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The Independent Policy Evaluation

**Occasional Paper: InTER/6/88
October 1988**

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INIER

**INFORMATION TECHNOLOGY
IN EDUCATION RESEARCH
PROGRAM**

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The Origins of the ESRC – InTER Programme

In 1985, a three-year pilot Information Technology and Education Programme was financed through the former Education and Human Development Committee of ESRC at a total cost of £250k. It created a co-ordination unit with the following aims:

- to review, evaluate and disseminate recent and current activities in the field of IT and Education;
- to identify the needs of Education in relation to IT;
- to stimulate relevant research and to formulate research guidelines;
- to establish and maintain a database of relevant work and to undertake arrangements for coordinating and networking those active in the field including cognitive scientists, educational researchers, practitioners and policy makers.

In 1988, the Council of ESRC undertook to play a further major role in the evolution of new ways in which technology could contribute to learning by supporting some of the necessary basic research. It was accepted that the uncertain pragmatics of early work on classroom technologies required more clearly defined studies. Cognitive science, which promised to provide the basic concepts for work on teaching and learning, was seen to be achieving some maturity. Nevertheless, current work remained somewhat scattered. Whilst diversity of approach remains undoubtedly important when new problems are to be solved, an investment was required in broadly managed programmes across this multidisciplinary field to promote the development of 'critical mass' and the emergence of directions for change.

Occasional Paper InTER/1/88 describes the first phase of this ESRC initiative for the period 1988–93. A Coordinating Centre, a Programme Evaluation Unit and three Research Centres have been approved for work over three years with support from ESRC of over £1M as part of the research initiative programme of the Human Behaviour and Development (HBD) Research Development Group.

The Research Centres, are taking responsibility for the management of a portion of the research agenda. Following a tendering and peer review process conducted in the spring and early summer of 1988, three major contracts of £250,000 each for three years were awarded. The centres are inter-disciplinary and inter-institutional. As part of their research contracts, the centres have been allocated resources to stimulate collaboration on a national basis for their respective research topics. The responsibilities of each centre include the management of a seminar programme, to include practitioners and appropriate policy makers. They also have responsibility for disseminating and supporting the outcomes of their work alongside the Coordinating Centre.

In this Occasional Paper the planned work of the Independent Evaluation of the Programme is described.

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THE INDEPENDENT POLICY EVALUATION

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INTRODUCTION

Evaluation is the process of conceiving, constructing and distributing information to guide social action related to specified activities. Typically, as in this instance, an independent evaluation is commissioned in circumstances where something new is being tried out and where the level of investment in the innovation and the level of uncertainty about its outcomes are sufficiently high to warrant an additional investment in learning about the Programme. When such programmes involve the use of public funds, then the investment in independent evaluation may also be seen as a commitment to public accountability for actions taken on behalf of the citizenry (MacDonald, 1976, Norris, 1988).

From an evaluator's point of view, the Programme is thought of as a case, a particular case that is different in significant respects from any other case (Simons, 1987). Since there is no such thing as a replicable sequence of social action and social consequence, information for case-related action has to be of at least two kinds. The first is information of assistance to those for whom the InTER Programme constitutes their theatre of judgment and action. For them the idiosyncrasies of the case may be more important than the properties it shares with others. The second is information of assistance to those whose primary interest in the Programme is the extent to which it yields learning that can be usefully applied in different circumstances. For them also, of course, a grasp of the particularities of the case is important in restraining over-confidence in the generalisability of the Programme experience.

It is easy to say that the Programme is a case, rather more difficult to say what it is a case of. Answers will vary according to interests and interests must be taken into account as and when they become known but even at this early stage it may be useful to offer a provisional definition of the case from the perspective of two policy evaluators. Unless there is a close correspondence or compatibility between the evaluators' definition and the definitions of those who seek the services of evaluation they are unlikely to develop a productive relationship.

AN INTERPRETATION OF THE PROGRAMME IN CONTEXT.

The Programme is an innovatory formula for resolving problems associated with national initiatives. These problems include the following:

- Despite 30 years of varied experience, we are still unsure about how best to combine central control of financial resources with the conditions of grassroots human productivity. This is a problem of design and management.
- Despite an even longer period of concern about the relationship between research and action (to be precise, between social science and social policy) the problem of linkage remains and becomes more acute as time goes on. Crudely, we need research but cannot wait for it. It is Catch 22. The invention of evaluation can be seen as an attempt to create a science of utilisation by linking knowledge construction directly to strategies of action in real time. Until now evaluators have been largely frustrated in this role by limited access to policy formation and consequently by limited understanding of why or how things happen (MacDonald and Norris, 1981).
- Competitive research and competitive investment are too expensive and too inefficient in the short run, especially in a field like IT, which has assumed an imperative status in the future prosperity of the nation. But collaborative or complementary research programmes face daunting obstacles, not least because the competitive dimensions of the research community include paradigm wars and epistemological differences which make collective knowledge construction difficult. And collaborative investment, notable by its absence in the recent history of IT, depends upon political decisions beyond the control, though not of course beyond the persuasions of any particular programme. We know that the 'ideal' for a model of social action under rational command has no correspondence in the real world, even one committed to the pursuit of rational efficiency (Cronbach, 1981).
- How can organisations learn, use that learning to shape their own actions and share that learning with others? This is a complex problem, particularly for an academic research programme embedded in pressing political and administrative interests. One dimension concerns the consequences of admitting error. Whereas error may sometimes seem the stock-in-trade of academic research, its identification and correction a respectable pursuit, its concealment is the stock-in-trade of political and administrative advance. Any programme evaluator can testify to the sensitivity of programme and project managers with regard to this issue and their resistance to changes of course which imply that misjudgments have been made (Stronach, 1982). Another dimension of the problem is more technical. Even when we confine such learning within the boundaries of a rolling programme and to internal formative processes, experience suggests that the formal control of investment is no guarantee of freedom of manoeuvre (see National Development Programme in Computer Assisted Learning for a classic example) and may itself constitute an impediment to the learning process. Learning is difficult for accountable public programmes (MacDonald and Jenkins, 1979).

In the light of these problems, what is the Programme's response? I think it has the following salient characteristics:

- It takes a long term view of IT research in education but a short term view of the need to connect the research process to contexts of development and application and of the need to demonstrate its relevance and utility, particularly to those agencies that could be induced to amplify its modest, 'core' funding.
- It defines the IT field at present as disparate and poorly connected, in need of integrative mechanisms and connective tissue (the mixed metaphor is deliberate). It proposes structures which are focused enough to stimulate research in important areas where better understanding will have widespread applicability, flexible enough to mobilise known constituencies of interest and open enough to overcome territorialism and competitive instincts. It also proposes a variety of means of transmission, exchange and interaction between research centres, between levels of programme decision-making, between participants and relevant others.
- It believes that a collaborative, non-hierarchical culture is both possible and necessary to facilitate collective output, promote constructive political realism and maintain participant confidence. It proposes relationships of trust based on shared goals, democratic values and reasonable contractual commitments.
- Crucially, it envisages the possibility of an effectively informed policy-making process both within the Programme as it unfolds and within other policy-making arenas to which Programme knowledge is relevant.

That is how we interpret the Programme as a model of social action. Its rhetoric of intent is not unfamiliar and it must be said that in the past similar rhetorics have given rise to rhetoric/reality gaps and generated a great deal of cynicism, not confined to participants. In this case, however, there is reason to believe that such gaps may not arise. In the first place, the design and plan of action is consistent with the rhetoric of intent. In the second place, the evaluation brief which is unprecedented in the authors' experience of twenty years of programme evaluation, provides *prima facie* evidence that the Programme means what it says.

A PROFILE OF CONTEMPORARY PROGRAMME EVALUATION

- We no longer treat programmes as if they were poorly designed experiments from which, with a bit of care we can extract some useful (ie. decontextualised) generalisations. Rather we see them as new elements (new in kind or in quantity) introduced into a social situation in order to promote certain values at the expense of others.
- We no longer treat programmes as disembodied ideas enacted through the interplay of role sets. Rather we see them as resources in the marketplace of individual and institutional aspiration at a point in biographical time.
- We no longer treat programmes as if they will happen but rather as game plans conceived on the basis of unsafe projections and subject to continuous modification in the light of experience.
- We no longer treat programmes as if they had an unquestionable right to exist. Rather we see them as options exercised by those in delegated authority, using resources for which they are publicly accountable.
- We no longer see ourselves either as technicians or as judges but rather as reporters of action, interpreters of meaning and brokers of information.

This process of redefining the objects of evaluation in terms of dynamic social action has been slow to emerge, as has the parallel review of evaluation as a particular form of research which both changes and is changed by the situation with which it interacts. It seems fair to say, however, that there is now widespread recognition of the need for evaluators to adopt a responsive, rather than a pre-ordinate, approach to the design of their enquiry and to think more in terms of a process-oriented rather than a product-oriented view of the contribution they can make, particularly to Programme development (Stake, 1983). What do these changes entail, what difference do they make to the work of the evaluator? Let us look briefly at an 'ideal' model of contemporary evaluation.

We negotiate with sponsors, participants and audiences, seeking an accommodation of interests to guide our questions and observations. We seek access to all the levels of determination relevant to programme origin and action, so as to get a grasp of how and why the programme came about and what the consequences of changing, continuing or abandoning it might be. We stay close to the programme from start to finish, responding to changes of context or of key personnel that may have implications for the direction, focus or timing of evaluative feedback. We see ours as an educative role, widening the sphere of deliberation both in terms of the numbers participating and in terms of the range and depth of the information that is taken into account in a graduated process of reshaping beliefs. We are case-oriented, relatively non-comparative, respecting actor frames of reference and values in representing their work to others. We are non-recommendatory, resisting the exploitation of our platform. We are sensitive to the human consequences of reporting social action and the threat implicit in the evaluative act. We operate from no particular discipline base, produce no grand theory, pursue no personal theory. We work within the language of those we seek to influence. We offer methodological competence in the construction of new knowledge rather than substantive expertise. We depend upon educative interaction to achieve impact rather than upon authority. We do not conspire, we do not collude and we insist upon our obligation to represent the views of those who hold neither power nor office. In the latter respect, we are political brokers (MacDonald, op.cit).

THE EVALUATION BRIEF

It seems to us that the foregoing philosophy of evaluative engagement and of the evaluator role is very close to the expectations and requirements of the brief and consistent with the conceptualisation of the Programme. The Programme is concerned with the creation and distribution and utilisation of both research knowledge and Programme knowledge. So is evaluation. The Programme is concerned particularly to influence policy-making. So is evaluation . . . What then is the case for having an evaluation?

The answer to that becomes clear if we try to formulate the kind of questions we can reasonably prioritise from a reading of the Programme's own brief and its brief to the evaluators, and then ask whether the Programme along could answer those questions with both competence and credibility.

- What are the vocabularies of action and communication in and around the Programme?
- What is the context of research generation and context of research utilisation?

- How effectively are the domains of research and action linked by the form and content of communications? What is the decision structure of the Programme?
- What is it essential to know in order to make an informed decision?
- What is it possible to know?
- What is it reasonable to know and reasonable to transmit?
- What is it essential to know but difficult to tell?
- In terms of knowledge as information, what are the significant differences between means of transmission - formal reports, networking, seminars, personal contact?
- How is knowledge sharing influenced by lateral and vertical lines communication?

These questions interrogate the relationships between three communities, domains or worlds, each of which prioritises a different question. There is a world of research academics. their priority - how good is the research? There is a world of Programme administrators. their priority - how good is the information about the research? There is a world of research application. Their priority - of what practical use is the information?

Programme managers must address all these questions and build effective connections between them. The hub of programme management is the Coordination Unit. The trouble is that the Unit is an action unit, responsible for day-to-day management of a large, complex and distributed system and its maintenance, both in a technical and cultural sense. They have a hundred tasks and find it difficult to do anything as well as they would like to. They may, in any case be limited by skills, by limited access, by limited credibility. The evaluator, on the other hand, is free to concentrate on specific problems, can negotiate access to knowledge on terms that no programme actor can offer, can observe and interrogate the Programme from a perspective which no insider can assume. An independent, external evaluator is not the creature of any sector of the Programme and can attempt an impartial account of all interests in promoting the quality and utility of Programme information.

The brief specifies a formal reporting relationship between evaluation and the Steering committee and a close informal relationship to the Coordinator. The second of these requirements may generate some suspicions among participants as to the impartiality of the evaluation but in terms of Programme needs and in terms of the acceptability of such an evaluation, such a relationship is essential and must be harmonious. The evaluator will not be able to tell the Coordinator all he knows and this must be made clear to the participants and accepted by the Coordinator. A written code of conduct for the evaluation will stipulate the principles and procedures that will govern the acquisition and release of information by the evaluator. It must also be said that, whilst the substantial focus of the evaluation is on understanding and improving the Programme as a learning community, the evaluator also has an obligation to serve public knowledge of publicly funded programmes. Since the Programme brief can claim a similar goal and wants the evaluation to assist it in making an effective impact, there is, in principle, no conflict of interest. However, in the light of what was said earlier in relation to experienced difficulties in this areas it will be necessary to establish

agreed procedures in the event of disagreement about the form or content of any evaluation communication intended for a public audience.

The evaluation brief, however, goes beyond these familiar programme roles, inviting a focus on the programme itself as a choice between alternatives. The sponsors of the Programme, the ESRC, is in effect asking whether this style of central initiative, a variant of the categorical funding tradition established by government departments in the seventies, is an efficient, effective and fair way for a council of research academics to discharge its responsibility to its community. This is a policy issue at the highest level of academic management of research funding. For the evaluation it means that the boundaries of the Programme as a case must be widely drawn.

AIMS OF THE EVALUATION

We have already said something about the underlying philosophy and intended working style of the evaluation, as well as about many of its likely foci of investigation. All of the latter are provisional and require confirmation by appropriate parties with respect to their interests and needs. In a responsive evaluation not too much can be set in concrete before the action, or at least the interaction, has begun. The following aims, therefore, are cast in general terms and constitute a framework of aspirations for the evaluation.

- to encourage the process of self-reflection within the Programme by bringing to bear the perspective of an institutional outsider;
- to assist policymaking at all levels (Council, Steering Committee, Coordination Unit, Research Centre) by elucidating theoretical and analytical models of their management, by providing independent checks on their own observations, additional evidence of the impact of their actions and alternative perspectives;
- to assist Steering Committee in particular through periodic overviews of programme progress and focused studies of issues with significant implications for overall policy;
- to improve the quality of information-sharing within the Programme, seeking to improve its validity by discrepancy identification and its utility by constructing profiles of information need based on actor frames of reference;
- to assist the process of communicating the work of the Programme to interested non-participants, to those to whom Programme actors are accountable and to the community at large;
- to characterise, preserve and make available in useful form the learning of the Programme, for those who may be called upon to build on its experience.

These aims, to the extent that they are fulfilled, will help the Programme to become more effective in its own terms. We are talking, therefore, of a participant form of evaluation. It is important, for the credibility of its claim to independence, that we set limits to this participation. The evaluation is accountable for the quality of the information it provides but not for actions taken on the basis of that information. The evaluation will therefore stop short of making recommendations for action. It will, however, where appropriate and feasible, elaborate options and estimate the possible costs and benefits of alternative courses of action. Nor will the evaluation be docile to hierarchies of Programme power, though it will be responsive to the distribution of responsibilities and sensitive to custom, expectation and vulnerability. The

evaluation will use its independence to be impartial — that is to say, to take all legitimate interests into account. These are the most important limits to its participant status and we would ask for them to be accepted in principle and respected in practice.

EVALUATION TASKS

Evaluation is a study of what particular people do and think at particular times in particular places. The InTER story has already begun, some time before the teller arrives. There is a history to excavate from the files and memories of these who took the first steps. That is one, certain task for the evaluation, better carried out while the tracks are still fresh. We will investigate the origins of the Programme, seeking access to the relevant documentation and the people involved in decisions which led to the Programme.

Even before that, however, we need to make good our promise to produce a code of conduct for the evaluation, one that is acceptable to those upon whose confidence the evaluation depends. We will propose and negotiate a set of principles and procedures governing the gathering and reporting of information. This will be written and is intended to constitute a fair agreement between participants and evaluators.

A number of tasks for the evaluation are specified in the brief and can be taken to represent the major concerns of those who commissioned it. Some of these take the form of general, on-going services to the Programme management structure and our commitment to them is embodied in the aims outlined in the previous section. Others are more specific, such as evaluating the effectiveness of the procedures for inviting, modifying, vetting and selecting proposals. This is an issue of at least professional if not wider interest and one of our early tasks will be to examine the Programme's initial choice of investments, the influence of its briefs and subsequent interventions on the shape of the research centres it supports and the impact of non-selection. This is clearly a delicate and sensitive task for an evaluation in a formative role but the data and its analysis is crucial for a three stage funding process in a Programme which hopes to improve its performance through learning from its experience.

Another task, signalled earlier in this paper, concerns communications within and beyond the Programme. As the Programme develops its communication channels we will begin to chart the patterns and frequency of contact between participants, hopefully with their collaboration. This could lead to periodic representation of evolving networks and to qualitative investigation of information-sharing in relation to participant, Programme and outsider needs.

All these tasks arise from a combination of pre-specifications, interpretation and a conceptualisation of what an evaluation should do. They are, if you like, centrally defined, by the few who have so far had an opportunity to shape them. They are a starting point in the construction of an agenda and a way of indicating, to those with whom we currently negotiate, what we are prepared to offer, how we might begin. As the Programme grows, as other interested parties are identified or make themselves known, there will be many others with a legitimate interest in the evaluation resource, others who may pose different questions and make different demands of us. We must also bear in mind the unpredictability of events, unforeseen consequences and developments that may generate different priorities

and new concerns. All social action programmes are beset with difficulties. Evaluators are one of the few adaptive resources they can turn to. A responsive capability is essential.

An evaluation which is overburdened with pre-determined tasks loses a very necessary capacity to respond to changing needs.

METHODOLOGY

Thus far we have outlined a political and procedural model for evaluation, without elaborating the methodological implications. These can be addressed in terms of three issues. The first concerns the purposes of evaluation (what is the *case for?*). The second concerns the focus of the enquiry (what is the *case of?*) And the third is about the role of the evaluator (who is the *case by?*).

The case for

We began by saying that the Programme is a case but that it is difficult to say what it is a case of. Prior to answering that question, the evaluator has to respond to the concerns, values and interests of those legitimately concerned with the Programme - the stakeholders. These constitute a set of concerns that are prior to any methodological decisions but which have important implications for methodology. For example, the boundary of the case is subject to these concerns and to their ongoing redefinition as the Programme develops, as well as to the sorts of methodologically based reconstructions of the case and its boundaries that procedures such as (say) 'progressive focusing' (Parlett and Hamilton, 1972) or 'grounded theory' (Glaser and Strauss, 1967) might require. Thus 'responsiveness' is an evaluative criterion that is prior to and privileged in terms of, any methodological decision. To that extent, evaluation differs from research.

In addition, we defined the evaluation enterprise as 'information for case-related action', signalling a definition of 'information' in terms of its use-value and posing for ourselves the question: 'how can organisations learn?'. This educational intention also helps to decide how the case will be conceived and reported.

Thus both the politics and the pedagogy of evaluation give a priority to the *case for* rather than to the *case of*.

The case of

The question: 'what is this a case of?' appears at first sight to be a purely methodological one, a question of 'conceiving' and 'constructing' the case. But it too has important preconditions attached to it. When we promise to be 'sensitive to human consequences', to be independent and to follow a pre-specified code of conduct regarding the negotiation of data, we limit in significant ways what we can know and say about the case.

Thus the politics of evaluation relationships sets methodological limits. For example, our undertaking to 'take all legitimate interests into account' invokes a practice of representativeness that has its base in a notion of justice rather than in a principle of sampling (House, 1980). That is to say that we begin to balance two ideas of representation against each other. The one constructs the case in terms of a political brief; the other in terms of a methodological warrant.

It follows, then that evaluation is a kind of research practice that is peculiarly beset with political and temporal contingency and that these contingencies affect what we study and how we study it. Educational evaluation gives priority to utility, in focusing, conceptualising and reporting: it is an educational dialogue just as much as it is a research process, relying on discussion, argument and revision in order to make progress; and it is certainly not a perfect science, either in practice or in possibility. That is why the evaluation rationale proposed here sets such store on achieving an educative dialogue between evaluator, programme personnel and stakeholders.

The case by

But who are the evaluators? That is our third question. In this account we have identified the evaluators as 'participants' in the social action, limiting their freedom with procedural checks for 'impartiality', 'brokerage', 'representativeness' and 'sensitivity'. But this is not to deny their presence in the enquiry, only to restrain the whims of individual prejudice.

Of course, it is also true that methodology acts to constrain their enquiries but we cannot take this to imply a neutral or objective ground upon which evaluators may therefore stand, or a single or unadulterated discipline to which they may appeal for methodological succour. The muddying of the waters that the *case for* and *case of* determinations imply cannot be avoided. The purposes of the Programme and the practices of evaluation have sometimes to be reconciled on a political or pragmatic basis: thus evaluators have to become aware of how they are both changing and being changed in the process of the enquiry -- of the nature and effects of their own involvement in developmental processes and changing contexts.

This awareness implies both the 'educative' and the 'responsive' moments of formative evaluation in relation to the Programme, in which evaluation makes a research-based series of attempts to understand and portray the case (Winter, 1987). The first of these 'projections', of course, is given in this paper and draws on past experiences of the evaluation role rather than on data concerning this Programme in order to make a 'provisional definition of the case' in terms of salient characteristics and expectations. These 'projections' begin as speculative research products and aspire to greater validity and utility as understanding increases. But more importantly, they are also part of the learning process, providing the provisional accounts through which recognition of error and reinterpretation may be determined (Ricoeur, 1981) and on which dialogue with programme participants may draw.

What does that mean for methodology? It means that we accept the imprecision of our methods but expect that each attempt to understand and portray will be better founded than the last. It also means that we depend on collaboration as an educational as well as a political process -- taking 'negotiation' to imply a search for understanding as well as agreement or compromise. Thus we see approaches to programme evaluation by the rationales and methods of a single discipline (eg. ethnography, social psychology, learning theory), as neglecting some of the central problems and possibilities of formative evaluation processes. We also believe that, given the inherent and inescapable difficulties that attend such an enterprise, evaluation can only be effectively pursued in this context as a collaborative exercise, based on shared interests and trade offs.

None of the above implies an abandonment of methodology or method: it merely acknowledges the sorts of problems of understanding which beset any programme evaluation seeking to stay close to the action. Programmes, after all, are unstable, politicised, consequence-laden and values-loaded arenas of social action. Discovering the nature and dynamics of such social settings calls for field-based investigation of a particularly sensitive and evocative kind in order to construct knowledge in forms usable by a wide range of people and to do this in a way which is not in principle prejudicial to any particular interest.

But still the objection can be made: "yes but what are you going to *do* in terms of methodology and method?" Let us conclude this section with a rather 'ideal' illustration of that 'doing' and the rationale that lies behind it:

Our approach is eclectic in terms of data-gathering and the kinds of concepts, relations and theories it may generate or deploy. That seems a shameful admission but we would want to argue that it is a necessary starting point for any evaluation that intends to arrive *at*, rather than *with*, its conclusions.

How can we redeem that hope? We start with the methods of 'naturalism' (Guba, 1978) - looking, talking and listening to people in ways which recognise and support their autonomy and reporting in a common, rather than a technical, language. In this, we share an ethnographic approach in terms of method (but not methodology, as we have seen). Our questions are: how far can we succeed in enabling people to tell their own story, or stories, in their own way? How can we understand the ways in which we as evaluators change that story by being part of it? How can we construct and portray these stories in terms (linguistic, conceptual) that make sense to participants and stakeholders?

That is the first circle of understanding. It is inevitably both limiting and contaminated.

But contamination can be healthy - we also bring to the enquiry the experiences of prior evaluations, that putative 'science of utilisation' to which we earlier referred. Such history offers comparisons and discrepancies in the fields of innovation, management of change, dissemination and so on. We have available to us those concepts, theories and practical wisdom that the field of enquiry has been able to develop, although we employ these sparingly. An example of this kind of questioning: what traditions and contexts inform the participants' accounts? What counts as innovatory in this case and on what grounds? How can conflicting accounts be reconciled, if at all? In this way the questions open up a second, critical circle of enquiry which tests and is tested by naturalistic research into the current Programme.

The third circle is eclectic: the *case for* sets questions with methodological and methodical implications. these indicate a range of possible research strategies and conceptual schema through which the purposes of the Programme may be addressed. The variety of these purposes points to the need for variety in our methodological responses. For example, we might seek to understand a particular dissemination process or outcome in terms of pre-existing and relevant theory - a playful example would be the reference to 'paradigm wars' earlier in this text (Kuhn, 1970, Feyerabend, 1975). Of course, it is probable that sociological or educational theories would be more relevant than the philosophy of science but the point is clear: we see the disciplines as alternative and often conflicting ways of

understanding Programme actions from which we have to choose and about which we have to consult, according to our need and expertise. This does not imply that somehow we stand outside these disciplines; but it does imply an inter-disciplinary (which shall we choose?) and a meta-disciplinary (how shall we choose?) stance.

Our 'eclecticism', therefore, depends on the purposes of the Programme, the nature of the data and emerging themes, the limits of our own repertoire of methodological and theoretical competence and the possibilities for extending that competence through consultation.

At any rate, our account would be founded on that first circle of understanding, respecting the 'actor frame of reference' - although that is not to say that we would take such frames to be definitive, for that would deny the educational and transformative possibilities of our formative strategy. Representative questions in this third circle of understanding might include: what is the possible range of constructions of the case? How do they relate to the purposes and anticipated outcomes of the Programme? What kinds of knowledge and research should we construct and deploy?

Our evaluation approach, then is a simple one. Like a child's tricycle, it has three wheels, three circles of understanding. Unlike that tricycle, the relationship between these circles is not a given 'frame' and must also be worked out in each case of evaluation. And, of course, it is always the case study evaluator's contention that the wheels will need to be reinvented each time.

REFERENCES

- Atkin, J. and House, E. (1981) The Federal Role in Curriculum Development, 1950-1980. In *Educational Evaluation and Policy Analysis*, 3, 5, 5-36.
- Cronbach, L.J. and Assoc. (1981) *Towards Reform of Programme Evaluation*, London: Jossey Bass.
- Feyerabend, P. (1975) *Against Method, outline of an anarchistic theory of knowledge*. Verso.
- Glaser, B.G. and Strauss, A.L. (1967) *The Discovery of Grounded Theory*. London: Weidenfeld and Nicolson.
- Guba, E.G. (1978) Toward a Methodology of Naturistic Inquiry. In *Educational Evaluation, Monograph Series in Evaluation* 8. Los Angeles, CA. UCLA, Center for the Study of Evaluation.
- House, E.R. (1980) *Evaluating with Validity*. Beverley Hills: Sage.
- Kuhn, T.S. (1970) *The Structure of Scientific Revolutions*, (second edition). University of Chicago Press.
- MacDonald, B. (1976) Evaluation and the Control of Education. In Tawney (ed) *Curriculum Evaluation Today: Trends and Implications*, 125-36. London: Macmillan.
- MacDonald, B. and Jenkins, D (eds) (1979) *Understanding Computer Assisted Learning: The Final Report of the Educational Evaluation of the National Development Programme in Computer Assisted Learning*. Norwich, Centre for Applied Research in Education, Mimeo. Copies should also be available from the Department of Education and Science.
- MacDonald, B. and Norris, N. (1982) Looking up for a Change, Political Horizons in Evaluation Fieldwork. In *Case Study Methods: ERM 881* (Deakin University) and *Case Study in Education: ED826* (University of Queensland) Deakin University Press.
- Norris, N.F.J. (1988) *Key Problems in Educational Programme Evaluation*. Ph.D. thesis: University of East Anglia.
- Parlett, M. and Hamilton, D. (1972) Evaluation as Illumination: A New Approach to the Study of Innovatory Programmes. Occasional Paper AP9. Centre for Research in the Education Sciences, University of Edinburgh. Reprinted in Hamilton, D. et al. (eds) (1977) *Beyond the Numbers Game: A Reader in Educational Evaluation*, 6-22. London: Macmillan and in Glass, D. (ed) (1976) *Evaluation Studies Review Annual, 1, 140-157*. Beverley Hills, CA: Sage publications.
- Ricoeur, P. (1981) Hermeneutics and the Human Sciences. In Thompson (ed) *Essays on Language, action and interpretation*. Cambridge University Press
- Simons, H. (1987) *Getting to Know Schools in a Democracy: the Politics and Process of Evaluation*. London: Falmer.
- Stake, R.E. (1983) Program Evaluation, Particularly Responsive Evaluation. In Madaus, Scriven and Stufflebeam (eds) *Evaluation Models: viewpoints on educational and human services evaluation*, 287-310. Boston, MA: Kluwer-Nijhoff.
- Stronach, I. (1982) *Final Report on the Clydebank EC Project*. Glasgow: Jordanhill College.
- Winter, R. (1987) *Action Research and the Nature of Social Enquiry: Professional Innovation and Educational Work*. Aldershot: Gower Publishing Co.

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