry's chief cause for concern. "It's a problem when you have very small groups....But again as far as I'm concerned it takes up only a third of my time. I've got two other subjects to think about teaching as well plus faculty responsibilities."

4. "To some extent I'm half tied by the ages of my family in that there are gateways to when I can actually apply for promotion. One of which is coming up next year. I am in the process of doing an M.A. in Educational Management which should finish next year......I'm looking for promotion in the humanities, social studies area one rung up the ladder or so or possibly into administration or a more administrative type of job. It just depends what is available."
INTERVIEW No. 3

The interviewee in this case was given the pseudonym Colin Burns, Head of Humanities at the fictional Balmoral School (Research Code No. 19). The actual location was a town in the South-east of England where the interview took place on 10.7.89... Colin was classified an Authentic adopter with a score of +5 for congruency of perception.

A. Education and Teaching.
1. Colin had mixed feelings about possible changes in the status of education. "I think education has gone down over the last 10 years in terms of the public's respect for teachers and to a certain extent teacher's respect for themselves.... I am not convinced that the output of students has gone down, in fact I would say it had stayed the same or possibly gone up." He thought that new, more relevant and more interesting methods were responsible for any improvement of outputs. "The morale (of teachers) has gone down largely because of pay. Teachers feel they are not paid enough." By contrast he thought that morale amongst the staff at Balmoral was quite high owing to the recent successful amalgamation of two schools. Balmoral had become the most popular school in the area due in large part to "a dynamic headteacher who had vision and who managed to take teachers who were working quite hard anyhow and to channel their work much more efficiently." Colin gave examples of the headteacher's achievements. There was now "lots of display work around the place". Much had been spent on interior decoration particularly in the reception area.

2 & 3. Colin had become Head of Humanities during the reorganisation for amalgamation. He did not think that this fact had any great bearing on his buoyant attitude. "I've never actually got fed up with teaching in 11 years." "He (the headteacher) gave us challenges and I thrive on challenges." Owing to his relatively short time in the profession he did not comment on possible changes in the problems facing education. He did however comment on work load, particularly heavy preparatory work and on time. "We have tons of meetings... on Mondays...senior staff...Faculty meetings on Tuesdays or pastoral meetings... Wednesdays working parties...making policies... `PHGs' Policy Advisory Group..." etc...even two residential staff conferences.

4. Colin had recently applied unsuccessfully for a deputy headship but was pleased that references had been taken up at his first attempt. He did not see much scope for
advancement in Balmoral or for MPG humanities teachers whom he thought were still in surplus.

5. Colin hoped that teachers gained promotion on merit but added "I see teachers who I knew myself.... who've been promoted and I can't see any reason why.... apart from the headteacher wanted to get rid of them. I knew what they were like as teachers and they're Deputy Heads and Heads now..... I would think perhaps you do get rid of people by promoting." He went on to answer his own question of what to do with a bad teacher by relating an example of how he had helped such a teacher to competence.

B. School and LEA.
1. Balmoral School was "Projecting an image that we are already teaching the National Curriculum..... We're not quite a yuppy school but for instance our kids go round with the 'Balmoral Folder'.... They keep all their current work in it and they carry nothing else around with them." Colin claimed that with few exceptions students did not have text books only pamphlets produced by departments. "So they only carry around a small amount of stuff with them. The Head's reasoning is that this is making them very business-like, making them cope better with GCSE coursework." All completed work was stored in files and kept in school. Colin believed that the system worked well.

Balmoral also maintained a balanced curriculum which would become its National Curriculum and tried to project the image of "a very efficient, forward-looking school" into the "largely middle-class" local area.

2. Colin was, perhaps understandably, taken aback when asked to assess the main concerns of Balmoral's senior management. "We're working hard on records of achievement." Innovation ideas were top-down. "Largely they have come not just from senior management but from the Head downward." Nevertheless Colin had been able to suggest and lead a half day discussion on Equal Opportunities. The Head was open to positive suggestions but would not listen to negative ideas.

3. Colin had noticed that "the MPG teachers felt that they weren't getting a good say." They were the recipients of policy made elsewhere. He repeated his belief in the Head, an ex-humanities teacher, who when he appointed Colin "kept right out of my way"."He wants me to develop things my way with the team." Colin had sought advice on occasions though. "So humanities has actually been quite successful."
"Problems in the area have been RE which we were meant to deliver. We have one practicing Christian." Balmoral had chosen integrated modular humanities at the time of amalgamation in preference to the existing single subjects. So pamphlet production for all years had assumed priority in their first year in the new school. They were now looking to broaden their resources and make courses more interesting.

4. Were the staff well-integrated and mutually supportive after the amalgamation? "Because of the points structure some people did not get the promotion which they felt they deserved and so some moved on...... Of the ones who are left I would have thought perhaps three or four felt very frustrated about it even now a year on." Colin thought the rest of the staff "got on together very well". Other departments borrowed atlases, video player or computer from his room. Staff shared ideas across faculties.

5 & 6. Except for the appointment of the Head, Colin saw the LEA as remote and uninterested. "When it comes right down to humanities and geography (the LEA have) probably got nothing to do with it whatsoever. Probably don't even know it (Geography 16-19) exists." They had had little to do with the introduction of the course. Colin had been introduced to the project while working for another authority and had followed it up after moving to Balmoral. The LEA "seem to like" the project and were prepared to fund its Annual Sixth Form Conferences.

C. Geography.

1. Colin saw geography as a high status subject within the school. "At A level we've a 100% pass rate for the last two years." The present Upper and Lower Sixth Geography groups were the biggest A level groups at Balmoral with 8 and 17 students respectively. "When I came here there were two kids doing A level one of them got an E and one failed." He thought that his department had transformed geography. "We've also probably had the highest or second highest pass rate at GCSE and O level."

There were problems at GCSE due to amalgamation. His own department in one of the constituent schools had done MEG Syllabus D while the other school did MEG Syllabus A. In order to minimise disruption the merged school retained the traditional Syllabus A but Colin was waiting for an opportunity to change this. He thought geography had a high profile with the SMT, which worked to his advantage.
2. 3 & 4. Colin declined the opportunity to summarise the evolution and trends in geography over recent years. "I've no idea." He did however praise the new elements of Geography 16-19. He was bored by lecturing the Oxford Syllabus. He had seen great potential in the interactive nature of the 16-19 Project and now made all his lessons issue-based. He later admitted to a small amount of straight lecturing. "We also always have coffee in lessons to promote discussion." For the same reason he had many plants in the room. Both he and his students liked the approach.

5. Colin met with other Heads of Geography in the locality once a year at a conference organised by the Environmental Studies Adviser. "To be honest the last two or three that I went to were so boring I just decided not to go again."

6. There was a local G.A. but Colin had not joined. He got most stimulus from the half termly Geography 16-19 Consortium Meetings of local schools.

D. Innovation.
1 & 3. Colin was asked how he would go about implementing change, focussing on his intention to change the GCSE course. "Obviously I've got to do it in conjunction with Michael (Head of Geography)." He wished to change Balmoral's didactic style of geography teaching to match the progressive style found in the rest of humanities teaching. "We've just done a review of the faculty which is an innovation as well."

Colin was then guided to talk about the process of change. "In the old school if I'd wanted to I'd have just said... to the Deputy Head of Curriculum "Right! This is what I want to move to." Explain to him why and he'd probably say "That's fine." Here (at Balmoral) there's rather an odd structure. There is someone above me before the Deputy Head Curriculum who is the Head of Learning Area .... Modern Languages, English and Humanities. This is the Communications Learning Area. So I'll probably mention it to him." After he had given his reasons he expected to gain support for change.

2. Colin was "quite happy to innovate" provided that he was convinced it was for the better. He had argued against some changes in Balmoral such as the scrapping of lesson bells but now recognised that it worked.
4. What were the rewards for innovation? Colin mentioned that he expected students to enjoy geography more when he had changed the GCSE syllabus. The less able students found LEAG Syllabus A documents quite difficult to comprehend. The faculty operated mixed-ability classes. He believed that group work in integrated humanities lessons had helped the less able and could do so in geography, given a modern syllabus. "Pupil-centred learning. It must be called something like that. I'd also like to have more use of computers."

E. Self.
1. Despite there being a Head of Geography working under him who had specific responsibilities for the subject, Colin, in all his references to curriculum change, gave the impression that he as Head of Humanities would get his way eventually. He would as a matter of course consult others but did not expect anything but cooperation. His proposal to change the GCSE syllabus was only delayed by considerations of work load. Both the manner and content of his speech projected the image of faculty helmsman.

2. Colin gained ideas from Geography Consortium Meetings and from his membership of a group which had been set up to write a Geography 16-19 text book. A Project field trip to the South of France had also helped.

3. Colin would not be drawn on the pressures of his job, in which he seemed both confident and happy. "We're used to hard work here." He alluded to one of the sources of the hard work. Again it was that of creating resources. "Our biggest problem is resources. I wasn't very impressed by Longman (the project publishers)."

4. Asked about his next career move, Colin said, "I'll apply for Deputy Headships as of next April."
INTERVIEW No.4

In this instance two Authentics were interviewed. One was David Jones, Head of Social Studies Faculty in St. Benet’s School, a comprehensive school in the South-east of England (Research Code No.63) on 10.7.89.. David scored +5 for answers to questionnaire Part B(ii). The Head of Geography, Eric Heysham, who independently registered a score of +3, also attended the interview. His comments are differentiated from those of his Faculty Head.

A. Education and Teaching.

1. David considered the present situation in schools to be "challenging" and sometimes felt "pessimistic" but added "then you see spaces for you to develop," even though, "....its closing in with the National Curriculum, assessment testing and everything." He was not as pessimistic as two years ago.

Eric believed that the school was one "which tended to look for loop-holes in systems and therefore perhaps we are approaching the present watershed in a slightly less anxious state than some schools.....schools that are used to taking a directed line on learning schemes and things may feel a bit more threatened than we do.....We will find ways of doing what we want to do."

2 & 3. In reply to a question on problems in education generally and changes in them over the last ten years, Eric thought that "in many ways the biggest problem is the attitudinal problem amongst pupils." "I think that education for education's sake is less valued than it was. Its a much more instrumental view and in some ways its more difficult to get kids interested in things which they cannot see an immediate repercussion of."

David said, "Education is not highly valued.... by parents." He believed that "lower-middle class" "in a traditional cultural sense" saw education as instrumental. There was now a desire for "immediate gratification" and no "agreed value system" which featured education for its own sake. He also thought that teachers had become more evaluative and critical of what they do. "I think we are more rigorous than we were."
4. With reference to teaching opportunities, David said that the school "had always been very lucky... the calibre of in-take... has always been very high." There had always been good competition for advertised posts until recently when suddenly over the last few months there had been a dearth of mainstream teachers for new posts in the school and the area.

Within the school he saw little prospect for advancement at the lower end. "I think at the moment there's a big block because we've just merged, so we've got two heavy middle managements..." This was the reason why teachers were leaving the school. The promotional route had "jammed up in the last three or four years." Before that "we've always come in from the bottom and gone out through the top... people left scale fours to become deputy heads."

5. Both interviewees believed that promotion was fairly meritocratic in their school. Eric added the rider that "it depends to quite a large extent on people further up the ladder making the decisions. Its fairly meritocratic but not as meritocratic as it ought to be."

David saw "relationships whereby a senior staff member will probably latch on to or spot a certain individual and make sure they succeed even against the odds."

B. Institution and LEA.

1. In the past, according to David, the school had been one of two local institutions with a positive inertial image retained after the change from grammar school to comprehensive. While ex-Secondary Modern schools in the area struggled to retain the support of their local community, St. Benet's School had been successful at projecting the progressive comprehensive image out into the community. Now it had to find a new image largely because of its own recent merger but also in response to the effects of local reorganisation on its competitor schools.

Broadening the discussion, Eric said "there was a national dimension to this... Up until a several years ago the general perception of what constituted a good education was very much the sort of model which this school was pursuig; progressive, education for the future, education for individual initiative and that sort of thing, rather than an exam geared curriculum......We have had a tradition of doing very much more Mode 3 style examining with as much
coursework as possible...... There has been a huge shift. I think the one thing that Kenneth Baker has achieved, for good or bad, ... he has totally changed people's perceptions of what they want from education. In a certain sense he has undermined confidence..... people outside are looking for something a bit more traditional." In response "we must not necessarily re-examine what we do but re-examine how we present what we do to the outside world."

3. St. Benet's School attempted to cater for all pupils but there was a "tension between attending to certain people's needs and others" resolved by compromise. One of the strengths of St. Benet's, according to David, lay in its organisational structures whereby "most parts of the school were collaborative exercises. It had a tradition of people working together." Within the Humanities Faculty they had been able to introduce changes "without too much trauma. We changed to a completely different syllabus using the same structure and we can use it again. We will use that structure to change in response to the National Curriculum.....more easily."

4. There was a good deal of faculty and department autonomy. "Faculties are little schools." "To be honest there's a weak Senior Management Team. We've always had weak coordination and weak top-down innovation. Now that's sometimes deliberate, sometimes developmental but each faculty has developed in its own interest and through its own efforts. We've had no top-down initiatives. In terms of courses, curriculum it's very much what the faculty wants."

Eric saw the need for inter-faculty curriculum development. There had been links. Teams of teachers in Humanities and English had worked together to produce 'Inquiry', a fully integrated humanities course for students in their first and second years. He felt that "this has been successful as far as it has gone" but he and others would like to have seen this develop further. "The concept of inquiry without any scientific investigation is a nonsense." He believed that National Curriculum implementation would force integration between faculties and "that would be a healthy thing."

5. David went on to describe the faculty's lack of involvement with the advisory service. "The LEA has a peculiar relationship with us. A lot of people in the LEA
think that we're Clever Dicks and they would rather not get involved..... without being paranoid, I think they almost deliberately not include us on most pilot schemes."

He was supported by his colleague. "I think I am right in saying that our Environmental Education Adviser has not been in the school in eight years." David put this distanced relationship down to the traditional "laissez faire" nature of their LEA and advisers. Their county "had never had county policies on anything.........They allow a great variety of schools from the most progressive to the most rigid.......They are going to leap in at inspectorate level." That would be the LEA's "first input into schools. They are going to miss out on the advisory role and are now planning how to inspect schools."

Eric thought that children in the county had "a real choice" because there were significant differences between local schools both in the type of education offered and, he added, in its quality.

C. Geography.

1. David admitted, "Any subject department in the Sociological Faculty has a difficult status because its not taught a great deal as a single subject." Geography appeared as an option course for 14-16 year olds and again at Sixth Form level. Elsewhere Geography formed part of the 'Inquiry' course for students in their first two years and then as part of the core Social Studies course for the next three years.

Eric found this a disadvantage "in terms of signals kids get. Somehow or other they always know when they are doing History in 'Inquiry' because anything of the past is historical. It's easy. What they are not conscious of is the enormous quantity of Geography that they are doing and quite often getting very positive feedback from. They don't see it as Geography." Pupils coming into the school and even those making option choices in their third year had "a very very dated perception of Geography. It is lists; it's names of mountains; it's rivers..."

Those who opted for Geography as a single subject came from right across the ability range but varied from year to year in group size. The variability created problems for the HoD. "It's very difficult. The take-up at A level is very variable as well." They had been doing the Bristol Project
course but changed in the previous year to a two-year version of a one-year mature SEGs course. The Bristol Project had fitted the school philosophy but for candidates to gain the higher grades a great deal of factual knowledge had been required as well as skills and interpretation. The HoD had found this difficult to provide in a mixed ability situation without favouring the more able.

2. & 3. Reflecting upon recent trends in Geography, Eric noted that his department had introduced environmental awareness and had moved towards issue-based enquiry learning. They were planning a new module for a Humanities option on environmental problems. All this came from an interest in 16-19 Geography. The other initiative mentioned was a successful development of local studies again issue-based "helped enormously through fieldwork and projects for GCSE and for A level."

5. The LEA organised a Geography conference once a year which Eric as HoD had attended two or three times but had "not found terribly stimulating. We have a 16-19 consortium in the county which is now big, in fact so big it has split in two. The consortium was still growing and would probably divide into local groups. This was one fruitful source of curriculum ideas. "But quite honestly, after a bit you start to spark up your own ideas.....its self-generating."

D. Innovations.

1. There did not seem to be any formal procedure for changing the curriculum within the school or faculty. Eric's analysis was that changes were made "on your own" meaning that "any one who was running the course in that year could sit down and write it. I suppose there's a lot of trust there and it would probably be discussed..... I don't think its something that someone would go off into a corner and do secretly. ......We get on quite well together as a team."

2. & 3. He also detected some ambivalence on the part of the senior management team. "I think the school wants curricular change but it doesn't exactly encourage it particularly. Does it?" To which David replied, "Although whenever the Head is talking about the school he will use Humanities, Social Studies enquiry areas to say what is going on because we are the inivitae area." Eric interjected, "But there is not a structure within the
school.... not even to force the pace but to sustain the pace of change. In fact we see some faculties ...... which don't change."

David thought that the Science Faculty and their own were the inviative sections together with English which had recently become more radical. The system perpetuated itself because each faculty "socialised" probationary teachers into its activities. Probationers in Humanities were drawn into a system which encouraged new ideas. The faculty's curriculum was under constant review in respect of balance, a progression of skills and course coherence, but also changed because teachers got bored with syllabus items.

The core integrated humanities course was 100 percent internally assessed for GCSE and it was easy to change elements of it. Initial anxiety over the proposed National Curriculum Programmes of Study had now largely been dispelled by reading the early reports. Their main concern was whether to offer Geography courses or modular courses with elements of geography and environmental studies. Eric had reservations about geography as a single subject. "We are less consciously teaching Geography than we are teaching about environment..... Geography is a high status label, environment tends to be, in schools anyway, a lower although it is probably raising its status....I don't think there is any justification in middle school for offering an academic geography course. It's different at A level."

E. Own Status.

1. The influence of staff was answered in terms of numbers. There were five students in the Upper Sixth, twenty in Lower Sixth and they estimated an intake of 10 next year. It depended on students' experience in lower school, on the quite large numbers coming in from other schools

2. Eric's ideas came from 16-19 consortium meetings or were self-generated. (See Geography paragraph 5.)

3. Pressures were currently associated with the merging of their school with another. This involved a good deal of building work on site with its noise and dirt. A reorganisation of faculty rooms had meant the wholesale moving of resources and the amalgamation of staff and students was yet to come.
4. David thought that his next career move would be to Deputy Head although he was not convinced that this was what he wanted.

Eric admitted to being older than his colleague. He had been in teaching twelve years, eight of them in St. Benet's. He was on an Allowance B but had no idea about his next move.
INTERVIEW No. 5.

The interview took place in an 11 to 18 city school in the West Midlands on 15. 7. 89. The Head of Department has been dubbed Frank Casey of Evergreen Comprehensive School (Research Code No. 54). Frank, an Eccentric project adopter, scored -5 in the multiple-choice test for congruence of perception. He was an Early Adopter.

A. Education and Teaching.
1. Frank was asked how he would assess the progress made by education over the past decade. He replied, "It all depends on what mood I'm in. I come home some nights and I'm incredibly optimistic about things. I think we're on the right way..... all the theory is actively becoming practiced. Other times..... I'm quite pessimistic about what is happening; about whether things have, in the classroom, changed that much; whether we're just saying we're making changes..... I think there are some things we've become better at. We're a lot better at involving kids in looking at issues in geography and that has become much more central to our teaching."

2 & 4. Frank saw his main problem as "trying to motivate staff." "It probably dates back to, in fact the industrial action probably brought it to a head. For all sorts of reasons staff don't seem to have the enthusiasm that perhaps we had a few years ago..... I think to a certain extent people are like rabbits in the middle of the road with the headlights coming towards them. Some people outside our area are dazzled by the amount of things they are supposed to cope with. Some people are getting on with it well..... The cynical view would be they've got to because they're post holders. They have positions of responsibility within the school structure. Then there are a lot of people on M.P.G. who see no future for promotion, see their efforts not being recognised by parents, by kids, by the Local Authority all the way up to the government. It has evidence in pay awards and a lot of people are generally fed up; are doing what is required and no more."

3. Was this a new problem? Frank said, "Yes. I think so. I mean we can all reminisce about the halcyon days of the past but I don't see the amounts of extra curricular activity going on that there used to be. After school activities don't seem to happen as much. People don't seem to take kids away as often as they used to...... Actually the staff car parks are emptying a lot earlier at the end of the day than they perhaps did ten years ago..... I'm quite optimistic and
quite enthusiastic. I think a lot of people are but there are a lot more people who are fed up with teaching than there were in the past... a lot more disillusioned."

4. What sort of teachers get promotion? "I see good people around who I know will probably not get much further than they are because of poor interview technique. The sort of people I hope would get promotion are the good classroom practitioners. They're people who do a good job of teaching kids..... who lead by example in terms of lesson preparation ...enthusiasm.... motivation. They can get other staff to work with them and for them." When asked whether this should happen or does happen Frank replied that he thought it still did to a large extent. "I've got to be the world's greatest expert on going to interviews. By and large I've always felt that the people who got the job in preference to me, they've given it to the right people. The messages they (the successful candidates) have given off on the day to me are (that) they are people... who are good classroom teachers, ...enthusiastic about teaching.... about their subject... about schools. But its got to be more than just enthusiasm. they've obviously got the ability ....a grasp of what the problems are" in managing a department.

B. School and LEA.
1. "Because of the nature of our school serving a large council estate we can never lay claim to producing academic brilliance. There's some very good teaching going on at our school. Run-of-the-mill teachers probably would not deserve because of the type of kids we've got. I think the image we try to project, because we are a small school, is one of a caring school. I guess all schools say that but we put a lot of time into that. For a small school we have a large number of incentive allowances wrapped up with pastoral work and there's a lot of going out into the community.... home visits ....visiting neighbouring (primary) schools." Frank did not know whether there was a conscious policy by senior management to project a certain image but he thought "caring" in an active and outgoing way would be their priority.

2. When asked to deduce the concerns of the S.M.T., Frank expressed concern about the S.M.T. "Up until last year when there were changes at the top, our senior management team has been divided and openly divided." He went on to paint a picture of internecine hostility; mainly one "incredibly divisive" Deputy Head openly criticising the actions and policies of other members of the S.M.T.. The reactionary Deputy and his followers had a definite but limited vision which boiled down to achieving quiet classes of students who
were passive recipients of the curriculum. This faction believed that their responsibilities did not extend much further than the classroom in direct opposition to others who espoused "a more sensitive approach to education but did not have as much political clout." Frank gave the example of the school's commitment to Records of Achievement which was undermined because the devious Deputy was responsible for the time-table and saw to it that no staff were released from teaching to prepare and execute work in this area.

Frank went on to describe the priorities of the S.M.T. since the departure of their reactionary Deputy. "I think it's clearer this year. There's more of a coherent view of what the school is trying to achieve." He praised the work done recently on Records of Achievement and cited their new style report forms.

Later in the interview Frank mentioned the concern of his Headteacher, an ex-Head of History, for the negative effects of modularising the history syllabus.

3. Focussing on the weaknesses of the school, Frank thought that the S.M.T. had still not "developed... a strong picture of what they are trying to do overall. They can see some good work going on in science which undoubtedly is the strongest area of our school." He believed that the S.M.T. had also identified weak faculties but had not devised a plan for upgrading them. Even their Records of Achievement were not integrated into the mainstream teaching. "They haven't seen the link in or they have made no conscious effort to get Records of Achievement as part and parcel of the mainstream curriculum." Frank thought Evergreen School still lacked a general coherence.

Questioned about recent LEA proposals to close the school, Frank appeared phlegmatic. "Our school has been threatened with closure since before it was even opened." He thought the threat ought to bother him but it did not. "We're going to lose, I hate to think, how many thousand pounds under LMS. We've been threatened with closure once already and that's been fought off. We've lived under the threat.... for so long ....... eventually you don't feel the pain." He thought the campaign to save the school had had a beneficial effect of forging links with the community. Most staff had now closed their minds to closure on the other hand they were aware that the introduction of LMS would reduce the number of Incentive Allowances.

4. On the subject of staff relations, Frank stated that the devotions and back-biting apparent in the S.M.T. "has
bred throughout the school..... It's a little bit like East Beirut, our school, sometimes.... You get a faction forming here, a faction forming there." However since the departure of the devious Deputy, Frank felt that the fractionalisation of the staff had disappeared and that staff were pulling together. "Yet most significant curriculum developments have taken place within departments." With the exception of RoA., he could think of no developments which had been interdisciplinary. "Having said that, the staff do work well together." He admitted that "People tend to stay in their faculty areas" except at morning break. Frank knew that staff mixed socially across faculties at other times but did not meet for professional reasons.

5. Reviewing the LEA's work in geography, Frank referred to the "amazing amount of time" devoted to the 14-16 curriculum and to setting up modular courses in particular TVEI. Out of this drive for modularising the curriculum had come Modular Humanities and other 14 to 16 modular courses. "There's been a lot of stuff geared to that age range and reflecting that sort of approach." Frank felt that modular courses were necessarily linked to RoA.. Some work had been done on Equal Opportunities but it had not been accorded the same status. "I wonder if it's just been lip service."

6. Frank felt that he had been well supported by the LEA. "I have no complaints about the LEA and its officers. They have always been very honest with me." He referred to support from advisers with money and time made available to him for 14-16 curriculum development.

C. Geography.
1. By means of LEA support and his own efforts Frank believed that he had vastly improved geography teaching in Evergreen School since his arrival. "For all sorts of reasons geography was in a bad state and we've turned that round to being one of the strength areas, one of the jewels in the curriculum crown." He thought that geography was highly regarded by school staff, students and the S.M.T. but that there was now some concern about the good work was being eroded by the adoption of modular humanities courses.

2. Frank was wholeheartedly in support of the philosophy behind Geography 16-19 and the trends it was setting. He had willingly joined a consortium arrangement with a neighbouring school. "1984 was when we first piloted it in the city." The numbers of students attracted varied from year to year. Frank had been away on a temporary posting in the year prior to the interview and gave this as one reason why the numbers in
their current Lower Sixth geography class were disappointing. The Upper Sixth he regarded as the best year with six students following A-level geography "which probably doesn't sound very much...... but when there are only 12 or 13 in the sixth form in total" it was good. Geography was the most popular course.

3 & 4. For Frank the trend in geography was towards more issue based learning and this was why other exam. boards should be asking why Geography 16-19 A level entry numbers show "a curve which is shooting off the graph and they are just about holding par." He thought that the project would pressurise other A level sylabuses into adopting issue and enquiry based learning with a large element of course work. It would herald a more imaginative approach to teaching, assessment and syllabus content. Geography would probably contribute to more multi-disciplinary courses such as BTEC and to a broader based sixth form curriculum.

He was not pessimistic about the effects of the National Curriculum in general. Although he thought it may have an adverse effect by way of assessment. "There's such a strength of feeling amongst modern and progressive geographers. ..... that it's going to be very difficult to turn the tide back." Frank firmly believed that those who had developed recent progressive projects would greatly influence the shape of the National Curriculum.

5. Frank did meet with other Heads of Geography on a regular basis. The city had a Geography Teachers' Association and an active adviser/coordinator and he attended both sets of meetings regularly.

6. He was not a member of the local Geographical Association.

D. Innovation.
1 & 2. "There has got to be a reason for innovation. I wouldn't innovate for the sake of it. I would innovate .... because it's going to improve the quality of what's there." Frank added that his department had made major changes because the quality of the curriculum was not good enough and in consequence examination results had been poor. From his experience necessity had dictated change. Therefore everyone involved had seen the reason for it and had cooperated.

3. Does Evergreen welcome change? Frank said, "The approach of the S.M.T. is one of caution but having said that they have never stopped me doing anything that I have wanted to do. They have delayed it. I wanted to get Modular Humanities
into the school and they delayed that for a couple of years. They were quite happy with changes to 14-16... 16-19... the 3rd Year curriculum. I certainly wouldn't go off without consulting them first."

4. The trials and tribulations of innovation were worth it to Frank. His reasons were. "To pat myself on the back. I just want kids to enjoy geography." Student behaviour in class and attitudes to the subject had been poor. This had been reflected in the numbers opting for geography and in results. "And to be honest it's your own self-image isn't it. You always want to be seen in a good light."

E. Self.
1. Frank considered that he had virtual control over the geography curriculum with the proviso that he could present the S.M.T. with a cogent argument for change. He also took advice from LEA representatives.

2. He did not get his ideas from the LEA though. "A lot of the ideas I had on education and what geographers should be doing I had before I came to Evergreen School." The LEA may have developed and assisted his ideas. Previously he had worked for a very large LEA and had seen very little of the advisory service. "If I had to point to one thing that has influenced my teaching, I'd have to look to the Avery Hill Project which I got involved with very early in my teaching career." Prior to the industrial action meeting other Heads of Geography and "bouncing ideas off them" had "been a great source of ideas."

3. Frank did not feel that he was under a great deal of pressure at present but he suspected that this could change when the final orders came out for implementing the Geography National Curriculum. He suspected that pressure too could come from a department member who saw no reason to do anything more than teach in the classroom. He felt that changes enforced by LMS could also create pressure. The nature of the children in Evergreen presented problems for some teachers and this again could be a source of pressure in the future when teacher appraisal was introduced.

4. Frank had a singular promotional aim. "My next move will be Head of Humanities." Nothing else "not if I'm going to stay in teaching." However he thought it unlikely that he could leave teaching because he was in his late thirties. "I think (about leaving) on a bad day when the kids have been playing up." However most of the time he professed to enjoying his job.
INTERVIEW No. 6.

The Head of Geography in this case was given the name Mary Nelson of Southside College (Research Code No. 4), a city college in the South-west of England. Mary scored -7 in the multiple-choice test for congruence of perception and was therefore an Eccentric project adopter. She had been a member of the local Geography 16-19 piloting team. In the time between completing the questionnaire and the date of the interview (20.7.89.) Mary had gained promotion within the college to a post equivalent to Head of Faculty.

A. Education and Teaching.
1. Mary had mixed feelings about the trends in education. Her view was "Well, generally optimistic in terms of the curriculum things that are happening and I suppose in a way pessimistic because its all become rather chaotic and so many changes all at once." She welcomed the changes but thought the pace excessive. "The things we're trying to do in FE at the moment have improved certainly; dramatically over the last ten years."

2 & 3. A major problem was this speed of change. "We're implementing changes before we can evaluate how well we did with the last one." Resources were not a problem. She had made a point of "getting into 16-19 early as it was very much a free-for-all." By this tactic she had acquired resources. Moving the faculty to a purpose built building would further assist their teaching.

4 & 5. Mary thought that there was scope for personal advancement in teaching although she cited an example of a friend who had had to subject himself to years of form-filling and interviews in order to achieve it. Some people were lucky because opportunities presented themselves but "obviously the people who move into them are somebody (sic) who is seen to be making a contribution. It doesn't just happen by accident. Although I've known a couple that happened like that." She believed that promotion was much more competitive these days. The processes involved were more rigorous and more open.

B. School and LEA.
1. "The college's mission statement is 'Caring for your Future'. But being a community college is the ethos of the college and the college is located in a working class and a very high unemployment area in a city with low unemployment.
So it's fairly unusual." Mary pointed out a conflict in the assumed purpose of Southside College. It was keen to become involved with the local community but with the advent of LMS "obviously up-market courses are the way of earning money for the college". The "much more professional, much sharper image" needed for the latter market was inclined to deter enrolment amongst local people.

2 & 3. "One of the strengths is that the lecturers in general very much care about the students. Lots of students have said that.... I think the weakness is that I've being saying about change, the change I meant then was national change, but the college has been through as lot of local change." The LEA had made two attempts to make Southside into the tertiary college for the area. Both attempts had foundered but Southside was now "tertiary by default" within a loose federation of schools and colleges some of which chose not to recognise the arrangement.

"We've had a new principal who's been here two years... He's instituted a lot of changes, the whole organisation... that's how I managed to move up.... We're expanding. We've had to put courses on another site. Everthing's changed and I don't think the internal organisation has caught up with all the changes.... We're not as efficient with the students or the admin."

4. Mary thought that Southside was "a very friendly place to work but also there are lots of separate little enclaves... There are now, I don't know they keep changing the divisions, but there are 12 different curriculum divisions, three of which work very closely together to deliver GCSE and A level." Mary said that some staff taught across the divisions and that there were signs that other divisions were beginning to integrate.

5. The fact that Southside was getting a new building was evidence to Mary of LEA support yet she was wary of Greeks bearing gifts. "Of course now with the LMS coming in and anxiety about NAFE reviews and anxiety about whether we're this and how we're going to keep our market share of that. But that's the LEA looking at all colleges, playing one off against the other."

"We did have an excellent adviser but he died.... He did do a lot for geography in the area and I'm not sure that he's been replaced... It was him who involved me in 16-19 in the first place, him who got us given extra resources..."

"I don't see the LEA though supporting any particular
(initiative) in FE anyway because the advisers are mainly for schools .... I mean OK it or something like that."

C. Geography.
1. "In general at 16-19 the college doesn't get the best quality candidates because we're in competition with the sixth-form college, the catholic sixth-form college just down the road and with other colleges.... many parents aspiring to middle-class send their kids out of the area to secondary school and they stay on.....the results in the college are good .... better than the sixth-form college." Mary went on to say that results had not been good with the previous A level syllabus. The examination papers had not allowed their students to achieve their potential. Even with the 16-19 course which was much more suitable yielded widely varying results over the years but had recently been very good. A typical geography group would have 20 students in at the beginning of the course but would lose some. The SUJB Geography evening class on the other hand would start with very few but pick up numbers as other colleges closed their small group courses. For these reasons Mary put the status of geography on a par with maths. and other subjects of the college curriculum.

2. Mary's reasons for changing the day-time A level course were mainly because of criticisms of the then Chief Examiner SUJB Geography. "The papers are better now because the Chief Examiner has changed. But the previous Chief Examiner used to try to set as esoteric questions as possible. I wouldn't have said it was more academic. It was just often quite esoteric." Anxiety was created by uncertainty as to whether the work done with students was going to be relevant to the final papers. Mistakes had been made by the board. "They weren't supposed to specify regions and they actually named countries one year. I mean they made a real mess of the exam. paper and had to remark all of them."

3. Late in the interview Mary referred to the evolution of 16-19 Geography teaching. "I think one of the things people do at first is to throw out a lot of the theoretical geography and certainly I found that it should go back in. Because if you read the questions unless you've done a lot of the theoretical geography students will not produce particularly good answers... We've been through an evolutionary cycle but.... I certainly think people enjoy it more." She complained that physical geography was under represented in the syllabus and felt that there was scope for putting in still more general theory. She criticised too the routine way in which issues were handled. The skills
acquired from the first example could be applied to all the rest. Recent changes to GCSE geography meant that students had covered much of the content of the 16-19 Project albeit in less depth. Not only did this repetition reduce student motivation in some cases but it also also reduced the breadth of geographical learning over the 14 to 19 age range.

4. She saw merits in the Geography 16-19 course but felt no desire to change from the new SUJB syllabus evening course which she also liked.

Referring to the delivery of Geography 16-19, Mary said, "I tend to integrate lectures and notes in with enquiry-based work. I tend to mix them all the way along... I didn't feel that at 16-19 you have to have enquiry-based learning all the time." She did this to deliver more in the time allotted which was a generous 5 hours per week.

5. Did she meet with other Heads of Geography? "We've just set up a 16-19 sort of support group. Our regional coordinator... wasn't doing a great deal. We felt a need now there are a lot of people in (the region) doing 16-19... We felt we needed the stimulus of meeting other people." The project's national coordinator had been very helpful in setting up the group. Southside's new Head of Geography now had the responsibility for liaising with the support group. From this and their own efforts, it was hoped to create a resource bank within the college.

6. Mary did used to attend the local GA meetings, belonged to the National GA and usually attended its annual conference. She was until the previous year on the FE sub-committee of the GA.

D. Innovation.

1 & 3. Mary had had a free hand to change the A level course to the 16-19 Project. As then Head of Geography she had consulted the other A level teacher who had been in favour. She had then informed her immediate superior in the old college structure, the Head of General Studies. "He was somebody who let you do pretty well what you (wanted to do). He liked you to ask. You know." She thought that FE colleges had more freedom than schools when choosing courses. "The college's policy had always been to let lecturers choose whatever syllabus they wanted to deliver their subject."

2 & 4. Mary appeared to have had a very pragmatic approach to change. She would embark upon it if things were going wrong.
However she claimed that her positive experience with piloting the 16-19 Project had given her a new perspective. They were not considering any syllabus change because the project was new to the present Head of Geography. "She's very keen and it's all new to her. I've just about got to the stage where that was the bus that came along... it's time we got on a new bus. .... I had a lot of advantages being in at the beginning with that." She expressed an interest in looking for an extra new market for geography rather than changing their current courses but was not specific. As for the SUJB A level put on for the evening class, that would have to change because the take-over of SUJB by the Cambridge Board was forcing its closure. She had two ideas for its replacement but interestingly neither were London 16-19 Geography.

E. Self.
1. What influence do you have on the curriculum? Mary had answered this as part of Innovation Question 1 when she had related that question to her own circumstances.

2. Mary said that she gained her innovatory ideas from several sources including local and national GA meetings. She specifically mentioned the FE sub-committee of the GA as a good source of ideas although she had recently left due to pressure of work. Ideas had also come from her past membership of the SUJB Panel for Geography.

3. Pressure of work at that moment was coming from the administrative duties of her new job. "Because of the reorganisation nobody has a specific brief for GCSE and A level as a whole. I seem to have been left holding the baby this summer." She had no current problems with geography curricula but foresaw a perennial problem recurring at the beginning of the new term that of trying to get enough students in order to run classes. Also "keeping results up so that we can keep everybody's jobs and keep the college running...... The best marketing or publicity is by word of mouth. So you've got to keep up doing a good job."

4. Mary regarded herself as a Southside person. "I've been here for 17 years..... and I see (myself) being here another 17 years probably... I quite like being here." She had recently applied for one of the Southside Director's jobs but had been unsuccessful. She did not want to move out of the area or to travel far to work.

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3. Case Studies of Two Differing Institutions.

By means of questionnaire analysis good examples of Authentic and Eccentric Heads of Geography had been identified. Three from each category were selected for interview. After this stage just one Authentic and one Eccentric were revisited in order to construct detailed case studies of their working environments.

The initial interviews with the six institutions had revealed histories and organisations which were very different even within the two categories. A choice of any Authentic and Eccentric school or college from the sample would have provided both contrast and a wealth of useful data. The final choice was therefore decided on accessibility both in the geographical sense, a location within the West Midlands, and the institutional sense, a willingness to meet an outsider and communicate information.

The choices for case study were Scholefield Sixth Form College (Authentic) and Evergreen Comprehensive school (Eccentric). The second set of visits took place in July 1990 and incorporated interviews with the Headteacher and Deputy of Evergreen and the Principal and Vice Principal of Scholefield. The respective institutions were toured and facilities for geography teaching were seen. Useful literature including prospectuses were obtained. By good fortune a further source of written information for both institutions was available in the form of recent HMI reports. From these sources it was possible to put together the following descriptive case studies which were intended to provide further insight into why authentic and eccentric project adoptions occur.

CASE STUDY 1. Scholefield Sixth Form College.

Scholefield College has an inner-city location symbolically on the border between a newly redeveloped area and the remaining twilight zone of old housing and industry. It was redesignated as a sixth form college in the early 1980s and has been trying to overcome the poor image inherited from the secondary school which formerly occupied the building. From an initial intake of some 270 students (75% male) numbers have grown to around 800 with a more even gender balance.

A report of the City Council Finance and General Purposes
Sub-Committee (19.5.81) on the Future of Education recommended the planning of a system of colleges for the over-16s. Colleges were to be of "equal standing" and "equal advantage to students" and were to have a policy of "open access". The colleges have been set up but the hoped for equal standing has not materialised.

Although Scholefield College takes students from all parts of the city its local catchment encompasses areas of social and economic deprivation. To combat the low staying-on rate traditional in such areas the college has had to provide a variety of courses tailored to the needs of the local population. Consequently the normal three A level package caters for only a minority of students. According to the Principal, "Scholefield is perceived as a non-A level college but we run a greater variety of A level courses than other colleges". However, "Thirty to forty percent of our students are on GCSE courses". In addition courses in CPVE, performing arts, recreation and sport have been introduced and many are well-established. The Vice-Principal noted that there were advantages in starting from scratch, "No legacy of old syllabuses. No A level courses in existence". As a result, both SMT and staff have come to regard curricular innovation as a necessary process for growth and survival.

The college is atypical in yet another respect. A high proportion of students come from families of New Commonwealth origins. Some 65% are Asian according to the Principal who regards the college as "a microcosm for city diversity". So teaching mother tongue languages and making provision for students whose first language is not English is a further extension to the traditional sixth form curriculum. There are three noticeable consequences deriving from the college's multi-ethnic character. Firstly the professional development programme has to prepare staff for teaching students for whom English is a second language. Secondly students often enter the college to improve their English or to gain basic qualifications. Many stay on to acquire higher qualifications but by then are older than sixth formers in other colleges. Thirdly, in the words of the Principal, "From the beginning English was given the same status as other languages". To ensure this, A level courses were pioneered for Asian languages.

Mechanisms for the management of change seem to be efficient and well-understood. HMI comment that, "The management structure in the college is clear and known to all". "Staff meet on a regular basis through the pastoral
and academic structures. The Central Senior Council is the main policy forming group". However the Vice-Principal confided that there was more than one way to introduce change. She identified the "formal, official method" noted by HMI whereby "A Head of Department consults a Head of Faculty. This leads to a meeting where a proposal is made and the Head of Faculty asks about the staffing and resource implications, in other words costs. The proposal then goes to Senior Council for approval".

"There is an informal way which starts through Block 5 Extension Studies. They see what the market is for a new course and can offer it as an option. In time it can grow to a GCSE or an A level". The third "backstairs" method was "where a Head of Department develops a course unknown to the SMT". The Vice-Principal added that curriculum development had been rapid and "was encouraged in order to provide progression". It is probable that she was referring to the two official methods.

The college building itself is multi-storey, functional rather than attractive. Inside bare stairways and shabby corridors do nothing to assist the community ambience for which the college is striving. However the large geography teaching room has a pleasant atmosphere and had basic equipment although, as HM Inspectors pointed out, "there is limited storage" and "limited display areas".

Geography was delivered by two "appropriately qualified" teachers. Significantly both had high status within the college. Andrew King, the subject head, was also Head of Faculty. In this latter capacity he was a member of the Central Senior Council, a body responsible for sanctioning both curriculum and monetary decisions. The council was chaired by the other geographer who was also the College Principal. He was described by the Vice-Principal as "an enthusiastic geographer". The Vice-Principal labelled Andrew King "ambitious" and appeared to encourage this trait.

Resources for the Geography 16-19 A level course were limited owing to the way funds are distributed within the college. The Principal explained, "We have formula funding based on numbers and an expense weighting, 2 for Science, 1 for English, 1.2 for Geography". The small number of A level geographers, five at the start of the course, did not attract much allowance.

The limited nature of resources led HMI to question the future viability of the course. They suggested that if it
were to continue the college would need to provide a wider range of resources which they listed. Despite all this their report did allude to the good quality of teaching and observed that "students are required to work independently in the main". It can therefore be inferred that departmental teaching methods adhere to the Project's enquiry-based learning praxis.

The Geography Department has problems beyond those of small student numbers and limited resources. In general the college has a high proportion of students disadvantaged by poor English, for whom English is a second language and many come with poor GCSE results. Pastoral staff put much effort is put into overcoming "a basic lack of confidence" which the Principal observes "particularly in the older students". For this reason more than any other the drop-out rate is high.

Candidly or perhaps defensively the Principal said that "as a generalisation geography is a third A level. The more able students do history and RE". Moreover "There is a popular prejudice against social sciences in our main feeder schools. So we are trying to sell an undervalued subject". These sentiments run counter to lines from HMI's report which state that, "These (A level Geography) students are well qualified to undertake work at this level and are also following A level courses in a range of subjects". However two of the original five students have since left before completing the course so perhaps the weight of evidence is on the side of the Principal.
CASE STUDY 2. Evergreen Comprehensive School.

Evergreen School is situated on the edge of a large city in the West Midlands. It was purpose built in the mid-1970s to serve a large municipal housing estate itself built in the immediate post-war period. The school building looks modern, well-maintained and attractive. The site is also pleasantly green.

The school only briefly achieved its intended six form entry target and has recently declined to four (less than full) forms. The children come from an area of high unemployment and greater than average social problems. Few are from ethnic minority groups but the ability range of the intake is skewed towards the less-able. These factors make the task of teaching more difficult but there were, at the time of the enquiry, some compensations. Class sizes were smaller and teachers had less student contact time than average for the city. HMI were uncritical of this in their report stating that, "there are problems of behaviour and motivation in the school which increase the stress on staff and would justify a lower contact ratio".

The HMI were sharper in their tone when describing staffing and management e.g. ".... only one of the 15 most senior posts is held by a woman". "The school does not have many experienced staff". ".....the Head is assisted by three deputies".

Discussion with Angela White, the second deputy (the female) left the impression that she was progressive in her educational ideas, well-informed and concerned about the development of both the curriculum and individual children. This was not the image projected by either the headteacher or his senior deputy. There was no evidence to doubt the assertion of HMI that, "Senior staff have a clear view of the curriculum as a whole". But both appeared rigidly mechanistic in their management styles and displayed a 'no nonsense', disciplinarian attitude towards students. In fact the subtleties of interpersonal relationships seemed to be entirely missing from the deputy's modest store of social skills. It was not surprising to learn from other members of staff that the head and senior deputy worked closely and formed a duopoly of power over the rest of management. In discussion with a small number of staff some disquiet was discernable about SMT management style, its decisions and the power of one deputy.

The school was planned so that faculties have their own
separate specialist teaching areas. Faculty meetings were, as HMI report quotes, "attended by deputy heads and major curricular initiatives as well as more routine administrative matters are discussed". This has led to what may be called centre-periphery lines of communication. The structure was not entirely satisfactory and brought comment from HMI that, "Whereas the lines of communications between senior management and heads of faculty are clear the opportunity for cross curricular contacts could be improved". They also recognised that, "Each faculty has considerable autonomy in the deployment of staff and the organisation of teaching groups".

Within the Humanities Faculty, geography was largely taught by two specialist staff. It was evident that the Head of Geography, Frank Casey, was well-organised. Resources and students' work were filed or stored neatly in cupboards. Geography was one of only three subject areas to be praised by HMI for "a high standard of visual presentation of relevant information and work by pupils". In class Frank displayed a good working relationship with students. and resources provided for his students were of a high quality. Unprompted both headteacher and Mrs White attested to his professional competence. Mrs White admitted that the previous Head of Geography had left after a nervous breakdown and two years of inconsistent attendance. The department had been in poor shape and "geography was low in the option system". "Frank was appointed to turn the department round which he has done. He had an Open University degree. He had done some study and had a broad perspective". Frank was aware of the high esteem in which he was held yet on this second visit to his department he reaffirmed his wish to gain promotion and move to another school quickly.

The second geography teacher was a recent appointment. Her predecessor had been a young teacher in her first teaching post. Angela White remembered that this young teacher had begun her probationary year at Evergreen in the school year 1983/4, replacing a "good" teacher of some experience. This staff change was contemporaneous with the department's efforts to introduced the Geography 16-19 A level in consortium with a neighbouring school. The year 1983 was also important for the school as a whole. After HMI's report was received early in that year, there was a radical reappraisal of school policies and a gradual change in the way it was run. Angela White was pleased to elucidate the new order of things and from her descriptions it was possible to reconstruct something of old order which existed around the time of Project adoption.
To begin with there was a powerful force from outside the school. The LEA adviser for humanities saw Evergreen "as fertile ground for the revivification" of geography. He was "the prime mover" in introducing new courses and had an ulterior motive. "Geography 16-19 was an instrument for sorting out the department". The adviser gave "commitment and status" as well as funds for "good quality resources". With the benefit of hindsight Angela could see that the probationary teacher had gained a great deal from "working with others particularly on assessment".

There were few obstacles to innovation. Among the staff, there was "no rump of traditionalists" but "all new staff in the area". "The Faculty Head is not over-bearing. He is an open character with a 'let flowers bloom' philosophy. In any case humanities has less cohesive subjects than science". So "Ideas flow and then are sanctioned by the head".

Although the deputy head saw no obstacles in the way of change she did recognise tensions. "There has always been conflict between the labels geography and humanities. In many ways there is a separate empire in geography". At Evergreen "Geography is integrated in Years 1 and 2 then separated in Year 3. We now have modular humanities in Year 4". Mrs White identified change itself as a source of conflict. "People fight their corner" for time and resources "especially with National Curriculum coming". "Geography has an uncertain definition. So change is more likely and therefore tension". She said that departments were "receptive to outside bodies" adding significantly "which fit in with their views. There is resistance to innovation if it does not meet their ideas".

Over recent years the city council's need to reduce expenditure and make cuts has often brought debate about the possible closure of Evergreen along with other small schools. All staff were aware of the civic sword of Damocles and this may be part of the reason why Mrs White was acutely aware of competition and market forces. Inter-department competition in the subject options was the first to be cited. "Subject areas are aware of their image and there is cultured competition between them. We have some good popular departments who sell themselves well". She went on to say that since Frank Casey came the uptake for geography had increased at the expense of history. However the introduction of modular humanities at the behest of the adviser had created problems. There was limited curriculum choice because it was a small school.
Modular TVEI courses had been promoted to increase choice, to provide relevant learning and to attract funds. At the time of the adoption of Geography 16-19, funds were awarded to faculty heads who had allocation rights over them.

Inter-school competition for students also featured in the discussion. The deputy thought that consortium arrangements for delivering sixth form courses were not good but added that without them "we would not have a sixth form at all". If Evergreen were to become known as "the only school in the city without a sixth form" it would be a tremendous handicap when recruiting students from primary schools. Frank was happy with the consortium link since it gave him a specific advantage. Evergreen's sixth form geographers were inevitably outnumbered by those from its consortium partner yet half the course was taught by Frank in situ.
CHAPTER 6.

DISCUSSION.

1. Discussion of Questionnaire Results.
2. Semi-Structured Interviews and Summary.

1. Discussion of Questionnaire Results.

The results from the questionnaire revealed that the sample of institutions and of Geography Departments was quite well-balanced with respect to type and size. There was an adequate sample of Project/Associate schools, early Project adopting schools and late Project adopting schools. The figures suggested that on average comprehensive schools had been quicker off the mark at adoption and implementation than Sixth Form Colleges. In some cases the will was there but barriers created delay as revealed by one late adopting Head of Geography in a Midland comprehensive school. "I thought about it for several years but had to persuade colleagues to participate and to seek finance for extra resources."

Project literature and interviews with project leaders suggested that LEA advisers and inspectors were given a key role in selecting schools to become Project and Associate members of the trialing organisation. The impression was also given that the advisers coopted Geography Departments with varying records of curriculum development; some which were experienced in innovation and some which were known to be conservative.

Analysis of Part A of the questionnaire does produce evidence to support this claim although it suggests that the conservatives are a minority of the respondents. This point is illustrated by examining the nature of courses being operated by schools prior to Project adoption. Before adopting the Project the great majority of schools in the sample (including Category A Project/Associate schools) were running what can be called 'progressive' geography courses for both 14 to 16 and 16 to 19 year old students. Their A level courses were overwhelmingly based on the systematic or mainly systematic approach to geography. Some
45 of the 69 pre-16 courses run prior to Project adoption were progressive and the important Avery Hill Project was as well represented amongst Category A, Project/Associate schools as in the other two categories. Some respondents added comments to confirm the progressive link they wished to achieve between sixth form and main school curricula, such as this from a Project school. "We wanted a course that reflected at A level some of the developments that had taken place lower down."

If the claim to varied innovation pedigree were true for Category A schools, then the figures should demonstrate a significant difference between the type of syllabus being followed in these schools and the type used by schools in other categories, particularly those of Category B (the early volunteers). Judging by this aspect there is no real difference. Why? Perhaps LEA advisers were only able to coopt a small number of reactionaries or they extended their 'arms twisting' to other reactionaries after the pilot phase or, perhaps the most likely explanation, reactionaries have an antipathy to educational research and in particular to the completion of questionnaires.

The written comments from Project schools did signal a wide difference in attitude to adoption. One respondent displayed less than boundless enthusiasm. "I felt duty bound..... [to adopt Geography 16-19]..... in any case as I had been in on the scheme since its inception." Another was slightly more positive. "Our school was involved in writing trial materials - hence it was logical to involve pupils in this A level course." By contrast other Project schools were delighted to be involved. The following two examples bear witness to this more positive and sympathetic attitude. "Being a very small department, two staff, we welcomed the chance to become part of a local group to discuss and develop ideas with other Geographers." Similarly despite a lapse in logic; "I have enjoyed being part of the project since before its beginning. The idea of a group of staff being involved with the central team was extremely exciting and stimulating."

Adoption of the Geography 16-19 Project and its educational philosophy does seem to have influenced departmental thinking. The sample results show a reduction in alternative geography courses offered to sixth-formers and a clearing out of traditional O and CSE syllabuses (down 35% and 71%) for 14 to 16 year olds. Many departments seem to have acquired greater clarity of thought and more coherent curricula. Of course there were many exceptions for many reasons as demonstrated by this comment from a
Project school. "The A level 219 SCP Geography [the Project course] is taught to our 2 year A level group. We still teach London A 210 on our 1 year A level course."

The speed with which departments moved from Project awareness to Project implementation is also noteworthy. For the overwhelming majority this happened within a period of twelve months, some within two terms. On occasions this was later regretted, sometimes without loss of face. "The decision to adopt the course so quickly was made by the previous HOD. On reflection I might have taken a year to plan the course more thoroughly." As nearly all had the intention of institutionalising the new course from the outset, it can be assumed that efforts at implementation were both serious and long-term. Part of the implementation, that of planning the course in broad outline (with the guidance of Project literature) is a comparatively straightforward task. However the design of schemes of work and the gathering of relevant resources seems, for the most part, to have been as an ongoing task through the first cycle or even longer. A quote from an Associate school HOD makes the point. "It takes time. I saw this before we started and its proving true that 2 or 3 cycles will be necessary before the course is running according to what I want." It is of little wonder then that the Board's offer to accredit a school-designed module was almost invariably ignored. In fact many questionnaire returns draw attention to the extra work involved in setting up the new course. This blunt insertion into the questionnaire from a Project school respondent gave vent to feelings shared by many. "Its bloody hard work! Without the back-up of an excellent advisor in Sheffield, the setting-up of a group to produce, up-date and change resources we would have been floundering."

The most frequent 'very important' reason given for Project adoption was the desire to find an A level syllabus which fulfilled the aims of the department. The popularity of this answer made be partly explained by logic. Aims come first in planning and from them all else should follow. Hence aims are likely to be perceived as important. An additional part of the explanation may be that progressive departments with progressive aims will be the ones to seek out new courses and as noted previously to set in place a comprehensively radical curriculum. As one Project school HOD expressed it. "A natural development following the curriculum changes planned and/or in operation in Years 1 to 5 (11 to 16)." In general though, Project/Associate schools were less enthusiastic about this answer than schools in the other categories. This provides
evidence for the presence of a small number of reactionary LEA conscriptees within the group. However it is also likely that Geography Departments in Category A schools did not have aims which matched those of the 16-19 Project at the time of its debut. Schools adopting the Project later may have adjusted their stated aims to incorporate new ideas, some of which may have come from the Project itself.

It is worth recalling too that some LEA advisers were more enthusiastic and supportive than others. The aims of this influential group were probably as important as those of individual HODs in some areas. This was particularly apparent for Sheffield from where several comments came to attest the positive effects of their energetic and concerted efforts. Again these quotes are from HODs in Project schools, one simply stating that, "There is a strong support group in Sheffield as a whole for Geography." Another details some of the advantages of the coordinated approach. "It was a great help to work with other Sheffield schools who were new to the project - for support, suggestions, devising option unit assessment items etc. Also useful to hear from more experienced schools." Unfortunately Project adopters in other areas were left to their own devices and some were openly critical of the general situation. A late adopter commented disapprovingly. "1. A great deal of hard work. Very demanding on staff and resources. 2. There has been a lack of support for schools adopting the project. Groupwork and a network similar to GYSL would have been beneficial. [We have been ] too isolated in the preparation of coursework assessment even though the single annual meetings have been useful."

The scope for employing modern teaching methods was regarded as very important by departments in Category A and B schools, less so by late-adopter departments. Again this generally ties in with the progressive approach expected from departments which adopt new projects. A similar explanation holds for HODs in Category A signalling excessive factual knowledge required and content specified in previous syllabuses as a very important reason for change. Even so some support the changes but detect a lack of consistency. "So far we have been disappointed with the exam. papers. They don't seem to reflect the aims and objectives of the syllabus. They do require a lot of factual knowledge and recall."

After analysing the rank order lists of factors influencing project adoption, it was stated in the Results chapter that correlations between the three groups of schools were good and highly significant. While this is true for the lists in
general, there are some interesting anomalies. One of these concerning the match between the aims of departments and the aims of the Project has already been discussed. Category A schools are again out of step with later adopters when considering the suitability of a new course for the ability of their students. Category B and C schools give this factor a fairly high rank of importance (6th. and 5th. respectively) whereas for Project/Associate schools it ranks 11th. No obvious explanation for this can be deduced from the questionnaire. Written comments which accompanied the survey returns suggested a range of opinion about the suitability of the Project. For some types of student there appear to be clear benefits. "We have had far more success with our one-year evening class students (mature) who have found it stimulating and interesting. They also seem to cope far better with the decision making exercises and stimulus material presumably because of their experience i.e. work and maturity." Whilst the course is seen as an advantage for mature students in one centre, the HOD in another refers to continued difficulty for sixth formers. "A very demanding course for students - viz coursework/individual studies - They need to THINK, to cope with general course content."

In general Category A schools were not so concerned about the ability of their students to cope with the traditional A level courses but one can only surmise the likely reasons. Are schools with capable students more inclined to volunteer for or to be persuaded to take part in pioneering courses? Or was it suggestibility; the influence of Project literature on later adopters? It will be remembered that Project publications gave the changing character of Sixth Forms as a major reason for producing a new A level course. Naturally Category A Heads of Department were also subject to the same 'Project propaganda' which could have retrospectively altered the relative weighting they gave to decision factors. A further factor will have confused the issue too. It has been stated that the average number of different courses run in each centre has declined significantly since Project-adoption. Nevertheless there is much evidence to suggest that departments catering for a wide range of ages and abilities still use more than one course. Confirmation is supplied by an Associate school HOD. "This department runs 16-19 in parallel with London A. We offer a choice of courses to meet the needs of different types of student."

Content overload in traditional Geography A level courses is rated equal first amongst factors influencing change in Category A schools. Overload is ranked 8th. in Category B
and 5th. in Category C schools. This sits uneasily with the evidence given in the previous paragraph. Heads of Department in Project/Associate schools seem to be saying that they were not unduly concerned about the ability of their students to cope with the old syllabuses but that they considered the content of the old syllabuses to be too great. Too great for whom? On the evidence not really the students. Perhaps the fulness of the old courses precluded active learning strategies. After all two of the change factors which rank first equal for this group are the desire to change teaching methods and the need to reduce the knowledge component. However student interest (ranked 13th.) seems to have been as high when the old courses were taught in these centres. Perhaps teaching staff may have found the content too onerous but then changing the course to provide a stimulus to staff (ranked 9th.) does not appear to have been at the forefront of the minds in the Heads of Geography Category A. Those adopting the project later seem more uniform in their attitudes to this issue. A typical comment was, "JMB [A level syllabi] B and C got the results but were only moderately stimulating for students." Some saw benefits in increased staff specialisation. "The modular approach gives the department the potential to use the specialist skills of everyone as input. Unfortunately the timetable is a constraint on this in practice."

The only explanation which can be squeezed through the crowd of contradictions and at the same time retain a credible shape is that Project/Associate Geography Heads thought that cutting syllabus content would allow teachers more time for other things. New teaching and learning methods could then be employed for the greater good of the students' general development, whether or not they increase the students' interest in the subject or develop the staff who use them. This interpretation also fits in with General Aims of the Project (Naish 1987) and with the view of one Project school HOD who wrote, "An excellent course both in terms of student involvement/response and teacher development."

The interpretation is given some further weight when the ranking accorded by Category A schools to other decision factors are examined. There is an implied criticism of their old courses' lack of relevance to students and their restricted approaches to geography (both ranked 4th.).
Not many of the schools in the survey were critical of the course balance or breadth (academic narrowness) of their old syllabuses. These were ranked 12th. equal. This is fair comment since the traditional courses did have a good deal of breadth which probably contributed to their alleged curriculum overload. They can also be defended as balanced courses although this assertion begs a question. Balance between what course elements? The questionnaire offered two examples; physical and human geography, small and large scale studies. The more traditional syllabuses could be seen to balance physical and human geography but there are other 'balance' value judgements e.g. between knowledge and interpretation or regional and thematic geography. As elsewhere in the questionnaire the item probably sacrificed depth in an effort to please the respondent with brevity.

Analysis of question 11 of the questionnaire produced another ranked table of decision factors. This time schools were asked to select those features of the Project which appeared most attractive to them. Here as in the previous question scores were totalled for each factor and for each category of school using the "very important" ticks only. The ranked order of factors for Category A, B and C schools were found to have a higher correlation than in the previous question hence there were fewer disparities.

It is not surprising that most Heads of Geography rated the enquiry approach and the man-environment approach of 16-19 Geography as very important. These two themes of the new course were the ones which differentiated it most from the traditional A levels and the ones which were most often highlighted in its marketing literature. In fact one issue of Project News (Number 8 April 1979) is almost entirely devoted to expounding the two themes.

Even so, there was a noticeable difference in the frequency with which Category A schools selected these as very important factors compared with Category B and C schools. The latter ranked the factors first and second while members of Category A ranked them sixth. Why this should be is not clear from the questionnaire returns but it does provide further evidence that there is something slightly maverick about some members of the Category A team. The overall preference of these Project/Associate schools was for the benefits of the new assessment procedures rather than the merits of integrating human and environmental aspects of the course.
The fact that the Project targeted the development of *general skills* in students and sought to provide them with opportunities to question *values and attitudes* was very important to most schools in the survey. All three categories ranked these two factors among their top four. Again these were innovative themes for an A level course and served to mark the uniqueness of Geography 16-19.

Reflecting on the four Project themes which department heads most found most attractive, it can be seen that they concern aims and methods. This is consistent with the analysis of data from the previous question where respondents chose the *aims of their department* and *teaching methods* as the most crucial factors influencing their decision to change courses. The evidence from the answers to both questions is that matters of course content and the practical aspects of its organisation and resourcing were important to fewer schools.

One possible exception to this neat conclusion that aims and methods outweighed all else in importance, is the matter of *assessment*. The lack of opportunity for school-based assessment in traditional courses was the factor (from question 10) which ranked equal second with department heads when they were making the decision to change their A level courses. The following question revealed that the attraction of the Project's assessment procedures, 5th. in overall rank order, was not quite so profound except among Category A schools where it again ranked second.

One omission from the reasons-for-change options lists (questions 10 and 11) given to HODs was a reference to student numbers. In Question 9 departments were asked how many students they had in their sixth form groups and it is fairly certain that those with fewest students would be most concerned about numbers. However some HODs felt the need to emphasise this point in written comments. "I came to [present school] from a 14-18 background to find a very old-fashioned approach, with falling student numbers, trying to battle with an ever enlarging syllabus. In two years the numbers have doubled, students are enthusiastic. We are free to go out as and when our double periods occur. I now need more staff or will have to restrict numbers." The evidence here and from Examination Board figures is that Project adoption in both small and large departments has created a more favourable climate for recruitment.
Summary.

The majority of departments surveyed were progressive by nature but there is evidence from the results of Part A of the Questionnaire that conservative departments unused to curriculum innovation are present in the sample. Schools seem to have implemented the Project very quickly and its introduction has caused other curricular changes within the departments. On average Category A schools seem to have views which deviate more from the norm than the other categories. However it is apparent that there was a high level of accord between schools over the most important reasons for changing courses. The marketing of the Project seems to have been very successful at informing users and at forming opinions.

It can be concluded from Part A (a) that Project Authentics and Eccentrics can be found in the sample, (b) that the scope for differentiating between Authentics and Eccentrics is limited because of the apparent success of the project and (c) that Category A comprises an interesting group of departmental heads likely to yield Eccentrics (see Hypothesis 2).
Analysis of Part B (i) of the questionnaire returns confirmed that LEA advisers were largely responsible for promoting Project awareness among Category A schools. Category B schools received their earliest Project information from a wide variety of sources but conferences organised by the Project team were the most important. Conferences and Project literature were the most frequent means by which Category C schools (the late implementers) came to hear of the innovation and by then the overtures of LEA advisers were unimportant. All this suggests that first briefings were received from professional disseminations rather than diffused hearsay. In other words initial information received was likely to be accurate.

Most heads of department received at least one INSET induction course. Project based INSET declined over time, all Category A members receiving it but only two out of three in Category C. Nevertheless the figures represent an exceptionally high level of professional induction. Here again the Project team were the most frequent disseminators, especially for Category A. Therefore the chances of interpretive errors accumulating, as in the 'cascade system' of induction, must have been smaller than for most disseminated curriculum changes.

The quality of Project specific INSET given to heads of department and the proportion who received it explains the confidence with which respondents claimed to understand the course. All but three i.e. 95%, claimed to have understood its aims and methods very well or fairly well. Category A members displayed most confidence, perhaps because all of them attended INSET courses. There were some disgruntled late-implmenters who found little support in their local area after the Project induction day. This was a point raised in the previous section but it is worth reinforcing here with poignant quotes from two HODs. The first was left isolated when he started implementation. "Very poor dissemination after the initial meeting. I would welcome links with other schools who have taken on this syllabus. [There is] a feeling of being out on a limb, particularly as regards coursework assessment." For the second HOD it was the brief induction course which was clearly inadequate. "I have found it difficult to know whether I am taking topics to the right depth with students, whether the case studies are sufficient to cover what is required of the option modules. (e.g. Does the Longman Unit book on coastal management adequately cover all that is necessary for the coastal management aspect of the syllabus?) I would
like to attend a detailed INSET course on the syllabus but do not have information about where or when they operate."

Whether or not these claims can be justified must await further discussion of the results from Part B (ii) of the questionnaire. But it is worth noting here a comment made by Eleanor Rawling, one of the Project Team. Drawing on her recollections of discussions with Project/Associate heads of department during the pilot stage, she said that she was not sure that they had all kept pace with the developing aims and methods.

In discussion of Part A it was seen that survey respondents focussed on matters of Project aims and methods when they were considering the change to Geography 16-19 A level. i.e. at the adoption stage. During the implementation stage their concern shifted to the practicalities of resourcing and operating the new course. Adjusting departmental aims and teaching styles was still worrying some but a lesser problem for most. This evidence suggests that departments think about and take one step at a time. Do we like the proposed new course? Is it a good one? Ought we to be going down that road? These are questions which determine the decision to adopt in principle and the time of adoption. They seem to be considered not just before but independently of questions relating to the funding and availability of resources. When saddling up and trotting out for the long journey there is an assumption of successful foraging. Of course some schools, particularly those involved in the pilot phase, knew from the outset that they were to get extra funding for the Project and acknowledged the "financial assistance from the LEA to set it up."

Whether schools found the dissemination adequate or not, most were pleased with the course despite the undoubted stress its implementation created. The majority of adopters considered that they had made the right decision although not all were as inspired as this respondent. "During the first (L.6th.) year, response from pupils has been very encouraging. We usually see our field trips as a way of regenerating flagging enthusiasm. This year the course will provide an outlet for enthusiasm!" As with all innovations the course has its detractors. In total only a small minority of adopting departments abandoned the Project. However an example came to light in the survey. The HOD in a well-known Public School aired his disaffection thus and at some length although one is not
sure that the Project itself is entirely to blame for all of it.

"After a trial period this department is returning to its former A level syllabus because;

i. Man-environment is too narrow and far too many issues become polarised as economic v. conservation.

ii. the stress in the department caused by -
    a. deadlines which are difficult to meet in a boarding school,
    b. phenomenal preparation,
    c. constant revision of courses,
    d. internal marking.

However many of the students found the course interesting but its methods and approach are not as revolutionary as one thinks.

Values, attitudes decision making, role play should be in any decent teachers armoury.

Also the exam. itself is the course's weakest point. The questions are not as interesting as the course and in some respects do not stretch pupils. Also they are almost O level in approach.

On balance we as a department felt that although an interesting experiment from which we have learned much, we could do better elsewhere. Finally the amount of liaison between schools and moderators is insufficient."

It sounds as though it had been a long year.
Results from the multiple-choice section of the questionnaire threw up several interesting issues. The first concerns the validity of awarding negative marks for non-Project-congruent answers. The accepted theory behind multiple-choice examination is that a correct response should gain a positive mark and an incorrect response or none at all should be given a zero. Candidates are thus rewarded for what they know and not penalised for gaps in their learning. This system is appropriate to an examination aimed at grading candidates according to their knowledge of a subject and inevitably, their intelligence.

In a sense, part B (ii) of the questionnaire was also testing knowledge, in this case teachers' knowledge of the Geography 16-19 Project. Hence the use of the multiple-choice technique is as valid here as for any other subject assessment. Further, if any non-Project-congruent response were regarded as 'wrong', then both methods of 'marking' would yield the same rank order (albeit with different raw scores). A distinction comes where teachers have neither selected the Project-congruent answer nor a single alternative. A declared uncertainty, either by choosing more than one of the option answers or by making no choice, seems to merit a different score from a definite non-congruent answer. After all, the objective of the test was to discover which teachers were closest to the Project ideals. Each congruent answers indicates an assimilation and an acceptance of a Project idea. Each non-congruent answer shows that the teacher has stuck to a previously held notion and that Project induction has not been effective. An uncertain or non response suggests a position between the two. For this reason it was given a score different from both (a zero score as opposed to +1 and -1).

Expressed loosely, another issue was that responding teachers seemed to find some questions much 'easier' than others. Stated more precisely, a significantly higher level of Project-congruent scores was obtained from some questions. Does it matter? Does it affect the validity of the final result?

Those who compile multiple-choice examination papers often plan to include equal portions of easy, moderate and hard questions in order to gain a wide distribution of marks and a fair discrimination between abilities. Sometimes questions are piloted to find out which ones are most difficult for candidates. Even so the distribution of examinee marks usually clusters around the average.
The pilot questionnaire employed in this research was not large enough to predict which questions would become good discriminators and which would not. Its purpose was largely to assess feasibility (i.e. Could and would busy teachers answer the questions?) and to discover semantic problems. So it was with some relief that the researcher found a normal distribution of scores with the average score close to the mid-scale point. A wider spread of scores would have been useful if it reliably reflected the different levels of Project theory assimilation. However the strategies available to the researcher may not have guaranteed this. For example, it would have been possible to write distractors which were closer in meaning to the congruent response. This may well have produced negative effects, introducing error by penalising those teachers with little spare time to ponder precise distinctions or reducing the overall number of replies. Another rejected stratagem was to increase the number of given option answers to each question from three to five. Again this would probably have produced negative effects similar to those already stated. Furthermore it would have overstretched the researcher's capacity for invention.

As it was, the multiple-choice section did succeed in its stated aim to identify some teachers whose ideas were close to those of the Project team and some who held significantly different opinions.

A further point emanates from this. Why did some Project-congruent answers elicit support from more than 70% of teachers in the sample while others drew only minority support? The answer lies mainly in the importance given to these matters in Project dissemination. Teaching geography with the emphases on the interrelationship between man and environment (Question 9), on enquiry-based learning (Question 15) and on using a variety of scale and location for case study (Question 7) are all central to the project's philosophy and therefore to its dissemination schemes. What is more, approximately one third of teachers in the sample already used the Avery Hill 14-16 Project which had itself introduced similar ideas some years before. It is probable that others in the sample had seen Avery Hill Project literature or teaching materials and while not adopting its courses, had been exposed to a form of precursory dissemination.

Questions which brought forward very mixed responses generally concerned matters which were less important to a proper understanding of the Project e.g. the political
connotations of case studies (Question 22) and the purpose of teaching guides (Q. 12). Other questions in this category referred to classroom organisation (Q. 17) and management (Q. 21). There is a suggestion here that while teachers have absorbed one key phrase, one central Project message about promoting enquiry, there may be widely differing interpretations and practical implementations of it. From an historical point of view, secondary school teachers have of necessity had to adjust to changing subject content if only because examination boards have changed their syllabuses or new texts books have introduced new topics. Traditionally though they have not been required to adopt new teaching methods although many have voluntarily done so as part of professional development. Therefore one can anticipate more difficulty for innovations involving new teaching methods compared to those seeking content change. One can expect greater resistance to change, more diversity of implementation and less confidence among teachers. Further evidence of this emerged during interviews with the selected teachers.

At first sight, the teachers do not appear to be consistent when answering questions about the development of skills. A majority of 35 to 20 returned a congruent answer when asked how skills should be taught (Q. 11) whereas a minority of 12 to 39 gave the congruent answer when asked what the purpose of skill training was (Q. 23). Part of the explanation is that two of the optional answers for the latter question are close in philosophy. One is a better answer for Project congruency but the other is not inconsistent with Project ideas i.e. it is a 'harder' question. Part of the explanation may come from the relative positions of these items. A difficult question appearing as the 23rd. on a list of 25 may not have received the best of the intellectual energy available.

Calculating the mean scores (Table R22.) after they had been grouped into the three categories (A, B and C) produced an interesting comparison. The mean score of -1.17 for Category A, i.e. the Pilot/Association schools was less project congruent than the scores for either Early (+0.32) or Late Implementers (+0.32). In other words the piloting team who, of the three groups, had most contact with the central Project team have developed the least authentic behaviour. This last statistic supports the many previous pieces of evidence both numerical and descriptive which have been accumulating. They all point to the existence of Project deviants within the piloting HODs and to Project perceptions which are on average less accurate than those of later implementers.
2. Semi-Structured Interviews.

In the introduction to Results Part 2, it was noted that all interviewees were forthcoming and helpful in their replies. Nevertheless, although they were not specifically invited to do so, most found it necessary to advertise the successes of their departments at some length. This was of some concern during the cycle of interviews as it may have indicated that the 'atmosphere' was too formal; the occasion perceived as more akin to a job interview than a friendly conversation. The tapes, however, reveal a reassuringly relaxed flow of speech, for the most part, and a number of surprisingly candid remarks. While it was not assumed that all those interviewed were completely unguarded in their comments, there was a lot of good data in the recordings and at sufficient depth to allow a more complete piecing together of the true picture than was ostensibly presented.

At St. Benet's School two teachers were engaged in the conversation. David Jones, the Head of Faculty usually replied first to questions and his answers were supplemented by Eric Heysham, the Head of Geography. In the following analysis the views of Jones are examined. Heysham's contributions are used as background data.

One factor which the research did not plan to investigate but which became very evident during the transciption of the taped interviews was articulate speech. Four of those interviewed were highly articulate but two, Frank Casey and Mary Nelson, frequently began sentences which they failed to complete before beginning another. Their communication of ideas sometimes relied on an implied sense rather than a precisely stated meaning. It is interesting that both interviewees were Eccentric Project Adopters and while no causal link can properly be made between articulate speech and authentic project adoption, there may be pertinent causal reasons.

The first method of analysing the taped data was to compare the six responses to each question in turn. Convergence or divergence of opinions and circumstances were noted as well as any marked differences in the responses of Authentics compared with Eccentric. This exercise places individual responses in a comparative context so that their significance can be better understood in later analysis.
Part A of the semi-structured interviews on Education and Teaching revealed a mixture of answers, some predictable and common to all teachers but most interesting and diverse. The first question (A1) was useful as a cue to the nature of information required. It conveyed the message that personal opinions were being sought not just cold fact. Some useful clues were given about individual perceptions of the state of education today. In their expressions of optimism or pessimism all Eccentrics hedged their answers, giving some evidence of gloom and some signs of improvement. Authentics were individually more definite but not in agreement with each other. Two of them, King and Jones, were generally pessimistic about the status of teachers and specifically mentioned a fall in the quality of applicants for teaching posts. The third, Colin Burns, had gained promotion shortly before completing his questionnaire and at the time of interview showed excitement with and enthusiasm for his new position. His generally positive attitudes may have been a consequence of his euphoria; maybe a cause of his promotion.

Much of the information gained from the interviews was specific to individual circumstances. Even when asked (A2) about the major problems facing education in general, all replied with examples from their own school or college sometimes implying that their problems were fairly universal. In three cases, two of them Authentics, lack of time or the pace of change was seen as problematic. Otherwise individuals gave varied answers, most recognising a recent change in the nature of their problems (A3) and, predictably, an increase in work load.

The next prompt (A4) homed in on Hypothesis 5 concerning the Relative Deprivation Typology and feelings about personal and professional status. Was there sufficient scope for advancement in teaching? All three Authentics believed that there was scope for their own advancement, that is, posts were available at the top end of the profession. Two of them, Burns and Jones, expressed doubt about opportunities for junior staff. By contrast the three Eccentrics either avoided mention of themselves or in the case of Nelson thought further personal advancement unlikely. Masters and Nelson together with Authentic King saw opportunities for teachers generally. As for the status of teachers, all interviewees agreed that it was poorer than it ought to be and that it had declined in recent years. Nelson did not demur from this consensus but thought of herself as a lecturer, a separate branch of the profession whose image had not been so debased in the

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When asked what sort of teachers gain promotion (A5) all gave ability as an important factor but four added caveats. Burns, perhaps significantly, saw the problem of incompetent staff from the Headteacher's viewpoint and sanctioned the expedient of providing good references for poor teachers as a possible solution. The three Eccentrics all had knowledge of mediocre teachers gaining promotion. Masters who made acidic references to "con artists" and to using "all the jargon" supplied the weightiest contradictions to the rule of promotion on merit. Casey stated that there were many good teachers who were not able to sell themselves in interview and hence were not promoted. There was a strong suggestion that he was talking about himself at this point. During the recorded conversation, he was at great pains not to criticise officers of his LEA or any part they may have played in staff selection. Ostensibly Casey was prepared to criticise two of his senior staff but one had just left the school and the other was retiring at the end of the year. Off-the-record Casey appeared a less than whole-hearted believer in the education career meritocracy. Nelson gave two examples from her personal knowledge where mediocre staff had found promotion. She seemed to suggest that tenacity in applying for jobs was the most important factor.

The themes for Part B of the interviews were the Institution and the LEA. To begin with, Heads of Department were asked what image they thought their school or college was trying to project (B1). Their answers revealed a clear division between Authentics and Eccentrics. All three Eccentrics immediately plumped for their institution's policy of caring for its students. Two of them, Masters and Nelson, added that this policy was in conflict with other policies; respectively the wish to attract more able students and the desire to run profitable up-market courses. The third, Frank Casey, referred to conflict among senior management over the value of and need for an active caring policy. All three Eccentrics worked in less-affluent areas and all accepted the caring philosophy. By contrast, the Authentics concentrated on academic aspects of their institutions. Andrew King acknowledged that Scholefield's academic image was poor, giving social and historic reasons for this. Both David Jones and Colin Burns believed that their schools had a high academic status within their comparatively prosperous areas.

When invited to discern the concerns of their SMTs,
directly or indirectly all Heads of Department passed judgement on their managers. There was no clear-cut division between Authentics and Eccentrics. As noted in the previous paragraph, Frank Casey had worked under a divided management and considered his headteacher to be fairly weak. Mary Nelson saw her new principal grappling with the problem of creating a viable organisation after a restructuring programme. The previous college boss had appeared remote and laissez-faire, an opinion which found an echo in Barry Masters's assessment of his college principal. These less than flattering estimates of managerial prowess came from Eccentrics but they were joined in their condemnations by David Jones who increased the time span of criticism by declaring that St. Benet's SMT had traditionally been weak. The other Authentics, Andrew King and Colin Burns, had the highest regard for their principal or headteacher and held good opinions of all their SMT superiors.

A variety of direct answers were given to the specific question of SMT concerns. Colin Burns perceived the introduction of educational innovations to be his seniors' main concern. Innovation was mentioned by Andrew King too who added care and community service at this point. The other Authentic, David Jones also praised the school's record on innovation but denied that the SMT had any guiding role. The faculties were responsible his school's progressive practices. The Eccentrics had less to say about SMT concerns perhaps reflecting the wider social distance they felt between themselves and their superiors. Both Frank Casey and Mary Nelson stressed the remedial exercise needed in management organisation while Barry Masters tersely concluded that maintaining student numbers was the main managerial problem.

Requesting an outline of the strengths and weaknesses of the schools (B3) produced a very diverse response. A brief summary is that, with the exception of Casey, Heads of Department emphasised the positive aspects of their institutions. Again slightly more was said by the Eccentrics on the subject of pastoral care while the Authentics' bias was towards the academic. For example King critically reviewed each faculty in Scholefield College. Jones credited St. Benet's with a broad academic curriculum which catered for all abilities.

The next prompts (B4,5 and 6) were meant to probe the group affiliations of interviewees. Trials on the researcher's own teaching colleagues had shown that direct question about personal reference groups invariably yielded
expressions of fond comradeship for teacher colleagues particularly those in the same curriculum area. This was the almost unvarying initial response from each individual despite evident differences in sociability, ambition and other characteristics. Even using a more oblique prompt on general staff support and integration it was no great surprise when all six Heads of Department declared that their staff colleagues supported them and were mutually supportive. In contrast, most regarded the efforts of LEA representatives as peripheral to their innovative work. The exceptions were Frank Casey who was grateful for the on-going help provided by his local advisory service and Mary Nelson who had been informed and motivated by one particular Geography Adviser until his recent death. It will also be remembered that this section of the interview revealed individuals' differing affinities with their SMTs.

Part C of the interviews concentrated on geography, beginning with estimates of its comparative status within schools. Sixth Form College teachers, King and Masters, admitted to a low status for geography. David Jones found it difficult to judge since geography was integrated into Social Studies for their lower year groups while further up the school numbers of students opting for geography varied greatly from year to year. Nevertheless, David's Head of Geography thought that geography had a high status at St. Benet's. The other three interviewees considered geography to have a high status within their institutions. In all cases those interviewed equated status with examination success and numbers opting for courses.

Heads of Department were asked for their impressions of the trends in geography (C2 and 3). The aim was to discover any deviation from progressive philosophies or any regrets about jettisoned topics. In their responses most stuck resolutely to a repetition of the essential Geography 16-19 philosophies, in particular issue-based learning. However Mary Nelson's reasons for adoption were mainly to avoid student examination failures rather than a positive attraction to the project. Her retention of a different A level course for evening classes is further evidence of an incomplete commitment to project ideals.

It was therefore no surprise to discover that Mary Nelson was the only one to express any real qualms about recent developments in post-16 geography (C4). She lamented the lack of Physical Geography and Geology in the core of the course and while others professed an addiction to enquiry-based learning, Mary was pleased to admit that she used lectures to impart geographical theory.
The last part of this section on topics directly related to geography (C5 and 6), sought to discover whether the six Heads of Department consorted with other geographers. Again there was no stark dichotomy. None of the interviewees attended their local Geographical Association meetings or functions but there was a difference in the rationale behind their attendance or non-attendance of other geography meetings. Authentics went to meetings which were of direct use to them in the teaching of their current curriculum. Hence both Burns and Jones said that they attended the regular, local Geography 16-19 Consortium meetings. The other Authentic, Andrew King expressed a wish to meet with project-adopting teachers from other schools but did not know of any local arrangement or forum for doing so. However he did attend local GYSL meetings. None of the Authentics showed any desire to broaden their geographical horizons either in the academic or the social sense.

Frank Casey, alone amongst all the teachers in this sample, went to locally organised geography meetings of a general nature. He also attended project-specific meetings. At the time of adopting and implementing the Geography 16-19 Project, neither Barry Masters nor Mary Nelson associated with geographers from other schools and colleges although both are now doing work for examination boards, assisting with the marking and setting of papers respectively.

All six Heads of Department regarded the annual review meetings (regionally organised by London University) as important events worthy of their time. However it is unclear just how much inter-school discussion takes place at these gatherings. In some areas the whole annual event comprises a verbal report from a member of the London University Examination Committee for Geography and another from the local moderator.

In Part D of the interview programme, the six middle management teachers were prompted to reveal their attitudes towards innovation and the institutional set in which changes took place. The interviewees did not put forward many ideas for ways to implement innovations successfully (D1). All of them mentioned consultation with colleagues as an important step although in some cases the motive was apparently one of mere courtesy. Similarly informing superiors was regarded as a necessity. Again all accepted
their institution's system for dealing with change with the exception of the Heads of Faculty and Department in St. Benet's School where the repeated criticism of the lack of 'structure' implied a wish for better procedures.

In fact, Heads of Department found it much easier to critically comment on the existing structures for change within their own schools and colleges (D3). Of the institutions which had delivered the project authentically, two had definite and well-established procedures for organising change which were adhered to. Both these establishments, Scholefield S.F. College and Balmoral School seemed to take pride in their ability to respond to change and to activate curricular innovations. Moreover the Heads of Faculty/Department recognised the positive feed-back from the SMT and valued the contribution of their headteacher or principal.

The other four institutions had loose, almost informal, procedures for bringing about change. Authentic David Jones perceived a positive attitude towards innovation amongst his SMT. His headteacher praised good innovations in the school but not the innovators. By contrast, Eccentric Frank Casey saw his SMT as 'cautious' by nature and capable of frustrating or delaying changes sought by middle management. Senior management in the colleges where Eccentrics Masters and Nelson taught were said to have a laissez-faire approach to departmental curriculum changes.

There was professed support for innovation, in the shape of curriculum development, from all six interviewees but a profound difference in the preferred scope and perceived purpose of innovation. In their replies to prompt D2, "Do you personally welcome change?", the Authentic Departmental Heads expressed more enthusiasm and were less conditional in their responses. The Eccentrics, by contrast, hedged their acceptance of innovation with phrases like Barry Masters's "not for its own sake". Barry had had the unfortunate experience of losing his first Geography 16-19 teaching group within the first term because of student drop-outs. Having made the radical move to Geography 16-19, Frank Casey now proposed a time of "fine tuning" for the coming years. The replies of all Eccentrics suggested that they were driven to innovate in order to overcome problems. Poor or inconsistent examination results were a motivating factor for changing the A level syllabus in two cases, those of Mary Nelson and Frank Casey. All three Eccentrics were looking for ways to increase the numbers of students taking A level Geography.
Perhaps one of the most telling indications of the true effect of the adoption of a project with a new philosophy, is its influence on the rest of the curriculum within the department. In this respect, the three Authentics proved to be more logical and industrious. Since adopting the Project, all the Authentics had abandoned their traditional O level and CSE courses. In addition Andrew King had increased the department's commitment to the more progressive GYSL. Similarly the others had given greater priority to their 14-18 courses, David Jones also replacing a 'traditional' CEE with a 'progressive' CEE course. By contrast the Eccentrics had made no changes to their curriculum beyond replacing their 'old' A level course with Geography 16-19. Mary Nelson continued with O level Geography and retained the 'old' A level for one group of students. Barry Masters kept his 16+ course with its regional approach. Frank Casey's only pre-16 geography course was already GYSL-based. His previous A level syllabus choice had been a regional one and its replacement represented a move to coherence.

The two school-based Authentics seemed unconcerned by the sizes of their sixth-form groups while college-based Andrew King had more than one subject-string to his faculty-bow and regarded geography as an important but secondary concern. The Authentics gave the impression of choosing the 16-19 Project for its own sake i.e. for its educational merits, its value to students and staff.

The final prompt (D4) in this section asked the six to identify their perceived rewards for undertaking the real risks and inevitable extra work associated with innovation. Here again Eccentrics appeared more student-centred than Authentics. Two of them made immediate and direct reference to improved interest and relevance for their students. The third, Mary Nelson, initially referred to increasing student numbers then justified her statement with reference to the appropriateness of the course for students. Authentics too were quick to mention the needs of their students but gave more diverse answers. Andrew King's reply ranged over staff development and fulfilment, personal satisfaction and the benefits of good examination results. Colin Burns claimed a student-centred philosophy but while making statements to support this stance, conspicuously advertised his department as a dynamic and successful enterprise. By contrast and with commendable candour, David Jones gave 'cudos in the staffroom' as a key reward. This point was echoed by one Eccentric, Frank Casey, when he referred to 'self-image'. However he saw his image reflected in student
as well as staff judgements. "It's a pat on the back when kids enjoy geography."

The final part of the semi-structured interviews, part E, tried to focus conversation on the interviewees' perception of themselves within their role as middle managers. How much power did they have to change things? (i.e. Contextual self-assessment.) Where did they get their ideas for change? (i.e. Which reference group did they use?) Where did the pressures come from? (i.e. Where did they feel a sense of deprivation?) What would be their next career move? (i.e. To what membership group do they anticipate belonging?)

In response to the prompt E1 all six Heads of Department expressed the belief that they themselves had de facto (if not de jure) control over changes to the geography curriculum; that they were the local 'gatekeepers'. Two of the Authentics, King and Burns, underlined this assessment by remarking that they had decreed a faculty audit and a departmental review respectively. Similarly the three Eccentrics claimed the key role in departmental curricular matters but in each case added that there was only one other specialist geographer working part-time within the department. In other words, their efforts of consultation and persuasion could really only be directed at superiors.

Given that five of the six department/faculty heads had already shown disdain for local meetings which were not course-specific, prompt E2 on the origin of ideas for curriculum development yielded predictably vague answers. "Doing the rounds" was a phrase specific to one reply, Barry Master's, but characteristic of all. Literature was mentioned in most cases but without the quoting of examples. Ideas generated by other staff was a common answer from the Authentics, all of whom ran large departments or faculties and could call upon the expertise of more than one colleague. There was a tendency too to suggest that curricular ideas were self-generated, thought up in response to perceived needs. Frank Casey was eccentric in more than one way. He alone gathered innovative material from the regular meetings of local Heads of Geography and their invited speakers. He also reiterated that his philosophy of and attitudes to geography teaching had been previously "set" by the Avery Hill 14-16 Project.
The origins of middle management pressures (E3) were different for Authentics and Eccentrics. The causes of the differences lay partly in the contrasting organisational structures of the institutions. The Authentics who were in relatively large institutions all pointed to the burden of numerous meetings and of administration chores. David Jones gave the current reorganisation resulting from the amalgamation of schools as a major cause of harassment. Administration duties were seen as a source of pressure by the two Eccentrics working in Sixth Form Colleges but their overriding concern was to keep up the numbers of students enrolling for geography courses. The other Eccentric, Frank Casey, had worries about the continuing existence of his school because of low admission numbers. He also complained about the "non-cooperation of MPG staff". Meetings were not seen as a tiresome duty by Eccentrics. Noone mentioned pressure resulting from teaching work-load.

The anticipated career moves of the Authentics were strikingly more ambitious than those of the Eccentrics. Colin Burns and David Jones were applying for Deputy Headships in secondary schools, Andrew King for the post of Vice-principal in tertiary colleges. All three Authentics had had recent interviews. By contrast, Mary Nelson had no promotional ambitions at all although she had recently gained promotion within her college, her only application for many a year. Barry Masters wished to become a Head of Faculty but was not currently applying for these posts owing to family commitments. Frank Casey was actively seeking to become a Head of Faculty, a post which he had held recently on a temporary contract but had been given to someone else on a permanent basis. In an untapped disclosure, he said that he might move school to run a larger geography department on an increased salary.
### Summary of Authentic/Eccentric differential traits.

<table>
<thead>
<tr>
<th>AUTHENTICS</th>
<th>ECCENTRICS</th>
<th>EVIDENCE</th>
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<tbody>
<tr>
<td>1. All highly articulate.</td>
<td>One articulate.</td>
<td>General</td>
</tr>
<tr>
<td>2. Ran large departments/ faculties.</td>
<td>Ran small departments.</td>
<td>General</td>
</tr>
<tr>
<td>3. Problems blamed on external factors.</td>
<td>Two blamed other teachers for problems.</td>
<td>General</td>
</tr>
<tr>
<td>4. Two respected head of institution.</td>
<td>Critical or non-committal about head.</td>
<td>General</td>
</tr>
<tr>
<td>5. Open-minded about new curricula.</td>
<td>Showed allegiance to past ideals.</td>
<td>General</td>
</tr>
<tr>
<td>6. Two relatively new to HoD/F job.</td>
<td>Held post for a considerable time.</td>
<td>A4</td>
</tr>
<tr>
<td>8. Bias to task-centred teaching.</td>
<td>Bias to student-centred teaching.</td>
<td>B3 D4</td>
</tr>
<tr>
<td>9. Two institutions have definite procedures for dealing with change.</td>
<td>Loose procedural structures for sanctioning changes.</td>
<td>D1</td>
</tr>
<tr>
<td>10. Strong approval of curriculum development.</td>
<td>Conditional approval of curriculum development.</td>
<td>D2</td>
</tr>
<tr>
<td>11. Changed alternative &amp; supporting courses to match Geog.16-19.</td>
<td>No attempt to change other parts of curriculum.</td>
<td>D2</td>
</tr>
<tr>
<td>12. SMT encouraged innovation.</td>
<td>SMT laissez-faire or cautious about change.</td>
<td>D3</td>
</tr>
<tr>
<td>13. Rewards of innovation seen as personal.</td>
<td>Students seen as main beneficiaries of change.</td>
<td>D4</td>
</tr>
<tr>
<td>14. Regard selves as team leaders and value staff ideas.</td>
<td>See selves as independent curriculum decision-makers.</td>
<td>E1</td>
</tr>
<tr>
<td>15. Highly and actively ambitious.</td>
<td>Moderate or little ambition.</td>
<td>E4</td>
</tr>
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3. Case Studies of Two Differing Institutions and Summary.

The final stage of fieldwork had been to revisit two of the six schools where interviews had been recorded and to gain extra information about the working environment of one authentic and one eccentric head of department. The previous chapter presented factual data extracted from observations, interviews and documents. Working from this data it is now possible to draw conclusions which can shed some light on the basic question, "why are there authentic and eccentric project interpretations?". The discussion which follows below offers reasons why the institutional circumstances of Andrew King at Scholefield were largely conducive to Authentic project adoption. In discussion of the second case study evidence is assembled to show why the working environment at Evergreen School may have hampered Frank Casey's efforts to adopt the Project and contributed to his Eccentric interpretation.

CASE STUDY 1. Scholefield Sixth Form College.

It can be seen from the background data given in the last chapter that Scholefield is not an ordinary sixth form college concentrating almost exclusively on the delivery of A level courses. Its location, its local image, its multi-cultural and multi-lingual characteristics make it unusual if not exceptional. Given all these special circumstances, it is unlikely that the college has or will attract the most conservative of teachers onto its staff. A process of self-selection amongst potential applicants for posts at the college will have ensured that radical teachers who are prepared to accept challenges are well represented on its staff.

The combination of its radical ethos, its challenging environment and its supportive management provide a powerful encouragement to innovation. In this atmosphere, members of its Geography Department are likely to have developed adaptability even if they were not chosen for it in the first place. So it can be argued that the seed of curriculum development in the form of the Geography 16-19 Project was likely to fall on fertile soil in this institution.

Turning to the teachers in the Geography Department we find two staff with high status. For one to achieve the positions of Principal and the other the post of Faculty Head they must have demonstrated their abilities to organise and deliver curriculum developments. We can accept
that both have had substantial experience in this field. We must add to this the professional experience gained from service on the college's Senior Council where both were involved in formulating new policy and evaluating new courses. We can assume that their combined innovation expertise would have greatly facilitated the proper adoption of Geography 16-19.

The relationship between the two geographers appeared mutually supportive and professionally close. Each expressed a high regard for the other. These factors taken together with the principal's acknowledged enthusiasm for both geography and innovation, provide further evidence of a positive environment for efficient Project adoption.

Andrew King acknowledged that he was personally ambitious and was perceived by the SMT to be so. The SMT professed an interest in and support for his career development. In this climate Andrew had a lot to gain by delivering the new A level geography course efficiently. It is just possible that some extra motivation may have been provided by the knowledge that a team of HMI were to descend on the college during the first year of course implementation.

Data from his questionnaire and interview show that while Scholefield College was a late adopter of the Project, Andrew King was an early Project adopter. Andrew had previously taught in a Project school and so in a sense was re-adopting the course. Educational psychologists claim that re-learning is easier and quicker than learning, also the element of revision and review in re-learning leads to greater accuracy.

On the negative side, we can list the underfunding of the Project by the college and the consequent lack of resources. Neither of these directly impede the proper interpretation of the Project although they may affect the quality of implementation. Indirectly these problems may decrease the motivation to institutionalise the course and alter interpretation retrospectively. However there was no evidence of this. The small number of students opting for the course may have been disheartening although as argued before this does not directly affect the adoption process. A positive aspect of small groups, pointed out by the vice-principal, is that the time saved on marking can be used to plan and prepare the course more thoroughly.
CASE STUDY 2. Evergreen Comprehensive School.

It may only be the assessment of an amateur but Andrew King appeared much the more relaxed and confident of the two case study teachers. If this is true then there is a ready explanation. There was a good deal of evidence from both the initial interview and the subsequent school visits that Evergreen was a stressful place in which to work. We can add to that the many special problems which were specific to Frank Casey's post.

To begin with, the school had more than its fair share of social problems and less able children. The LEA made some compensation for this with extra staffing though this allowance was gradually shrinking through the 1980s as expenditure was reined in. Staff had the extra concern arising from the threat of closure. The stress of the situation was vividly apparent to Frank. He had the spectre of a predecessor whose health had deteriorated in the same job.

When Frank became Head of Geography he was given to understand that his task was not merely the running of a subject but the resurrection of a moribund department. The SMT expected results. However, from Frank's point of view, its two most senior members were not easily accessible or even approachable. He did receive help from an active and determined senior adviser. Who was helping whom? The adviser's primary motive may well have been to get a long-standing problem cleared up rather than to assist a new line manager. What is help? Support becomes coercion when one's feet no longer touch the ground.

It is true that there were no regressive forces within his department or faculty but then again there was little support. His immediate superior, the faculty head, appears neutral and uninterested but presumably as a fund holder he had to be consulted perhaps even cultivated. Tensions within the subject and faculty area were sufficiently obvious to have been noted and remembered by the second deputy head. Then Frank's experienced geographer colleague left at the time of Project adoption and was replaced by a probationer who was not initially a strong teacher. So at the crucial time she was a responsibility rather than an asset.

Frank was also the junior partner in the A level consortium team. The head of geography at Evergreen's partner school was senior in experience, his department had adopted the
course a year before consortium and his students comprised the majority of the teaching group. There is of course a positive aspect to this link. Frank would meet and discuss aspects of the course with his fellow head of geography. However with the schools some distance apart this liaison was largely for the purpose of administration. The two departments were responsible for different parts of the course. On the negative side there is an element of pressure in maintaining links and agreeing procedures.

Another explanatory dimension of eccentric Project adoption can be added by considering the school’s management structure and policy. Information was fed to a central decision-making duopoly but was not communicated to or discussed by the whole staff at one time. General staff meetings like whole school assemblies were a rarity. There are echoes of the centre-periphery model of dissemination in this management system and the associated problems would be similar. Decisions were made and communicated to faculties separately. Faculty staff tended to stay within their own base areas and the staffroom was under-used. Bottom up innovation was possible but stood more chance of success if it was backed by people with status and attracted funds. The sanctioning duopoly did not always make clear their reasons for rejection or delay. In this climate doubt and misunderstanding could be expected; bottom up curriculum initiatives would be discouraged. The general picture is of a school where staff were led to and through innovation. This view is corroborated by Mrs White’s assertion that post- HMI inspection "there is up and down initiative. Ideas now come from everywhere....... The climate between departments has changed. They have an innovatory attitude".
Summary of case studies.

Both Scholefield College and Evergreen School were located in socially disadvantaged areas. Both had difficulty attracting students although Evergreen had by far the more serious problem. For reasons of poor standards of student behaviour and motivation Evergreen had the more stressful teaching environment.

At the time when Geography 16-19 was being adopted Scholefield had the more structured and methodical approach to curricular change, a system which was understood by all staff. Management and the system encouraged innovation. The force and direction of change at Evergreen was largely provided by senior staff or by LEA representatives. Faculties worked independently of each other and were not formally informed of initiatives begun in other parts of the school.

Both geography departments had difficulty enrolling sufficient students for cost-effective A level groups. At Evergreen the problem was overcome by entering into consortium teaching with a neighbouring school and by the LEA front-loading the funding of the new course. Formula funding within Scholefield had led to a low level of resources for Geography 16-19.

Of the two heads of department, Andrew King at Scholefield had the greater breadth and depth of experience. He ran both a department and a faculty, teaching three subjects and assisting with general studies. He had an overview of curriculum development as a member of the college senior council. Frank Casey was responsible for one subject, geography. He had taught in one other school before taking his present post. He was not a permanent member of any curriculum committee beyond his own faculty.

Neither head of department had the facility for lengthy discussion of initiatives with geographically knowledgeable colleagues. Of the two Andrew King was the better placed for this subject specific advice. His teaching colleague, the principal, had been a head of geography, was still keen on the subject and would, by institutional procedure alone, have had to discuss the adoption of the new A level with Andrew. Frank Casey, on the other hand, had noone of suitable experience on site with whom he could discuss project adoption. The adviser who promoted the course had no personal experience of its adoption although he approved of its ideas. Frank, albeit willingly, was saddled with the course and a consortium partner; was following the
innovation rather than initiating it. His willingness to cooperate has its roots in his initial training in Avery Hill/GYSL 14-16 Geography. He could accept Geography 16-19 because he saw it as an extension of the same ideas into sixth form teaching.

There was a significant difference in the relationships between the two department heads and their respective SMTs. Andrew King had great respect for the Principal of Scholefield and as a consequence sought and valued his judgement. The SMT for their part actively encouraged good initiatives and appeared to support the career development of individual staff. Andrew foresaw promotion to a higher level of management namely vice-principal of a tertiary college as his next move. By contrast Frank Casey had no direct line to his headteacher and felt that at least one initiative in geography had been obstructed by the SMT. The SMT valued his contribution to the school but made no mention of his further development. Frank's own ambitions were fairly limited: a wish to run a larger department or a faculty but nothing beyond that. Part of the motivation for this move may well have derived from a desire to get out of his present school.
CHAPTER 7.

CONCLUSION.

2. Critique of the Research Project.
3. Possible Application of Results.


In this section each hypothesis is examined in turn. Relevant evidence from three stages of the fieldwork (questionnaire, HoD interviews and institution case studies) are reorganised in order to evaluate each hypothesis.

Hypothesis 1 stated that "Project adopting HoDs who choose non-membership reference groups are likely to be Authentics."

Two of the three Authentics interviewed showed great respect for their headteachers, found themselves sympathetic to their ideas and methods, and appeared to have a good working relationship with them. This is the behaviour of teachers who have not limited their attitudes and values to those of their staffroom or department colleagues. Their reference groups lie, at least in part, beyond their peer membership groups.

The same two HODs, King and Burns, were relatively new to their present posts and so would have had little time to put down roots within their staff communities. Hence their had been less time to absorb the attitudes and values of colleagues in either their departments or staffrooms. The shortness of time for convergence of opinions helped to maintain an independence of thought so that their reference groups were different from membership groups.

All three Authentics who were interviewed showed a bias towards task-orientation rather than student-orientation. The latter was associated with the three Eccentrics. This is further evidence that the Authentics had not become 'locals', institutionalised, concerned mainly or merely for people around them. They were able to discuss curriculum development in a more detached way than the Eccentrics.
Their self-awareness also supports this argument. The Authentics saw themselves as team-leaders with the emphasis on leadership. They were all ambitious, career-minded teachers who approved of Geography 16-19 unconditionally and saw its successful implementation as a 'feather in their caps'.

By comparison, the interviewed Eccentrics were less ambitious and had been teaching for longer in their present schools or colleges. Two of the three were comfortable in their posts and had no real plans to move. None regularly met with their SMTs and so would have been more open to influence from their membership groups, i.e. their respective staffrooms and departments.

Evidence from the institutional case studies showed that Scholefield, the place where Authentic Andrew King taught, was not a typical sixth form college. Its large intake of students from ethnic minority backgrounds and its inner city location would make it unattractive to teachers with fixed and traditional attitudes. Some flexibility, in choice of reference group, must have been shown by staff joining the college who were not themselves from the same ethnic minority groups as the bulk of the students.

Andrew King was a head of faculty with responsibilities for more than one subject area. This was also true of David Jones another Authentic. There was less chance of these faculty heads identifying with the geography subject group although, of course, there were other membership groups from which they could have drawn their values. Their senior positions and memberships of senior committees exposed them to the attitudes and values of other groups of which they were not members e.g. SMT and other faculties. This was particularly true of Andrew King whose geography colleague was the principal of the college. His good working relationship with the Principal provided him with a reference group of which he was not a member but with which he was closely associated. As faculty head, King had his own office. This may have contributed to his ability, in discussion, to detach himself from purely local considerations.

Ambition is a crucial factor. Andrew had his sights set on a post of vice-principal and had already attended one interview for that post. During interview he would have answered questions in the manner of a vice-principal. So for that time at least, he was forced to adopt the values of a non-membership reference group. He was encouraged in
his ambitions by members of the college SMT, a factor which would assist his anticipatory socialisation and draw him further from the values of his peers. He also linked (hoped for) success in implementing Geography 16-19 with chances of personal career success. There is here a direct link between his desire for promotion and his need to be a Project Authentic i.e. to be seen by a knowledgeable superior to have got things right.

At Evergreen Comprehensive School the Project-adopting Eccentric, Frank Casey, had a very different professional environment from which to make his choices of reference groups. The senior management which made curriculum decisions did not deal directly with him. The meetings he attended were held in faculty bases with faculty members and on occasions a deputy head was present. In this structure, Frank had little opportunity to acquire the broader values of his SMT. He did not hold two of its members in particularly high regard and hence would have been unlikely to adopt their values even if he had known them.

It was said that the central staffroom was seldom used and that most teachers stayed in their faculty areas. With a fragmentation of membership groups around the school, there was little chance of Frank gaining a wider reference group encompassing other faculties. The high stress levels in the school and the admitted inter-department tensions seem to have added to the pressure for teamwork amongst geographers and the development of a siege-like mentality. At the time of Project adoption Frank's only external influence, apart from literature, was the LEA adviser. This person appears to have wanted the curriculum development to enhance the standing of geography in the school. His support came in a practical form, mainly extra funds. He was not a mentor assisting with Project interpretation and advice. Given Frank's limited opportunities to discover the values of groups outside his own curriculum area and his attitude towards senior staff there is a strong argument for supposing that his reference group and his membership group were one and the same. Further evidence is provided by his wish for promotion to a similar post in a larger school.

The main sources of evidence, HoD interviews and institutional case studies, both support Hypothesis 1. There is also a secondary source, that is the questionnaire. According to the results, Category A HoDs were the most Eccentric group (Table R22). Table R11 shows the rank order of importance which HoDs attached to various
reasons for Project adoption. Category B and C teachers put option (b) 2nd. and 1st. in their rank order while the more eccentric Category A ranked this reason only 7th. Option (b) reflected a mismatch between the general aims of the school or department and those of their old A level courses. Aims imply attitudes and values and so are an indication of a chosen reference group. It is significant that the most eccentric group of adopters had least dissatisfaction with the aims (attitudes and values ) of the old syllabuses. More individuals in this group were choosing their local geography peers and not the Project team as their reference group.

It cannot be said that every piece of the jig-saw fits exactly but the emerging picture is sufficiently clear to establish a link between authentic Project-perception and individuals' choice of non-membership reference groups. Although the HoD interview sample was small there is supporting evidence from other fieldwork data. This triangulation of information strengthens the argument for rejecting a null hypothesis that there is no connection between HoDs' authentic Project-perception and their choice of non-membership reference groups. Hypothesis 1 is therefore accepted.

Hypothesis 2 states that "Members of the Project Pilot Team are more likely to be Authentics than other Project-adopting Heads of Geography."

In assessing the validity of this supposition the main evidence is taken from the questionnaire results. There responses were put into three groups, Categories A, B and C. Category A HoDs were members of the Project's Pilot and Linked Associate establishments. In Table R22 it can be seen that this group were on average less Project-congruent in their perceptions than the other two groups of later adopters. The Project Pilot Team are therefore less Authentic in their perceptions than other adopters and on this evidence alone it is possible to reject Hypothesis 2.

The recorded history of the development of Geography 16-19 provides some explanation for this. The Project Team working with LEA advisers, deliberately selected some schools with no curriculum development experience in geography as well as some with past experience. In the assessment of the previous hypothesis it was seen that some members of the Pilot Team retained their old reference groups and did not adopt all the values of the Project Team. One of the Project Team also suggested that some Pilot schools failed to keep up with developments.
Further reasons are provided by the HoD interviews. Two piloting HODs were interviewed. One was an Authentic, the other an Eccentric. They had very different attitudes and motivations. The Authentic was open-minded about curriculum change, was task-orientated, ambitious and believed that he was in a mutually supportive relationship with his headteacher. The Eccentric showed allegiance to past ideals by retaining the 'old' A level Geography course for one student group while introducing the Project course for the other. She was more student-orientated, wished to stay in the locality and was professionally remote from her principal. It seems that there are horses for courses and others which can be led to water but cannot be made to drink much.

It is clear that Hypothesis 2 must be rejected on the evidence of this research. The Project Pilot Team were not more authentic in their Project perceptions. In fact, the obverse of the hypothesis is supported by the results. In the case of the Geography 16-19, the Pilot Team were more eccentric than later adopters. The reasons lie in the special circumstances of the Project. In the first place, inexperienced curriculum developers were purposely involved. Secondly the developers of the Project were also its trialers. They had to cope with a course which changed as it developed and then trial the final version in their schools and colleges. Later adopters were generally self-selecting and had the advantage of receiving a fixed message through a formal dissemination programme.

Hypothesis 3 stated that "Heads of Department who are engaged in Anticipatory Socialisation are more likely to be Authentics."

To evaluate this hypothesis data was needed about each individual HoD's immediate ambition. This was directly asked in interview and indirectly sought during the two institutional case studies.

The three Authentic HoDs all claimed to be ambitious and stated that they had been interviewed for promotions in the then recent months. They all had good opportunities to observe the behaviour of senior management and to assimilate values from this reference group. Two of them had good and close working relations with the heads of their establishments. Two were heads of faculty with access
to senior committees. All were aware that the delivery of a successful curriculum development would enhance their prospects of promotion.

By contrast the three Eccentrics had, at the time of Project adoption, much more limited opportunities for working with senior management. Two had no plans to move from their places of employment or to seek promotion, although one subsequently gained a promotion when a post became vacant within her college. The third was seeking promotion but there are doubts about the real motive behind this. There was a strong possibility that escape from a stressful environment was a major factor.

Case study data lends further support to the hypothesis. The SMT of Scholefield knew of Andrew King's career ambitions, supported him and expected success. He had opportunities for anticipatory socialisation as a member of the college central committee where he met with the SMT and again within the geography department where his colleague was the college principal. In the other institutional case, Frank Casey had little chance to imbibe the attitudes and values of any group other than his own faculty. His ambitions were to seek promotion within geography teaching and as previously stated his motives were unclear.

The information on which Hypothesis 3 is assessed was gathered from a small sample of interviews. It points clearly to an acceptance of the hypothesis and is supported by case study. There is evidence for concluding that there is a connection between anticipatory socialisation and authentic project adoption. Perhaps it would be safer to alter the hypothesis word order and say that Authentics were found to be engaged in anticipatory socialisation. Eccentrics were not.
Hypothesis 4 stated that "Heads of Department who have seldom been involved in major curriculum change are more likely to be Eccentric."

Several pieces of evidence relevant to this hypothesis emerged during the course of the semi-structured interviews with HoDs. The three Authentics ran larger departments than the Eccentrics, in two cases they were in charge of faculties delivering several subjects. By the nature of their jobs, the faculty heads had a broader experience of curricula and more experience in the management of change. Two of the Authentics were quite new to their posts and had experienced recent change in their teaching curricula because of their moves. The three Eccentrics were well established in their departments.

Two of the Authentics were in institutions where change occurred through formalised procedures, was well organised and was encouraged. At the time of adoption, the Eccentrics were in establishments which had less structured approaches to change and in two cases became involved in Geography 16-19 at the behest of LEA advisers i.e. they had not initiated adoption themselves. It is also revealing to look at the effect that Project adoption had on the rest of their department's curriculum. Two of the Eccentrics, both in sixth form colleges, failed to change their other syllabuses to match Geography 16-19. The third was already running a compatible course, a version of GYS, for the 14 to 16 age group in his school and had no need to change.

The interviews brought out different attitudes to change. The Eccentrics held onto to past ideas and were less open-minded about innovation. Although in fairness it has to be said that for one of them the retained ideas derived from the GYS project which shared many concepts with Geography 16-19 (see later discussion). Authentics gave their strong approval to curriculum development in general whereas Eccentrics were quick to attach conditions to any approval.

Similar information emerged from the two case studies. Frank Casey's first appointment had been to a school where GYS was taught and this formed his philosophical induction into teaching. He then moved school to a HoD post in an area where a local version of the same project was organised by the LEA. The adoption and implementation of Geography 16-19 represented the first innovation for which he assumed responsibility. By contrast, Andrew King, the Authentic, was associated with all curriculum development
in Scholefield College by virtue of his position on the college's central council. Within his faculty, varying enrolments meant that courses were reviewed annually, the curriculum was demand-led and by necessity flexible. Andrew had past experience of implementing change in his previous post as a head of department.

The bulk of the evidence from interview and case study supports the hypothesis. In this enquiry, those with least experience of introducing and managing curriculum change were the eccentric adopters. Hypothesis 4 is therefore accepted. An associated point should also be explored.

Surprisingly those HoDs whose departments ran Avery Hill/GYSL courses prior to adopting Geography 16-19 were not significantly more authentic in their perceptions of the latter. Frank Casey was by no means an exception. There appears to have been no consistent transfer learning from one project to the other. Given that there was a time lag of approximately a decade between the national launches of the two projects, it is possible that the Geography 16-19 adopting HoDs were, in many cases, not the same as those who introduced GYSL. It is possible that those HoDs who had adopted both projects, had also forgotten or transmuted some of the GYSL guiding principles.

Hypothesis 5 states that "Heads of Department belonging to Types B and D of the Relative Deprivation Typology are likely to be Authentics."

Type B of the Relative Deprivation Typology describes individuals who are dissatisfied with their own position in their group (teachers) but not with the position of their group within society. Type D individuals are dissatisfied with the positions of both themselves and their group.

Prompts delivered during the interviews with HoDs were aimed at discovering teachers' levels of satisfaction. Their answers showed a unanimity of opinion when commenting on the position of teachers in general as a group. All six HoDs interviewed thought that teachers were undervalued by society and had been given over-demanding tasks to perform in recent years. All were dissatisfied with the relative position of their profession as they perceived it. Therefore none belonged to the Type B category of the typology.
All three Authentics considered themselves to be worthy of promotion but is this sound evidence for concluding that they were dissatisfied with their positions? Two had only recently been appointed to their posts so it might be assumed that they had had little time to become dissatisfied with their positions. But despite their short times in the jobs both were eager to apply for more senior posts and were doing so. The third Authentic was seeking promotion although when interviewed his energies were concentrated on the reorganisation of his faculty as a consequence of school amalgamation.

Turning to the Eccentrics, Frank Casey was keen to move on although his motives were probably different from the Authentics'. At the time of Project adoption the other two Eccentrics were quite content with their positions and were not actively seeking promotion.

Hypothesis 5 must be rejected as it stands firstly because neither Authentics nor Eccentrics could be classified as Type B. Secondly the data coming from interviews was too thin to establish a definite difference between Authentics and Eccentrics on the issue of individual satisfaction with personal positions. There was evidence to suggest that Authentics were the more ambitious but other data could not be found to support the notion that Authentics were Type D individuals.
2. Critique of Research Project.

The choice of the Geography 16-19 Project as a case study had both advantages and disadvantages. Compared with other Schools Council projects, it was a success in terms of its dissemination. Adopters were well-informed, only a few in the survey had not received specific INSET. This made it more difficult to distinguish between authentic and eccentric adopters. A lengthier questionnaire or one with more subtle multiple-choice questions may have achieved this aim but would probably have substantially reduced the sample size. However the Project represented the most refined model of dissemination to come from the era of Schools Council work. It was one of the last acts of the Council before its abolition was announced in April 1982, leaving the Project funded until August 1984. It had special significance because it was nationally disseminated and centrally administered. It therefore presaged national reforms introduced and controlled by central government teams.

The basic design of the research, that is the use of three fieldwork methods to gather interrelated data, provided a fairly strong structure. In most cases it was possible to evaluate hypotheses using results from more than one of the methods and so strengthen the validity of conclusions. The questionnaire yielded a wealth of data and the high number of respondents ensured a representative sample. Although the range in the Project-congruency of perceptions was not wide, it was possible to select extreme cases for interview.

The interviews with Authentic and Eccentric HODs also provided much useful information; enough to assess all hypotheses except the last. The few prompts delivered in interview gave insufficient data from which to draw a reliable conclusion for Hypothesis 5. A more sensitive instrument was required to tease out the levels of satisfaction which individuals had about their own positions in the teaching profession. A larger number of interviews would have helped establish a greater validity for all conclusions but data from the conversations with six HODs was sufficiently distinct to allow decisions to be made on four of the hypotheses.
The institutional case studies provided thick description which added depth to data garnered from the first round of interviews. Information from the two case studies substantiated that given by the two HODs; nothing contradictory was discovered as a result of discussions with SMTs and other staff. In consequence more confidence could be put in all the interview data. The case studies also supplied cross-reference points for assessing the hypotheses. As with the HOD interviews, the prompts and questions used in discussion with staff in the case study establishments could have been further honed to prize out more relevant information.

3. Possible Application of Results.

The research showed that HoDs who used non-membership reference groups were more likely to have authentic perceptions of a new curriculum project. This finding linked with the discovery that authentic adoption also benefits from anticipatory socialisation. Thus teachers should be allowed formal and informal contact with individuals outside their own membership groups if they are to become faithful adopters of centrally delivered curriculum development. At present this is the major source of development. In practical terms it will mean more curriculum-centred meetings within schools and across faculties so that teachers extend their frames of reference beyond their departments. Greater chance to discuss matters with the SMT, advisers, academics and representatives of other schools will also broaden the perceptions of teachers. In short, a reversal of present trends is required. Hard-pressed teachers are finding less time in recent years for discussion with anyone other than their own departmental colleagues. Values and attitudes are not being broadened due to the introspective, self-monitoring which is now increasingly the case within departments.

The discovery that members of the Project's Pilot Team were no more authentic in their perceptions than other adopters has been put down to special circumstances. The generalisations of human imperfection which follow from the conclusion are neither startling nor particularly useful. They are that not all teachers keep up-to-date with curriculum developments even when they are associated with
them. Secondly it is easier to disseminate a fixed message than a developing one. Finally it was shown that some teachers are more open to the adoption of new ideas than others. Perhaps one associated observation does have a relevance for other curriculum development. It seems that conservative-minded teachers cannot easily be coerced in accepting a new reference group and a new set of values.

HODs with little experience of curriculum development were seen to be less accurate in their Project perceptions. Again this finding argues for a reversal of current trends. Teachers need to be actively involved in developing their own curricula. The stifling of this sort of experience by the uniform enforcement of the National Curriculum will lead to a general loss not just of creative and organisational skills but of judgemental and critical skills too. It would be too cynical to suggest that this was a desired outcome.

The final hypothesis was not proven but suggestion emerging from its assessment taken together with the proven benefit to project-congruent adoption of anticipatory socialisation may have implications. Authenticity was associated with ambition. Curriculum development may therefore benefit from greater opportunity for career advancement or the possibility of reward for a job well done. Experienced upwardly-mobile teachers will generally be more in-tune with innovations than inexperienced (see last Paragraph) or unambitious staff. Thus for more than one reason, measures to improve mobility within the profession will improve the quality of education.
4. Suggestions for future work.

This enquiry was designed to illuminate some of the problems associated with centre-periphery dissemination of curriculum development. It mainly targeted problems of adoption and was specifically concerned with the adopter's perceptions of a project. There are many other barriers to the successful dissemination of an educational innovation which need investigation. Barriers, including incongruent project-perception, can occur at different times and places in the chain of events which leads to the institutionalising of an innovation. Diagram C1 below provides a schematic and highly generalised map of the process and of some likely variations which lead to the eccentric applicatio of a project.

If the centre-periphery model continues to be the main design for curricular dissemination then it is important, for DES (now DfE) innovators at least, to iron out as many potential problems as possible. The cascade system of dissemination used to introduce recent educational reforms is a variation on the centre-periphery theme. Its use increases the chances for distortions of the original message in two ways. In the first place government reforms are not optional and so unenthusiastic and reactionary teachers are called upon to implement the changes as well as those who are keen to adopt. Secondly the passing of information down a hierarchical management structure increases the chances of corrupt interpretation.

Further research is therefore needed to illuminate the potential points of distortion at the adoption stage and then at the implementation and institutionalisation stages of the process. The reasons for individual distortions must be understood before they can be countered. Logically the first step should be to improve the quality of perception because without authentic interpretation there is no hope of authentic implementation.
Diagram C1. Routes to Variance in Project Implementation.
(Relating to Schools Council 1st. and 2nd. generation centre-periphery dissemination.)

Creation of a curriculum development package by a central team.

**Dissemination**

School-based recipient has a project perception congruent with that of the project team. i.e. an Authentic.

School-based recipient has a project perception not congruent with that of the project team. i.e. an Eccentric.

**Adoption**

School-based adopter plans to put Authentic ideas into practice.

School-based adopter modifies Authentic ideas while planning.

School-based adopter plans to use Eccentric ideas.

**Implementation**

Plans uncompromised by local situation.

Plans compromised by local situation.

Students receive course consistent with original project ideology.

Students receive course inconsistent with original project ideology.
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APPENDIX 1.

SCHOOLS' COUNCIL CURRICULUM DEVELOPMENT PROJECT: GEOGRAPHY 16-19.

Preliminary Questions to be put to the Project Team.

1. From where did the pressure for change in 16-19 Geography come?

2. The wider variety of student abilities and of institutions involved in 17+ courses are cited as pressures towards the development of a new course. However a wide variety of courses already exist for this market. So what dissatisfactions were there with existing Geography syllabus choices?

3. a) Does the Team consider Geography at research level, to be a constant and direct source of pressure for change in the school Geography curriculum?
b) If so, what kinds of university research influence which aspects of the curriculum?
c) Are such changes desirable?

4. What measures were taken to assess the relative merits of the often conflicting developments in 'general educational objectives'?

5. What measures were taken to avoid:
a) the mistakes of past curriculum development schemes?
b) the bias of personal teaching knowledge?

6. What are the Team members personal views on the nature of Geography and on the scope and purpose of its study at the 16-19 level?

7. Did the Project Team adhere to the plan for development and the proposed timing of its stages (Project news 2)? If not, what were the reasons?

8. How were the Team able to harmonise the often conflicting interests of teachers, headteachers and L.E.A.s?

9. How is the enquiry-based learning approach demonstrated to teachers?

10. The contents of the courses are composed of items which lend themselves to the enquiry-based and man-environment approach. A spread of environments and of scales of study were ensured by using a matrix.
a) Were there any other criteria used in the selection of items for the content?
b) Did the Team consider that it had left out any major areas of geographic interest or any major skills and techniques, which did not lend themselves to the Project's approach?

11. The use of current issues/problems/questions relating to real data will lead to a high rate of obsolescence of resources. How does the Team propose;
a) to minimise the effort and expense of up-dating resources and,
b) to overcome problems of question-setting?

Attitudes and values cannot be taught, but the Team wishes to influence them through the Project.
a) Is there any evidence, that, in the long term, resolute students do change what may be highly idiosyncratic value-systems in the light of counter opinion?
b) If there is, what precautions can be taken to ensure that the 'established' viewpoint is not the only one to be accepted by large numbers of 16-19 year old Geographers?
13. Were the adopted assessment procedures and the weighting of their percentage marks, mainly the result of team recommendations, or were they significantly influenced by the Examination Boards?

14. Are there any current plans to modify the content of the Project's courses as a result of experience gained through the Pilot Schemes?

15. The team emphasizes the importance of involving teachers in the Project. In all probability, those who assisted in the Pilot Schemes were highly-motivated, promotion-minded teachers from the more progressive schools. Did or does, the team and its development plan make any provision for involving the less progressive teachers with average resources?

16. a) In what way did the data derived from the survey of current practices and attitudes amongst Geography teachers, help to guide the project?  
b) Did the practices and attitudes of 'Mr. Average' Geography teacher, more or less describe the majority of cases?  
c) How much reliance was put on the expressed attitudes and wishes of these teachers?

17. Does the feedback information, provided by the teachers in the Pilot Schemes suggest:  
a) any unexpected benefits from adopting the Project?  
b) any consensus of opinion as to future development?

18. Was any platform of knowledge and skills (either general or geographical), assumed for the students beginning 16-19 Project courses of E.E.C., C.I.E. or A-level standard?

19. Is there any evidence to indicate whether or not the 'new' sixth-former can cope with the wealth of information given as resource material, and the complex interrelationships between factors, which form part of the enquiry-based learning process?

20. There are those who believe that less-able students have greater difficulty in dealing with, and in seeing the relevance of information;  
a) on a large spatial scale (e.g. global or continental) and  
b) concerning very different and distant environments from their own.  
If the team acknowledges these difficulties, has it attempted to compensate for them in the Project?
APPENDIX 2.

Abreviated Transcript of an interview with M.C. Naish of the Geography 16-19 Project Team.

The interview took the form of a series of twenty questions put to Micheal Naish, the then Director of the Schools Council Geography 16-19 Project, in the University of London Institute of Education during the course of the morning of Tuesday 13.12.83..

Q.1. From where did the pressure for change in the 16 to 19 Geography curriculum come?

Answer. There was nothing for the 16 to 19 year age group in the 'New Geography'.......Aims were out of line with practice.......A-level courses on offer were incongruent with new educational ideas such as the move away from factual recall.......Values Education was not represented. .......Continuous changes are happening in Geography.......Oxford and JMB Examination Boards seemed to have made once and for all changes ...... then fossilisation ...... Ongoing changes are needed.......Changes in sixth-form make-up created.......pressure for new examinations....... it was institute-motivated.

Q.2. The wider variety of student abilities and of institutions involved in 17+ courses are cited as pressure towards the development of a new course. However a wide variety of courses already exist for this market. So what dissatisfactions were there with existing Geography syllabus choices?

Answer. To begin with the link with CEE.......Schools were not aware of the options.......Now knowledge is greater.......City and Guilds are used.......The need for 17+ input was recognised early.

Q.3a. Does the Team consider Geography at research level to be a constant and direct source of pressure for change in the school Geography curriculum?

Answer. Yes.......Ideas found in Radical Geography.......John Huckle's, "Geography in Education. Reflection and Action".
Q.3b. (If so) What kinds of university research influence which aspects of the curriculum?

Answer. All kinds should be looked at.......Bernard Crick's political education viewpoint is taken.

Q.4. What measures were taken to assess the relative merits of the often conflicting developments in general educational objectives?

Answer. Encourage debate.........with teachers and LEA .........in meetings.......Viewpoint of teachers important. ..........Conference at S.C. .........."Broad Aims" paper published.......Advisers are the key to adoption........All LEAs were written to informing them of the new project in its developmental stage.

Q.5. What measures were taken to avoid:
   a) the mistakes of past curriculum development schemes?
   b) the bias of personal teaching knowledge?

Answer. a) (Michael Naish) was involved in the 14-16 and Bristol Geography projects.........discussion at Annual Meeting of University Teachers.........Building on successes of past projects.
   b) ....wide reference to practising teachers.......school-based project........Some bias is inescapable.......Bias to enquiry and relevance was (sought).

Q.6. What are the Team members' personal views on the nature of Geography and on the scope and purpose of its study at the 16-19 level?

Answer. Don Riddle....... Chose a paradigm to develop the project. The team had a locational analysis bias........but we chose an open system which could develop man-environment issues..........'Man' was dropped later........thought to be sexist........The approach was the key to the project's development........ideas were generated.

Q.7. Did the Project Team adhere to the plan for development and the proposed timing of its stages (Project News 2)? If not, what were the reasons?

Answer. Roughly, yes........to the end of 1978 we kept up
to date....seen in copies of annual reports. Final stage in 1978 led to examinaton work and therefore the nature of the Team's work changed.

Q.8. How were the team able to harmonise the sometimes conflicting interests of teachers, headteachers and the LEAs?

Answer. There was a definite effort to involve LEAs. Not so much effort was spent on headteachers. Advisers are needed to back teachers with advice and finance. They are the 'gate-keepers', the curriculum controllers. There was some involvement of headteachers, for example in Sheffield. Generally.....not definite but informal involvement of heads.

Q.9. How is the enquiry - based learning approach demonstrated to teachers?

Answer. Through teaching materials and trial materials......visits to schools. The Team had assistance from Tony Pearce, Farnborough Sixth Form College reading an M.Ph. on enquiry-based learning. The Hurricanes Unit was the first step to involving teachers (in enquiry-based learning).

Q.10. The contents of the course are composed of items which lend themselves to the enquiry-based and man-environment approach. A spread of environments and of scales of study were ensured by using a matrix.

a) Were there any other criteria used in the selection of items for the contents?
b) Did the Team consider that it had left out any major areas of geographic interest or any major skills and techniques, which did not lend themselves to the Project's approach?

Answer. a) The Team considered the framework not the content as the important point. Themes were the basis.....

b) The need was felt to cut the quantity of syllabus content......refer to GCE Boards core for teaching A level Geography. Sometimes the choice has to be made between content and ideas, skills and concepts......It is possible for students to avoid Climate and Meteorology......possible criticism.
Q.11. The use of current issues, problems and questions relating to real data will lead to a high rate of obsolescence of resources. How does the Team propose:
   a) to minimise the effort and expense of up-dating resources and
   b) to overcome the problems of question setting?

Answer. a) In-service input is vital ........ The publication of a series of short booklets to replace trial materials is underway. ........ (These) do not cover all the coursework but stimulate ideas.
   b) The policy is to appoint creative examiners. ...... M.Naish then A.Kent have been examiners....... A series of Chief Examiners is (envisaged)....... This does not worry the Team.

Q.12. Attitudes and values cannot be taught, but the Team wishes to influence them through the project.
   a) Is there any evidence, that in the long term, resolute students do change what may be highly idiosyncratic value-systems in the light of counter opinion?
   b) If there is, what precautions can be taken to ensure that the 'established' viewpoint is not the only one to be accepted by large numbers of 16-19 year old Geographers?

Answer. a) There is Social Psychology evidence ....... but not direct evidence for the project.
   b) It is against the project's philosophy to put forward any one viewpoint. Opening up viewpoints is a key idea.......

Q.13. Were the adopted assessment procedures and the weighting of the percentage marks, mainly the result of Team and teacher recommendation, or were they significantly influenced by the Examination Boards?

Answer. The A level was a threefold approach....... Teachers put in ideas....... The Team too....... At the same time an Inter-Board Exam. Committee met the Team. .... There was no particular influence by the Exam. Boards.

Q.14. Are there any current plans to modify the content of the project's courses as a result of experience gained through the Pilot Schemes?
Answer. Yes....... in the latest syllabus. Both years of the A level work have been evaluated ....... by questionnaire and meetings. Numbers were assessed by computer....... and by meetings of the Exams. Inter-Board. The CEE school's syllabus is being modified.

Q.15. The Team emphasises the importance of involving teachers in the project. In all probability those who assisted in the pilot schemes were highly-motivated, promotion-minded teachers from the more progressive schools. Did or does the Team and its development plan make any provision for involving the less progressive teachers with average resources?

Answer. Usually the teacher-groups were put together by Advisers. In Northumberland for example all Geography teachers were involved. ........ in Sheffield many pilot teachers were not 'innovators'. A range of Authorities became involved, some with experience of the Geography 14-16 Project, some not. The majority of teachers in the scheme had no previous curriculum development experience. .. ....... There was a mixture of abilities in students too.

Q.16. a) In what way did the data derived from the survey of current practices and attitudes amongst Geography teachers, help to guide the project? 
b) Did the practices and attitudes of 'Mr. Average' Geography teacher, more or less describe the majority of cases? 
c) How much reliance was put on the expressed attitudes and wishes of these teachers?

Answer. a) The survey results were helpful. ....... The enquiry approach was not widely used in schools. ....... How much time was spent on Geography each week was vital information. Teacher values were of interest. 

b) This was a statistical average ....... from the computer. 

c) A lot of reliance ....... The sample was carefully constructed.

Q.17. Does the feed-back information, provided by the teachers in the pilot schemes suggest; 
a) any unexpected benefits from adopting the Project? 
b) any consensus of opinion as to future development?
Answer. a) The greater involvement of kids. ....... The adoption of an Oxfam child by one group.

b) Regular meetings of teachers and coordinators are needed. ....... The establishment of after-care ....... Setting up a local coordination system was a definite consensus view.

Q.18. Was any platform of knowledge and skills (either general or geographical), assumed for the students beginning 16-19 Project courses of BEC, CEE or A-level standard?

Answer. No. All students can start from scratch. ....... The course is now influencing both university courses and Lower School Geography. ....... Cambridge University interviews are now using problem-solving exercises. ....... A Schools Council course to 16+ is an advantage to 16-19 work.

Q.19. Is there any evidence to indicate whether or not the 'new' sixth-former can cope with the welter of information given as resource material, and the complex interrelationships between factors, which form part of the enquiry-based learning process?

Answer. This has not been tackled. ....... Care taken with the language used in the project materials. ....... Some independent research is being done. R. Leicester in Southampton. ....... his own experience after using the pack.

Q.20. There are those who believe that less-able students have greater difficulty in dealing with, and in seeing the relevance of information;

a) on a large spatial scale (e.g. global or continental) and

b) concerning very different and distant environments from their own.

If the Team acknowledges these difficulties, has it attempted to compensate for them in the Project?

Answer. The first year of the course can have a local and man-made bias. ....... The questions set have got to be worthwhile ....... a range has to be covered.
APPENDIX 3.

QUESTIONNAIRE: SURVEY OF THE SCHOOLS COUNCIL
GEOGRAPHY 16-19 CURRICULUM DEVELOPMENT.

TO THE HEAD OF THE GEOGRAPHY DEPARTMENT,

Your help is requested for an enquiry into the adoption of the Geography 16-19 Project's Advanced Level Course.

All pilot, linked associate and associate schools and colleges are being circulated with the same questionnaire.

It is hoped that the results from the survey will facilitate:
(a) the further propogation of Geography 16-19, and
(b) the dissemination of future curricular innovations.

Will you, as Head of Department, please complete Part A and Part B of the questionnaire. Will you also, give a copy of Part B to one other Geography 16-19 teacher in your school or college, and ask him or her to complete it independently.

Both parts of the questionnaire have been designed to minimise the time needed for completion.

Confidentiality is guaranteed for all replies received. Complete anonymity of persons and establishment will be preserved in any publication referring to the analysis and interpretation of results.

THANK YOU FOR YOUR HELP.
GEOGRAPHY 16-19 QUESTIONNAIRE.

NAME OF SCHOOL/COLLEGE. ________________________________

YOUR STATUS. ________________________________

PART A. FOR HEADS OF DEPARTMENT.

Please select your answer to each question and place a tick in the appropriate box. Questions preceded by 'M' may require more than one answer.

1. Please give details of the school or college in which you work.
   Type.
   Comprehensive School □
   Senior High 13/14-18 □
   Grammar School □
   Independent School □
   Sixth Form College □
   F.E. College □
   Tertiary College □
   Other □

   Size (N.C.R.) __________
   Sex. Mixed □
   Girls' □
   Boys' □

   Number please.

M2. Which of the following Geography courses was/were your department running for sixth-form students before adoption of the Geography 16-19 Project?

   A C.S.E. course. □
   An 'O' Level course. □
   A C.E.E. course (other than Geography 16-19 C.E.E.). □
   An A/O course. □
   An 'A' Level § systematic, § regional; Cambridge with Region Option, London, Oxford Local Econ. Geog. or Geog., Welsh. □
   The 'A' Level J.M.B. Syllabus C. □
   Other Geography courses or courses with a Geography component, please state. ________________________________

M3. Which of the following O/C.S.E./16+ Geography courses was/were being taught by your department at the time you were planning to adopt Geography 16-19?

   G.Y.S.L./Avery Hill/14-16 course. □
   Geography 14-18 course. □
   Traditional 'O' Level course. □
   Traditional C.S.E. course. □
   C.S.E. Mode 3 (other than G.Y.S.L.) □
   Conceptual C.S.E. course. □
   Other courses, please state. ________________________________
M4. Since your adoption of Geography 16-19 'A' Level, which sixth-form Geography courses does your department offer in addition? (If any)
   A C.S.E. course.  □
   An 'O' Level course. □
   C.E.E. (other than Geography 16-19 C.E.E.) □
   Geography 16-19 C.E.E. □
   An 'A/O' Level course. □
   An 'A' Level systematic course. □
   An 'A' Level & systematic, & regional course. □
   The 'A' Level J.M.B. Syllabus C. □
   Other courses with a Geography content, please state. □

M5. Since your adoption of Geography 16-19 'A' Level, which G/C.S.E./16+ Geography courses does your department offer?
   G.Y.S.L./Avery Hill/14-16 course. □
   Geography 14-18 course. □
   Traditional 'O' Level course. □
   Traditional C.S.E. course. □
   C.S.E. Mode 3 (other than G.Y.S.L.). □
   Conceptual C.S.E. course. □
   Other courses with a Geography content, please state. □

6. In which year did your department decide to adopt Geography 16-19 'A' Level?

7. In which year did your department begin teaching Geography 16-19 'A' Level?

M8. In which of the following ways did your department initially decide to adopt Geography 16-19 'A' Level?

   Adopt the whole course with the intention of running it for several years as a main course. □
   Adopt the whole course for a trial period or trial group. □
   Modify the course by the introduction of a special Option Module □
   Adopt some of the Project's ideas to enhance another course. □
   Significantly modify the Project's suggested teaching method. □
**GEOGRAPHY 16-19 QUESTIONNAIRE.**

9. How many students began your initial Geography 16-19 'A' Level course?
   - 5 or less. ☐ 6-10. ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ over 25 ☐

10. How important were each of the following factors in your decision to look at alternatives to the previous 'A'-level course/s run by your department? Please answer each part on the scale provided.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Very Important</th>
<th>Fairly Important</th>
<th>Minor Importance</th>
<th>No Importance</th>
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<tbody>
<tr>
<td>(a) The widening range of sixth-form ability meant that the previous 'A'-level course/s became less suitable.</td>
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<td>(b) The previous 'A'-level course/s became less appropriate to the general aims of the school or department.</td>
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<td>(c) The previous course/s was/were too dependent on factual knowledge.</td>
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<td>(d) The content of the previous course/s was/were too extensive.</td>
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<td>(e) Shortage of time restricted the choice of teaching and learning methods.</td>
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<td>(f) The syllabus requirements for the previous course/s did not lend themselves to modern developments in teaching method.</td>
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<td>(g) Many of the students found the previous course/s uninteresting.</td>
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<td>(h) It was difficult to find adequate and relevant resources for the previous course/s.</td>
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<tr>
<td>(i) The previous course/s failed to keep pace with developments in Geography.</td>
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<td>(j) Staff in the department needed the stimulus of a change in curriculum.</td>
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<td>(k) The previous course/s offered little or no scope for school-based assessment.</td>
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<tr>
<td>(l) The contents of the previous course/s lacked balance e.g. between Physical &amp; Human Geography, small &amp; large scale studies.</td>
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<tr>
<td>(m) The previous course/s was/were too narrowly academic.</td>
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<td>(n) The previous course/s lacked relevance for the majority of students.</td>
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</table>

Other factors (if any). Please state.
11. How important were each of the following factors in your decision to adopt Geography 16-19 in preference to other 'A'-level courses available? Please answer each part on the scale provided.

(a) The man-environment approach.
(b) The enquiry-based approach.
(c) The modular syllabus format.
(d) The choice of content.
(e) The assessment procedures.
(f) The emphasis on key questions and guiding concepts.
(g) The opportunity to consider Geographical ideas and principles within a variety of spatial scales and regional locations.
(h) The opportunity for students to develop their own values and attitudes.
(i) The opportunity for students to develop general skills e.g. group skills, decision-making skills.
(j) The possibility of teaching courses of different levels (e.g. 'A' & C.E.E.) with the same resources.
(k) The possibility of using your existing stock of text-books as back-up resource material.

Other factors (if any). Please state.

12. Have you any additional information or comment, relevant to your department's adoption of Geography 16-19? If so, please state.
GEOGRAPHY 16-19 QUESTIONNAIRE.

NAME OF SCHOOL/COLLEGE.

YOUR STATUS.

PART B (i). FOR TEACHING STAFF INVOLVED IN GEOGRAPHY 16-19, INCLUDING HEADS OF DEPARTMENT.

Please indicate your choice of answer by placing a tick in the appropriate box. Questions preceded by 'M' may require more than one answer.

1. By what means did you first learn of the Schools Council, Geography 16-19 curriculum development?

   From the Project's literature. □ From an L.E.A. adviser/inspector. □
   From the Educational Press. □ From another teacher. □
   From a conference or talk involving the Project Team. □ If none of these, please state your source.

2. Have you personally attended an in-service training course or workshop on Geography 16-19?

   Yes. □
   No. □

3. If you have attended a Geography 16-19 in-service training course, or more than one such course, who was/were mainly concerned in disseminating the information?

   Staff of another school/college. □
   An L.E.A. adviser/inspector. □
   Member/s of the Project Team. □
   Others. Please state.

4. To what extent do you consider that you understand the aims and methods of Geography 16-19?

   Very well. □
   Fairly well. □
   Understand basic ideas. □
   Unclear, as yet. □
5. With respect to each of the following tasks, please indicate the degree of difficulty encountered by your department when implementing Geography 16-19 'A'-level.

| (a) Assimilating and putting into effect the broad aims. |
| (b) Acquiring the resources in sufficient quantity and quality. |
| (c) Translating the resource materials into student tasks/work-sheets. |
| (d) Acquiring suitable additional resources. |
| (e) Assessing the standard of course-work produced by students. |
| (f) Adjusting teaching style to enquiry-based learning methods. |
| (g) Acclimatising students to purposeful enquiry-based learning. |
| (h) Incorporating the Route to Enquiry into student working practice. |
| (i) Devising questions for internal assessment. |
| (j) Organising suitable field-work. |

Other tasks. Please state.
PART B (ii). The following questions are an attempt to gain some indication of how individual teachers interpret the Geography 16-19 course.

Each question is in the form of three statements relating to the same aspect of Geography 16-19. You are asked to choose the statement which is closest to your own interpretation.

There are no right or wrong answers. Statements have been chosen to reflect different shades of opinion and emphasis.

Please select one answer to each question, and indicate your choice by a tick in the appropriate box.

In a Geography 16-19 decision-making exercise, students should:

6. (a) avoid personal bias when examining the issues.
   (b) give most weight to the perceived needs and wishes of those people who would be affected by the decision.
   (c) incorporate their personal values into the making of an informed decision.

7. Geography 16-19 should:
   (a) concentrate mainly on areas of the world where the most significant and important man-environment problems or issues are to be found.
   (b) refer to a wide variety of environments in order to give students a breadth of understanding of different human problems and issues.
   (c) concentrate on those examples of man-environment problems and issue issues which best lend themselves to the teaching of Geographical principles and skills.

8. Geography 16-19 should:
   (a) make students aware of the delicate balances within natural and semi-natural environments.
   (b) foster attitudes towards natural and semi-natural environments which are consistent with man using them for his best long-term advantage.
   (c) aim to develop positive attitudes towards the conservation of natural and semi-natural environments.

9. Geography 16-19 is mainly concerned with:
   (a) illuminating the opportunities and restrictions which a varied range of environments offers to man.
   (b) considering the possible benefits and losses involved in any of man's decisions to change his environment.
   (c) the distribution and interaction of phenomena on the Earth's surface.
10. Students starting a Geography 16-19 course:
   (a) will be at no disadvantage if they have not followed a Geography course to the 16+ age level. ☐
   (b) will derive a considerable advantage from having followed a Geography course to the 16+ age level, but need not have done so. ☐
   (c) should normally have followed a Geography course to 16+, though a few exceptions may be made. ☐

11. Each section of the Geography 16-19 course-work should be designed to allow:
   (a) the introduction of a new skill or the revision of a skill insufficiently practiced. ☐
   (b) the use of a variety of skills. ☐
   (c) the use of skills as and when they are appropriate to the tasks. ☐

12. Geography 16-19 teaching guides:
   (a) are precise and enable teachers adopting the course to avoid designing practical approaches, if they so wish. ☐
   (b) have substantial detail but need some interpretation, thereby allowing a variety of approaches to teaching. ☐
   (c) outline only those fundamental approaches emphasised in the project philosophy, and give maximum choice of interpretation. ☑

13. The course content of Geography 16-19 should:
   (a) be standardised for the foreseeable future, for practical and administrative reasons. ☐
   (b) allow schools the option of developing their own content, as and when they choose to do so. ☐
   (c) act as an exemplar for the purpose of guiding and encouraging independent school-based developments. ☑

14. Geography 16-19:
   (a) requires students to acquire substantial geographical knowledge. ☐
   (b) regards the learning of factual geographical knowledge as being of minor importance. ☐
   (c) gives equal importance to the acquisition of geographical knowledge and the development of skills. ☐
15. By the end of a Geography 16-19 course, a student should be able to demonstrate, in relation to a Geographical issue or problem:
   (a) the ability to give an informed judgement based on relevant information.
   (b) understanding of the principles and concepts relating to a question.
   (c) the use of learned skills and techniques in appropriate ways.

16. For the purpose of teaching Geography 16-19:
   (a) detailed lesson plans are precluded, since teachers must be prepared to develop lessons from the interests and responses of the students.
   (b) some class time must be given to open-ended discussion and work related to it, but for practical purposes, guidance from teachers towards achieving a full and informed enquiry must be expected occasionally.
   (c) regular and planned guidance from the teacher is consistent with enquiry-based learning, and is the most effective way of ensuring that each student is making progress.

17. For the purpose of effective learning of Geography 16-19:
   (a) classroom seating should be organised by the teacher so that groups can discuss their work when necessary.
   (b) seating arrangements should mainly be left to the students, where possible.
   (c) seating arrangements are of no real significance.

18. When teaching Geography 16-19:
   (a) a diversity of resource material should be available from which students can make their selection.
   (b) the teacher should ensure that resource material specific to the task in hand is available for use.
   (c) students should be encouraged to ask for guidance as to which resource material is relevant.

19. A Geography 16-19 teacher's questions to students:
   (a) should mainly be for the purpose of opening out discussion, and should respond positively to student contributions.
   (b) should be for the purpose of assessing what students already know and guiding them towards an acceptable line of enquiry.
   (c) should be designed to establish key facts.

20. The man-environment approach used in Geography 16-19:
   (a) is an alternative to the spatial approach.
   (b) can include some spatial concepts.
   (c) is fundamentally concerned with spatial concepts.
21. When teaching Geography 16-19:
(a) it should be possible for teachers to do a good deal of direct teaching, including 'talk and chalk' methods, if they so wish.
(b) teachers should seek to manage classwork by asking important questions and leading discussion.
(c) teachers should reduce directive class management to a minimum, encouraging students to initiate and direct their own studies.

22. When considering topics which have a political dimension, the Geography 16-19 teacher should encourage:
(a) the due consideration of political influences, but should avoid emphasis of a party political nature on any issue.
(b) the discussion of party political viewpoints, if relevant, provided that care is taken to ensure an initially balanced presentation.
(c) the discussion of party political viewpoints, if relevant, but would wish these arguments to be initiated by the students.

23. The skills which Geography 16-19 aims to teach students are mainly related to:
(a) the interpretation of Geographical data in a broad variety of forms, including maps, diagrams, photographs, statistics and written texts.
(b) the organisation and analysis of data for decision-making together with the communication of conclusions through well-argued cases.
(c) developing the ability to work effectively within a group, to organise group-workers and materials when required, and to express ideas and values with confidence.

24. It would be most useful, to introduce into Lower School (pre-16-19) Geography courses, the Geography 16-19 approach of:
(a) enquiry-based learning through a specified route of enquiry.
(b) man-environment questions, which consider the interrelationship of man with his physical, socio-cultural and behavioral environment.
(c) emphasis on key Geographical questions and guiding concepts, across a curriculum matrix which ensures a variety of scales and regional locations.

25. Have you any additional comments or information relating to the dissemination of Geography 16-19, or to any difficulties you have had with its interpretation or implementation? Please state.