

The Curriculum And Meaningful Objectives

Curriculum theorists are, among other things, engaged in attempts at producing models of curriculum design and/or curriculum development. Such attempts, according to Robin Barrow, aim at establishing “a set of ideal steps that will both lead to coherent proposals for curriculum change and, when incorporated in the curriculum proposal, enable it to be successfully adopted.”¹ Establishing such “a set of ideal steps” involves a consideration of needs, practical constraints, curriculum content and curriculum planning. Such projects also include a formulation of curriculum objectives, ways of implementing objectives and methods of evaluating the success or failure of achieving these objectives. In this paper I propose to reflect on the nature of objectives by focusing on the following questions:

1. Are objectives part of the curriculum?
2. What constitutes a meaningful objective?

In discussing replies to the second question, I examine the behaviourist approach to objectives, possible criticisms of this position, and the view put forth by some radical educationists that ‘curriculum planning’ and ‘education’ are mutually exclusive. I should point out that these questions are not being asked in order to provide an exercise in conceptual analysis. Answers to these kind of questions indicate the importance of a consideration of moral issues which arise from an examination of objectives and which are central to a proper study of the educational process. Such answers ought to be taken into account in formulating, implementing and evaluating curriculum objectives. Before attempting to answer these questions, it is appropriate to look at the nature of the concept of objectives and how it is applied in the field of curriculum.

Objectives

The word ‘objective’ belongs to the family of concepts which includes the concepts ‘intention,’ ‘purpose,’ ‘end,’ ‘goal’ and ‘aim’. One thing that unites them is that all refer to the possible actualization of something, to the carrying out of something in the immediate or remote future. They tell us what destination someone is trying to reach. The destination one is trying to reach varies with the context of one’s journey or set of activities involved. The variety of contexts within which one may act is the primary means of distinguishing the various uses of these concepts. The generality or specificity attached to these concepts depends upon the context they occur in. Some are more specific than others, because they are only used with reference to certain goals, or with regard to certain journeys and destinations. The words ‘purpose’ and ‘end’ are usually employed when one is trying to achieve something comprehensive, general or even “ideal” in scope. We speak, for example, of “the purpose or end of one’s life.” ‘Purpose’ or ‘end,’ in this case, might consist of one or several general thing(s) sought over a long period (we speak, thus, of a life’s ambition(s)). I am not denying ‘purpose’ is used in other contexts. We speak, for example, of “the purpose of a meeting” or “the

purpose of a mission.” Even in these contexts, ‘purpose’ or ‘end’ imply breadth of scope not implied by the ordinary usage of ‘aims’ or ‘goal’ (not, at least, when they take their primary, non-metaphorical, sense). The breadth of scope implied by ‘purpose’ (even in the latter context) is evident from the fact that often various steps or stages, each with a particular aim, are necessary before the ‘purpose’ or ‘end’ is attained.

The primary meaning of ‘aim’ and ‘goal’ is derived from sports activities such as archery, shooting, or soccer. The archer’s aim is to hit a target or the centre of a target, the bull’s eye. The soccer player, especially if his position is in the attack line, is to get the ball past a goalkeeper within a certain specific area of the pitch, marked by goal posts.

In the metaphorical or figurative sense, ‘aim’ refers to activities other than sports. An aim is something that someone (or more than one person in the case of associations, institutions and clubs) is trying to achieve. One tries to formulate aims in order to clarify and make more precise what one is trying to do. It may not be possible to formulate aims in very specific terms. Aims in this sense might be quite general, although less so than ‘purpose’ or ‘end’. This is another feature distinguishing the primary from the metaphorical sense of ‘aim,’ the former sense being always very specific.

Another important characteristic of aims is that they fall within the scope of the same activity that they refer to. To use a metaphor, the terminus does not lie outside the journey: one travels to a destination and the destination falls within the itinerary of the journey although it is the final item on the itinerary. This does not mean that achievement of an aim cannot lead to things extrinsic to the initial activity. But the aim *itself* is intrinsic to the prior activity.²

Two more remarks about the concept ‘aim’: a) When one aims, either in the primary or the figurative sense, at something ‘X’, ‘X’ is generally not very close or easily accessible to one. It is possible to fail in achieving ‘X’. b) Since the verb ‘to aim’ is not an achievement verb, it makes sense to say “I aimed at X but I did not hit X.” To aim does not necessarily involve success. Moreover, if one aims at X and hits Z, Z cannot be considered as one’s achieved aim. In other words, the notion of ‘aim’ excludes any element of randomness.

These points about the notion ‘aim’ may seem tedious or obvious but as I shall try to show later on, a number of the common misgivings about curriculum objectives arise from a lack of proper consideration of just this kind of thing. One might wonder at this stage how these points about aims are relevant to the notion of objectives. The two notions are in fact so closely related that in some instances they have been nearly completely identified with each other. This brings us to a consideration of ‘objectives’ particularly as applied in the field of curriculum.

The terms ‘aims’ and ‘objectives’ are frequently used interchangeably. There is some strong justification for this: both refer to something which is either reached at or which it is intended will be carried out, and (in both cases) this something is quite specific. ‘Objective’ is derived from ‘object’ — something one can see, touch and point to.

How is 'objective' used in curriculum discourse? J. Galen Saylor, William M. Alexander and Arthur J. Lewis, in *Curriculum Planning*, state:

Objectives state the *specific, overt changes* in student behavior that are expected to result from participation in a unit of learning activities. Obviously, they develop more explicitly the general goals and their respective sub-goals for the purpose of planning instruction.³

These authors see two main characteristics of objectives:

1. They are specific — even more specific than what Saylor *et al.*, refer to as 'subgoals' and 2. Objectives refer to observed outward changes resulting from a process of learning. (Whether or not all curriculum objectives should be performative or behavioural will be discussed later on.)

Curriculum theorists generally agree that objectives are usually more specific than general statements of aims. 'They do not agree as to whether or not *all* curriculum objectives should be very specific. This is why some theorists, such as Bill Gilby, distinguish between "long-term objectives" from "short-term objectives".⁵ Long-term objectives are equivalent to broad or "high level aims". They refer to activities to be carried out over a long period of time. Short-term objectives refer to specific activities to be carried out over a relatively short period of time. Eisner distinguishes "instructional objectives" from "expressive objectives".⁶ The former are specific and predetermined. They unambiguously describe what the learner is expected to achieve after a specific activity is completed. The precise nature of achievement is not predetermined in the latter case. Expressive objectives simply identify an educational encounter.

Some curriculum theorists identify curriculum objectives with the objectives of education. Do the two refer to the same thing? I do not believe so. The educational realm is broader than and includes that of the curriculum.

Are objectives part of the curriculum?

Having delineated the contours of the notion under investigation, it is appropriate to turn to the question: "Are objectives part of the curriculum?" (or, "Is the notion of curriculum meaningful without objectives?") The English word 'curriculum' is derived from the Latin word *curriculum* meaning 'a course', 'a race' or 'a running'. This suggests a process, the idea of going through something which has a beginning, a development and an end. The secondary meaning of curriculum was 'career'. Both the primary and the secondary meanings of curriculum referred to temporal space and to non-temporal endeavours or intellectual pursuits. The expression 'curriculum vitae', then referred to both intellectual and non-intellectual pursuits. Today curriculum in the educational context refers primarily, if not solely, to intellectual pursuits. Actually curriculum is related to learning in a broad sense, incorporating more than the "cognitive" aspect (what one learns, how this is brought about, how it is planned, evaluated, etc.). This suggests that the concept curriculum is a complex notion. Various meanings have been attached to it.⁷ A careful analysis of curriculum shows that the notions of "plan", "content or subject matter", and "method" are intimately connected to curriculum which should not be completely identified with

any one of these concepts. What about objectives? Are they part of the curriculum? If the notion of curriculum is related to that of planning then it seems that objectives do form part of the curriculum since the notion of planning directly or indirectly involves the notion of objectives. Let me elaborate briefly on this point.

According to the *Concise Oxford Dictionary* a plan could refer either (i) to a scheme, or to a table describing the characteristics of an *intended* course of action or (ii) to a scheme or table of something that already *exists*, is being or has already been actualized. The first meaning of a plan is explicitly concerned with objectives. What about the second meaning of a plan? Can a plan (an educational plan) of what actually takes place avoid consideration of objectives? Can we maintain that the plan of what actually takes place does not result from or depend on a set of objectives? It seems that the answer must be 'No'. Objectives are inferred from the design and content of the plan. Not to refer to objectives, to what we believe should take place, makes production of such a plan seem pointless. Eisner very properly remarks that educational planning is *only* meaningful if we formulate goals.⁸ Commenting on the etymology of 'curriculum', G.H. Bantock writes:

The notion of a set path, of something circumscribed and directed to a goal, seems to be built into its meaning. The idea of a race or a contest in running would seem to imply a coherence of effort among a number of elements brought into some sort of unity for the purpose in hand.⁹

Bantock maintains that this applies to an "academic curriculum". Given that, like Bantock, curriculum theorists generally agree that the notion of objectives is central to curriculum,¹⁰ the issue that remains to be settled is that of the nature of the objectives that ought to form part of the curriculum.

What constitutes a meaningful objective?

Those in favour of curriculum objectives stress that these must be meaningful. The real issue is, "What constitutes a *meaningful* objective?" Should *all* curriculum objectives be *very specific*? Should there be a distinct objective for *each* activity? Should objectives be formulated in behavioural terms? Should objectives be predetermined? Should one expect responses to these questions to be the same for each objective?

The classical position on these issues can be paraphrased 'the specific-predetermined-behavioural view of objectives,' and falls within a perspective about curriculum theory which J.B. Macdonald, one of the exponents of the Reconceptualists, recently labelled "the Control Type of Curriculum Theory".¹² (Macdonald distinguishes three types of curriculum theories: *control*, *humanistic* and *critical*.¹³

Proponents of this position which became prominent in the 1950s reply affirmatively to all the above questions. Its roots can be traced to the curriculum theorists of the first two decades of this century. Theorists such as Franklin Bobbit emphasized the importance of providing *clear* and *specific* objectives for the curriculum. Another prominent reconceptualist, William Pinar, reminds us in his article "Notes on the Curriculum Field 1978," that most early cur-

riculum theorists were school teachers interested primarily in increasing the efficiency and effectiveness of the educational process.¹⁴ These theorists represent the influence of the emerging “scientific movement in education.”¹⁵ Their argument was basically that the end sought must be known or the direction pursued will not be clear. Specific objectives must be selected and the most effective means must be determined: Franklin Bobbit offered 160 objectives, and Pendleton, Guiler and Billings followed suit. Pendleton offered over 1,500 social objectives for English.¹⁶

Two factors converged to make this movement unpopular by 1930. Firstly, teachers found it a heavy task to wade through all these objectives. Ironically, what was proposed as a means to alleviate problems in the practice of education turned out to be quite impractical.¹⁷ The second factor was the growth of the “progressive movement” which promoted a view of the person as “growing organism”. This view did not match the mechanization implied by a plethora of end-specific objectives.

In the early '50s, curriculum theorists such as Ralph Tyler and Benjamin Bloom became interested once more in clear and specific objectives. The theorists who revived this interest were influenced by behaviourism, as reflected in their views about the nature of objectives for the curriculum. For by now curriculum theorists had explicitly added another characteristic to the type of objectives proposed: objectives, besides being clear, specific and predetermined had to be *behavioural* or *performative*. Behavioural objectives were considered to be meaningful and the most effective because it is easier to measure such objectives, to check whether they have been achieved, and to control outcome. This fits the control approach to curriculum. The paternalistic, control view about curriculum is expressed by Ivor K. Davis:

The essence of planning, and thus the indispensable property of objectives, is concern for the future and for its fulfillment. Unlike the fortune-teller who only attempts to predict the future, a *wise teacher* attempts to *control* it and realizes its potential for the benefit of the children in his or her charge.¹⁸

At face value, this might seem the best approach to take in proposing objectives for the curriculum. The advantage of this position is that since objectives, from this perspective refer to something overt — behaviours — this approach is less ambiguous and makes assessment of outcome fairly straightforward. This approach has recently met with serious objections. These can be grouped under three headings: (a) problems arising from the assumption that most objectives can be identified, (b) problems arising from the hampering of innovation and freedom, (c) problems arising from the basis on which criteria for selecting objectives are established.

The basic tenet of the behavioural-control perspective of objectives is that objectives should be expressed in behavioural terms. When one provides a curriculum plan only those objectives that can be expressed in behavioural terms should be included. This assumes that we know or could readily identify all our curricular objectives. This assumption would be true if it were the case that all objectives could be expressed in behavioural terms. But in fact

this is not possible unless one is willing to limit or restrict objectives. One negative result of this approach has been that objectives which are educationally relevant but cannot be fully expressed in behaviouristic terms have either been given less weight or abandoned totally.²⁰ The danger with this is that behavioural objectives begin to be identified with educationally relevant objectives, although the latter form a wider set than the former. There is also serious doubt as to whether all *behavioral* objectives are *educationally* relevant.²¹

Proponents of the behavioural objectives approach believe that this approach provides the best means of checking whether objectives have been achieved. When objectives are expressed in behavioural terms, results can be better identified than otherwise. If one can do this, it is argued, one can know the best methods to apply or the best means to follow in order to bring about certain predetermined and “desirable” results. The argument generally advanced against this point is that the behaviouristic approach does not, in fact, guarantee that we will be in a position to check whether objectives have been reached or whether the correct method is being applied. An overtly manifest change in behaviour does not necessarily guarantee achievement of certain things (in our case certain learning states). A student might have learned certain things but, for some reason, (fear, lack of confidence, shyness) he or she might not express this learning in the outcome predetermined by a behavioural objective. One-to-one correspondence between behavioural objectives and curricular activities does not always work. The belief that the same response can be expected for every behavioural objective formulated is false and reductionist in nature.²²

This last point concerning the expectation of the same response for every behavioural objective, leads us to the second type of problem, about the hampering of innovation and freedom in a behavioural context. Opponents of this approach feel that the implementation of these objectives infringes on the freedom of the student. Different human beings express themselves in different ways in a single situation. To expect the same reaction, the same behavioural outcome from everyone, goes against the very notion of an “educative process”. Human beings have a “creative aspect” in virtue of which we are able to explain what is essential in human intelligence and are able to distinguish human beings from animals.²³ Behaviourists such as Skinner maintain that “all control is exerted by the environment” and “that the ability of ‘autonomous man’ to choose is an illusion.”²⁴ Those who oppose behavioural objectives maintain that when the basic tenets of behaviourism are applied to education, we end up with mere conditioning, an activity “concerned only with involuntary behaviour.”²⁵ But “‘Education’ does suggest some kind of intentionality on the part of the learner, however embryonic.”²⁶

I am not opposed to the notion of objectives but to the view which holds that *all* curriculum objectives should be of a certain, a behavioural, type. This is a salient point, since some educationalists and philosophers of education argue that the very notion of curriculum planning and curriculum objectives are anti-educational.²⁷ They claim that for a certain process or activity to be educational one cannot

implement any planning for curricular activities. The notions 'curriculum planning' and 'education' are mutually exclusive.

The main thrust of this argument is that the notion of curriculum planning involves someone (i.e., a teacher) who determines a set of objectives. When these are carried out, they influence (or even determine) student development. They infringe on the freedom of the student. The development of the student is directed by the ideology of whoever plans the curriculum. The problem with which this position is faced is this: Can we have an educational context which is *totally* "non-manipulative", *totally* "non-absolutizing" and *totally* "objective"?

The second objection raised by "radical" educationists is that, as a result of planning curriculum objectives, emphasis on learning is replaced by emphasis on the authority of the teacher. This can lead to undesirable manipulative procedures which "alienate" the student. This objection is also raised by some contemporary neo-Marxist educationists.²⁸

This objection hinges on the issue of the autonomy of the student. The question to be settled is whether these undesirable effects necessarily arise from the idea of planning curricular objectives. The answer seems to be 'No'. It is not always the case that in setting up curricular objectives the student's point of view is not taken into account. In order to answer this question properly, one must also see what type of objectives are proposed (i.e., whether objectives are very specific) and how one plans to carry them out (i.e., whether a behaviouristic approach is taken).

Radical educationists are worried about autonomy and "the critical raising of levels of self-consciousness"²⁹ which can be viewed as their objectives. It is true that these objectives might not be achieved if planning curricular objectives is construed in a narrow, specific and manipulative way. It is also true that the "objectives" proposed by the radical educationists have been arrived at rationally. The point I want to make is that the objections raised by the radicals do not seem or should not be viewed as being directed towards *all* curricular objectives. After all, given their rational assumptions about autonomy and critical self-consciousness, it would be odd if what they wanted to defend were a process which involved random learning. There are alternatives to random learning on one hand, and specific behavioural objectives on the other.³⁰

Let us proceed to the third problem which deals with the criterion of selecting objectives. According to the behaviourist-control model, objectives must be behavioural. As such, the number of objectives available is already reduced. One might think it easier for exponents of such a position to produce a valid way of selecting objectives. Critics accuse them however of not really having a basis for selection.³¹ Others assume what this criterion is, or might be, given a certain position. According to the behavioural model, objectives must be overt and specific, or it will be difficult to measure outcome. They also hold that if this measurement cannot be achieved, one cannot be assured of an efficient process with regard to the implementation of objectives. Given that behaviourists emphasize the issue of measurement, Myron Atkin concludes that "the behavioural

analyst seems to assume that for an objective to be worthwhile, we must have methods of observing progress."³² According to Atkin one of the principal criteria of selecting objectives in this model is to see whether or not objectives can be measured.

Emphasis on this criterion is problematic. Selection of curriculum objectives must rely on the notion of worthwhileness. There might be, and indeed there are, objectives which are worthwhile to the educational process but which do not fit the criterion of measurability. The notion of measurability is not identical in an education context to that of worthwhileness. As Atkin remarks: "What the educational community poorly realizes at the moment is that behavioural goals may or may not be worthwhile."³³ The notion of worthwhileness in an educational context is directly related to that of 'the moral'. The question "What objectives should we select?" or "What criterion should we apply in selecting objectives?" raises *moral* issues. Measurability is too weak to be the primary criterion for the selection of objectives.

Concluding Remarks

In this paper, I have attempted to clarify the relationship of the concept of objectives to that of the curriculum, and to investigate some possible views as to what constitutes *meaningful objectives*. As a conclusion, I suggest the following points that arise from the discussion of the questions dealt with in this paper.

1. Although in some cases curriculum objectives may be expressed in behavioural terms, it is not appropriate always to do so. Serious misapprehensions follow from attempting to do so.
2. Although in some cases we may attempt to formulate curriculum objectives in specific terms, such a procedure should not always be attempted.
3. The issue of curriculum objectives leads directly to moral issues such as "How do we justify certain objectives?" These must be considered.
4. If these considerations are kept in mind, it makes sense to include the notions of curriculum objectives and curriculum planning in educational discourse.

John P. Portelli

Notes

1. Robin Barrow, *Giving Teaching Back to Teachers: A Critical Introduction To Curriculum Theory* (Brighton, Sussex: Wheatsheaf Books Ltd., 1984), p. 39.
2. With regard to this point R.S. Peters writes: "It is odd to use it [aim], like the term 'purpose' or 'motive', to suggest some end extrinsic to the activity." In "Education as Initiation," in *Philosophical Analysis and Education* ed. Reginald D. Archambault, (New York: Humanities Press, 1972), p. 93.
Some of the remarks I have made and will make about aims are elaborated by Peters. In particular see "Education as Initiation" and "Aims of Education — A Conceptual Inquiry," in *The Philosophy of Education*, ed. R.S. Peters (London: Oxford University Press, 1975), pp. 11-29.
3. J. Galen Saylor *et al.*, *Curriculum Planning*, (New York: Holt, Rinehart and Winston, 1981), p. 163. My emphasis.
4. For example, A.V. Kelly states: "Curriculum planning has been seen as a process of developing more precise statements of goals from these general aims. It is these more *precise statements* that are normally termed objectives." *The Curriculum: Theory and Practice*, (London: Harper and Row, Publishers, 1979), p. 26. My emphasis.
P.H. Hirst writes: "...it is clear that in responsible curriculum planning we must not evade the fundamental task of formulating *clearly* and *precisely* what the aims and objectives are." "The Logic of the Curriculum," in *Journal of Curriculum Studies*, Vol. I, 1969, p. 145.
And E.W. Eisner writes: "Objectives are the *specific goals* that one hopes to achieve through the educational program ... In order for educational planning to be meaningful not only must goals be formulated, they must also be formulated with precision and with clarity." *The Educational Imagination: On the Design and Evaluation of School Programs*, (New York: Macmillan Publ. Co. Inc., 1979), p. 39.
5. Bill Gilby, "Curriculum Objectives," in *Theory and Practice of Curriculum Studies*, eds. Denis Lawton *et al.*, (London: Routledge and Kegan Paul, 1978), p. 153.
6. E.W. Eisner, *et al.*, *Area Monography Services in Curriculum Evaluation*, Vol. 3, (Rand McNally, 1969).
7. See Ian A.C. Rule, *A Philosophical Inquiry into the Meaning(s) of 'Curriculum'* (Unpublished Ph.D. thesis, New York University, 1973) and John P. Portelli, *Philosophical Approaches to the Justification of the Curriculum* (Unpublished Ph.D. thesis, McGill University, 1984).
8. E. Eisner, *The Educational Imagination*, p. 93.
9. G.H. Bantock, *Dilemmas of the Curriculum*, (New York: John Wiley and Sons, 1980), p. 2.
10. Some curriculum theorists who hold this position are: E.W. Eisner (See, *The Educational Imagination*, 1979), P.H. Hirst (See, *Knowledge and the Curriculum*, London: Routledge and Kegan Paul, 1974), Hilda Taba

- (See, *Curriculum Development: Theory and Practice*, New York: Harcourt, Brace, and World, 1962), Ralph Tyler (See, *Basic Principles of Curriculum and Instruction*, Chicago: University of Chicago Press, 1949), and A. V. Kelly (See, *The Curriculum: Theory and Practice*, London: Harper and Row Publishers, 1977).
11. Major opposition to this view comes from educationists usually referred to as "radicals" or "de-schoolers". Some of these, at one point, even objected to the use of the term 'curriculum' (See, Neil Postman, "Telling It Like It Ain't: An Examination of the Language of Education" in *Alternatives in Education*, ed. Bruce Rusk, (Toronto: General Publ. Co. Ltd., 1971), p. 20).
12. J.B. Macdonald, "Value Bases and Issues for Curriculum," in *Curriculum Theory*, eds. Alex Molnar and John A. Zahonik (Washington, D.C.: Association for Supervision and Curriculum Development, 1977), p. 10-21.
13. Ibid.
14. William Pinar, "Notes on the Curriculum Field 1978," in *Educational Researcher*, September 1978, Vol. 7, No. 8, pp. 5-12.
15. E.W. Eisner, "Educational Objectives: Help or Hindrance?" in *Curriculum: An Introduction to the Field*, (Berkeley, Calif.: McCutchan Publishing Corporation, 1978), eds., James R. Gress and David E. Purpel, p. 358.
16. See E.W. Eisner, "Educational Objectives: Help or Hindrance?" and Ivor K. Davis, *Objectives in Curriculum Design*, (London: McGraw-Hill Book Co. Ltd., 1976), Chapter 3, "A History of the Objectives Movement in Education," pp. 43-60.
17. This makes one wonder whether W. Pinar is right to say: "Traditionalists value service to practitioners in the schools above all else ..." ("Notes on the Curriculum Field 1978," p. 5).
18. Ivor K. Davis, *Objectives in Curriculum Design*, 1976.
19. See B. F. Skinner, *Beyond Dignity and Freedom*, (New York: Vintage Books, 1971).
20. See E. W. Eisner, "Educational Aims, Objectives and Other Aspirations" (Chapter 6), in *The Educational Imagination*, pp. 93-107, and J. Myron Atkin, "Behavioural Objectives in Curriculum Design: A Cautionary Note," in J.R. Martin, ed., *Readings in the Philosophy of Education: A Study of Curriculum*, pp. 32-38.
21. See D. Hoghen, "The Behavioural Objectives Approach: Some Problems and Some Dangers," in *Journal of Curriculum Studies*, Vol. 4, 1972, pp. 42-50, and J.H. Gribble, "Pandora's Box: The Affective Domain of Educational Objectives," in *Journal of Curriculum Studies*, Vol. 2, 1970, pp. 11-24.

The emphasis of behavioural or measurable objectives has also influenced ways of evaluating teaching which is still very heavily dependent on the notion of effectiveness as related to measurable achievement. For an exposition and critique of this view see, Maxine Greene, "A Philosophic Look at Merit and Mastery in Teaching", in *The Elementary School Journal*, Vol. 86,

- No. 1, 1985, pp. 17-26.
22. See E. W. Eisner, "Educational Aims, Objectives and other Aspirations."
 23. This point is made by Noam Chomsky in *Language and Mind* (New York: Harcourt Brace Jovanovich, Inc., 1972) (Enlarged edition).
 24. Chomsky quotes Skinner's *Beyond Dignity and Freedom* in *For Reasons of State*, (New York: Vintage Books, 1973), p. 321.
 25. R. S. Peters, "What is an Educational Process?," in *The Concept of Education*, (London: Routledge and Kegan Pal Ltd., 1967), p. 12.
 26. *Ibid.*, p. 14.
 27. For references see P.H. Hirst, "The Curriculum and Its Objectives — a defense of Piecemeal Rational Planning," in *The Curriculum: The Doris Lee Lectures*, (1975), pp. 9-21.
 28. See Harold Entwistle, "Sense and Nonsense in Radical Pedagogy," in *The Working Teacher*, Vol. 3, No. 3, Spring 1981, pp. 22-27. (Entwistle refers to himself as an old-fashioned socialist and not a neo-Marxist).
 29. P. H. Hirst, "The Curriculum and Its Objectives — a defense of Piecemeal Rational Planning," p. 18.
 30. See E. W. Eisner and P. H. Hirst referred to above. Also P. H. Hirst, "Rational Curriculum Planning: Its Logic and Objectives," in ed., S. Murray-Smith, *Melbourne Studies in Education*, (Melbourne: Melbourne University Press, 1977), pp. 26-44.
 31. See J.H. Gribble, "Pandora's Box: The Affective Domain of Educational Objectives," in *Journal of Curriculum Studies*, Vol. 2, pp. 11-24.
 32. See J. Myron Atkin, "Behavioural Objectives in Curriculum Design: A Cautionary Note," p. 37.
 33. *Ibid.* See also, Maxine Greene, "A Philosophic Look at Merit and Mastery in Teaching".