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PRODUCT OR PROCESS? A REPLY TO BRIAN CRITTENDEN.

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Brian Crittenden misunderstands my views in his article on 'Product or Process in Curriculum Evaluation'; and since his misunderstanding confuses the issues, it is worth correcting.

His crucial confusion arises from his failure to pick up the distinction between outcomes and objectives. A secondary confusion occurs in his failure to recognise the need to distinguish between assessment and evaluation.

Assessment I take to mean judging the merit of pieces of work produced by students, and, by extension, of the students themselves. Such pieces of work can, allowing a little latitude to cover copying or rehearsal of earlier performances, be thought of as outcomes of the educational process, and thus as products. They constitute behaviours, in the broad sense, which includes symbolic behaviour, and, taking behaviour in this sense, we can infer learning in others only from the observation of such behaviours. At no point have I doubted or cast doubt on this.

I argue that, although education is inevitably concerned with the transmission of skills and information, its heartland is in giving access to knowledge as a medium and discipline of thinking. Skills and information can be readily tested and, if it be desired, specified in terms of behavioural objectives. However, an education which merely gives skills and information is an inferior education as compared to that which inducts students into knowledge. The aim of

education which offers access to knowledge can be summed up in the word, understanding. What constitutes understanding in respect of any type of knowledge is problematic from the viewpoint of epistemology.

Now, understanding is demonstrated by the capacity to perform well according to criteria, selecting information and skills appropriately to one's purpose. It cannot be usefully pre-specified in terms of behavioural outcomes; and consequently it is best assessed by means of essays, organised attempts to express one's understanding of phenomena, experiences or problems. My argument is that the assessment of performance in knowledge calls for the specification of criteria by which performances are to be judged, and not by specification of the performance which is to be the subject of judgement.

Crittenden (1979) writes:

Stenhouse seems willing to talk about aims of education, but does not recognise that they cannot effectively guide the process of education unless they are related to learning outcomes through which they are progressively achieved. He refers to the pedagogical aim of the Humanities Project as being 'to develop understanding of social situations and human acts and of the controversial value issues which they raise.' (sic.) He correctly points out that such understanding can always be deepened (i.e. it cannot be achieved once and for all) and that the criteria of valid understanding are disputed. However, if the aim of understanding in the Humanities Project is to be pursued intelligibly the teacher must at least have some notion of what constitutes an improvement in understanding, and how to recognise it when it occurs. (p.39)

Quite!

Pages 33 to 35 of the Humanities Project handbook, which deal with judgement of students' work meet these points exactly.

At the same time it is essential to know what counts as success in work aimed at understanding. We therefore offer in this section suggested criteria by which students' work might be judged. These criteria are intended to be principles of judgement for the teacher: the student may well produce work which will stand judgement by these standards without being able to enunciate them.

Teachers will be concerned with judging students' work for two reasons. Sometimes the judgement, whether it be of discussion or of other work, will be part of the diagnostic and self-evaluative process by which the teacher meets his duty to assure himself that individual students or groups are making progress in understanding. In another context, students' performance may need to be assessed and expressed in terms of grades or some other system of public evaluation. (The Humanities Project: an Introduction. p.33).

There follow ten suggested criteria for the assessment of work directed towards the aim of understanding. One can only assume that Crittenden is attempting to get a critical grip on the Humanities Project without reading the only account of the project which it corporately produced. Nor is the situation helped by his misquotation of the aim of the project from my Introduction to Curriculum Research and Development: the aim is 'to develop an understanding.....'.

The implication is that an understanding is a personal achievement in the presence of public criteria. The choice of the word understanding as an aim is illuminated by a consideration of its two opposites, not understanding and misunderstanding. There is an implication of a claim to understand made by an individual who has a subjective experience of closure, an Aha! feeling, but at the same time knows that there exist criteria by which to judge whether his understanding is defensible, whether it is a misunderstanding.

Now, my contention is that, while Tylerian objectives work well enough when skills and information are at stake - so far as assessment is concerned - they do not work in respect of knowledge, which is the heartland of the school curriculum. Although knowledge is inferred

from behaviours, we cannot pre-specify which behaviours we hope to evince. 'Critical thinking' (cited by Crittenden), even when associated, as Tyler would have us associate it, with a content area, remains a broad aim and not an objective. Its development cannot be held to be sequential in any sense that helps curriculum planning. Nor can it appropriately be tested by any means other than an essay - an original composition in words or music or visual form - which liberates the learner from the intentions of his teacher. For the essence of knowledge is that it provides standards by which to judge the quality of the unpredicted; it inheres not in behaviours but in the criteria by which behaviour is controlled and judged.

Knowledge cannot be reduced to behaviours. As a medium of thinking its characteristic is that it is supportive of creative thinking and thus indeterminate of behaviours. Pre-specified behavioural objectives necessarily falsify the nature of knowledge. But the falsification is in the pre-specification implied in the term objective. It does not imply that knowledge is not an outcome of education. Indeed, I am arguing that we can judge outcomes without anticipating them. Standards in education, and in curriculum planning, do not depend upon a pre-specification of behavioural outcomes, at any rate in areas of knowledge.

I have made as clear as I can within the confines of this brief outline my conception of the educational process as one governed by standards or criteria which depend upon the judgement of the teacher and my contention that the judgement of the teacher cannot be guided in areas of knowledge by a pre-specification of outcomes. Whence can one derive standards for the selection of content and the criticism of performance? Only, I argue, from the teacher's grasp of the nature and standards of the knowledge being taught. That is why teachers learn subjects.

When I argue for the statement of the curriculum in terms of content rather than objectives, I am suggesting that much should be

left to the responsive process of teaching. I wonder how Crittenden teaches. Either he breaks his subject up into a specification of multiple behavioural objectives (which research tells us he should give out to his students) or he accepts a brief specification of content from a university calendar of courses and colours in that outline himself. And no doubt he will teach differently each year, though the calendar is not revised. I think this is entirely proper, and it's certainly what I do myself. Each year the course changes. Each student gets a chance too to follow his bent in his work.

And now I think we are coming to the heart of the matter. I believe that the objectives model actually rests on an acceptance of the school teacher as a kind of intellectual navy. An objectives-based curriculum is like a site plan simplified so that people know exactly where to dig their trenches without having to know why.

In any knowledge area - say history - begin your curriculum planning by getting a group of colleagues together who are going to teach the subject. Let each define his substantive interest: eighteenth century diplomatic history, or the history of the Australian rules game (see Hexter's History Primer) or the history of banking or the steam engine. Let all agree to read regularly for a year in the philosophy of history and historiography, and then for a second year in classics of historical writing, and during that time to produce some work of his or her own in the chosen substantive area of interest. Relate this to teaching by accepting the curriculum and teaching you are now engaged in as a starting point. Regularly review examples of pupils' work alongside your own. Are they making the same sort of progress as the teacher group is? Keep tinkering about with the curriculum and the teaching strategies to extract more performance.

If you need more structure, take on a curriculum project in history and use it as a line of development, feeding back evaluative

assessment from your classroom and your teacher seminar group and digesting the project until it disintegrates as it is digested to form muscle in your teaching.

At a different level this is possible in relation to non-specialist teaching in primary schools. 'Let's have a blitz on....' science or social studies or history or maths: that's the usual formula.

Crittenden suggests that I take the view 'that learning outcomes expressed in behavioural terms have no place in the planning and evaluation of curriculum concerned with induction into forms of knowledge.' His statement is rather muddled. Either he means 'prespecified in behavioural terms' or 'expressed in behaviours', I imagine. My position is that the planning and evaluation of curriculum and teaching should be based upon the close critical examination of examples of pupils' work - i.e. behaviours which are outcomes of teaching - but that the critical examination should be based upon the standards expressed in a form of knowledge, or, as I might prefer it, a mode of experience (after Oakeshott 1933), and not on a comparison between the observed outcomes with some prespecification of the outcome. You can judge whether a history essay is good in terms other than its conformity to earlier formulated hopes and expectations.

So far I have given an account of curriculum planning by a teacher group, of teaching and of assessment. It includes a degree of self-monitoring by teachers, which some would call self-evaluation. It calls into question Crittenden's emphasis on the difference between the activity of a social science teacher and that of someone teaching social science in a graduate degree programme: rather it emphasizes the similarity. (Crittenden 1979 p.39).

However, Crittenden is concerned, I believe, not simply with the transactions of the school and class but with curriculum research

development and evaluation at a more public level. For this reason I need to explain my view of curriculum research and development, and here I can start from Crittenden, who makes this comment on MAN: a course of study: 'For example, the first aim quoted - 'to initiate and develop in youngsters a process of question-posing(the inquiry method)' - does not even suggest how a teacher is to initiate and develop this process.' It seems that Crittenden wants to instruct the teacher as if he were a sub-professional.

Now, as a matter of fact, there is an extended literature about the 'inquiry method' so that the aim does - in so far as it is taken to refer to or denote this literature - suggest how the teacher might focus his task. Prominent in this literature is that of John Elliott's Ford Teaching Project, which was an action research project on inquiry - and discovery-based teaching. And I believe that if we look at that project it will help us to understand the view I am putting forward about curriculum.

Ford T worked with teachers who couched their intentions in terms of teaching through inquiry and discovery and it made its progress by the rigorous documentation of the perception of their practice and its implications by the teachers themselves, by their pupils and by the researchers. This was extraordinarily demanding on teachers. They had to shoulder the burden of creating content and methods which met their own claims or aspirations. There is no doubt that the project was worthwhile, but it was extraordinarily tough on the teachers.

My view of curriculum research and development is based on the proposition that all curricula are hypothetical realizations of theses about the nature of knowledge and the nature of teaching and learning. The function of curriculum research and development is to create curricula in which these theses are made articulate and

explicit and thereby subject to evaluation by teachers. Such curricula are media in which ideas are expressed in forms which make them testable by teachers in the laboratories we call classrooms. And my contention would be that when curricula are not articulate and hypothetical but implicit and traditionally sanctioned, then pupils are the subject of uncontrolled and unmonitored experiments. This is the condition of most schooling.

The importance of MAN: a course of study is that it embodies theses 'towards a theory of instruction' (Bruner 1966) and thereby makes them accessible to evaluation in the 'process of education'. (Bruner 1960) The ideas I am trying to express are only difficult because they are unfamiliar. Curricula educate teachers and pupils as plays educate actors and audiences. Waiting for Godot invites us to explore the nature of life through the process of theatre and meanwhile develops the art of the actor. MAN invites us to explore the nature of knowledge through the process of education, and meanwhile develops the art of the teacher. For this to work we must see that curricula are hypothetical and always flawed. The purpose of teaching MAN: a course of study is to evaluate it across the board - as knowledge and as pedagogy. The purpose of the evaluation is to improve it and us. A well-researched curriculum is a curriculum designed to help us to evaluate propositions about knowledge and pedagogy. This is the context of my remarks quoted by Crittenden on p.43 of his article.

I tend to believe that in the context of such a tradition of curriculum research the function of evaluation research is to support teachers' capacity to evaluate. But of course there is a long way to go, and to many readers the ideas I am putting forward will seem quite novel.

MacDonald (with whom, pace Crittenden (p.43) I tend frequently to disagree) is, I think, mainly interested now in the evaluation of policy and its execution; but he must speak for himself. My position is that a well-designed curriculum should be illuminative: it should cast light on important matters when it is taught critically and evaluatively.

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