TOWARDS AN ANALYSIS OF THE TEACHER AS RESEARCHER

by

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ABSTRACT

The purpose of this study has been the examination of the role of the 'teacher as researcher' and the analysis of the participation of teachers in research in their own classrooms.

This has involved a study of two projects - the Humanities Curriculum Project and the Ford Teaching Project - which introduced the idea of teachers examining their own practice, and an analysis of action research from the perspectives of John Elliott and Stephen Kemmis.

Three recent projects:

(a) Leicestershire Classroom Research In-Service Education Project

(b) A Register of Self-Evaluation Schemes compiled with the Open University

(c) A Schools Council Programme 2 Project: Leicestershire Network

were analysed to determine what happened when teachers engaged in self-evaluation and research in their own classrooms.

The results show that there are only a small number of teachers actively engaged in self-evaluation and they experience difficulty in starting their research because they lack experience of monitoring techniques and how to fit these procedures into the routines of teaching. Creating time to engage in self-evaluation is a major inhibiting factor.

The need for a support structure to help teachers is clearly identified and the role of co-ordinators to bring teachers together to share ideas is essential for the development of this work. At the present moment the teachers have taken the first step in acquiring competence and confidence.

Many of the teachers expressed the view that self-evaluation had enabled them to learn more about their teaching, about pupils, and about their own subject.

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LIST OF ABBREVIATIONS

CARN	Classroom Action Research Network
FTP	Ford Teaching Project
HCP	Humanities Curriculum Project
ILEA	Inner London Education Authority
INSET	In-service Education and Training

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CHAPTER ONE

INTRODUCTION

Over the past few years there has been a growing concern about the lack of teacher involvement in educational research. Teachers, their pupils and classrooms have been the subjects of research by visiting researchers; teachers are seen as the consumers of research and never as the producers of original research (Nixon, 1981b). However, this view has been questioned and, as Shard (1981) has pointed out, if educational research is to have maximum impact on those who are concerned with the practice of education, it needs to engage them in an active and practical way. This view has been supported by a number of authors (Burgess, 1980; Smetherham, 1979; Verma and Beard, 1981) who have identified a key role which teachers can play in practical research and the study of classroom problems.

It is interesting to speculate why teachers have not been involved in educational research. Some explanations have been suggested: first, it is claimed that much of research in education has not been applicable to the teacher in the classroom. The teachers have had problems defined for them by people who are outside of the classroom situation. Questions have been posed which were of little concern to the teacher in a classroom. This has been pointed out by a number of writers (Bartholomew, 1972; Burgess, 1978; Cosgrove, 1981; McCutcheon, 1981; Nixon, 1981; Verma and Beard, 1981) who claim also that most educational research is an activity

indulged in by those outside the classroom for the benefit of those outside the classroom. Second, research reports are frequently full of jargon and statistics and often written in a fashion not accessible to teachers (McCutcheon, 1981) and they appear in journals which are not readily available to the classroom teacher (Bartholomew, 1972; McCutcheon, 1981; Verma and Beard, 1981). Thus, teachers have been left out of the research process, research reports have appeared to be of little relevance to teachers, and what is available is not easily accessible.

Elliott (1976) identifies the dilemma facing both the teacher and the researcher. Teachers' concepts about life in the classroom are rarely taken into account by outside researchers, because their interpretations are assumed by many researchers to be biased and not grounded in relevant and sufficient evidence, and that only the outside researcher trained in scientific methods can give objective accounts of the teaching and learning that takes place. Elliott says that teachers argue back that the researchers' findings are often irrelevant to practice. The reseachers have replied to these criticisms saying that either they must make their findings more relevant or do more to help teachers understand just how relevant they are. But there still remains the problem that the most valid public knowledge of what takes place in the classroom remains in the hands of the professional researcher who is not engaged in classroom teaching.

This study will attempt to examine the background to research-based teaching and in Chapter Two it identifies two projects which

have pioneered the concept of the teacher in research and led to the development of a theoretical perspective called action research.

In order to examine the idea of teachers in research more closely, Chapter Three examines the work of teachers in Leicestershire who are engaged in a classroom research project where they have focused on examining learning.

Chapter Four examines the problems that teachers face in monitoring and examining their own practice.

Chapter Five is an analysis of an Open University register of self-evaluation schemes and helps us to understand what kind of projects have been undertaken by teachers in different parts of the country.

CHAPTER TWO

TEACHERS IN RESEARCH

2.1 Introduction

In examining the role of a teacher doing research in his own classroom, Nixon (1981b) does not see him as a special kind of teacher but simply one who wishes to increase his or her professional expertise. By investigating and reflecting upon their own practice, teachers may increase their own understanding of the classroom and improve their own practice. It is this kind of tradition that Nixon is speaking about when he suggests that teachers in research are engaged in a tradition of systematic inquiry by means of which they are able to communicate to colleagues and to other interested parties insights culled from their classrooms, and to use these insights in such a way as to improve their own teaching. He goes on to point out that a research tradition involving teachers may require a willingness on the part of teachers to learn about their classroom practice and a desire to develop themselves professionally.

Pring (1978) echoes this by stating that a teacher-researcher is someone who takes seriously the injunction to theories about practice or to think systematically and critically about what he is doing. Stenhouse (1975) believes that when teachers are doing research they are taking a research stance to their teaching which means a disposition to examine their own practice critically and systematically, and in so doing the teacher is attempting to

understand better his own classroom. He goes on to argue that in a research tradition in which the teacher examines his own practice critically and systematically, one may be able to understand the implications of teaching in a certain pedagogical approach. In the Humanities Curriculum Project he has attempted to develop this idea. This was taken up and developed further by one of the HCP team, John Elliott, who was one of the directors of the Ford Teaching Project.

These two projects form the basis for Chapter Two which examines the idea of teachers in research. Arising out of the Humanities Curriculum Project and the Ford Teaching Project, the term action research came into use. Two writers, John Elliott and Stephen Kemmis, have attempted to outline what is meant by action research. This is important because action research develops the idea of the teacher in research and puts it into a theoretical perspective. It is this theoretical perspective which is outlined in the final part of this chapter.

2.2 The Humanities Curriculum Project

The Humanities Curriculum Project under the directorship of Lawrence Stenhouse attempted to get teachers to test the feasibility of a curriculum proposal in practice, with the following remit,

> "to offer to schools such stimulus, support and materials as may be appropriate to the mounting, as an element in general education, of enquiry-based courses, which cross the boundaries between English, history, geography, religious studies and social studies. The project is expected to concentrate upon such support as will in

particular meet the needs of adolescent pupils of average or below average academic ability." (Stenhouse, 1968)

The general aim of HCP was to develop understanding of the nature and structure of certain complex value issues of universal human concern. The project team defined a set of teaching principles for discussion-based enquiry which was aimed at developing an understanding of such issues. Stenhouse (1975) says:

> "In the Humanities Project we were hammering out in collaboration with teachers a procedural discipline like that of 'procedure at meetings' or parliamentary procedure with the important distinction that we were concerned not with a decision-making group, but with a learning group aiming to develop understanding."

The team asked teachers to explore the problem of implementing these principles in practice, and the team asked teachers to promote the idea as a means of exploring for themselves the problems of teaching controversial topics rather than as an authoritative solution provided by experts.

Stenhouse (1975) indicates that there was a considerable problem in communicating this research stance to the teachers, for in curriculum projects of the past teachers had been told what to do rather than being invited to undertake the research. The principles of procedure prescribed procedural neutrality, protection of divergence and a discussion-based rather than an instruction classroom. They adopted a research plan based upon the specification of a procedure of teaching, which should embody the values implied in an aim in a form which could be realised in the classroom. A distinction should be made between the principles of teaching and

the principles of procedure. The former are the principles implied by the stand you are taking, and by the value position. What is important is to articulate what these principles are in that stance and to be consistent in one's teaching if one holds those views. The latter "are the working across of what that actually means in the classroom" (Stenhouse, 1982).

What the team was offering the teachers was an alternative strategy for teaching controversial issues to adolescents. This strategy was to be process rather than product based.

> "Instead of taking our general statement of aim and analysing it into specifications of terminal student behaviour, we analysed it logically in order to derive from it a specification of a use of materials and a teaching strategy which should be consistent with the pursuit of the aim. One might draw a distinction between the two ways of disciplinary and structory behaviour, including classroom behaviour. In one case behaviour is disciplined by the pursuit of goals. In the other, behaviour is disciplined by the acceptance of a form or of principles of procedure." (Stenhouse, 1971)

The changes which the team specified were not changes in terminal student behaviour but in the criteria to which to work in the classroom. These changes are defined by enunciating certain principles of teaching which are expressions of the aim. One of the project team (Elliott, 1981a) explains this procedure as follows:

> "A fundamental belief underlying the support provided was that any clarity of aim should develop out of the teachers' reflection about their own practice. What was offered to the teachers was not so much a set of defined goals as a classroom procedure which would:
>
> (a) help them to become more aware of their behaviour patterns
>
> (b) affect their perception of the possible course of action open to them

(c) help clarify their awareness of what would constitute a worthwhile aim."

When the project began in 1967, the project team assumed that when dealing with controversial issues teachers would tend to act in an authoritarian manner and Elliott (1981a) highlights how this may be done. He states that teachers would:

1. "Use their authority position to promote their own views."
2. "Pressurise students to arrive at concenses conclusions."
3. "Instruct or inculcate certain attitudes and values rather than allow discussion and force interchange of views."

In order to help the teacher avoid using his authoritative position, the team felt that it must attempt to develop experimentally and evaluate a pattern of teaching with the following characteristics:

(a) The teacher should be neutral.

(b) The teacher should not indoctrinate his own views.

(c) The procedure should allow students through discussion to be able to understand a divergence of views.

(d) The aim should be understanding; the pupil should understand the nature and the implications of his point of view.

Stenhouse, as the project director, believed that in order to do this it would be necessary to establish a particular relationship with teachers. He explained that in order to follow the experimental design intended it was necessary to enlist teachers as experimental colleagues. They wished to cast the teachers with whom they worked in the role of researchers, and the central team were the learners.

The team, who worked with a group of 32 schools, were able to evolve from the study of classrooms a discussion technique in which

the teacher attempted to implement the role of neutral chairman.

The teacher should not seem to be biased in a discussion; however, the problem was the pupils had traditionally accepted or rejected the teacher's view, because he is the teacher rather than because they had thought the issue out for themselves (Adams, 1976). Because of this dilemma, the project team produced five premises for the teachers:

1. that controversial issues should be handled in the classroom with adolescents;

2. that the teacher accepts the need to submit his teaching in controversial areas to the criterion of neutrality at this stage of education, i.e. that he regards it as part of his responsibility not to promote his own views;

3. that the model of enquiry in controversial issues should have discussion, rather than instruction, as its core;

4. that the discussion should protect divergence of view among participants, rather than attempt to achieve consensus;

5. that the teacher as chairman of the discussion should have responsibility for quality and standards in learning.

(The Humanities Curriculum Project: An Introduction, 1970)

In his review of the project, Aston (1971) suggests that the overall task of the project was to discover a teaching strategy which would implement these premises in the classroom, to report the strategy, and to support teachers who wished to develop it with training.

The training of the teachers was vitally important. The team hoped to train teams of people all over the country so that they, in

turn, could organise programmes about the ethos of the HCP and the training and after-care of teachers interested in the innovation. Stenhouse (1973) explains the plan. In the summer of 1968, the team would hold conferences in all the experimental schools and by that time the team would have outlined a teaching strategy. They would present to the schools the premises on which the team were working, which they thought the teachers would accept, as they had already shown an interest in joining the project. The team would present an outline of the problems which would be encountered and, through chairing discussions, they would indicate how far they had got in understanding the role demanded of the teacher, if he were to develop this kind of work. For the team, the premises were a constant controlled variable; their diagnosis of problems and suggestions were hypotheses to be tested in classrooms.

The principles of procedure stated by the project team cast the teacher in the role of the neutral chairman in a discussion-based lesson, thus the discussion groups had to be provided with documentary evidence. It was from this that the need for the curriculum materials arose, for if a discussion is to take place there needs to be evidence on which to base one's point of view. And, if the position of neutrality of the teacher is to be upheld, then the input must come from the materials. Given the pressures on teachers, the team decided to help by offering materials, but it was hoped that the teachers would keep them up-to-date by adding and introducing topical materials to their own Jackdaw-type banks (Stenhouse, 1973).

Besides adding to and deleting materials, which had little or no relevance, and evaluating the materials, the teachers' main task in

the experimental schools was to test and develop hypotheses about the teaching method:

> "A considerable amount of time and effort was spent by the project team and myself (J.E.) helping teachers to test the validity of the assumptions implied by its procedural principles. This involved developing a methodology for relating teachers verbal and non-verbal behaviour to the way pupils responded to their teaching and producing some explanations for these relationships. The relations observed are not sufficient to identify the teachers' conduct as promoting his own views in inviting consensus. We have to explain how the teachers' actions are connected to the pupils, the mechanism which explains the relationship. This can only be appropriately done by gathering evidence of the meaning pupils ascribe to their teachers' actions." (Elliott, 1981a)

Stenhouse points out that this was done by observing classrooms and taking notes of events which seemed to be significant and the team asked teachers to send them tapes of their discussions at regular intervals. The study of these tapes enabled them to work out the implications of the basic premises and aims for discussion-based work. Unfortunately, there were some problems, the poor quality of some of the tapes received by the team, and perhaps more important:

> "For many of the teachers involved in the research and development phase, the experience of attempting to explore such a radically new approach was frequently punitive, if not harrowing, especially during the first year of the experiment." (Elliott and McDonald, 1975)

At the second Easter conference in 1969, the work on the tapes was presented as a series of propositions or injunctions to chairmen, and the teachers were asked to test them the following year. But the team soon realised that it had made two errors. The expression of the methodology as injunctions was wrong.

First, generalisations did not hold. Teacher judgement was necessary at all times. Second, injunctions were statements, they were treated as instructions to teachers, rather than as hypotheses. And, as Stenhouse pointed out in a personal interview in May 1982:

"the teachers did not see them as hypotheses but as rules"

but he says that initially they were created as rules, but the team had to push them back as principles of procedure and hypothetical procedures to test.

Unfortunately this led to a problem that some teachers just 'obeyed the rules' because they had come from the team (and therefore were seen to be important) and not because they were hypotheses which were worth testing.

> "It is all too easy for exploratory ideas and suggestions from the central team to become authoritative statements in the eyes of the trial schools. When we were presented with what the central team saw as a series of hypotheses to be explored in the classroom, they became in our hands no longer hypotheses but matters of H.C.P. policy or a series of rules to be obeyed at all costs. Failure to adhere to them implied a failure to operate the project. We had neither the confidence to challenge these hypotheses nor the belief that we were able, as part of our brief, to explore and investigate them in the classroom situations and so test their validity." (Dale, 1973)

Reflecting on this, the central team decided not to produce a handbook for teachers, which contained a list of rules, but instead highlighted a number of significant types of teacher behaviour in the classroom, and asked teachers to collect data and evidence as to how the pupils responded, and to examine the teaching in the light of this.

The Humanities Curriculum Project was a collaborative exercise in which both the research team and the teacher researchers were

learning from each other, each using their individual expertise to test and monitor the various facets of the project. The project team tested its hypotheses by asking teacher/reseachers to try and teach according to the premises, and the teachers' understanding of the role of the neutral chairman. Whilst the teachers were doing this they were evaluating the materials offered by the team as evidence for discussion, because as neutral chairman their own input and authority had disappeared.

2.3 The Ford Teaching Project

In this project, which ran from 1973-75, 40 teachers were invited to join the general team of three, John Elliott (member of the HCP project team), Clem Adelman, and Tina Reay, who was the secretary but also responsible for co-ordinating liaison between schools, and between the schools and the project team. There were also advisers nominated by their local authorities to help the team and to support the work of the teachers. These were part-time helpers. The local education authorities in the neighbourhood of Norwich were asked for the names of teachers likely to be interested in, and suitable for, the project. Unfortunately, when the list of names arrived, the team assumed that the teachers would be able to reflect on their own classroom performance and submit it to scrutiny, but this was not the case (Adams, 1980), and the team soon realised that the teachers lacked the initial preparation for such work.

> "Perhaps during this initial stage we should have concentrated more on the selection of schools than on the recruitment of teachers within them."
> (Elliott and Adelman, 1976)

The team had tried to negotiate teachers' participation in action research, but after one term it became clear that the action research was simply not getting off the ground. Few team meetings had taken place, feedback from schools was sparse, even though the team had agreed to go into schools to work with the teachers once problems began to emerge. When enquiries were made, the teachers replied by saying, "everything's all right, don't call us, we'll call you".

After working in schools for one term it was clear that little progress in the project seemed possible without intensive and heavy intervention by the team. It was obvious that some teachers, in an environment where there was little or no opportunity for discussion and reflection within the school, were having great difficulty in motivating themselves for involvement in action research (Elliott, 1973a).

For this reason the project team initiated a form of second order research to develop practical hypotheses which were relevant to the question, "how can one initiate teachers into the activity of reflecting about their practice?"

> "It was in this context of reflecting about the problems of implementing teachers' participation in action research, that the idea of the self monitoring teacher began to crystallise as the key concept for the second order research." (Elliott and Adelman, 1976)

Thus, the Ford project team decided to test two hypotheses:

"1. It is possible for a group of teachers working in a variety of contexts to identify problems and effective strategies for resolving them which are highly generalisable.

2. Action research methods which promote self awareness by monitoring pupils accounts of teaching are the

> best means of helping teachers to faithfully diagnose their most persistent and generalisable inquiry-discovery problems." (Elliott and Adelman, 1973b)

The project team (the outsiders) and the teachers (the insiders) met at Easter in 1973 for a conference and a three-pronged task was defined in the following way:

1. To specify the aims and principles governing inquiry-discovery based teaching.
2. To identify, diagnose and document a range of teaching problems which are raised by attempts to realise those aims and principles in practice.
3. To attempt to establish practical guides to teaching by enquiry discovery methods.

The project team's responsibility was for maintaining and adopting an organisational framework, which would facilitate the execution of these tasks.

An important part of this framework was the covering of meetings organised by the advisers, which were to be held twice termly at local teachers' centres. The teachers would meet in groups to discuss teaching problems and to share ideas about the collection of data. During the first full day conference it was noticeable that there were communication problems. Certain terms meant different things to different teachers, and it was clear that there needed to be a common language when dealing with the concept of inquiry-discovery teaching. After discussions with teachers at the conference, the project team worked out a schema of contrasting terms and particular distinctions used by teachers. This was an attempt to avoid any chance of misunderstanding of the terminology used within the group. Elliott (1981) makes the point that:

> "the team helped teachers to clarify the language they used to talk about classrooms and the underlying theories it expressed."

It is interesting to note that there were teachers from a cross-section of schools attending these meetings. Staff from Junior Schools 7-11, Middle Schools 8-12 or 9-13, and Secondary Schools. During the four terms the project lasted in schools the teachers also met for three four-day conferences.

The conferences allowed teachers to start their own problem-solving by focussing on practical problems defined by practitioners (insiders), and encouraged collaboration between outsiders and insiders, who in dialogue sought solutions to the practitioners' problems. This provided a great opportunity for lateral communications across educational boundaries and the project team felt that this lateral communication about classroom problems increased teacher autonomy, because it supported critical reflection about practice and gave teachers greater control over their own behaviour. Elliott (1981a) makes the point that:

> "the central aspiration underlying the design is to provide a structure which will help teachers to share ideas across established educational boundaries and thereby to begin to generate a *culture of teaching* which transcends these boundaries and is widely accessible."

The opportunities for sharing ideas reflected the team's aspirations to involve a group of teachers in the development of a theory about their own practice of 'inquiry-discovery' teaching which other teachers may have access to, as a support for their reflections about classroom problems. The central team attempted to

support teachers participation and collaboration on the project's research tasks by helping them to articulate the concepts which the teachers had evolved. Whilst the teachers were engaged in their own research in the classrooms on inquiry-discovery teaching, the consultants undertook research into effective ways of supporting action research of this kind. The consultant's action research is therefore dependent on the work of the teachers involved and would only be *action research* if they improved their ways of supporting teachers doing such work. The second order research was instigated because of the project team's belief that the teachers would be able to adopt a reflective stance to their teaching from the beginning (Elliott and Adelman, 1976).

The project team felt it was important for the teachers to monitor their own problems and develop practical hypotheses about how they arose and how they could be resolved, but also, to explore the extent to which these problems could be generalised and thus useful to other teachers in their classrooms. The team was concerned with the development of a general theory, but this theory was to be practical rather than a theoretical theory. In other words, the hypotheses produced by the teachers had to have a practical applicability for teachers in classrooms.

Smith (1981) in his analysis of the Ford Teaching Project suggests that the Ford Teaching Project was able to support teachers in formulating generalisations about particular classroom situations and this was as a result of the self-monitoring process. These generalisations were not predictions but rather guidelines for

understanding what was taking place. In addition, by systematically monitoring pupils' accounts of teachers' practice the project team helped teachers to become more aware of the consequences of their actions. As observers in the classroom, it was possible to triangulate different accounts of teachers' practice. Elliott and Adelman (1976) explain this procedure as follows:

> "Each point of the triangle stands in a unique epistemological poisiton with respect to access to relevant data about a teaching situtation. The teacher is in the best position to gain access via introspection to his own intentions and aims in the situation. The students are in the best position to explain how the teachers actions influence the way they respond in the situation. The participant observator is in the best position to collect data about the observable features of inter-action between teachers and pupils. By comparing his own account with accounts from other stand points a person at one point of the triangle has an opportunity to test and perhaps revise it on the basis of more sufficient data."

In discussion with the teachers, they would give feedback from the pupils and elicit accounts from the teachers about their lessons. In no way did they impose their own judgements on the teachers. The teachers were helped by the project team in a technical sense by actually assisting them in the use of tape-cassettes, tape-recorders and slide photography for monitoring their classroom behaviour. In some cases lessons were actually monitored by the team, for the teacher, using various pieces of audio-equipment, but in others the teachers were given advice on the advantages and disadvantages of each technique, but were left to do the actual 'recording' themselves.

The roles and relationships of the outsider and the insider in this project may be best summed up in the words of two teachers who worked on the project:

> "We are pleased that this project has brought research workers into the school - it seems to have helped them to understand our problems and helped us to understand theirs." (Cooper and Ebbutt, 1976)

This project was a good example of co-operation between researchers and teachers. There was dependence by both groups on each other and if the project was to be a success they would both have to learn from each other.

2.4 John Elliott on Action Research

Elliott (1981) defines action research as

> "the study of a social situation with a view to improving the quality of the action within it."

It aims to feed practical judgements in concrete situations, and the validity of the 'theories' it generates depends not so much on scientific tests of truth, as on their usefulness in helping people to act more intelligently and skilfully. In educational action research, 'theories' are not validated independently and then applied to practice, they are validated through practice. If one refers to classroom action research then it is a study of the classroom, with a view of hoping to improve the quality of the teaching and the learning which goes on in that classroom. Basically, it is about teachers improving their perceptions of what is taking place in their classrooms. It is a continuous in-service experience for teachers:

> "Action research is concerned with the everyday practical problems experienced by teachers, rather than the 'theoretical' problems defined by pure researchers within a discipline of knowledge. It may be carried out by the teachers themselves or by someone commissioned to carry it out for them." (Elliott, 1978)

In other words, it involves both the study of the practical problems in particular situations and the attempts to generalise across these studies. The idea was that each teacher involved would try to identify, understand and resolve his own teacher problems with a class and produce accounts which other teachers could compare with their own. In this way it was hoped to make research relevant to practice by giving teachers an opportunity to take part in the development of theories about their practice. But when these critical theories had been elicited they needed developing by comparing their similiarities and differences between cases. The generalisability beyond the context of the research must be hypothetical and dependent on further grounding in case study.

Elliott (1980) says:

> "Classroom action research means systematic but eclectic reflections on teachers practical problems, with a view to deciding what ought to be done about them. It therefore involves participation by teachers. If research does not help teachers to understand their problems it cannot feed their decisions and count as action research. If research generates understandings which teachers do not perceive to be understanding of their problems, it cannot be action research."

What this may be is just basic educational research. Sceptics of educational research often point out that a great deal of research effort goes into the discovery of findings that could be established by commonsense, as easily as by empirical investigation. Elliott (1980) argues that one of the divisions often made in talking about educational research is between the 'decision-orientated' and 'problem-orientated' studies. The former indicated that a definite answer is required to a specific problem; it includes the type of

question an administrator or Headmaster might ask. The latter approach denotes that the research problem itself is the starting point. What is required here is a better understanding of the situation which may lead to practical action. These terms are probably more useful than 'pure' and 'applied' research. There are few pieces of educational research which are strictly pure research, although many studies will have a double pay-off. They will have some practical utility but they may also make a contribution to the fundamental knowledge about education, and hence be 'pure' in that sense.

Elliott (1982) points out that educational action research is concerned with four main areas. First, with developing strategies for realising educational values which cannot be clearly defined in advance, and independently of, the chosen means. Second, it is a process in which the practitioners accept responsibility for reflection, and do not simply depend on the analysis of external investigators. The outside researchers' role is to stimulate reflection by practitioners, and the former's accounts or hypotheses are only validated in dialogue with the latter:

> "If outside researchers are to engage in action research in the classroom they must foster a dialogue with teachers, not as interview subjects but as full partners in research." (Elliott, 1982)

Third, action research always proceeds from the perspectives of the practitioners' end-in-view, and, fourth, it is a necessary condition of the professional development of teachers. He sees professional development in terms of three aspects: the development of the teachers' self-awareness in the classroom, which assumes that the

teacher is free to develop his self-awareness; secondly, an understanding of the institutional, social and political structures which constrain such development; and, finally, the development of his self-awareness may not be enough for bringing about the improvements in his practice which he has come to desire, he may have to understand the structures which constrain his freedom of action in the classroom. If action research is to contribute to the three aspects of professional development, it must go beyond the study of teacher-student interaction in classrooms to pass on the structures which distort its educational function.

Elliott (1978) describes the characteristics of action research in schools by saying that the aim of the research is to deepen the teachers' understanding (diagnosis) of his problem, and since action research looks at a situation from the participants' point of view, it needs to be described and explained in language which teachers use. That is, the commonsense language people use to describe and explain human actions in everyday life, for he says:

> "it is by virtue of this fact that the accounts of action research can be validated in the dialogue with participants. A research report couched in the language of abstract disciplines is never a product of genuine action research." (Elliott, 1978)

He goes on to argue that action research looks at problems from the viewpoint of participants and it can only be validated in unconstrained dialogue with them. This involves participants in self-reflection about this situation, as active partners in the research. This unconstrained dialogue between researchers and other teacher-researchers must be open, and there must be a flow of

information between them. The theory of action research is being created by those actually involved in it and it is something to which everyone in the educational world can contribute. It is built up through the process of analysis, experience sharing, and discussion by the participants themselves.

Action research also seeks to bring together teachers and researchers in a co-operative exercise. It involves different personnel with distinct but complementary kinds of expertise. The teacher is the expert in classroom policy-making, but in order to function in this way he requires the systematic diagnosis of his situation, which only the reseacher can supply, so the teacher gives the researcher access to his problems in the classroom. In return the researcher provides him with a diagnosis for decision-making. This conception of action research has its practical limitations. It can only have a limited application in the absence of enough competent people in the field of applied educational research to meet the likely demand for adequate research support. Also, most researchers probably have been trained in pure research and are based in academic institutions. They are prone to the temptation to sacrifice the practical requirements of action for academic standards and purity. Since for the teachers, understanding is necessarily instrumental for action, they require research support which is prepared to sacrifice methodological purity for the needs of action. The co-operative view of action research seems to Elliott, logically to imply a form of dependence by the teachers on others for reflective analysis. This appears to be inconsistent with placing great importance on the teachers' power to perform his role

autonomously and responsibly. But Elliott argues that it is a necessary part of self-reflection, because the teacher will be helped by the outsiders being a critical friend, open-minded and perhaps providing alternative lines of thought.

If teachers want to gain control over what is to count as relevant and valid knowledge of their work, in ways which feed their professional responsibility for making informed classroom decisions, they must be able to communicate freely with each other about classroom problems, and methods and techniques for collecting and analysing data about them. It is specifically directed towards action and decision, and concerned with producing practical statements about what is the case.

2.5 Stephen Kemmis on Action Research

Grundy and Kemmis (1981b) describe educational action research as:

> "a term used to describe a family of activities in curriculum development, professional development, school improvement programs and systems planning and policy development. These activites have in common the identification of strategies of planned action which are implemented, and then systematically submitted to observation, reflection and change. Participants in the action being considered are integrally involved in all of the actitivies."

It shows quite clearly that there is a need for planning, observation, reflection and change, and that participation by teachers is an important factor.

For Kemmis, the aims of action research activity are two-fold: first to improve, and second to involve. In the first of these, the improvement is aimed at three main areas: the improvement of practice, the improvement (professional development) of the understanding of the practice by its practitioners, and the improvement of the situation in which practice takes place.

Kemmis argues the aim of involvement is as important as the aim of improvement, as action research is a social form of research, those involved in the practice should be involved in the action research process in all its stages of planning, action, observing, and reflecting. In action research, all the actors involved in the research process are equal participants, and must be involved in every stage of the research.

Kemmis describes three types of action research that differ:

> "in the emphasis they give to one or another of three different sets of social commitments at different moments in the development of self-reflection among participants in an action research project."
> (Grundy and Kemmis, 1981a)

First, there is technical action research, in which the teachers or participants are co-opted by a facilitator (those who help to create the conditions and provide information about possible techniques to allow this to happen) into exploring some aspect of their practice. A technology of dynamics is used to create and sustain group commitments to the project and the facilitator takes on the role of project director. The action researchers are:

> "those who systematically submit their actions to observation, analysis and evaluation, modifying their action plans in the light of emerging understanding." (Grundy and Kemmis, 1981a)

Both the facilitator and the participants conspire in this instrumentalisation process, responsibility for the project success or failure rests ultimately with the skill of the facilitator and of the participants to translate data into action. In this sense there is dependence by the practitioner on the facilitator.

The aim of this kind of action research is more efficient and effective educational practice. The criteria by which progress towards effectiveness may be evaluated pre-exist in the mind of the facilitator. This form of educational action research may produce also findings either explicitly in the form of practices which come to be endorsed by the group as commanding attention because they have been subjected to analysis, or in the form of a hypothesis which it is believed others can investigate. Technical action research may be used by facilitators to encourage teachers to test the applicability of the findings carried out by others (academic researchers) and as such it may be a form of co-option of action researchers into a research enterprise whose development they do not control.

This may seem a little damning but it must be pointed out in the defence of technical action research that it can provide a stimulus for change. It can offer teachers an opportunity to participate in a significant way in their professional development, and it provides a supportive organisation structure in which self-monitoring may be

initiated.

Second, there is practical action research in which the participants monitor their own educational practices with the immediate aim of improvement and the general aim of developing professional wisdom. The criteria for improvement are generated by group members individually and in the 'language community' they create for one another. Their monitoring is directed at improving their understanding and, in the process, their criteria for improvement (and their views of education) will change. The facilitator's role in practical action research is Socratic: to provide a sounding board against which the action researchers may try out issues and learn more about the substance of the action research project as well as the process of self-reflection. It could be said that the facilitator's role is that of encouraging practical deliberation while systematically transferring ownership of the method of self-reflection to participants.

The third type of action research is emancipatory. The method of emancipatory action research is necessarily collaborative, it does not seek to change by the transformation of individuals but by transforming the conditions of communication within groups and the conditions under which commitments to action are made. The role of the facilitator in emancipatory action research is that of a moderator who helps to build group understanding of the conditions necessary to the organisation of enlightenment. The moderator intervenes in the group only to ensure that these conditions are established, and once established are maintained. Once the

moderating role is understood by those involved, there is no need for a moderator as such, as the role can be taken by any member of the group.

In emancipatory action research there may be two roles. A weak role, which is essentially the same as practical action research in that it is critical reflection of professional practice in order to change one's practice, because the practitioner has the freedom to do that. The strong role is concerned with action research into the organisational structure and the conditions and constraints which distort one's professional practice. However, the practitioner may not have the freedom to change distorted practice. He has control over some elements of his practice, but no control over other elements, and they may be beyond the capabilities of the teacher group.

Emancipatory research can only make the practitioner aware and foster understanding of the constraints in organisational structures which distort his professional practice. But enlightenment is only one stage in emancipatory action research. The next stage is to take action to remove the constraining structures. This cannot be done by individuals, and must be undertaken by the school as a whole; it involves a group of teachers in action to bring about institutional changes which will allow individual teachers to develop themselves professionally through deliberation and discussion with each other. The administrators will need to facilitate procedures by which teachers in the school will be able to examine as a group, the relationship between organisational structures and their activities as individuals.

act - observe - reflect - plan - but the plan is not put into action or monitored as a basis for further review.

> "Here the arrested cycle becomes a mechanism for rationalisation of old and prospective practices rather than a process for continued learning and development." (Grundy and Kemmis, 1981b)

Third, the single loop is used as a persuasive device to co-opt teachers into implementing a desired practice using the device of observation, reflection, and planning in an apparently collaborative way (as in technical action research), but in fact using these activities as a tool for leading participants to a group decision which is compelling and more likely to ensure faithful implementation of a desired action.

In the spiral of action research, Kemmis points out that the essential problem is that of relating retrospective understanding (reached through past action), observation, and reflection to prospective action and plans for action. The process of action research bridges the gap between past and future in systematic learning. He shows them in the following way:

	Reconstructive	Constructive
Discourse among participants	4. Reflect - Retrospective on observation	1. Plan - Prospective to action
Practical (in the social context)	5. Observe - Prospective for reflection	2. Act - Retrospective guidance from planning

Figure 1: The 'Moments' of Action Research

Grundy and Kemmis (1981b) argue that the plan is constructed action and by definition must be prospective to action, but it must

be forward looking. Action is retrospectively guided by planning in the sense that it looks back to the planning for its rationale. But action is not completely controlled by plans. For it takes place in real time and encounters real social and material contraints. Action is retrospectively bound by prior practice, but prior practice only has a tentative grasp on the realities of the present. Action is thus fluid and dynamic. The action moment of the action research process shows the practitioner at work. Observation has the function of documenting the effects of the action it is prospective, that it will always be guided by the intent to provide a sound basis for critical self-reflection. In this way it can contribute to the improvement of practice through greater understanding and better informed strategic action. Reflection is retrospective as it looks back to observation to locate problems, issues and constraints made manifest through strategic action and seeks to make more sense of them. Through discourse among the participants reflection leads to the reconstruction of the meaning of the social situation and provides the basis for the revised plan.

These four aspects should not be understood as static steps, but as 'moments' in the action research. In the process, the aim is to bring together discourse and practice (in one dimension) and construction and reconstruction (in the other) so that improvement in practice and in understanding can be made systematically, responsively and reflectively.

The relationship can be shown in diagrammatical form as: (a) the strategic axis; (b) the organisational axis -

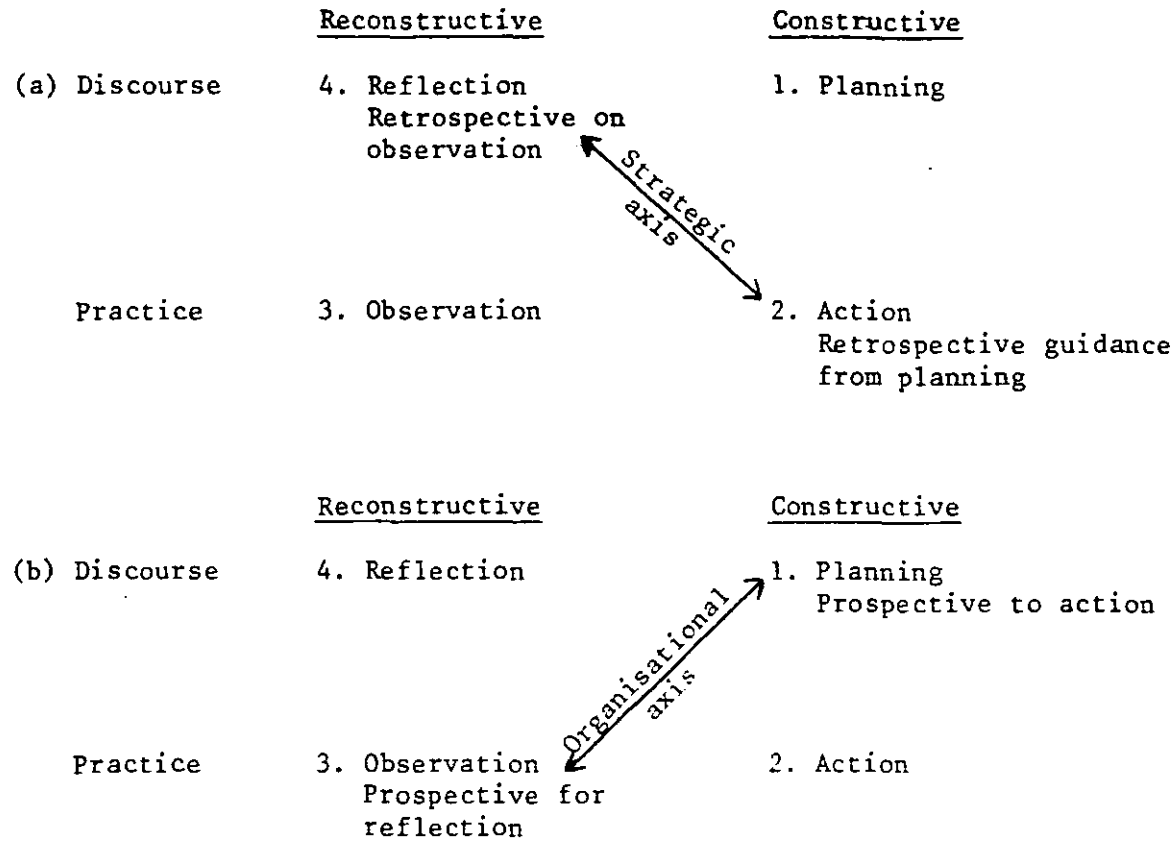


Figure 2: The Relationship Between Retrospective Learning and Prospective Planning

Grundy and Kemmis (1981b) describe this as follows:

> "Action and reflection from the strategic axis of the action research process. Planning for action on the basis of reflection and observing action as a basis for future reflection from the organisational axis of the process. On the strategic axis of the process, reflection, a discursive, reconstructive activity, complements strategic action, a constructive practice. On the organisational axis, planning, as constructive discourse, complements observation, as reconstructive practice. Along both axis discourse (theory) and practice are dynamically inter-related. As this dynamic works itself out in the life of the action research process, improvements in practice and understanding occur concomitantly."

An analysis of the features of action research through the written works of Kemmis may be made in conclusion:

1. Action research is participatory and collaborative.

   This has the main elements: (1) it involves all the participants in all stages of the research, (2) the problem sources are those of the participants and not some theoretical problems of outside researcher and (3) it engages the participatory ways of understanding of those taking part rather than the views of an external observer, whose primary object is in explaining it rather than acting more effectively and with greater understanding.

2. Action research as practice based and action oriented.

   Action research begins with the problems arising from practice rather than theory and is directed towards the spacement of practice. Not just as a matter of the action researcher understanding with an aim of improving later, but the immediate intention to improve practice is incorporated in the research process.

3. Action research as concretely critical.

   Interests are not in the production of theory but of the production of concrete, practical and strategic policies. Action research works on the material of real problems of strategic action, reflectively constructing and reconstructing participants and practitioners understandings of these problems and practical action.

   It seeks to give individuals the power to act for change (action) by generating knowledge through rational reflection upon personal experience (research).

4. Action research as Emancipatory.

The learning communities in action research demonstrate a commitment to learning through continual self-criticism. They attempt to liberate themselves from the dictates of habit, precedent, custom and coersion through the exercise of critique.

This deliberative process must be one of rational reflection that goes beyond the self-reflective group process of social interaction to generate a critique of the social situation in which the group operates.

2.6 Summary

An analysis of the Humanities Curriculum Project and the Ford Teaching Project shows that teachers can engage in systematic and critical reflection of their practice as a basis for learning about teaching. In both projects teachers and project team worked in collaboration as experimental colleagues. The Ford Teaching Project attempted to engage in second order research about how to support teachers engaged in self-monitoring and this was important, because very little is known about the problems that teachers face in attempting to incorporate a research tesk into their teaching, or, as Stenhouse has suggested, adopting a research stance to teaching.

The elaboration of the meaning of action research has provided us with a basic theoretical position and has established some important distinctions, particularly the three types of action research. The Humanities Project and the Ford Teaching Project

are examples of the second type of action research, practical action research. However, emancipatory action research must be seen as an important concern for those engaged in fostering the idea of research-based teaching. Both Elliott and Kemmis are very close in their elaborations of action research and though there is an element of abstract theorising in their work, they have helped us with our understanding of this idea.

CHAPTER THREE

THE LEICESTERSHIRE CLASSROOM RESEARCH IN-SERVICE EDUCATION PROJECT

3.1 Introduction

In Chapter Two, two projects were examined which initiated the idea of teachers in research and led to the development of a theoretical perspective on action research. In this chapter this work is developed further by examining a project led by Stephen Rowland who set up the Leicestershire Classroom Research In-Service Education Project.

For both the Humanities Curriculum Project and the Ford Teaching Project the principal focus was teaching, but in the Leicestershire Classroom Project the focus moves to the learner. However, this project set up teacher groups to conduct research and to work collaboratively and their work in research forms the basis for this chapter.

The major aspiration of the project was to increase teachers' understanding of learning by studying children. In attempting to do this the teachers developed a procedure for integrating teaching and research. The project did not have a central team and was entirely teacher-based with no support for researchers in Universities or Institutes of Higher Education.

It is these aspects which make the Leicestershire Classroom

Research Project a focus for further study into teachers in research.

3.2 Research Procedures

The analysis of this project was made by:

1. an examination of Stephen Rowland's thesis 'Enquiry into Classroom Learning' for a M.Ed. at Leicester University (Rowland, 1980) and articles prepared for publication (Rowland, 1981).
2. two taped recorded interviews with Stephen Rowland.

The first interview attempted to find out how the Leicestershire Classroom Project originated. The first interview and the writings of Stephen Rowland formed the basis for a second interview which attempted to elucidate and elaborate what the project was attempting to do and how it functioned. The tape transcripts were made available to Rowland and he accepted the record as a true and fair reflection of how he saw the project.

Interviews with teachers in the project were considered but it was felt that this would place too much of a burden on the seconded teachers, therefore regrettably this had to be abandoned.

3.3. Background to the Leicestershire Classroom Research In-Service Education Project

In 1976 Michael Armstrong worked in Stephen Rowland's classroom with eight to nine year old pupils at the Sherard Primary School in Melton Mowbray. Rowland (1981) described it as follows:

> "a classroom which was organised along informal lines with a considerable degree of autonomy allowed to the children"

and

> "which involves the child taking a more responsible role in the planning of his activity in the class."

Armstrong was involved in doing fieldwork:

> "in order to gain some understanding of the quality of children's intellectual activity as it is evidenced in the classroom. His plan was to work as both a teacher and researcher alongside another teacher and thereby gain access to the details of children's work as it progressed." (Rowland, 1982)

Both Rowland and Armstrong put a great emphasis on the children's ability to exercise a certain amount of autonomy in their work, and so the classrooms chosen for this work were basically those which were 'informal'. This meant that the students were allowed some autonomy in their learning, and where there was no rigid time-tabling for the various areas of the curriculum. For, if they (the pupils) were not allowed to make any choice or decisions for themselves in their work this would restrict what the teacher/researchers were likely to understand about the children's thinking. It was not an attempt to investigate the quality of learning across a cross-section of classrooms. Instead, Rowland (1980) points out:

> "Rather, through careful selection of a specific classroom in which to operate, the research seeks to provide evidence concerning the quality of children's intellectual abilities upon which hypothesis may be constructed concerning the ways in which children are able to learn within the classroom."

Hypotheses were developed during the course of the research. They were not constructed first and then research methods applied to test their validity and reliability.

Both Armstrong and Rowland taught and researched, but the main responsibility for the running of the classroom was left to the latter, and the former conducted the research. Towards the end of the year, Armstrong was doing a lot of teaching and Rowland was making a large number of notes. Armstrong's research, which included a large amount of field notes and children's work was later written up as a book 'Closely Observed Children' (Armstrong, 1980). It became clear that the value of this work was not only a means for finding out more about how children learn in classrooms, but also was of value for the teacher in increasing understanding of children's learning:

> "it provided me, as the class teacher, with a unique opportunity to increase my own awareness of the complex relationships between what I do as a teacher, the subject matter being studied and the resulting changes in the children's skills and abilities." (Rowland, 1980)

Thus,

> "the teacher would re-organise materials and provide opportunities as the children's interests developed, as he became aware of their needs through his collaboration with them, and able to ensure a comprehensive coverage of the curriculum." (Rowland, 1981)

After this year of work with Armstrong, Rowland was seconded from his school to work with Chris Harris, in his class of nine to eleven year olds at Melton School in Syston. Rowland (1982b) explains:

> "There, with the support of the L.E.A. and Leicester University (to which I was seconded to do a research M.Ed.) I aimed to continue the enquiry from where Michael had left off."

In order to continue the research started by Armstrong, which was to learn more about how children learn, and to fully exploit the in-service potential of such work, Rowland put forward a scheme to the Leicestershire Local Education Authority:

> "that each year at least two people should be seconded for a year to the School of Education, to do a year's field work and to write up as a research thesis." (Rowland, 1981)

Besides the two seconded teachers who would form a consultative group, there was to be a group of about 25 associated teachers who would be attached to the project. These were teachers who had been interested in the work of Armstrong and Rowland during its pilot scheme:

> "They were not intended to represent or cross-section or 'average' in the terms of experience or teaching style, and indeed most expressed some form of commitment to the broadly 'informal' methods of teaching which conerns this project." (Rowland, 1980)

3.4 Analysis of the Project

3.4.1 Role of the co-ordination

As co-ordinator of the project, Rowland saw himself as the person responsible for supporting and developing this approach to teachers in research. From an administrative point of view:

> "I have the time to contact everybody. I am the only one who knows what everybody is doing."
> (Rowland, 1982b)

He was responsible for the organisation of meetings, but he saw this as only part of his role, because he had to interact with the different groups within the project.

His relationship with the individual teachers in the classroom was important, because he could help the teachers by working as a teacher/researcher alongside the teacher, by teaching a small group of children, or taking the whole class whilst the teacher worked with two or three pupils. But he hoped that in the future:

> "we will be able to develop alternative structures so that it does not have to be me who is always in other teacher's classroom but they can be in each others classrooms."
> (Rowland, 1982b)

In May 1982 the consultative group of seconded teachers and the associated teachers were split up into small sub-groups of around 6 teachers with common areas of concern or interest, who would have a certain amount of autonomy in relation to each other:

> "my role has been that of chairman. But also because I had got to know everybody and their concerns, I had taken on a certain role also in terms of the actual content, forming the agenda and raising the main issues as I saw them." (Rowland, 1982b)

But, because Rowland felt that the centrality of this role did not allow individuals or permit the whole group to function, it was decided that he would try and release himself from that role; if he could do that:

> "My role then could become more of an administrative kind of role with regard to the whole scheme and also collaborative in that I would join in the actual studies which the individual teachers were doing." (Rowland, 1982b)

Whereas before, he felt that he was being too influential on their studies and was affecting what they were doing by his central role of chairman.

In this project, Rowland explained that he was:

> "collaborating with teachers in their studies about children's learning and obviously maintaining an interest in that. However I have completed my own, one of a series of sessions of field work studying children's learning, in which I tried to develop a conception of how children can control their own learning. In a sense what I see now that I am doing is to try to develop a conception according to which teachers can develop a control, and how they control their learning, that is learning about children's learning. So my actual study now, is to analyse the data which the scheme produces in order to find ways in which teachers develop some kind of awareness from the studies they make." (Rowland, 1982b)

So in his research, by studying the field notes, discussing with teachers and analysing their transcripts, he hoped to find out, not so much about how children learn, but ways in which analysis of students' work developed teachers' professional awareness. He was doing a form of second order research similar to the Ford Teaching Project.

3.4.2 Research by teachers

The project functioned on three levels. First, there was the co-ordinator, Rowland, who was the overseer of the whole project. Second, there were the seconded teachers who were on lease to the University of Leicester School of Education, and, third, there were the associated teachers following their normal school timetables and duties, but undertaking research at the same time into children's learning. But, all three levels are inter-related and one could not function without the presence of the other two.

The seconded teachers' roles were similar in some respects to that of the co-ordinator in that they worked alongside another 'host' teacher as a teacher/researcher, freed from the responsibilities of the everyday running of a classroom.

> "In practice one member of the teacher/researcher pair (the researcher) would take overall responsibility for the collection of data and its analysis, while the other (the class teacher) would have overall responsibility for the management of the class, its curriculum, normal assessment procedures and so forth." (Rowland, 1980)

The problem, as Rowland saw it, was that some of the seconded teachers might have seen Rowland as a 'guru' figure and that their work was closely allied with his. Thus, one of the reasons for splitting the consultative group up into sub-groups was an attempt to decrease the influence that he was having in the research and the theories which emerged from the studies.

Rowland (1980) points out:

> "In this research, the researcher has the advantage of considerable experience as a teacher. This qualification is indeed essential if he is to fulfil his role as

> researcher/teacher, and provide him with a background of experience against which he can make judgements concerning the students' activities."

So, it was at the group meetings where the teachers discuss the work of the children, that his experience was vital. The discussion and analysis of data focus on the student's learning rather than on the teacher's teaching, that is not to say that the two are separable, but that they are two perspectives of the same phenomenon. One problem which arose was that there was no common language among the participants, and the explanation of the underlying structures of the project may not have been understood by all of the group:

> "So part of the experience of the group meetings, of both full and sub-groups is to get over that kind of theoretical framework. It is a framework, on the one hand about the relationships between the teacher, the learner and the subject matter, and as a framework on the other hand about the nature of the research vis-a-vis problems of objectivity and subjectivity, phenomonological approach versus a logical scientific approach. These sort of issues are in fact going to be worked out and refined within specific sub-groups with those specific tasks." (Rowland, 1982b)

It was only during the last two years that Rowland felt that a common language had been built up in the meetings:

> "I think what we have produced is a degree of common langugage so that we can now do something, like define for ourselves a list of themes and objectives whereas if we had done that two years ago they would have been very different types of themes and objectives. They would have been, for example, couched just items of particular areas of the curriculum, 'I want to look at Art', 'I want to look at P.E.'. Whereas now I think the level of understanding about what it is we are at, sees that the curricula division is only one arbitrary way of classifying understanding and perhaps there are other more interesting ones." (Rowland, 1982b)

The meetings which took place once a week for the seconded teachers and perhaps six times a term for the associated teachers were a

commitment which the teacher/researcher had to accept as part of their involvement in the group scheme. The functions of these meetings would be:

> "the forum in which analysis took place. At its lowest level just discussion, but at a higher level trying to construct some kind of theoretical understanding." (Rowland, 1982b)

The sub-groups would meet to provide a forum for analysis and discussion. The teacher would make an observation in the classroom, write up some field notes about it, share these notes with the sub-group and then prepare some kind of paper which would then be discussed again by the sub-group before presentation to the consultative group.

The documentation which the teachers produced for analysis at these meetings was an integral part of the project. It had three levels. First, teachers would bring along pieces of children's work, stories, pieces of art, which he would distribute around the sub-group and after giving his ideas the teacher would open up the meeting for discussion. But this had been succeeded by the second level:

> "where the teacher has collected together some work or a report of some activity, he would have given it quite a lot of thought, and written some notes to guide a discussion, which he would initiate by scrutiny of the subject first." (Rowland, 1982b)

The third level is where the teacher would have a field note, a critical descriptive analysis of the work in question and he would then distribute this to the group for discussion. It could be a piece of written material that could be discussed, re-written and perhaps used by others in the group. Because all the 'thoughts' of the group were individual, it was important that they could be shared with and

submitted to the whole group for scrutiny. This was a group scheme and not individual private research for the researcher/teacher. As the focal point of the meetings was discussing papers presented by teachers, it was imperative that the teachers were able to present written work. This proved to be a problem:

> "a lot of them find it difficult to write" (Rowland, 1982b)

and

> "it is to some extent, I think a matter of building up in the teacher a kind of confidence so that he can suddenly realise that what he takes to be commonsense, his view about what is happening in his classroom, is actually something which is worth communicating." (Rowland, 1982b)

Rowland feels that it was not until the teacher actually wrote something down about his observations that he started any research for this project:

> "So it is the first stage, I think which distinguishes between just talking about the classroom and doing research and the advanced stage of putting one's ideas in written form." (Rowland, 1982b)

The basic documents produced by the teachers were field notes completed every night by the seconded teachers, who could offer them for internal use within a group. Working papers from the sub-groups were a means of communicating their work to others in the consultative group. They were written in case study form and the teachers had help in the production of these documents from Rowland, in the sense that he read them and helped them focus their ideas and to think through their writings. These documents were not an attempt to produce generalisable hypotheses:

> "but its nature to some extent must be framed in a generalisable kind of language." (Rowland, 1982b)

The support they got from one another in the sub-groups and from Rowland in writing down their observations, re-writing them and presenting them in a final form, is an important part of the research process. The weekly meetings of the seconded teachers helped the teachers to define their interests and their problems more concisely. They acted as a focusing mechanism, because it was found that many teachers at the start had difficulty in defining an area precisely, one that was not too wide to cause them to 'flounder around'. In order to help this, all the sub-groups looked at the same area or issue because all the discussion and analysis was aimed at that one specific area. The techniques used by the teachers in the collection of data were:

> "the techniques which are used would be techniques which are consistent with his role as a teacher." (Rowland, 1982b)

In other words, based on the pedagogical ideas that this project was based on the notion of children constructing knowledge rather than just receiving the knowledge of their teachers. Thus, it seemed that the most appropriate methodology for the teachers was an interactive one. Rowland (1981) suggests:

> "As far as techniques are concerned normally teachers doing field work, would make field notes, being descriptive, discussive and analytic. Some would have developed a procedure for making notes during their work in the classroom. Many have used, to differing degrees the tape recorder, to tape both students and discussion between them and their students; and to a very small extent photography." (Rowland, 1981)

It was vitally important that the techniques were seen to be part of the teaching, for access to information from the students was dependent upon a close teaching/learning relationship with those students. There was a danger that if the researcher/teacher was seen as just a researcher, there would be a loss of intimacy on which this access depends. Thus:

> "It is from the perspective of our teaching, with the privileged access this gives us to the young engaging mind, that we hope to gain insight and thereby improve our practice." (Rowland, 1982b)

Having collected data, presented it in written form to the sub-group and the consltative group, what was the point of the analysis? Rowland feels that it is two-fold:

> "Firstly to understand, to increase our understanding of the children's learning in question, that is the direct content and its point, and at a different level the point of it is that through a critical description and theorization about the phenomenon of the classroom, the teacher brings to a conscious level, through writing, what would otherwise possibly remain at an unconscious or tentative level." (Rowland, 1982)

The immediate objective was not really to make changes in classroom 'tactics', although there may be changes in 'tactics', because when analysing some field notes a teacher could realise that his interaction or interruption at a certain point was a rather inappropriate one. The main purpose of the analysis was to understand how children learn and the quality of their thought. Only by understanding children's learning could the teacher appropriately change his practice. In this way:

> "The final objective of any educational research is to enable change to take place as a result of an increase

in our understanding. The advantage of the research method reported here is that this change takes place in the progress of the research. It is through the researching that the teacher is enabled to improve this teaching. The means and the ends of the research largely coincide." (Rowland, 1980)

In conclusion, Rowland (1982b) identifies the significance of the project:

"that it is to take to its logical conclusion the pedagogical notion that in order to learn one must have control over the frame in which one learns. One must relate new knowledge and construct new knowledge in relation to one's existing knowledge. One must therefore exercise some controlling influence over the phenomena which support and develop your new knowledge. Whereas this is the pedogogical view that something like that is perhaps the view that we share about children. As an in-service training scheme and a research method it applies the same ideology to that which is to say that as teachers we have got to control and develop for ourselves the means by which we can learn about teaching and about learning. And as researchers similarly. And as there is no longer the distinction which there traditionally is between producer and consumer in that the research is produced by researchers for consumers. We would see this relationship between producer and consumer as being necessarily broken down and that the producer and consumer of that product. That has implications for dissemination because it means that you cannot produce and then disseminate, for the normal schema for dissemination suggests that producers disseminate we have got to involve those consumers in production. Therefore the result of our work would never be to put on a series of courses and lectures for other people although that might be part of it. That we might wish to explain through that means what we are getting at. In order to change people we have got to involve them in the kind of thing that we are doing."

The project was not attempting to offer a list of hypotheses which teachers could test, but through the medium of actually teaching children research into how they learn.

3.5 Summary

The Leicestershire Classroom Research In-Service Education Project has broken new ground by proposing that in the teacher/researcher role the research task is dependent upon the teacher's knowledge of how his classroom works. In addition, the idea that teachers should only adopt research procedures that are consistent with their method of teaching is an important one.

The work of the teachers clearly shows that a 'common language' is an essential starting point for teacher-focused research and that classroom research techniques need to be made available. The difficulty of teachers committing their work to paper so that colleagues may scrutinise and discuss their work is a critical point that future research will need to address itself to.

Unlike most projects, the Leicestershire Classroom Research Project did not operate with a central team, specially funded to co-ordinate the work of the teachers. Instead, it attempted to generate a self-supporting structure and Rowland's role was to initiate this process. In this connection, Rowland's role was an interesting one and deserves further analysis as the work of the teachers is made accessible.

CHAPTER FOUR

SCHOOLS COUNCIL PROGRAMME 2 LEICESTERSHIRE NETWORK: SELF-EVALUATION: A PRACTICAL APPROACH FOR TEACHERS

4.1 Introduction

In 1980 Peter Baker, Head of the Leicestershire Centre for Educational Technology, applied successfully to the Schools Council for a grant to support a local initiative on self-evaluation by teachers. The proposal (see Appendix) was funded under Programme 2 which attempts to help teachers improve their effectiveness and focuses on the role of teachers in the process of change. Up to £500 is awarded to help teachers develop work of direct relevance to the aims of Programme 2.

The project proposed by Peter Baker was started in June 1981 when a group of Leicestershire teachers were invited to attend an inaugural meeting.

This project forms the basis for the second part of the research because it provides an opportunity to study a group of teachers who are about to undertake research on their teaching.

4.2 Research Procedures

In the analysis of this project an attempt was made to provide a description of the work of the teachers involved in self-evaluation from three points of view:

1. the responses teachers made at group meetings which were recorded as field notes by an observer;
2. a questionnnaire completed by the teachers taking part in the project;
3. an interview with the co-ordinator of the project, Peter Baker.

4.2.1 Observation of Group Meetings

At each group meeting field notes were taken in order to build up a picture of what each teacher was doing in the project. This was possible because the group meetings centred round the presentation of work undertaken by the teachers and discussion within the group.

The field notes were examined and a profile of each teacher's comments from meeting to meeting was constructed. The teachers' names were not used in order to protect their anonymity but a letter (A to K) was allocated to each teacher to help the reconstruction of the profiles.

4.2.2 Questionnaire

At the beginning of the project it was intended to interview all the teachers involved in the project. However, as the project unfolded it became obvious that interviews of each teacher would place an unnecessary burden on them because their involvement in the work of the project was time consuming. The teachers expressed the view that a questionnaire would be more acceptable so long as it was

given to them before the project was completed and they had time to make a response.

This procedure was followed and a questionnaire was compiled in discussion with one of the project participants and the project co-ordinator. At the group meeting on 10 February 1982 the questionnaire was distributed to the teachers and a copy sent by post to those teachers who were absent from that meeting. No time was specified for the return of the questionnaires but the teachers were given a reminder to complete the questionnaire before the end of the project. All the questionnaires were returned.

Because interviews were not possible, the questions posed to the teachers were framed in a form similar to an interview (see Appendix).

4.2.3 Interview with Project Co-ordinator

The co-ordinator of the project, Peter Baker, was interviewed at the end of the project. The interview was tape recorded and a transcript was prepared to enable the co-ordinator to approve the transcript as a true and fair reflection of his views about the project. His permission to use the transcript in the research was given.

4.3 Observation of Group Meetings

Five group meetings were observed in addition to the introductory session and session three when a guest speaker made a presentation. Field notes taken at these meetings were restricted to teacher comments on their work and no other field notes were made about the meetings. The teacher comments recorded at each meeting can be seen in Appendix .

Only three teachers attended all the meetings and the maximum number of absences was two, which meant that the teachers had a good opportunity to describe their work and learn how other group members were working.

All of the teachers except one worked within a group in their own school and this provided an opportunity to use colleagues as observers. The teachers explored a variety of monitoring techniques (interviews, observation, diaries, questionnaires, tape recordings and shadow studies) and though some problems existed they appeared to be due to lack of experience of incorporating them into their teaching. Two of the teachers (H and I) found difficulties with the ability of the pupils to answer questions and communicate, and two teachers (A and C) expressed concern about pupil diaries which were found to be of little use or threatening to some teachers.

The most striking response from the teachers was the way in which the monitoring of their work changed their perceptions and awareness of what was happening in their classrooms. Seven of the teachers (A,B,E,F,G,H,J) made the point that they had learned from

the experience of monitoring and this had influenced their teaching which meant that changes had to be made. In addition, two of the teachers (J and K) expressed the view that their relationships with pupils had improved as a result of involving them in the monitoring exercise.

All this points to a very positive response by the teachers to the exercise of using monitoring procedures in their teaching.

4.4 Analysis of the Questionnaires

All of the teachers involved in the project received information about it from their Headteachers, Principals or Department Heads who had had contact with Peter Baker, who was the Head of the Leicestershire Centre for Educational Technology. They were all volunteers who wished to be involved in self-evaluation, for various reasons. It was "good for my career" or "I was fascinated to know whether I had any faults, and how I could repair them", and "Performance Development, an opportunity to research a curriculum area of the school which conerns me".

As a cross-section of teachers from different types of schools and disciplines, all of them had their own perception of self-evaluation:

1. "To look at one's teaching methods and approaches and to try to make some judgements about their effectiveness."
2. "The intention must be to appreciate what we are doing in class and how we may improve what we are doing if necessary."

3. "I understand it to be a methodology, albeit subjective and individual, whose aim is to improve one's self-awareness in the classroom with a view to maintaining the more effective aspects of one's performance while replacing the ineffective with something better."

4. "Examining my own work in the classroom to see whether I am achieving what I set out to achieve. Also to question whether my expectations to achievement are suitable."

5. "Looking at the organisation, phrasing, tone of instructions and lessons or part lessons to try to elicit information on weaknesses in teaching techniques."

6. "The process by which a teacher seeks to understand his/her effectiveness in the classroom."

7. "Self - I do the collecting of evidence: I decide on criteria of evaluation: rate evidence and see how it measures up to the standards I'd expected."

8. "Keeping one's own performance in the classroom in mind with a view to improvement, preferably by some measurable criterion."

9. "Thinking about how you teach, examining ways of looking at your teaching, and feeding this back into your teaching - a sort of cyclical process - thinking - teaching - thinking."

The teachers felt that it was a means of looking at one's performance in the classroom, monitoring that performance, with the aim of using evidence to perhaps change that performance for the better. In other words, they were hoping to do some 'action research' on their teaching in the classroom for, as Corey (1953) has suggested:

"Action research is research undertaken by those in the field, in order to improve their own practice."

Five of the group felt that they had been doing self-evaluation ever since they had started teaching, e.g. "Always thought about it", "Have always tried to keep it in mind" but four said it had started after the first group meeting. Perhaps there is a distinction to be made here about "thinking about it" and actually doing some specific monitoring to one's teaching, making an evaluation of the data and evidence and making changes in one's teaching behaviour as a result of the evidence.

The teachers identified a number of problems which they faced when involved in the project. They can be split up into three main areas, and each area has its own particular problems.

1. Getting started

1. Time

This was a constraint that most teachers found to be the most difficult one to overcome:

"forcing myself to get down to it when I know I must get 5ths homework books marked for tomorrow."

"the daily bustle of school made it difficult to create a time and space in which to talk, think, plan with regard to self-evaluation."

"organisation of time."

"insufficient time to analyse lessons - lack of time to work on the work in general."

"time to prepare a suitable lesson and to analyse it: Timing important also. You can't just drop into a discussion half way through."

"time to read the literature in order to know where to start."

"finding the time to think and read."

"time to think things out and decide in which area to work."

"the difficulty of finding time in school to organise those tasks which could only be done in school, e.g. interviewing pupils."

"for many teachers the full-time commitment to teaching is enough to cope with."

"not enough time to do it."

"too busy teaching to worry about measurement, etc."

"energies went into survival rather than thinking about self-evaluation."

"no time to discuss."

2. Lack of knowledge

Some staff felt that they lacked 'knowledge' to be able to work as a teacher-researcher:

"unfamiliarity with the ideas and monitoring devices."

"lack of theoretical background."

"simply one of procedures. Despite having guidelines for monitoring devices."

"How would I gather my evidence and analyse it?"

3. Practical problems

Some teacher-researchers were faced with "practical problems within the school" which made getting started with action research difficult:

"only teach the chosen form twice a week (my constraint)."

"time-table constraints limiting too - needed in double lesson."

"audio-equipment - constantly being either used or left broken."

"dissemination to other staff."

"no spare-socket for the tape recorder."

4. Exposure

"not knowing precisely what I was looking for."

"scared, feelings of exposure, opening myself to criticism from outside."

"some staff rather disillusioned needed re-assurance and praise."

2. Problems with procedures adopted for data collection

1. Tape recorders

"overcoming silliness and shyness of pupils."

"children too dispersed for good recording."

"problems with transcription - too long."

"only one socket: reception poor."

"children not used to the machine - only certain people spoke."

2. Diaries

"lost their novelty value."

"problems with children's writing."

"needed guidelines from the teacher."

"pupils fed up with writing diaries."

"things forgotten by evening."

3. Observation

"fruitfully occupying the rest of the class whilst observing."

"insufficient specific instructions to the observer."

"nervousness on the part of the observer."

3. Problems with working in isolation

Many teachers felt that they were working on their own and lacked confidence in doing so:

"working alone (H.M. does not encourage the involvement of other staff)."

"the feeling that I was working entirely on my own."

"the difficulty of trying to involve colleagues in even minor ways."

"consideration of implications of results which might arise and how they might be viewed in the school."

"very easy to forget about the project."

"no one to push you along, discuss success or failure with."

"no one to talk with."

"enthusiasm flags."

"school obstructive."

"tend to lose momentum."

With such a diverse group of teachers the role of Peter Baker was a vital one. He was seen by the majority of participants as "the co-ordinator" but with other roles as well:

"the focal point of discussions"

"prompt"

"chairman of meetings"

"a facilitator to sort out problems"

"a technical adviser"

"to give practical advice"

"a sympathetic ear"

"someone to talk to"

"encouraging and cheerful"

"maintains operations"

"pushes when necessary but equally willing to offer support"

and the group felt that there was a need for someone like him:

"to identify with"

"someone to pull everything together"

"someone to set deadlines" or

"we would fade away through lack of drive"

"visitor to provide a boost in morale" for

"teachers are busy at present, and research is a low priority, they need a push."

He was seen by one teacher as the "person to carry the burden of failure" but generally he was seen as the co-ordinator of the group who could bring the group and individual efforts together.

One of his main tasks was to organise the group meetings during the academic year (1981-82) at the Herrick Road Centre during school time (an arrangement with the LEA allowed for supply cover for teachers on the project). They varied from whole day meetings to half day sessions and without exception all the teachers found the meetings worthwhile for various reasons:

"to meet others who are on the Project."

"helps to get thoughts into perspective."

"classified work to be undertaken."

"as a spur to do something."

"chance to talk across the curriculum."

But when asked what they do at the meetings more than 60 per cent of the teachers said that they listened. The reason for this appears to be that the basic format for the meetings was usually, after an introduction by Peter Baker, an opportunity for the teachers to talk and explain to others what they had been doing since the last meeting. There was some discussion of their work by other teachers but the

tendency was to just 'listen'.

Most of the teachers felt that the meetings had been well organised but they would prefer shorter meetings. Some concern was expressed about the first meeting when a number of so-called 'experts' in self-evaluation had been present and this tended to cause resentment and make the teachers feel that they were not part of the in-crowd, because of the jargon used. About half of the teachers wanted more meetings to maintain contact and enthusiasm, to motivate people into trying out more methods, to give momentum to one's work and create less of a feeling of isolation.

Six members of the group started to implement some self-evaluation procedures within a few weeks of attending the first meeting. The reasons were varied but show that involvement in the group was a crucial factor:

"pressure of belonging to the group. I had to take the plunge or lose face."

"knowledge and enthuiasm gained from the first meeting."

"talking about taping at the meeting - sounded easy and interesting."

"Being on this course."

The procedures used for monitoring were quite varied. All the teachers used a tape recorder at some time to record a whole lesson, or part of a lesson, while some used it to record conversations or interviews with pupils. For some teachers the focus was what did

they say during a lesson, while others focused on the pupils or the interactions between teacher and pupil. Several teachers used pupil diaries for obtaining feedback about lessons and some teachers used their own diaries. Questionnaires were used by four of the teachers. Observation by another teacher in the school or another member of the project group was used also. Some teachers attempted to observe their own classrooms and with the help of Peter Baker had their lessons recorded on video tape for analysis.

All the teachers involved in the project felt that it had been worthwhile, and hoped that when the project came to a conclusion it would not be the end of their self-evaluation, but the starting point for further study. Many hoped that it would become an on-going part of their teaching, but doubt was expressed because of the need for support and the lack of interest of some of their colleagues.

4.5 Interview with Project Co-ordinator

The interview with Peter Baker provided another perspective on the conduct of the self-evaluation project undertaken by the Leicestershire teachers. As co-ordinator he was in a unique position to observe the teachers at work. He saw his role in the project as a facilitator to make available to teachers a range of self-monitoring techniques and audio-visual equipment for monitoring. In addition, he was the co-ordinator who set up the meetings, invited visiting speakers, made contact with the teachers by telephone and letter, and visited schools at the request of any teacher.

This co-ordinating role brought with it a number of problems which needed working out. Peter Baker would try to visit schools before one of the group meetings; however, the teachers tended to see this visit as some kind of inquisition, someone coming along to assess, whereas the visit was supposed to be a support to find out if the teacher was all right and needed any help. The visit was usually associated with a flurry of activity and comments like, "I haven't had time to do much". As the project progressed it wasn't possible to make a lot of visits, and the co-ordinator felt that the teachers' initial attitude would have changed if he had been able to make more visits.

The teachers appeared reluctant to seek help but this may have been due to the problem of actually getting in touch with the co-ordinator at the Centre for Educational Technology.

Peter Baker saw the project as an opportunity for the teachers to explore a variety of monitoring techniques in a number of different settings and to find out what worked for each teacher. He wanted them to evaluate them thoroughly and produce case studies of what worked for them. The teachers appeared to get on with the task without too much intervention. Lessons were monitored because the teachers wanted to try out a technique and at first they tended to prepare a lesson specially for the monitoring exercise, but as they became more used to this work lessons were chosen at random. There was a tendency to use a technique and then use it a lot, and they seemed to work in spurts rather than sustained monitoring. Peter Baker felt that the teachers experienced problems with field

notes but found student interviews to be most useful.

As co-ordinator, Peter Baker identified a number of problems that appeared to be common with the teachers. Getting started with a project, 'actually pushing the button', seemed to take a long time. Once they got over this problem they produced a lot of data but didn't do very much with it. The teachers got into a self-critical mood and became worried in the early stages, but the co-ordinator believes that they had to go through this stage. In addition, the teachers seemed to feel that they had to create special things to observe and in some cases the projects they chose restricted them. However, the exercise of monitoring helped the teachers to find out a lot about their teaching.

Peter Baker expressed the belief that the group meetings were important for getting to know each other so that they could open their hearts and talk about problems and he felt that teachers looked forward to meeting and sharing ideas. He felt that teachers needed to talk about their work with someone while it was going on. The meetings provided a mixed community of different subject areas and different age groups which Peter Baker believes was a strength of the project. The project did not have a tight structure because the co-ordinator wanted to see what teachers could do with the minimal amount of support.

4.6 Summary

From analysis of the questionnaire to the teachers, the interview with the project co-ordinator, and from the meeting reports, there are some lessons that can be learned from this project.

Without exception the teachers and the project co-ordinator felt that one of the most useful facets of the whole project was the meetings. They were the forum for formal and informal discussion, an opportunity to talk socially and to open their hearts, a chance to learn about new monitoring devices and techniques - their advantages and disadvantages - and an opportunity to discuss one's practice in an atmosphere that was sympathetic. Many of the teachers felt there should be more meetings.

It was important that the group meetings were structured and that there was a varied and balanced agenda. At many of these meetings the group talked to each other about their own individual pieces of work, but there were other occasions when outside speakers were invited to address the teachers, and these were thought to be useful. One criticism which did arise about these outside speakers was the tendency to go off into their own language of evaluation which was not familiar to the teachers. The co-ordinator and teachers were a little put off by this use of jargon. It was suggested that perhaps it would have been better to have invited teachers who had been involved in action research and their input would have been aimed more at the level of the teachers' understanding of action research and self-evaluation.

Peter Baker, the co-ordinator, felt that the sharing of ideas with other people about specific tasks was a valuable exercise and the fact that it was possible with a mixed community of primary and secondary teachers and different subject areas was even more important. One teacher expressed the view that it was important to have the opportunity to talk across the curriculum, because in schools research groups may be limited to one department or faculty. The group meetings seem to have served an important social function in addition to the opportunity of sharing ideas.

One of the strengths of the project has been the opportunity for teachers to find out for themselves about research in classrooms, to try out different methods of monitoring their practice, and to evaluate them without too much pressure from outsiders. Although many of the teachers used techniques in the Ford Teaching Project, they found out for themselves the advantages and disadvantages of using a tape recorder, making field notes, or writing diaries. They tried to establish which methods were most suitable for them in their own situation and many found that pupil feedback was a most satisfactory monitoring procedure. However, the greatest strength appears to have been the opportunity to learn about teaching and one's practice in the classroom.

The greatest problem facing the teachers doing research in classrooms was time - time to reflect, to collect and analyse data, and to read relevant material. In addition, getting started and 'pressing the button' was something the teachers had to overcome. Teachers involved in research on their teaching need to realise that

it will require some extra time and will involve more work: something that may be forgotten. The time of the year when the research is attempted may have an important part to play in its success or failure.

In conclusion, it appears that the project co-ordinator's role was a crucial one in organising meetings and acting as a support. Meetings form an important social function to enable teachers to share ideas and find out what others are doing. The teachers need access to monitoring techniques so that they can explore them, and time to reflect and try out appropriate procedures. The results and the findings of the teachers' efforts need to be made available so that teachers can learn from each other's experiences.

CHAPTER FIVE

OPEN UNIVERSITY REGISTER OF SCHOOL-INITIATED SELF-EVALUATION ACTIVITIES IN THE UNITED KINGDOM

5.1 Introduction

In 1981 the Educational Evaluation and Accountability Research Group at the Open University placed an advertisement in the *Times Educational Supplement* (5 June 1981) and letters were published in *The Teacher* and *ILEA Contact* and the Classroom Action Research Network (CARN) to contact teachers, schools and colleges. In the advertisement a request was made which asked: "Have you or your school or college undertaken self-evaluation, self-assessment, self-monitoring or curriculum review; or do you know those who have? If so, we would like to hear from you."

The purpose of this inquiry and request was to document the self-evaluation activity conducted by schools, colleges and teachers, largely on their own initiative, because much of this work remains unacknowledged and it is rarely publicised or disseminated beyond the boundaries of the school community. Many schools or college departments are sufficiently small or cohesive for the predominant mode of communication to be oral and a need to describe their self-evaluation in writing may never be perceived.

The Educational Evaluation and Accountability Research Group received replies from about 200 teachers, schools and local authority advisors, and INSET tutors. Many of the replies were of

a general nature and rarely described particular exercises in sufficient detail. In addition, some of the replies included self-assessment schemes. After much sifting, 50 accounts of activities were left which could be subsumed under the term 'self-evaluation'.

The Research Group had contact with Loughborough University because of mutual interest in self-evaluation and an invitation was issued to be involved in the analysis of these self-evaluation schemes. It is this analysis which forms the basis for this chapter because it provides access to a wide range of evaluation activity which usually remains undetected.

5.2 Research Methodology

The Open University Research Group made available 50 reports for analysis but it was decided to exclude reports from Colleges or Institutes of Higher Education and concentrate only on documents from schools. This left 42 replies which formed the basis for the analysis. The methodology adopted for arriving at a comparative analysis of 42 self-evaluations was a 'content analysis' of documentary evidence. Most of the schools had provided written materials in the form of letters and documents.

All the material was read first in order to generate a number of dimensions, and then read again to refine the analysis. The dimensions were framed in terms of questions and all the reports were read again in order to extract responses and compile an analysis of all the documents. A profile of each report with

responses to the questions was not included in this research because it was an overall description of the reports that was being attempted.

The validation of this account was obtained by comparing this analysis with the analysis conducted by the Educational Evaluation and Accountability Research Group at the Open University. They had no knowledge of how this analysis would be carried out and no attempt was made to share ideas until the research had been completed.

A second validation procedure was considered; however, it was impossible to return to each school an analysis of their documents and provide an opportunity for them to check the account and amend or comment on it. The Open University had already done this and it was felt that a second response would have caused unnecessary duplication in the eyes of the teachers and additional work.

5.3 Analysis of the Register of Self-Evaluation Schemes

Number of schools participating in the survey

42

Types of school

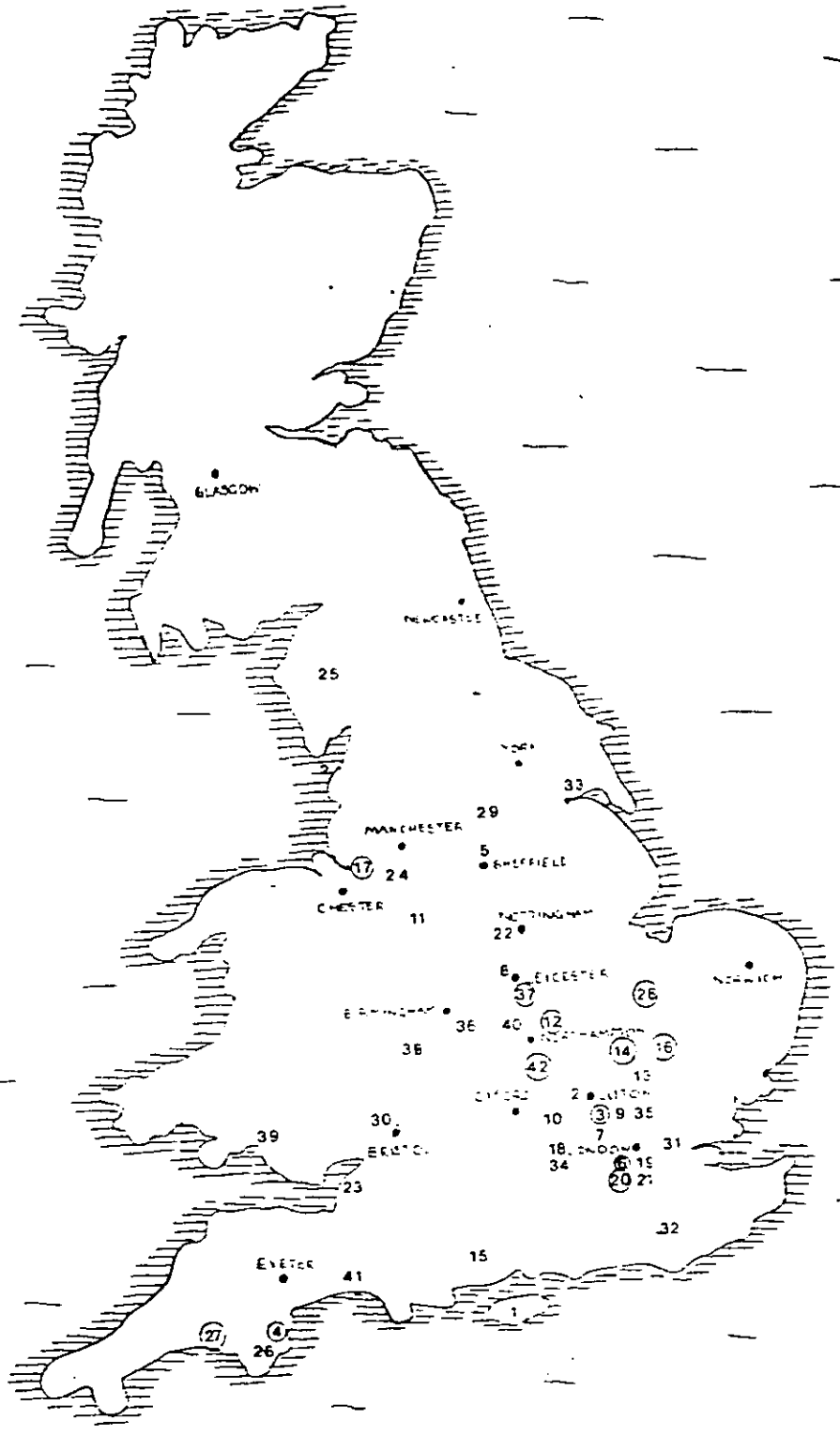
Upper Schools 14-18	2
Comprehensives 11-18	14
Comprehensives 11-16	7
High Schools 10-14	1
Primary Schools 5-11	9
Infant Schools 5-7	1
All age Special Schools	3
High Schools 13-18	3
High Schools (Middle) 9-13	2
Grammar Schools	0
Independent Schools	0
High Schools 11-14	0

Where did the initiative come from?

Headmaster	24
Deputy Headmaster	4
Individual Teachers	14

The large majority of initiatives came from the Headmaster but often these were brought about by the 1980 Education Act or the fact that the LEA was making its own edvaluation of schools in its area.

Where individual teachers were the initiators it was with the blessing of the Headmaster, but quite often the work was linked with research for a higher degree. The expression 'individual teachers' is somewhat of a misnomer because very often a whole department would be involved in the work, but the initial suggestion



Circled numbers indicate outsiders were used.
A list of schools can be seen in Appendix .

Figure 3: Geographical Distribution of Schools in the Register.

was that of the Department or Faculty head.

Were outsiders used in the evaluation work?

Yes 13 No 29

Outsiders were used more in some counties than in others, e.g. Cambridge and ILEA. One of the possible reasons for this is that there are in those counties 'Specialists in the field of evaluation and action research' who are readily available for consultation by schools wishing to do an evaluation.

What were the outsiders' roles?

External Assessors of the work	3
Advisory capacity	5
Director of the evaluation	1
Consultants in the project	3
Speakers at in-service conferecences	1
Teacher-Researcher	2
Advisers invited to school	2
Parents assisting with reading	1

Was a course or a degree involved in the work for the project?

Several people were involved in work for higher degrees. It was difficult to ascertain if the work was a part of the degree course, or whether because they had a higher qualification in education an interest had been stimulated in this type of work.

Time scale of the projects

The projects varied in length from 8 years to 2 weeks.

They have been charted below to give full details of the length of the activities. It has not always been possible to be precise about the length because some of the work is still on-going. Where the work is an annual event I have presumed the work has taken one year. That does not mean to say that the work is going on all of the time for one year, but that the end product has had to be produced at the end of the one year.

One term	5 + 1 (4 weeks) + 1 (3 weeks) + 1 (2 weeks)
Two terms	2
One year	6 + 4 (annual events) + 1 (on-going)
Two years	3 + 1 (on-going)
Three years	4
Four years	3
Five years or more	1 (5 years) + 1 (5 years on-going) + 1 (6 years on-going) 2 (8 years)
Not yet started	3

The year the work commenced:

1981	9 + 3 to start in 1981
1980	7
1979	5
1978	6
1977	4
1976	2
1975	4
1974	
1973	1
1972	
1971	1

There has been a large increase in the amount of work done in the last five years compared with the previous five years. One reason for this may be the 1980 Education Act which requires schools

to be more accountable for their work.

It was initially impossible to analyse in which part of the academic year the work was done; details were not given and there appears to be no set pattern.

Areas of the school involved in the work

The Whole School (several faculties, departments)	29
Individual Departments	9
2 Departments	1
2 Teachers	1
Individual Teachers	3
Management Survey	1

Some of the work fits more than one category. For example, one individual teacher looked at the teaching of science in an infant school. This was entered in three categories: the whole school, an individual department and the individual teacher.

Areas of concern looked at by the schools

Learning by Pupils	39
Teaching by Staff	38
Administration	28
Administration only	5

It was difficult to separate precisely those looking at teaching from those looking at learning, for it is presumed that one will have a direct effect upon the other. There were five cases where the object was to look solely at one or two aspects of the administration of some part of the school.

Areas of concern:

1. Organisation of the School Department

Evaluation of a Maths Department	
Whole curriculum evaluation	
Values of the school - school climate	3
Option choices	
Organisation of a Geography Department	2
Resources/evaluation of materials	2
Timetable	2
Curriculum innovation	2
Balance of cirriculum content	
Staffing/staff contact time	2
Banding/streaming	2
Examination of the whole school as an organisation	4
Staff development	7
Pastoral work	3
Aims of a Department	5
Attendance	
Links with the community/community education	
Schools buildings	
Syllabus	
Communications	2
Exam. results	2
Probationary teachers	
Discipline	
Department self-assessment	
Evaluation of a Craft and Technology Department	1
Use of non-teaching time	
Staff responsibilities	
Review of learning for slow learning pupils	
Transition from 2nd/3rd Yr.	
Social education	
General subject reports M.Eng.Sci.Health PE & Craft	

2. Teaching

Mixed ability teaching
Good practice/weak practice
Quality of teaching linked to experience and qualifications
Teaching methods
Staff/pupil ratio
Improvement of education of pupils
Attitude to pupils' written work
Teaching and learning of science (2)
Teaching of reading and writing
The teacher as a teacher
Evaluation of materials
Reasons for teaching Political Education
Methods of teaching Political Education
Aspects of literature teaching
Attitudes of children towards shows/staff influence
Aims of teaching ESN (M)

3. Learning

Children's attitudes towards Soc.Educ/careers
Education as a process for promoting learning (2 Maths)
(1 English)
Exam. of pupils and schools ideas re. learning
Review of work - 2nd/3rd Yrs
Raising consciousness about language use
Group dynamics in the classroom
Progress of child in English from infant-junior school
Suitability of work
Effects of discussion and visual aids on reading level
How children learn/children's learning
Remedial children and Music

4. Assessment

General assessment	5
Self-assessment by pupils in Maths and English	
Reports/Students self-assessment	2
Department self-assessment	
School self-monitoring programme	

Procedures used in the survey

Verbal

Meetings	12
Discussions	8
Outside speakers	4
Interviews with colleagues	4
Observation by colleagues	9
Discussion with pupils	2
Help from outsiders	13
Observation by outsiders	4
Discussion with outsiders	4
Dialogue with pupils by outsiders	2
Staff workshops	1
Interviews with pupils	2
Structured discussions	1
Pupils' attitudes	2
Group work	

Written

Questionnaires for staff	11
Questionnaires for pupils	6
Questionnaires for parents	1
Staff diaries	2
Likert surveys	3
Open-ended questions	
Standardised tests for children	

Documents

Reading of as preparation to evaluation	3
Collecting	
Reports produced by staff	5
Presentation of papers by staff	6
Shadow study	
Setting up terms of reference	
Checklists from Departments	3
Record kept for individual/group	
- Pupil profiles	
Statistical analysis	

Audio Visual

Tape-cassette of lesson	4
Transcript analysis	
Analysis of lesson by agreed criteria	
Video recording	2
Observer making notes	
Researcher working alongside teacher	
Triangulation	
Training of co-observers	

Thinking!!

Problem areas

1. Apprehension by staff

Staff cautious - some not enthusiastic.

Level of commitment varied from group to group.

Teachers' attitudes - the main obstacle to curriculum development.

Staff have little idea what evaluation means (involves) some never heard of it.

How do we go about it - what is evaluation?

You can impose innovation by edict, but you cannot actually implement it by the same means.

Some outsiders not fully committed - had to attend other meetings so work prepared for them not always used.

Some staff not well versed in assessment procedures.

2. Time

May have attempted too much too quickly - pitch and pace incorrect.

Reports did not meet deadlines - initial burst of speed now slackening off.

Problems with higher priorities.

Time - only 24 hours per day.

Pressure of work at the end of Spring Term - some work abandoned.

Impossible to observe other teachers as researcher (T) has full time-table.

3. Collaboration

Not complete collaboration - hierarchiacal - one way.

Use of advisers - they did not always meet and feed back to staff who were not HoDs.

Groups seemed to proceed too independently - cohesion affected.

Getting consultative groups to produce findings of their own.

4. Administration/Organisational

Reports too general or too personal LEA reports not relevant to individual cases/schools.

Tests for pupils not suitable - did not test whst had been intended.

Odd questions in questionnnaires not precise enough (ambiguous).

Problem of bias: role definition - role in the school may interfere with findings as a researcher (School Policy).

Solution to one problem - caused another - problem was not that of solving but deciding upon alternatives.

Documentation

Final reports	2	
Reports from Head of Dept.	3	
Criteria for evaluation		Evaluation
Setting out procedures for evaluation		
The problems of identifying objectives		
Papers on thoughts, aims, objectives produced by HM		
In-school evaluation (Hds report)		
Assessment within schools		
Papers produced for discussion		
Discussion papers: framework for co-operation of programme for flexibility.		
Documents for the chronological record of thinking		
Problems of school evaluators		
Brief assessment policy for staff		
Document for staff conference		

HM's diary for monitoring developments
Staff handbook
Results of previous year's work - used to place children in classes the following year
The above documents are those produced by HM or project organisers to help with the carrying out of the evaluation/action research.

The following documents are those produced by staff working in the field. Sometimes they include pieces of work, results of surveys, questionnaires, etc.

Papers on reports and reporting
Pieces of children's work
Questionnaires for parents
Internal memos to staff
List of lesson notes - methods of teaching
Profiles of language uses
Curriculum ideas for reading, writing and comprehension
Notes on the teaching of science in infant schools
Discussion documents.

The following pieces of work are those produced at the end of the piece of evaluation. Whether they are acted upon is another matter: and difficult to find out.

Case study
Shadow study
Parent/pupil brochure
Report on the Curr. needs of ESN (m) or school-leavers
Report on the Curr. to develop the self-concept of ESN (m)
Focus on self-concept
Results of a survey on (a) non-teaching time, (b) showers
Self-evaluation document of CDT Dept.
Thesis (2)
Book 'Closely Observed Children'
Aspects of an English Department, VI Form, Records, Exams, Good practice.
Paper on praise, sanctions, rewards: Movement about the school: Self-assessment
List of Staff responsibilities
Review of the Geog. Dept.
Final Reports for Governors, etc.

Outcomes and actions taken as a result of evaluation and action research

Positive Actions

Success has led to a plan for a follow-up venture.

An improvement in the quality of the curriculum - thus strengthening the relationship between evaluation and the development process in the school.

Production of pupil profits of work, effort and progress.

Production of better pupil reports/comments.

Continuation of work for another year.

Remedial action to be taken where appropriate.

Better practice - understanding in the classroom.

Updating of resources: Introduction of Geology: Provision of Geography for the less able.

School policies on cirriculum guidelines for Maths and English.

Tests results place children in classes the following year.

Outcomes

Increasing perception, imagination and initiative.

Many questions posed - leading to more discussion.

The identification of priorities for further in-service training.

Some changes in staff development retraining.

Clearer objectives for the future.

Useful staff communications exercises - good to see what other classes were doing.

Awareness of staff opportunities for self-development.

More improved knowledge of children's learning.

Better understanding of the teaching of science.

Better classroom and Dept. Practice.

Better preparedness for LEA assessment.

Better understanding of remedial children and music.

Better understanding of children's problems.

More sophisticated and reliable meaning of the self-concept are needed.

Thought - reflection on values conveyed, methods used, atmosphere created.

Better understanding of the work of 2nd/3rd years.

5.4 The Analysis Conducted by the Educational Evaluation and Research Group at the Open University

The analysis of the self-evaluation schemes was conducted by two people and took several weeks to complete. They adopted the same 'content analysis' procedure which generated two categories:

(a) Levels
- Institution
- Department
- Teacher

(b) Sectors
- Secondary Schools
- Middle Schools
- Primary Schools
- Special Schools

and seven dimensions:

- initiatives
- involvement
- purposes
- organisation
- focus
- methods
- reports.

The Research Group constructed an analysis of each school and compiled a profile based on the categories and dimensions. The analysis of each school was returned to the school and the teachers were able to amend or comment on the analysis as they saw fit. Only two accounts were withheld: one because the deputy head had since moved: the other because the teacher involved felt that her activities were too unsophisticated to appear in a review.

There was considerable agreement between the categories and dimensions identified by the Open University team and the questions

posed by this research. The Research Group's analysis has been published by the Open University under the title "A First Review and Register of School and College Initiated Self-Evaluation Activities in the United Kingdom" (James, 1982). In the Appendix to this report is the analysis conducted for this research.

There were some slight differences in the questions posed in this research and the analysis conducted by the Open University research team. However, the similarities of the two reports is important and this was acknowledged in the report by the Research Group (James, 1982, p.28). In the Research Group's analysis they did not address themselves to an examination of problems faced by teachers in the self-evaluations. This is interesting because a University-based team may not consider this important. In this research particular attention was paid to these factors and this was the only real difference in the two reports.

5.5 Discussion and Summary of the Analysis

The greatest number of activities reported in the Register have taken place in secondary schools (n=29) and it has been difficult to determine why this was the case. No explanation can be found in the documents.

Out of 42 schools involved in the project the majority (29 schools) of the self-evaluation schemes were focused on whole school evaluations involving the whole staff, and it was no surprise to find that the initiatives for the work came from the Head or senior staff. Where

individual teachers initiated work, it was with the blessing of the Headteacher and the work was usually being undertaken for research directed towards an advanced qualification. These qualifications ranged from professional development courses to master's degrees. Working towards a higher qualification may have led the teachers into self-evaluation but it was difficult to determine whether this was the case. However, when one considers the incentive for engaging in this kind of work, the external stimulus of a higher degree must be taken into account.

The geographical distribution of activities reveals a distinct clustering around London, the Midlands, parts of East Anglia and Cambridge, and, to a lesser degree, in the south and south-west. These activities have a strong connection with institutes of higher education and INSET providers (e.g. the Universities of Aston, Birmingham, Bristol, East Anglia, Exeter, London, Leicester, Loughborough, Southampton, Sussex, Warwick, The Open University and the Cambridge Institute of Education). This pattern may have been influenced by the way the data was collected, because contacts were made through the use of networks associated with self-evaluation. However, the fact that many teachers were working for advanced qualifications has played a critical role.

A number of schools invited outsiders to work with them in their research but their role appeared to be simply advisory or consultancy. In three projects external assessors were appointed, but it was difficult to determine clearly what their role was. Though some involvement by outsiders can be determined it is probably

true that all the activities recorded in the Register are genuine internal initiatives.

The time scale of the self-evaluation schemes ranged from one of two weeks to one of continued activity over eight years. However, 18 of the schools had been engaged in evaluation for over two years. A number of the schools (4) used evaluation exercises as an annual event and some of the schools had undertaken projects for less than two terms. Whe one considers the time scales of the projects and the fact that much of the work has been during the past five years, this may parallel the interest in accountability within schools, or indicate that teachers are acquiring an interest in learning about their practice. It was impossible to determine from the reports which part of the year was used to undertake the evaluation exercises.

The content of the evaluations was difficult to ascertain clearly; however, four areas appear to be visible:

1. organisation
2. teaching
3. learning
4. assessment

but this tells us very little because a wide variety of tasks were undertaken by the teachers. As there was no obvious pattern, this suggests that the teachers selected an area of interest or a specific problem. Staff development/organisational exercises and analysis of a school's aims seem to be the most popular.

The evaluation procedures used by the teachers in their investigations are varied also, but meetings and discussions appear to be the main focus for teachers' work. These are closely followed by questionnaires and the use of observers to describe lessons. A small number of teachers used audio-visual procedures. It was interesting to note the use of pupils to obtain feedback through questionnaires or interviews by a small group of teachers. There did not appear to be any rationale for the selection of research procedures.

Many of the teachers do not appear to be using sophisticated research procedures in their investigations, though some teachers have had access to such techniques and used them, e.g. triangulation. The use of more sophisticated research procedures can be identified with teachers pursuing further qualifications and linked with an Institute of Higher Education. The use of meetings and discussions in the evaluation exercises raises an interesting issue. Such procedures are hardly research activities but are clearly evaluation procedures. Hence, a distinction can be drawn between evaluation activities which can be research-based and activities which are just evaluation. Whether these meetings and discussions are an important first step for teachers before they systematically use research-based activities in their evaluations must remain the focus for further study.

One of the issues concerned with evaluation centres round the problems faced by teachers in such investigations. Research on two earlier projects had pointed to this issue; therefore it was

the focus for further study. It was difficult to extract this kind of information because the teachers do not appear to acknowledge in their reports that actual problems were encountered. However, it was possible to discern some. It appears that the new venture of evaluation and examination of one's practice is difficult to start and only some teachers are committed to it. Time is a critical issue because some teachers report "doing too much" and asking "when can one find the time?". Collaboration between colleagues within school and outside caused some problems.

If teachers don't report problems in their reports as a general practice, this may be a 'problem'. It would be difficult to envisage a new venture in schools not to reveal some problems; therefore it may be that teachers are reluctant to expose their problems in public reports. However, one school did produce a report on the "problems of school evaluators".

The issue of time being available for self-evaluation raises an interesting point. If self-evaluation is regarded in terms of meetings and discussions, then this may be viewed by teachers with a full teaching load, and additional commitments after school which are often meetings, in a biased way which could be counter-productive. There is a need to examine the way self-evaluation can be incorporated into the teaching patterns of everyday school life.

In the reports made available for the survey, a wide range of documentation of results were produced but they were very unsystematic. Some schools, though small in number, produced supporting documents

One of the weaknesses of this research was that the evidence was examined from one perspective because it was impossible to have access to the 'responses' made by the teachers after reading the analysis of their documents. This research would have been more responsive if it had been possible to construct an account of each school's report and seek clearance from the school.

CHAPTER SIX

SUMMARY AND SPECULATIONS

The three projects in this research provide different perspectives about the teacher in research - examining classroom practice.

In the Leicestershire Classroom Research In-Service Education Project the co-ordinator worked with a team of seconded teachers who examined children's learning. The teachers did not observe someone else's class as a researcher, instead they taught and researched at the same time.

The Schools Council funded project, Self-Evaluation: A Practical Approach for Teachers, brought together teachers in Leicestershire from different subject areas and different age ranges to try out self-evaluation techniques in their own classrooms. The co-ordinator of the project provided a basic framework to enable teachers to share their ideas and a forum for learning from each other. The teachers had a great deal of freedom to select classroom research procedures and to undertake a small study which was shared with colleagues.

The Open University Register of Self-Evaluation Schemes provided access to teachers' documents about self-evaluation activities in different parts of the country. From the Open University Register it was possible to determine the kinds of self-evaluation activity undertaken by teachers and examine patterns of activity.

When these three projects are combined together in the form of a triangulation it is possible to identify emerging themes that have implications for the development of research-based teaching or teacher involvement in classroom research and self-evaluation. In this final chapter the emerging themes which are closely related together will be outlined and key elements within each theme will be described.

The first theme is concerned with PROBLEMS that faced the teachers when they started to examine their own practice.

When a teacher takes on the task of investigating his own teaching one of the most difficult phases of the project is actually starting. In the Leicestershire Network Schools Council Project, the co-ordinator called it "pressing the button" and he identified this as a major stumbling block. The Open University survey of self-evaluation and the Schools Council Project showed that teachers:

1. had not read any research projects and did not know what to expect;
2. had difficulty in isolating a specific area of research;
3. were not familiar with moinitoring techniques.

In addition, they lacked confidence and security because they felt that they would be working alone and in isolation. Under these circumstances, it is not unreasonable to expect some delay in their involvement in self-evaluation and research.

The most inhibiting factor facing the teacher who wishes to engage in research is the problem of time - finding time to incorporate

a research task into the routines of teaching. The pressure of day-to-day school life made it difficult for some teachers to create the time needed to think, plan and engage in self-evaluation. The teachers expressed the view that unless they devoted specific amounts of time to the task of self-evaluation other school priorities would take precedence. In addition to teaching, teachers are expected to attend meetings within the school about policy, examinations, or parents evening, and take part in extra-curricular activities like school teams, or music and drama clubs. These pressures make it difficult for teachers to find additional time for self-evaluation.

There is no evidence in this research that teachers have found solutions to this problem. However, this issue has been examined by Almond (1982) who suggests that during a school year there are peaks and troughs in a teacher's work load and there are particular times during the year when it may be more appropriate to engage in self-evaluation. Almond (1982) goes on to propose that the early part of the Spring Term in school is a difficult period because of sickness and absence from school. In the Schools Council Project it was noticeable that most of the absences from group meetings occurred during this period. Other people have noted this pattern: Moon (1982) and James (1982) both make the same point that attempts at self-evaluation just before Christmas or in the months of January and February are likely to encounter difficulties. This could be an important point for teachers who wish to engage in self-evaluation and there needs to be further research.

Almond (1982) proposes also that short spells of work are better

than commitments over a long period and he calls this 'containable time'. He believes that during these short spells teachers will recognise a starting point and a definite finishing point and find this more acceptable.

In this research one deputy-head made the point:

> "how do you keep the interest going with all the other demands of school on the busy teacher. I have tried to encourage, gently remind, and have fairly regular meetings to keep the pot boiling."

Also, in the Schools Council Project, the work done by some of the teachers lasped after two or three meetings, and it was not restored until they realised that they had to make a presentation, or were reminded by the project co-ordinator.

Nixon (1981b) has argued that although it is possible for teachers to study their classrooms whilst continuing to work under the constraints of a normal day:

> "time set aside for planning the research, for interviewing pupils and discussing the findings with members of staff, is essential if the research is ever to achieve any impact within schools."

Unless time can be set aside for self-evaluation within the normal timetable, teachers will have to examine their commitments and the pattern of their working life in order to identify potential periods when they can engage in self-evaluation. It is probably not feasible or desirable for teachers to engage in self-evaluation all through the school year, therefore Almond's (1982) proposal could have important implications for teachers.

The difficulty of actually starting and engaging in self-evaluation was made worse if the teachers have had little experience of techniques to use in self-evaluation. In the Open University survey most of the teachers used meetings and discussions as the basis for their involvement and did not attempt to explore the use of different procedures. This could be because the teachers lack the experience of setting and analysing questionnaires, using interviews, or writing field notes, and relied on the only procedures they had available. The teachers in the Schools Council project explored the use of different self-evaluation techniques but they experienced difficulty, because they had no previous experience and lacked basic knowledge. A similar difficulty was experienced in Rowland's work with primary teachers. In addition, it was apparent in all the projects that further difficulty was experienced when it came to analysing data. There was often too much and the teachers did not know where to start, or how to go about organising the data and producing evidence.

Many teachers found that one of the most difficult tasks in their self-evaluation was the commitment of writing up their research. Rowland in the Leicestershire Classroom Research Project believes that unless teachers write something down about their observations they have not been engaged in research. The teachers he worked with had to present to the group, for discussion and criticism, papers they had written about their research. He felt that teachers must realise that what they take to be commonplace in their classroom may well be worth communicating to other teachers. In the Schools Council project the teachers did not present much written material, but they presented their research in the form of verbal reports.

However, it was acknowledged that their research should be written up and made available for others to read.

Rowland's point is particularly important because the discipline of writing up an account for presentation to an audience of fellow researchers may be the one factor that makes self-evaluation activities become research. It becomes research because it makes the basis of your judgements open to public scrutiny and provides for the teacher alternative perspectives on their observations.

A number of very practical problems emerged during the course of the teachers' investigations. Some teachers found that the subject they taught, or the teaching method they employed, produced specific difficulties. It was easier to use an observer when pupils are seated in rows and the teacher is not involved in a lot of movement between groups, therefore in some mixed ability and team teaching situations the observer found it difficult to monitor. On playing fields it was difficult to tape record different groups of pupils and using a video camera had its own specific problems in wet weather. Sometimes the quality of recordings was not clear enough to produce a useful transcript. These problems occurred in the Schools Council project and the teachers had to think very carefully about the techniques they were going to use. Some teachers found audio-equipment was broken or not available, or there was no suitable plug in the room they used. These problems are inconvenient though not insurmountable, but for teachers inexperienced in self-evaluation they created constraints that hindered their work and involved them in additional time, effort and worry.

The second theme is concerned with SUPPORT and the crucial role that it plays in teachers' involvement in a new idea. The process of change which self-evaluation implies can cause stress, insecurity and a lack of confidence. Support in this enterprise is important and three main elements emerge.

In the first place teachers attach a great deal of importance to working in a group and attending meetings. It is these group meetings which form the focus for the development of self-evaluation. Teachers see the group "as a forum for discussion", "an arena for constructive debate", "an opportunity to discuss and analyse data", "a place where you can open your hearts about research and problems", and "where we have a receptive audience".

The importance of meetings was identified in the Humanities Curriculum project in which the central team used meetings and conferences as platforms for explicating the notion of neutral chairman. In the Ford Teaching Project the team used meetings in order to articulate the notion of inquiry-discovery teaching and as a forum for teachers to share their ideas. The analysis of the Open University register showed that meetings was the main procedure used by teachers in their self-evaluation.

Meetings provide an opportunity to share ideas, to listen to problems that other teachers are facing, and recognise that you share the same problems, and to learn about techniques of self-evaluation that may be appropriate for you.

In the Leicestershire Classroom Research project attendance at group meetings was a commitment that all the researchers had to accept, because they were seen as important in fostering understanding of the work they were engaged in. Ruddock (1982) in a project with teachers engaged in self-evaluation indicated that group meetings served an important social function and teachers believe they are important. This has been bourne out in this research, because the teachers see meetings and working within a group as an important support structure, because they may not get any support from within their own school.

A second important aspect of support for self-evaluation is the role of a co-ordinator or facilitator. This outside help appears to be important for the teacher. The co-ordinator can act as the central focus for disseminating information, as an organiser of group meetings, and someone who can provide technical assistance in the form of audio-visual equipment for monitoring. As the organiser of group meetings he has contact with all the teachers in the group and the teachers have a central point of contact in case of difficulty.

Some researchers (Brown *et al.*, 1981) see the role of the facilitator as a powerful medium for supporting teachers and generating a research base. They propose a number of responsibilities that a facilitator can adopt. The facilitator:

1. can provide critical feedback, allowing researchers to generate a number of alternative perspectives on their problems and data to assist participants in the process of objectification of their own experiences;

2. can through dialogue provide a reference point for practitioners reflections;

3. can provide a sounding board for the action researcher's thinking;

4. can assist in focussing attention on previously unconsidered aspects of their situations;

5. can help in identifying points in the data which it may be profitable to explore.

However, in this research these kind of responsibilities were not identifiable, because the co-ordinators did not see their role in this way. Peter Baker in the Schools Council Project was a facilitator but with no teaching function. In the Leicestershire Classroom Research In-Service Project, Stephen Rowland had more of a teaching function but it was not elaborated in the way that Brown and his fellow researchers propose. Brown's proposals are interesting because they provide a framework for a co-ordinator to aspire towards. Elliott (1975) in the Ford Teaching Project was able to implement some of these proposals.

The third element is concerned with the need for support within a school where self-evaluation is taking place. A teacher working alone on a project will experience difficulty in generating work and sustaining it, unless he is highly motivated. Working within a group structure provides motivation and stimulus besides the opportunity to discuss mutual interests. The group provides the opportunity to build up a relationship where colleagues are able to discuss openly and critically their work in classrooms. These points were brought out in the Schools Council project but there was some evidence also in the Open University survey.

Support within the school is necessary because the Headteacher will play a vital part in any innovation. Without this support teachers can experience difficulty in obtaining permission to attend meetings. In both the Schools Council project and the Leicestershire In-Service project supply cover was available to enable teachers to attend meetings, and this was an important support element.

The third theme in this research relates to the stage that teachers have reached in developing the ability to do research in their own classrooms and engage in self-evaluation. In all three projects the teachers appear to be at a preliminary stage of having the interest, the will, and time to initiate research in their own classroom. However, their endeavours in self-evaluation have revealed several shortcomings in their ability. These shortcomings were identified in the problems that arose during the research. A need for training in monitoring procedures and the need to learn how to incorporate research tasks into the routines of teaching.

The Schools Council project and Leicestershire In-Service project showed that teachers were learning to do this, and the opportunity to be part of a project had provided the opportunity to learn monitoring procedures and to a lesser extent to fit these tasks into their teaching patterns. These teachers had taken the first step in learning how to do classroom research.

In this first stage, the teachers in all the projects made the point that self-evaluation has enabled them to learn about their teaching, to learn more about their pupils and their own subject.

This outcome has important implications for teaching because the teachers appear to be developing a better understanding of their own practice. This is related to action research where the aim is to involve participants (teachers) in a study of their own practice as a basis for changing their practice through increased understanding. However, the teachers have only reached one stage, even though it may be an important step, and they are a long way from what Kemmis (1980b) and Elliott (1980) call 'emancipatory' action research where they are able to accept responsibility for investigating their practice and making changes.

This research has been able to document and examine some of the issues involved in self-evaluation and classroom research by teachers. It has identified some of the problems that teachers face and it has been able to show some of the complexities of the task. However, there is a need for more detailed work, through case studies, of how teachers can fit self-evaluation into the day-to-day routine of teaching and the cycles of a school year. The need for a collection of monitoring techniques which is easily accessible to teachers is all too obvious. How teachers use these techniques would be an important area for further analysis. The role of the co-ordinator in facilitating and supporting teachers engaged in classroom research and self-evaluation needs to be examined in terms of second order research; the co-ordinator also adopts self-evaluation techniques to examine his practice.

During this research several limitations have arisen. In the Leicestershire In-Service Project interviews with the teachers working with Stephen Rowland would have provided another perspective on the

role of the co-ordinator and more insight into the issues of engagement in classroom research. During the Schools Council Project interviews with teachers would have provided once again a more detailed analysis of how teachers think about their involvement in self-evaluation. The Open University survey of self-evaluation schemes made it impossible to seek clarification from the teachers about the perspective that the researcher took in the analysis of the documents. In all these cases plans had to be changed, alternatives implemented, and the research diluted to an extent. These problems in retrospect identify a need for researchers to keep a field diary about their own engagement in research. If one is to learn from research then monitoring one's practice is research is critical.

APPENDIX A

PROJECT PROPOSAL TO SCHOOLS COUNCIL

INITIAL PROPOSAL

To: Schools Council of Great Britain.

Submission for Grant 1981-3 under Programme 2.

From Leicestershire Centre for Educational Technology.

SELF-EVALUATION: A PRACTICAL APPROACH FOR TEACHERS

It is hoped that this project will develop useful, uncomplicated, and non-threatening methods of self-evaluation which will have a general appeal to teachers in the UK.

The work carried out by Gordon Elliott at Hull University on the annotated bibliography "Self-Evaluation and the Teacher" will provide an ideal starting point for this project.

1. Aims: (a) To set up a pilot programme of action research in self-evaluation by teachers.

(b) To explore existing methods of self-evaluation. This may include:

(i) video feed back

(ii) audio feed back

(iii) interaction analysis

(iv) direct feed back from students via objective tests; open response forms; Cosford responders; meso-analysis discs; etc.

(c) To develop simple, readily available, and useful procedures for teacher self-evaluation.

(d) To mount a conference at the end of the first year using the teachers' experience on the pilot scheme to broaden the experiment and validate techniques.

(e) To produce materials towards a "Self-evaluation Pack for Teachers".

2. Composition of the pilot group will be two heads of department in upper schools (14-18), two heads of department in high schools (11-14), two teachers with posts of responsibility in primary schools. This group will be selected from rural and city schools. The subject areas involved initially will be the humanities, maths and English. The group will be co-ordinated by the head of the Centre for Educational Technology who has a research brief within the County. Close links will be maintained with appropriate advisers and with Neil Paterson, Assistant Director of Education, who is the County liaison officer for the Schools Council.

3. Financial help is required as follows:

(a)	Books, papers, photocopying and duplication of extant research	£150
(b)	Videotape, audiotape and film	£120
(c)	Paper and Printing	£75
(d)	Consultant/Lecturer/Evaluator fees and expenses	£150
	Total:	£495

4. This project is a pilot project attempting to establish whether or not useful self-evaluation techniques for teachers can be developed and adopted. It follows on from the Hull bibliography and may have potential for wider dissemination and practice.

5. £495.00 See (3) above.

6. Materials developed and disseminated at the conference will be used and evaluated locally in an extension of the work. The evaluation will be undertaken with the co-operation of the Leicester University School of Education.

7. The existing facilities of the Leicestershire Centre for Educational Technology and the LEA will be available to support the project.

Peter Baker
Head of Centre for Educational Technology
Leicestershire.
28/10/80.

APPENDIX B

TEACHERS' COMMENTS AT GROUP MEETINGS

Teachers' comments made at group meetings. Each teacher has been allocated a letter (A to K) to distinguish them. These responses are discussed in Chapter 4.3, page 54.

Teacher 'A'

Meeting 2 (a) to analyse the amount of contact time between teacher and individual students in a mathematics lesson.

(b) to modify teacher approach to develop more contact.

(c) to find out if students change their attitudes when they have more contact.

Meeting 4 had devised her own chart for measuring the number of interactions in a mathematics lesson. She felt that she had to spend longer time with pupils with a more meaningful end.

Meeting 5 gave out three sheets of paper: one a photocopy of some of the pupils' diaries, an interaction sheet and a comment sheet. She is looking basically at her relationships with pupils rather than at the content of the lesson. She uses diaries for pupil feedback and she feels that this is an avenue of communication, and she replies back to the pupils in written form.

Meeting 7 felt that involvement in this project had not altered her thinking about her teaching but it had perhaps altered how she taught, e.g. she had longer interactions with few pupils. She had used pupils' diaries which had been "useful for giving me an on-going picture of the students' reactions to me, each other and the work" but she said that other teachers in other departments in the school felt that diaries were threatening.

Teacher 'B'

Meeting 2 to use a variety of feedback devices, e.g. audio, tape-recorder, questionnaire, etc., to monitor open-ended discussion in a Humanities class to see just how open-ended it is.

Meeting 4 felt good at the end of her lesson, but on feedback from pupils they said she had not taught what she thought she had taught.

Meeting 5 gave an account of a lesson in which she was looking at how she encouraged effective oral work. In this instance she used an observer and a pupil questionnaire at the end of the lesson. She realised now that she did not brief the observer well enough and the observer's comments were not really useful. The questionnaire gave her a good deal of useful feedback. She felt that she had learned a lot about a few certain individuals.

Meeting 7 spoke about using a questionnaire adopted and adapted from the Grid Teaching Project, because she felt that the language was too difficult for some children to understand. There was useful feedback from the questionnaire, as to whom answered questions in the classroom and who asked them. She would use this strategy again with other groups as it was easy to administer.

Teacher 'C'

Meeting 2 to evaluate questioning techniques in English and to see if indeed questions do get more sophisticated as children get older.

Meeting 6 said that he had stopped using pupils' diaries as they had lost their effect, "just another piece of writing", but he was still using tape-recordings. Felt it emphasised what he already knew. He had observed another group member's lesson. They had very similar teaching styles. He felt that self-evaluation should be an habitual part of his teaching.

Meeting 7 found that tape-recording was inhibiting for pupils, plus poor quality of the recording did not help. He had later used an observer to interview pupils, and also used a questionnaire.

Teacher 'D'

Meeting 2 to compare the effectiveness of various methods of classroom research in relation to ways of giving instructions in maths and computer studies.

Meeting 5 was looking at the problems of pupils not being sure of what they had to do after having been given apparently clear instructions. She was now keeping a checklist of students who say that they don't know what to do - and their reasons for not knowing - to see if there is a pattern building up. This checklist may help her to see if certain pupils have special needs.

Meeting 6 had had her class observed by another colleague who had also interviewed the pupils. Were the children actually reading the book or just scanning it for answers to questions? How did children perceive their own abilities and how did the teacher perceive their abilities?

Meeting 7 had used a tape recorder (also not very successfully), then used a questionnaire. But did not find technical aids very useful. Felt that an observer was helpful (if well briefed) but not always available. Single recording methods are very useful, checklists, notebooks, etc. if you were sure of what you were setting out to do.

Teacher 'E'

Meeting 2 to evaluate my teaching techniques particularly in relation to question and answer, and open-ended discussion in science.

Meeting 4 had had problems with the mechanics of the tape-recorder and the quality of the recording was poor.

Meeting 5 produced a questionnaire which he had used with his class. He asked for comments about it from the group. The discussion that followed centred around the question of "How valid are children's comments?" Are they able to make valued judgements? He said that he felt that it was only now, 6 months into the project, that the group was opening up and problems and confidences were being shared.

Meeting 6 felt that pupils still felt threatened by the outside observer. Will attempt pupils interviewing other pupils. He felt that he had done a great deal. Observations, interviews, questionnaires. The use of an outsider prompted people to do things - prepare observation sheets, etc. Were pupil questionnaires useful once a week? Did pupils get bored with them? They took a long time to analyse. He felt that a great deal of his time had been spent on modifying and adapting materials for his own use.

Meeting 7 had used a teacher diary to 'log' his week. The observation by another teacher, pupil questionnaires about a lesson, and finally pupil feedback using a tape-recorder during discussions with small groups. His interest in the project had started him to think about what he was doing.

Teacher 'F'

Meeting 2 to set up a school-based evaluation project across departments using my own experience as an example.

Meeting 4 was still reluctant to put pen to paper stating strengths and areas of weakness - felt he needed more guidance.

Meeting 6 said that two of his group had withdrawn for varied reasons. The remainder were observing the methodology of each others' lessons. Will do a time-and-motion study of one of his lessons - give the observer carte blanche. He talked about the problems of getting other Heads of Depts interested in the world of self-evaluation. They felt it was threatening, time consuming, difficult to disseminate, unless it had official stamp.

Other people in the group said that teachers just aren't interested, they don't want to be put under the microscope. They tended to work in isolation, keeping their classroom doors closed. There was no community for critical reflection.

Meeting 7 had used an observation checklist, which he said was not particularly useful, but it had made him inquisitive. He felt that the extra work load had made him more aware and sharpened his ideas of what was happening in his classroom.

Teacher 'G'

Meeting 2 to evaluate teacher performance and pupil learning in physics with the least able children.

Meeting 4 had worked with another member of staff - some of his problems solved when he made changes in class organisation.

Meeting 5 used diaries (compulsory) at the end of each lesson and he found that the comments were becoming a little terse. Were the pupils fed up with having to complete their diary? He always asked the same questions. But has recently changed his second question to "What did we learn which was new?"

Meeting 6 said he thought it was helpful to be observed as well as to be an observer. He still used pupil diaries. He would try and use his time as he thought best fitted that lesson. There were underlying issues which may make him change his practice. Was there any way of monitoring that change? Do we use the same techniques?

Meeting 7 felt that all the strategies which he had used had been helpful. Diaries, observation, video and audio recording, because they had influenced changes in his teaching methods and his class organisation.

Teacher 'H'

Meeting 2 to test out a variety of evaluation techniques in relation to questioning and silence in English teaching.

Meeting 6 worked with a colleague who was a useful asset for lesson analysis. Used questionnaires for pupil feedback, and tape-recorder. Felt that he achieved more in his teaching when he was talking to 2 or 3 pupils rather than to the whole group, because in the whole group some pupils were not listening. He had tried pupils interviewing each other, but had tried to make that 'discussion' rather than 'question' based.

Meeting 7 wished that the changes he could make in his practice could be instinctive and automatic rather than reflective, and he wanted changes - fine rather than broad structure. He had used pupil diaries and tape-recording but he felt that the quality of these depended on the child's ability to communicate. He said that the project had developed his awareness as a teacher to recognise that children are equal partners in classroom interactions.

Teacher 'I'

Meeting 1 (a) to look at teaching techniques for language development concentrating on children's written work.

(b) to look at questioning techniques involved in teaching language.

(c) the setting and marking of children's writing.

Meeting 2 had problems with pupils' inability to answer questions on questionnaires - usually 'yes' or 'no'.

Meeting 5 had had problems with written answers in questionnaires from young children, so he had now developed 'oral strategies' (tape-recording small groups). He has also used an observer who had been briefed beforehand, and these comments had been most useful and helpful to the teacher.

Teacher 'J'

Meeting 2 to evaluate teacher contact and pupil response with those pupils who fall in the 'grey area', i.e. those pupils who are skilled at avoiding contact with the teacher but always get by making normal progress being neither very bright nor less able.

Meeting 4 said that his contact with the 'grey area' of pupils had changed his teaching technique.

Meeting 5 spoke about his second piece of research, that of using 'geog. boards' to help children relate to special concepts. But the school was still continuing to do its shadow study of a child each day. He felt that more staff were becoming interested in the work. He said that there was a good self-reflective community of teachers in his school.

Meeting 6 had continued to look at the 'grey areas' - the school. He has had a 'bearing-in-mind' session. Shadow-study of one girl for one day. His research was low on technology, learned quite a lot about the child - the child became more positive towards him. Better total relationship.

Meeting 7 said that other teachers in his school were now doing similar work to his. His research was backed on low budget technology, as he felt that this was less

stressful to both staff and pupils. But it was argued that this stressful situation could disappear if pupils came into more contact with tape-recorders, videos, etc., then the pupils can be part of the research rather than objects for research.

Teacher 'K'

Meeting 2 to analyse whether these in conflict between teacher demands on a personal response of students when studying a literacy text by evaluating teaching techniques through pupils' diaries and interviews.

Meeting 5 talked about his work with the novel 'Silas Marner' and he saw his research as a challenge to get the pupils to evaluate in a critical way the book and not to just dismiss it because "it has no action" or "its an old book". He felt that the pupils were now more willing to question their first principles.

Meeting 6 had also used pupil-pupil interviews and found that comments were more direct, and that the interviewer had tried to defend the teacher and the book and had tried to make the criticisms less negative. He had also used an observer in the classroom. He felt that because of this work his relationships with his pupils had improved.

APPENDIX C

QUESTIONNAIRE TO TEACHER

The questions posed to the teachers about the Schools Council Project. The responses to these questions are discussed in Chapter 4.4, page 55.

Leicestershire Schools Self-Evaluation Project 1981-82

Schools Council Programme 2 Outer Network

Please answer the following questions as fully as possible.

1. How did you come to hear of this project?
2. How did you get involved in the project?
3. What kinds of things made you want to get involved?
4. What kinds of things did you think you were going to do?
5. What did you want to do?
6. Do you find the group meetings worthwhile or not?
7. What do you do at these meetings?
8. How would you have organised these meetings?
9. Should there have been more or less meetings? Please state which and why.
10. What do you understand by Self-Evaluation? Be precise but brief.
11. When did you start to think about Self-Evaluation?
12. What kinds of problems arose at this stage?
13. When did you start to implement some Self-Evalation?
14. What triggered that off?
15. What was the first thing you did?

16. Which procedures have you used for data/evidence collection?

17. Have there been any problems with these procedures? If so what were they?

18. Have you worked in isolation or in a group in your school? Have there been any problems with this approach?

19. Do you see this Self-Evaluation ending at the end of the project or will it now be an on-going part of your teaching?

20. Has your involvement in the project been worthwhile?

21. How do you see Peter Baker's role?

22. Do you see the need for someone like Peter? Yes - How?
No - Why not?

23. I wish we hadn't .....

24. I wish we had .....

25. I wish we could have .....

Please use this space for any comments you may wish to make.

Thank you very much for your time and co-operation in completing this Questionnaire.

John Boyall

Feb. 1982.

APPENDIX D

INTERVIEW WITH PROJECT CO-ORDINATOR

The transcript of the Interview with Peter Baker, Project Co-ordinator. This interview is discussed in Chapter 4.5, page 64.

Another perspective of this research was to interview the project co-ordinator to see how he saw his role in the project, the roles of the teachers, the strengths and weaknesses of the project, etc.

The interview was tape-recorded and a transcript of that tape, which has been read by the co-ordinator, who granted his permission to use it in this research is given below. It can be compared with the views of the teacher-researchers concerning the role of the co-ordinator given in the analysis of questionnaire, completed by the teachers.

Transcript of the Interview with Peter Baker, 12.5.82

Peter Baker is the co-ordinator of the Leicestershire Group of teachers involved in the Schools Council Programme 2 Self-Evaluation Project.

J.B. How do you see your role in the project?

P.B. Mainly as (a) co-ordinating what everybody does

(b) giving any sort of assistance at any level when asked for but I don't feel that I am directing in any way.

J.B. When you say directing do you mean any individual's work?

P.B. Yes, I am not directing any individual's work or making plans on their behalf, I will only even suggest possible things that they might do next if they ask me. But I always try to keep out if actually going there and saying you should do this or you should do that. I don't feel in any way that I have a directing role.

J.B. Do you think that the teachers think of you as an expert?

P.B. Yes, I think that they probably do, because I think they possibly need someone to turn to - but I don't think I'm an expert - I don't feel that I know as much about things - I'm gleaning a lot of material from other people all the time - so yes, I have if you consider an expert as someone who has more knowledge than they do - Yes I think I probably have - but then I never consider myself to have all the knowledge which is necessary.

J.B. Would you say that your knowledge is basically technical knowledge? Is that how the teachers see it?

P.B. No, I don't think so now - I think they may have got that impression initially when they saw the letter with Educational Technology at the top. People tend to associate that with tape-recorders but I think that in the first session we had I made it fairly clear that my interests were in both

action research and self-evaluation. And I don't think, therefore, it was just on the mechanics of how things work - but they do ask questions on that.

J.B. What problems have you faced as the Project Co-ordinator?

P.B. I think that the biggest problem is knowing when to intervene. I always go round, I try to see everybody before we have a meeting, and it's quite clear that some people look upon this as an inquisitional visit. Whereas all I see it as is a friendly chat to see how (a) if they are getting on all right or (b) if they need any help. But from the way some people react it is obvious that they seem a little worried, and their opening words are something like - "Well I haven't done very much I'm afraid but ..." and so they do see me as slightly inquisitional. But I suppose that is inevitable really. Anybody who runs a group like this and sees people seldom and I don't see them very much, and I only go in if I'm asked apart from just these sort of odd friendly visits which may last anything from 5 minutes to half-an-hour. I think that if I saw them a lot that attitude might change. But I have not the time to see them a lot and anyway the purpose of the project is not to see them a lot - because I feel that if they need help for a lot of the time, this would imply that teachers doing self-evaluation for themselves would need help for a lot of the time and one of the objects of the exercise is to say "Well, these techniques can be used by teachers without help" or with the minimum of help, that's why I keep out of it.

That's one of the reasons why I act as their adviser only when asked. So that one of my main objectives is to say, "Well, these techniques which we have used, we feel can be used by any teacher at any time in any classroom without a great deal of hassle and without having to get an expert in", it seems to me that if we may not get anything which we feel is valuable, in that area, if we can come up with things that's going to be useful, I mean the aim of the thing is a practical approach. That's in the title and that's what I am trying to keep it to.

J.B. So how then do you see the task of the teachers?

P.B. The task of the teachers really is quite difficult. One is giving them a very brief outline of what's going on at the outset. To try to encourage them to use techniques for a start, that's their first job, to use various techniques which I have described, or which they have discovered from things like the Ford Teaching Project and then to use those techniques in a variety of ways and with a variety of classes and try (a) to come to grips with the techniques, and decide which are valid and which aren't for them, and (b) to then use the ones which they like over a longer period of time. And they do seem to be doing that to a reasonable extent. But I wonder if in fact people do need pushing more than I am pushing them - because I certainly get a feeling that there is a flurry of activity when I am due to arrive.

J.B. You have talked about the tasks of the teachers, following on from that what do you feel the teachers ought to be doing, but you have basically answered that ...

P.B. Yes, (a) use the techniques, (b) decide which are best for them, (c) evaluate them thoroughly and see if it has any effect on their own teaching - to see in fact if they are becoming more efficient or better teachers or whatever. Certainly in some cases people are getting positive feedback to themselves and finding that useful.

J.B. What problems have the teachers faced?

P.B. Time problems. The first problem was actually getting down to it - it was the old problem of "actually pushing the button" thing we have talked about a lot. Once they had got over that they got heavily into data collecting and collected an awful lot of data and didn't do very much with it. So we had to get over that and so there have really been three phases. There have been technical problems like getting audio-tapes to work satisfactorily in a classroom, which is a little trickey because they pick up random events as opposed to events which you want to tape; in fact, we have now got a radio mike which we hope will solve some of those problems. But it is quite interesting to note that no one has actually asked for it. I'll have to plug it a little more.

J.B. Do you feel that the teachers are coming to you when they have problems or are they hiding them under a bushel and saying nothing about them?

P.B. Both. I think that some hide them under a bushel and it comes out at a meeting where one would have liked them to say it earlier on so that one could have sorted it out. Some do, some come quite regularly, one teacher particularly I have visited about 12 times in a space of 2-3 weeks to look at his particular problem and get it sorted out.

J.B. Why don't they come to you do you think - is it because they don't want to appear insecure?

P.B. A mixture of both I think.

J.B. They saw you as a person willing to give help at the beginning of the project.

P.B. I think that getting in touch is difficult and being in this place, although I have always said that they can ring me at home, and some do. Perhaps it's just a reluctance to be helped. They feel that they ought to be able to get on with it on their own.

J.B. So they don't like to admit failure in their own eyes?

P.B. Possible, but I've not asked them that, the other thing is I

think that some of them see me as a teaching practice tutor type, almost assessing what they are doing and therefore, certainly one person has done that, I don't know.

J.B. Do you feel that at the beginning, your brief to them, when you pointed out your position, may not have been explicit enough?

P.B. Perhaps not. I thought that I had made it fairly clear but it may not have been the case.

J.B. Stephen Rowland reckons that the teachers in his group saw him as a 'guru' and everyone who started off and joined his group did the same thing as Stephen had done because he was the leader.

P.B. Yes, that is right.

J.B. I don't think that people see you in that sense but if people need help there is no where else to go - so I would have thought that either they would flounder and I think one or two did - or they would come back to you. If they are not coming back to you they are going to flounder - they will all flounder.

P.B. No, I don't think that is necessarily the case. They are all getting on with it. When you actually get out there you find that they have done all sorts of things. In spurts,

things happen in spurts and I think that they all got on to a technique and use it a lot.

J.B. Do you think we asked too much of them? Most of them saw it as a year project and it has been found that working over a year it just isn't viable, people get fed up with it, find other interests and even fail to turn up at meetings.

P.B. We have found the opposite - people want more time not less.

J.B. Yes, they want more time but had we said to them "I want you to do something in this term, evaluate it, and something next term and something in the third term" we might have got a better response over a short period of time (5 week blocks than over a whole year) would the response have been better?

P.B. I don't know - it may have been. I was reluctant to structure it that much.

J.B. You see the point that I am making is, that you said yourself that when you get to visit someone they have done something because they know you are going to visit them. That appears to me to say that although they are supposed to be working over a whole year, they only get a jolt when they know that a meeting is imminent, and you will be in to see them and then nothing happens for 6 weeks.

P.B. I'm not sure I'm accurate on that. I certainly get that

feeling that some people feel that they have got to rush around and do something, but I'm not sure that's general.

J.B. But you said at one of the meetings someone said "that you did a video" and the kids were excited for days before. Does that mean that was a one-off lesson?

P.B. Yes, it was. Whether he has done it again of his own accord, because he has got the equipment to do it, I don't know. Yes, certainly it was a one-off thing. It was built up into quite a big thing which video tends to do.

J.B. Yes, that is one of the problems with it.

P.B. I agree with you.

J.B. How important are the group meetings to the project?

P.B. Well I think that they are very important. I wonder whether we ought to have had them more often in fact, but certainly from what the teachers say, that availability to share ideas and problems in a group which is not of their own school but in a group where a mixed group of people feel that they can now really open out. I think that has gradually become clear that over a period of meetings they have got to know each other better. Obviously they are really prepared to open their hearts about their problems to each other and get responses and help from each other. Probably that is the

most important part of all of it. I think that it is one of the most valuable things that we do - they look forward to them - we try to make them a social occasion, and have lunches and things like that - I think that it is very important and I think they have found them very useful. Certainly the people who can't come to a meeting are very upset because they look forward to them. That looking forward to sharing ideas with other people about specific tasks seems to me to be valuable.

J.B. Do you think that if we had in schools a climate, I think that one member of the group has in his school a community where everyone wants to be involved, does he see the need for the meetings as much as shall we say a member of the group who works in isolation? Or the case where the Headmaster does not really want to know what is going on, in actual fact has been obstructive to the group member. Does the latter need the meetings more than the former?

P.B. No, I think the former gets things out of all meetings, and the sort of critical community you are talking about in his school is such that it makes people very responsive to any sort of joining together of people. No, I think he gets more out of it because he is very well tuned in to talking about problems whereas the other person you are talking about is more reluctant, although he finds it useful. I worry about the school critical community thing, because I think it just depends on the school. If it is that sort of school

where those things occur regularly among a certain group of staff and they share ideas fine. I think that's excellent and I think that's the way one would like things to happen but it is certainly very clear from the majority of staff, it would be very difficult to set up something like that in their school. What they have found is that they usually have someone they can talk to. For example, there are three teachers in one school and so they have got each other to talk to, but certainly a lot of them are pairing up with somebody (another colleague). I do feel that they need to talk about it to someone while it's going on. That does seem to have happened except for one instance.

J.B. Do you feel there has been the need for a common language?

P.B. A vocabulary of action in research and things like that?

J.B. Yes, to some extent, if for example someone says something like the principles of teaching, everyone knows what the phrase 'principles of teaching' mean - that's just one expression - do we all know exactly what everyone else is talking about when they use 'jargon' because by looking at the definitions of self-evaluation - a lot of the group have differing ideas as to what it means. Do you feel that there was a need for a common language? Where we sat down with the group and thrashed out 'this means this' and 'that means that' so that when someone used an expression everyone was in touch with the meaning of that expression.

P.B. I think that one of the advantages of action research is that it has a more acceptable jargon than most educational research. It's on that sort of lower level if you like. It is easier to get into. I think it is a question of knowledge rather than vocabulary - common knowledge rather than vocabulary they are involved with. I always think that you are going to get this semantic difficulty of people not actually quite understanding what the thing is. When seeing John Elliott's latest paper on understanding and what understanding is, and what a concept is I got completely baffled after page 3 when you get into that sort of depth. I think people do have a general feeling about what this is.

J.B. You see, the Ford Teaching Project: the teachers sat down and worked out amongst themselves, and with the influence of Elliott obviously, what Inquiry-Discovery teaching meant. The Humanities Curriculum Project sat down and looked at the principles of procedure for the teacher taking the role of the neutral chairman in discussion groups. Stephen Rowland with his group sits down and explicates what they are actually looking at and so all three projects and their participants have a clear view of what they are talking about.

P.B. No, I have never done that apart from the very first occasion where I explained very briefly what action research was, and what I felt Self-evaluation was, which I tried to make as simple as possible. We have never sat down and sorted the

language out.

J.B. It has never come up in meetings where someone has said "I don't understand what you mean?"

P.B. No, the only occasion that has happened is in the early days when we had a lot of observers from places like Universities who tended to suddenly go off into their own little language and then the teachers just languished into not knowing what was going on. That patently happened at the first meeting, when a lively argument ensued between three observers and you could see the teachers just switching off one after another and lapsed into sleep until those people shut up.

J.B. In retrospect what do you reckon are the strengths and weaknesses of this project?

P.B. I think the strengths are we have created a mixed critical community.

J.B. When you say 'mixed' do you mean inter-disciplinary?

P.B. Yes, inter-disciplinary and inter-school as well: primary, high and upper. That in itself, I think, has been very important and very useful and productive. I think that certain teachers on it, you will always get some more than others, probably the majority of teachers, have got a lot out of it for themselves. They have found out more about

their teaching and they have used what they have found out profitably. Certainly talking to them they have. People will come and say "Now I have solved that problem" that was great.

J.B. Do you feel they all felt they had to look at a problem? rather than ...

P.B. Yes, I know what you mean. I tried to say that self-evaluation was not self-criticism. I pushed this, that one was just looking at what one did and if one did good things as well as weak things, one should say that is good, I should do that again. No, I think that if one just looked at it as just destructive criticism, I think that it would get very weary and upsetting. I often get a teacher come along and say "I taped that and I thought that it was a great lesson".

J.B. Yes, but did he tape that lesson because he thought he might have had a problem, or did he tape it because it was an interesting format?

P.B. No, he just taped it in that instance, because it was a lesson. It was just one he decided to tape at random. There was no specific reason for it. That is good really and that is one thing which I think we have moved towards, people just taping random lessons. Because people get very worried in the early stages of taping that sort of lesson and were actually preparing lessons to tape. Now they will tape just anything.

J.B. Any more strengths of the Project?

P.B. Of the Project itself? One thing it has sorted out some of the bugs in ways of developing good techniques for use, and we have discovered drawbacks with field notes, etc., and we have begun to say what methods we can use successfully and I think that has happened.

J.B. Which methods do you think they are?

P.B. One of the most useful things has been student interviews. Certainly one of the most useful things I have taken part in especially in one school.

J.B. Project feedback from interviews?

P.B. Being able to use pupil feedback to find out if the pupils do in fact understand what the teacher is saying and what strategies they use to find out if they don't understand. I think that has been useful. I don't think a lot of the teachers realised they would get as much useful feedback out of the students as they actually got. Tape-recording varies depending on the quality of the sound on the tape.

J.B. And may depend on the availability of a plug.

P.B. And where that plug is.

J.B. One may have to change the lesson format, seating arrangements, because the plug is in one corner of the room, if one wishes to record that lesson.

P.B. This is where a radio mike is most useful.

J.B. Weaknesses?

P.B. I think it meandered along a little bit; I think it should have had a tighter structure, perhaps as you suggested we should have done something each term and I think that some people would prefer to work under that sort of régime. But on the other hand, again getting back to my original premises - that I want any teacher anywhere to be able to use these techniques - any teachers anywhere is not going to work under a tight structure. They are going to have to do it when they can do it, when they can fit it in and that is basically what we are doing.

J.B. What about people actually producing things?

P.B. Yes, producing things is a problem and getting started has been a problem, their attitude to what they are doing in some ways has been a problem. I think a lot of them got worried about themselves, got into this self-critical thing which one did not want them to do - but I think they probably had to go through that. Then there was the problem of creating special things to observe and to talk about opposed to everyday things. I think that one of the problems was the things

which they chose to look at. I think that a lot of them tied themselves down to rather strange things to look at and perhaps when they come up with their original plan, or someone should have interviewed at an early stage to say, well, as you said on one occasion, "that's far too much" or "that's too tight, why don't you open it up?"

J.B. The problem with that is that the teacher-researcher will then turn to you and say, "You are guiding too much what I want to do".

P.B. Exactly, that is why I didn't do it.

J.B. In other words, "this is what you want me to look at rather than what I want to look at".

P.B. Which was the last thing I wanted to do.

J.B. Finally, what do you see as the end product?

P.B. Well, I hope that each teacher will write a case-study of what happened which will be mainly anecdotal and not a dissertation type, which I hope will be readable by other teachers, and read by other teachers (not only in Leicestershire) who may find something useful in it. So that teachers on the project will say "I used this technique I found it useful, this is how I did it".

J.B. Do you think the fact that people have just taken part even if they don't produce anything and they come to you and say "Peter I just can't put pen to paper" does that matter?

P.B. No, but I would not say that to the group because it could be then very easy to drop their pens. But if there was anyone who was obviously distressed or very hard up for time and had got lots of other pressures on them, I would accept that, but I think that most people will produce something - I think that they accepted that from day one. I hope that we will have some sort of local conference, meeting of minds, where we can share our ideas with other teachers in Leicestershire. I still have this little ambition that we can meet the Cambridge group as this could be very good in terms of dissemination. So I hope that something comes out of it.

APPENDIX E

SCHOOL CODE NUMBERS FOR MAP

The names of schools are identified with a code number.

1. Carisbrooke High School, Isle of Wight.
2. Rotheram High School, Luton, Beds.
3. Vandyke Upper School and Community College, Beds.
4. Teignmouth High School, Avon.
5. Frecheville Campus, Sheffield.
6. Quintin Kynaston, ILEA.
7. St. Anne's County Primary First School, Middlesex.
8. Bosworth College, Leics.
9. Burgoyne Middle School, Beds.
10. Bridgewater School, Berkhamsted, Herts.
11. Springhead County Primary School, Stoke-on-Trent, Staffs.
12. Wollaston School, Northants.
13. Greneway School, Royston, Herts.
14. Ernulf Comprehensive School, St. Neots, Camb.
15. Romsey School, Hants.
16. Melbourn Villege College, Cambs.
17. West Derby Comprehensive School, Liverpool.
18. The Heathland School, Hounslow, Middlesex.
19. Peckham Rye Primary School, ILEA.
20. Hackney Downs School, ILEA.
21. Priory Park School, ILEA.
22. Priory R.C. Primary School, West Wood, Notts.

23. Priory School, Weston-super-Mare, Avon.

24. Yew Tree High School, Wythenshawe, Manchester.

25. All Saints C.E. Primary School, Cockermouth, Cumbria.

26. Valerie Price (Teacher), Combe Pafford School, Torquay, Devon.

27. Mannahead Learning Centre, Plymouth, Devon.

28. Littleport County Primary School, Ely, Cambs.

29. Parklands High School, Leeds.

30. Mary Smith (Teacher), Bannerman Road School, Bristol.

31. Sabina Doust (Teacher), Essex.

32. S.E.R. Exam. Board, Tunbridge Wells, Kent.

33. Sir Leo Schultz High School, Hull.

34. Gillots School, Henley-on-Thames, Oxon.

35. Putteridge High School, Luton, Beds.

36. Smith's Wood Comprehensive School, Solihull.

37. Stephen Rowlands (Teacher), Leics.

38. High Park School, Stourbridge.

39. Bruce Pyart (Teacher), Glam.

40. Cardinal Wiseman School, Coventry.

41. Mark Ford (Teacher), Yew Stock School, Dorset.

42. Sir Frank Markham School, Milton Keynes.

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