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SITE LECTURE: The Teacher as Focus of Research and Development.

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Experience tells me that, if I am not to be misunderstood, I must begin this paper by offering you a brief sketch of my views on the relation of research to educational action. These views are set out at a greater length in other work which I do not necessarily expect this audience to be familiar with. (Stenhouse 1979a, 1979b, 1980)

First, I should mention that there is in England a strong doctrine that the study of education is fed by the contributory disciplines of history, philosophy, and sociology. I agree that these disciplines do contribute to our understanding of education. In my own personal experience I can say that in the curriculum project with which I am most closely associated, the Humanities Curriculum Project, my own contribution was substantially influenced by my knowledge of the history of elementary school readers, of the philosophical work of R.S. Peters, of the social psychology of groups and of the sociology of knowledge.

However, these disciplines, while they serve to stimulate educational imagination and to define the conditions of educational action, do not serve to guide such action. They provide for education - as rules of the game and traditions of play do for a sport - a context in which to plan intelligent action. But they do not tell us how to act.

The yearning towards a form of research which might guide educational action led educational researchers to look enviously at agricultural research. Here, in a tradition associated with Ronald Fisher, researchers had conducted field trials which utilized random sampling in block and plot designs in order to recommend to farmers those strains of seed and crop treatments which would maximize yield. Both random sampling - which legitimized the deployment of the statistics of probability to estimate error and significance - and measure of yield presented problems in educational research. A number of classic papers, among which Campbell and Stanley's 'Experimental and Quasi-Experimental Designs for Research in Teaching' (1963) is prominent have considered the robustness of various experimental designs and statistical procedures in terms of reliability and validity as sampling falls away from the desideratum of randomness. The doctrine of behavioural objectives allied to the development of criterion-referenced testing was developed to give measure of educational yield.

Personally, I am satisfied that the application of this so-called 'psycho-statistical paradigm' (Fienberg 1977) in educational research provides no reliable guide to action (though it may contribute a little to theory). It has to assume, as agriculturists assume in treating a crop in a field, consistency of treatment throughout the treatment group; but it is the teacher's job to work like a gardener rather than a farmer, differentiating the treatment of each subject and each learner as the gardener does each flower bed and each plant. The variability of educational situations is grossly underestimated:

sampling procedures cannot be related to educational action except on a survey basis rather than an experimental basis. Further, behavioural objectives are quite inappropriate to education except in the case of skill learning. They are a monument to the philosophical naivety of a psychological tradition which could simplify intentionality and purpose as 'having a goal'. Purpose in education is about having an agenda.

Now, if I am right about this - and you will not readily persuade me that I am not - then the question arises: if experimental research based on sampling cannot tell us how to act in education, how are we as teachers to know what to do?

One answer to this question is that instructions shall be laid down for us in the form of curricula and specifications of teaching methods. I reject this. Education is learning in the context of a search for truth. Truth cannot be defined by the state even through democratic processes: close control of curricula and teaching methods in schools is to be likened to the totalitarian control of art. Reaching towards the truth through education is a matter of situational professional judgement; and professors of education or administrators cannot tell us what we should be doing. Prescriptions will vary according to cases. You don't need a doctor at all if he is going to give you a treatment laid down by the state or suggested by his professor without bothering to examine you and make a diagnosis.

Educational action is concerned with varying according to case and to context the pursuit of truth through learning. In this subtle and complicated process, how is the teacher to conceive the problem: what shall I do? This riddle provides the context and occasion of my paper.

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The student who, during the course of ten years in school, meets two or three outstanding and congenial teachers has had a fortunate educational experience. Many are not so lucky.

The improvement of schooling hinges on increasing the numbers of outstanding teachers, on serving their needs, and on trying to ensure that their virtues are not frustrated by the system. The basic institutional frameworks of the educational enterprise - the neighbourhood elementary school and the comprehensive high school - are for the moment stably established or well on the way. Within these frameworks it is the outstanding teachers who transmute the process of instruction into the adventure of education. Others, it is true, may teach us; but it is they who teach us to delight in learning and to exult in the extension of powers learning gives us.

As part of a National Science Foundation study of the status of science education in United States schools, Bob Stake and Jack

Easley of the University of Illinois directed a collection of 'Case Studies in Science Education' (1978). Eleven close case studies of high schools and their feeder elementaries in different states were followed up by a national survey. One of their major conclusions confirmed the stance I have just taken. The science teaching that students received was good to the extent that they met good science teachers: teachers who, being interested in science, were absorbed by and skilful in teaching it.

That good teaching is created by good teachers may to some of you seem self-evident to the point of absurdity. You don't need eleven case studies across the American nation - or me to fly to Vancouver from Norwich - to tell you that. But the implications of this self-evident proposition do not seem to be widely grasped.

Good teachers are necessarily autonomous in professional judgement. They do not need to be told what to do. They are not professionally the dependents of researchers or superintendents, of innovators or supervisors. This does not mean that they do not welcome access to ideas created by other people at other places or in other times. Nor do they reject advice, consultancy or support. But they do know that ideas and people are not of much real use until they are digested to the point where they are subject to the teacher's own judgement. In short, it is the task of all educationalists outside the classroom to serve the teachers; for only they are in the position to create good teaching.

Let me restate my case by saying that I am declaring teaching an art; and then elaborate on that.

By an art I mean an exercise of skill expressive of meaning. The painter, the poet, the musician, the actor and the dancer all express meaning through skill. Some artists fly so high that we designate them geniuses, and that may be true of some teachers. But a claim as ambitious as that does not need to be made on behalf of the outstanding teachers I have spoken of. It is enough that they have assiduously cultivated modest but worthwhile talents like those of the innumerable stonemasons who adorned the English parish churches or those sound repertory actors who exceed in number the jobs the theatre has to offer. In short I am not elevating teachers inordinately. Rather I am diagnosing the nature of their job in order to discern how performances may be improved. I'm suggesting that just as dramatists, theatre school staff, producers, stage managers, front of house managers and even booking agencies need to understand to some degree the players' art, so curriculum developers, educational researchers, teacher educators, supervisors and administrators need to understand the art of the teacher.

Teaching is the art which expresses in a form accessible to learners an understanding of the nature of that which is to be learned. Thus, teaching music is about understanding the nature of music and having the skill to teach it true to one's understanding. Teaching tennis is about understanding the logic and psychology and techniques of the game and about expressing that understanding

through skill in teaching. Similarly, the teaching of French expresses an understanding of the nature of language and culture and of that particular language and culture; the teaching of wrought ironwork as a craft expresses the relationship of material to fitness for use and to concepts of beauty; and so forth. And one mainstream tradition of teaching is an expression of knowledge of a discipline or field such as history, science or geography. To teach such a discipline or field of knowledge is always to 'teach' the epistemology of that discipline, the nature of its tenure on knowledge.

My own belief, as I have said, is that, whether teaching is concerned with that knowledge we associate with the disciplines or with arts or with practical skills, it should aspire to express a view of knowledge or of a field of activity. This epistemological desideratum might be expressed by saying that the teacher should aspire to give learners access to insight into the status of what they learn. The way towards this is that a view of knowledge comes to infuse the teacher's perception of subject matter and judgement of the performance of students, and that this view and its status becomes revealed by teaching to the student. Such a perception of knowledge develops and deepens throughout the career of a good teacher and it is the product of the teacher's personal construction or reconstruction of knowledge. It can be assisted by reading and instruction, but it is essentially a personal construction created from socially available resources and it cannot be imparted by others or to others in a straightforward manner.

Now, the construction of a personal perception of our world from the knowledge and traditions that our culture makes available to us is a task that faces not only the teacher, but also the student, and teaching rests on both partners in the process being at different stages of the same enterprise. This is clear to us when we watch a great musician teaching a master class, but it tends to be obscured in schools in the ordinary classroom. The technical claptrap of learning systems and behavioural objectives is much to blame for this. Good learning is about making, not mere doing. It is about constructing a view of the world. It is not about showing that, although you have failed in that construction, you are capable of all the performances that would appear to make the construction possible. Education is for real: it is not (to borrow an image from Bruce Joyce) about practice shots.

Let me sum up so far by an analogy (which is not to be pursued too far). The art of social comedy expresses a view of manners and morals as people live them: the art of education expresses a view of knowledge as people live it. The medium of one is theatrical entertainment; of the other, schooling. Both are at their highest when the audience or learner is brought to reflect consciously on the message he receives. This fulfilment depends not only upon the quality of the play or the curriculum, but also upon the art of the actor or teacher.

And now let me take a second step. All good art is an inquiry

and an experiment. It is by virtue of being an artist that the teacher is a researcher. The point appears to be difficult to grasp because education faculties have been invaded by the idea that research is scientific and concerned with general laws. This notion persists even though our universities teach music and literature and history and art and lay an obligation on their staff in these fields to conduct research. There is no reason why research in education should look to science.

The artist is the researcher par excellence. So much so that prominent scientists are now arguing that, while routine consolidation in science can be achieved by following conventional scientific method, the big breakthroughs really show that science is an art. I'm sceptical of that, but I am clear that all art rests upon research and the purpose of the artist's research is to improve the truth of his performance. Leonardo's sketchbooks, George Stubbs dissecting a horse in his studio, Nureyev working with a partner in a new ballet, Solti and the Chicago Symphony Orchestra tackling Beethoven, Derek Jacobi evolving his Hamlet, all are engaged in inquiry, in research and development of their own work. And this development, though it involves improvement of technique, is not for the sake of technique: it is for the sake of the expression of a truth in a performance which challenges criticism in those terms.

Thus an elementary school teacher who wishes to improve his or her teaching of science will record teaching or invite a colleague in as observer, and will, if possible, bring in an outsider to monitor the children's perceptions as a basis for 'triangulation'.

From this the next aspiration is to drop the outsider and move towards open discourse between teacher and children about the teaching/learning process in the classroom and its 'meaning'. A crucial aspect of this meaning is the impression of science - always expressed in specific instances or episodes - that the children are acquiring. And this the teacher needs to criticise in the light of the philosophy of science. All teaching falsifies its subject as it shapes it into the form of teaching and learning: the art of pedagogy is to minimize the falsification of knowledge. It is the aspiration to do this, to shape understanding without distortion into pedagogic forms that is the challenge to develop one's art.

Now, if you say that most teachers are not like this, I shall reply that some are, and that it is the model of teaching that those teachers display to us that we need to disseminate. Allow me here to be a little of the wild-eyed maniac whose intervention Bruce Joyce sanctioned in his talk. The way ahead is to disseminate the idea of teacher as artist with the implication that artists exercise autonomy of judgement founded upon research directed towards their improvement in their art. The changes in school administration or curriculum or teaching arrangements which will be required are those which make it possible to implement that vision.

If I, as a teacher, absorb and accept the case I have just been putting, then it is clear to me that I am the focus of research and development. Who else could be? My problem then is how to get

others to recognise it. That is not going to be too easy. If teachers are at the bottom of the pile, there are bound to be lots of people who like it that way. So, though I can exercise my art in secret, or even in a small group of consenting adults, if I want the support of a movement, I need to make alliances and develop some political power.

Let me give you a short account of the kinds of support that have been developed round the teacher-as-researcher movement in Britain. First, there is an alliance between some universities or colleges of education and some teacher groups. What is required of the universities is that they break the stranglehold of the 'psycho-statistical and nomothetic paradigm' on educational research. The universities which have done this recognise forms of research alternative to the still dominant tradition of scientific positivism with its emphasis on experimental and survey procedures conducted on samples in field settings and giving rise to 'results'. Among these alternative forms are experimental or descriptive case studies which may be based upon the teacher's access either to the classroom as a laboratory or to the school or classroom as a setting for participant observation. In Britain standards for these research paradigms are now in process of being worked out at master's and doctoral levels, both through discussion at conferences and in the consultations between internal and external examiners.

This alliance with universities is important for the teachers because it gives access to a pattern of part-time study right up to

the level of doctorate which turns one towards one's professional work rather than away from it and offers a systematic training in the appropriate research skills as well as a grasp of the theoretical issues applicable to close-in, practitioner research. This tradition, once established at advanced levels, begins to influence patterns of in-service work.

Academic validation has drawn on alternative traditions which include the hermeneutic tradition and the neo-Marxist tradition from Germany, phenomenology and ethno-methodology. These theoretical currents are in harmony with reappraisals at present being conducted in the social science community whose interests lie outside education. This link is a source of validation and alliance. It turns the education faculty towards sociologists, anthropologists and historians as alternative allies to psychologists and philosophers. This shift of alliance has, of course, profound power implications in the academic community.

The academic endorsement of styles of research into schooling which are as accessible to practising school teachers as to university teachers and professional researchers can, also, of course, create considerable hostility and fear among university faculty. In my view, this is misplaced. The universities can only thrive the more as a result of an extension of the boundaries of the research community. The shift is from lecturing on research results towards training researchers. There is room for both, of course, but the balance becomes different. The message is that the 'role' of universities is bound to be central in the development of a tradition that puts research at its heart.

Of course, teacher power expresses itself in unfamiliar ways within this tradition. The Schools Council for Curriculum and Examination, the main funding agency for curriculum in Britain recently funded a conference of teachers on 'The Teacher as Researcher' (Nixon, 1981). The teachers who organized it did not invite anyone from a university. I guess we talk too much, and they wanted time to think over the issues in their own way. But they will need us. And we need them. In an age of accountability educational research will be held accountable for its relevance to practice, and that relevance can only be validated by practitioners.

Enlightened administrators look benevolently on the teacher-researcher model of staff development, and one can gather support there. The idea has potential appeal for teacher unions, though that hasn't really been pressed home in Britain. One way or another there are the makings of a movement.

But what are the consequences to be expected of such a movement if it gathers momentum and power? May we expect teachers to demand schools fit for educational artist-researchers to live in? And what would those look like?

We can only guess. But I am suggesting that forms of schooling can best be seen as obsolescent when they constrict developments in teaching. I believe that the development of the teacher as artist means that some time in the future we are going to have to get rid of school principals. My own guess is that we shall need delegatory rather than legislative democracy. Committees will not decide what

to do: artists grudge that use of time. They will delegate the power to decide to individuals for fixed periods and will hold them accountable. In the University in which I work professors' duties are no different from those of lecturers: a professorship is more an award than appointment. A capacity for intellectual leadership is appropriate, but the leadership role is not structured on the job. Perhaps we need such professors in schools: persons appointed by their colleagues to a status which recognizes their distinctive capacity to contribute to the community of teachers.

A community of teachers whose attention is primarily focused on the art of teaching will require - as a company of actors does or as a university faculty does - an administrative support structure. It is important that the teacher who acts as president of the school faculty command the highest salary in the institution, and that below that the head of the administration has parity with the highest grade of teacher. It is vital that administration service teaching, not lead it.

However, we shall not change teaching by creating a school organized on that model. The reform of school organization needs to be an adjustment to the development of teaching. It is the teacher who is focus of research and development: only the teacher himself can change the teacher himself. You can reorganize schools and he can remain as he was. You can pull down the walls and make an open school; but open teaching remains an achievement of the

teacher's art, and an achievement that is an expression of understanding.

What are the implications of all this for in-service development?

My position is that in-service development must be the development of the teacher as artist. That means the development of understanding expressed in performance: understanding of the nature of knowledge expressed in the art form of teaching and learning. No skills unless they enhance understanding, no curriculum study unless it enhances understanding, no courses of study unless they enhance understanding no assessment unless it enhances understanding. What I am advocating is so radical that I may not be communicating it. Let me sharpen the message of the area of curriculum: I am saying that the purpose of any curriculum change, any curriculum research, any curriculum development is the enhancement of the art of teaching, of understanding expressed as performance. The idea that you want a change and the change is dependent on restraining teachers is a non-starter.

As a starting point teachers must want change, rather than others wanting to change them. That means that the option of professional development leading toward professional satisfaction of a kind that brings an enhancement of self must be made clear and open to teachers. Teachers have been taught that teaching is instrumental. When we say that teaching is an art, we are saying that the craft of teaching is inseparable from the understanding taught. In fine, teaching is intrinsic.

Improving education is not about improving teaching as a delivery system. Crucial is the desire of the artist to improve his art. This art is what the experienced teacher brings to in-service development. Good in-service education recognizes and strengthens the power and primacy of that art. It offers curricula to teachers as music in-service offers Beethoven or Stravinsky to musicians. To further the art. In-service is linked to curriculum because the art of teaching needs content. In-service is linked to change because art is about change and only develops in change. If the art of teaching could develop without change, then there would be no need for change in education. It is art's appetite for change that makes educational change necessary to the virtue of schooling.

The artist is the researcher whose inquiry expresses itself in performance of his art rather than (or as well as) in a research report. In an essentially practical art like education all the research and all the in-service education we offer should support that research towards performance on the part of the teacher. For there is in education no absolute and unperformed knowledge. In educational research and scholarship the ivory towers where the truth is neglected are so many theatres without players, galleries without pictures, music without musicians. Educational knowledge exists in, and is verified or falsified in, its performance.

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