

Chapter 1

CURRICULUM THEORY AS AN EDUCATIONAL PROBLEM

A book on curriculum theory should stimulate theory-building activity that goes beyond conjecture and speculation. For too long, education in the United States has developed as a technology rather than as a science. This is to say that most of what we do in schools has come about more from our experience in the practical affairs of running schools than from well-developed theories which would give greater and more systematic meaning to the practices. This is not to say that practical experience can be ignored. In fact, Gordon and others explain the value of practice or tradition for stimulating more scientific guides to behavior:

Often, in the early days of the development of a scientific area, folklore typically provides a better basis for guiding behavior than scientific theory. However, history shows that once substantial effort has been devoted to the development of an area of knowledge, scientific means of prediction and control rapidly surpass those which tradition has provided.¹

One reason for this reliance on tradition might be that schools in our country have been very close to the people. This characteristic is a natural result of demand for mass education with the attendant problems of teacher supply and school construction. Each time in our history that a crisis has confronted the public schools, the technology has become more complicated. Whenever a demand

¹Ira J. Gordon (ed.), *Criteria for Theories of Instruction* (Washington, D.C.: Association for Supervision and Curriculum Development, N.E.A., 1968), p. 6.

for the transmission of an element of our culture to the young has arisen, that element often has become a new school subject. And most of the time, these subjects have been added without clear definition of pupil needs or the changing role of the school that demands new subjects. Examples like drug and sex education, consumer education, and environmental education are a few that have become popular subjects in the curriculum of the public schools. These have grown by the additive process, with social pressures being in large part responsible. Ours is a trial-by-error approach to educational or curricular innovation rather than a rational approach grounded in theory.

Contrast this procedure with areas of human effort where practices and well-developed theories have a reinforcing relationship. Our scientists and social scientists have developed theories to direct practices and to explain relationships. The theories are modified by technology and research, but they also tend to direct much of the technological development.

In education there has been too little employment of the techniques of science in the development of theories. One reason may be that such an approach appears to many to be impersonal and devoid of values. The products of the scientist tend to be impersonal, but as Conant pointed out, the activities of the scientists are shot through with value judgments.² An alternative way to state this argument is to use the philosophy of science expression *theory-determined* or *theory-laden*. Some might wish to say that all phenomena are perceived from a particular perspective and what the scientist sees is necessarily limited by theories he holds to be representative of reality; that is, "what a man sees depends upon what he looks at and also upon what his previous visual-conceptual experience has taught him to see."³

Another deterrent to the use of scientific techniques is inherent in the scientific process. Kuhn illustrates the time-lag problem:

. . . discovering a new sort of phenomenon is necessarily a complex event, one which involves recognizing both *that* something is and *what* it is . . . if both observation and conceptualization, fact and assimila-

²James B. Conant, *Modern Science and Modern Man* (Garden City, N.Y.: Doubleday and Company, Inc., 1952), p. 107.

³Thomas S. Kuhn, *The Structure of Scientific Revolutions* (2d ed., enl.; Chicago: The University of Chicago Press, 1970), p. 113.

tion to theory, are inseparably linked in discovery, then discovery is a process and must take time.⁴

Educators have been concerned with empirical data of all kinds, but they have been unable to make use of the conceptual processes of science in the development of theories. Some explanation may be found in the rapid growth of education in a growing country in which schools have been faced with one crisis after another. The contradiction between the practices of crisis hopping at a survival level and the time consuming *that* and *what* discovery processes of theorizing is self-evident. Another explanation may be found in the lack of ability and interest of educators in theory-building work. Explicit rationales for the operations of schools are urgently needed lest chaos be created by diversity in practice. Herein lies another difficulty for educators who are always searching for a model, or paradigm, that works in their particular situation. But paradigms are rarely replicable from one field to another in their original form. Skills and procedures need to be developed for their application and adaptation. In any case, the day seems to be past when the development of theory in education can continue to ignore the procedures of science.

CURRICULUM THEORY IN PERSPECTIVE

However, the central theme of this book is not educational theory but curriculum theory. Any educational theory would have to account for all the known components of education including curriculum. We probably should distinguish between education and schooling because most curriculum practice is a function of schooling. That is, a curriculum is developed for a school, and the processes of planning it and implementing it take place in the environment of the school. On the other hand, theory development in curriculum functions at a broader level than curriculum practices. It has to do with knowledge production in professional education. Hence, curriculum theory is a sub-theory of educational theory.

All theory is interdisciplinary in the sense that theories are developed by using many common rules and processes and by borrowing and adapting paradigms among fields. To the extent

⁴*Ibid.*, p. 55.

that theory building has been more vigorous and experienced over a longer period of time in the basic disciplines, all theories derive from the established disciplines. Figure 1 depicts a cluster of theory relationships; in essence, it is a theory microcosm of which curriculum theory is a part. At the top of the figure, three basic content categories of theory appear; they consist of the humanities, the social sciences, and the natural sciences. Within these three categories, the various established disciplines, such as English, sociology, or physics, have developed theories designed to explain and predict relationships within their respective provinces of knowledge. Scholars in the disciplines were first in developing theories. They borrowed paradigms and procedures from one another, and in turn, those who would develop theories in areas not classified as disciplines likewise borrowed and adapted from the basic disciplines. This is why we can say that all theory is interdisciplinary.

Emerging from these broad categories of theory are theories in the applied areas of knowledge. These are shown at the second level of the figure, with architecture, engineering, education, law, and medicine used as examples. Theories in the applied areas of knowledge draw their primary authority and information from the basic disciplines. However, it is true that a field such as engineering will draw primarily from the natural sciences, law from the social sciences, and so forth. Even though theories in applied areas derive greatly from the theories of the disciplines, they may not be considered to be sub-theories to the discipline theories; they do not support, or they are not an integral part of the disciplines.

Beginning with the applied areas, however, each group of theories is undergirded by a series of sub-theories. In other words, theories in architecture, engineering, education, law, or medicine normally would be supported by a structure of sub-theories. The chart does not include sub-theories for architecture, engineering, law, or medicine. The illustrative sub-theories for education are administrative theories, counseling theories, curriculum theories, instructional theories, and evaluation theories. These will be discussed in later chapters, but for now it is sufficient to make the point that substantive theories tend to be supported by clusters of sub-theories.

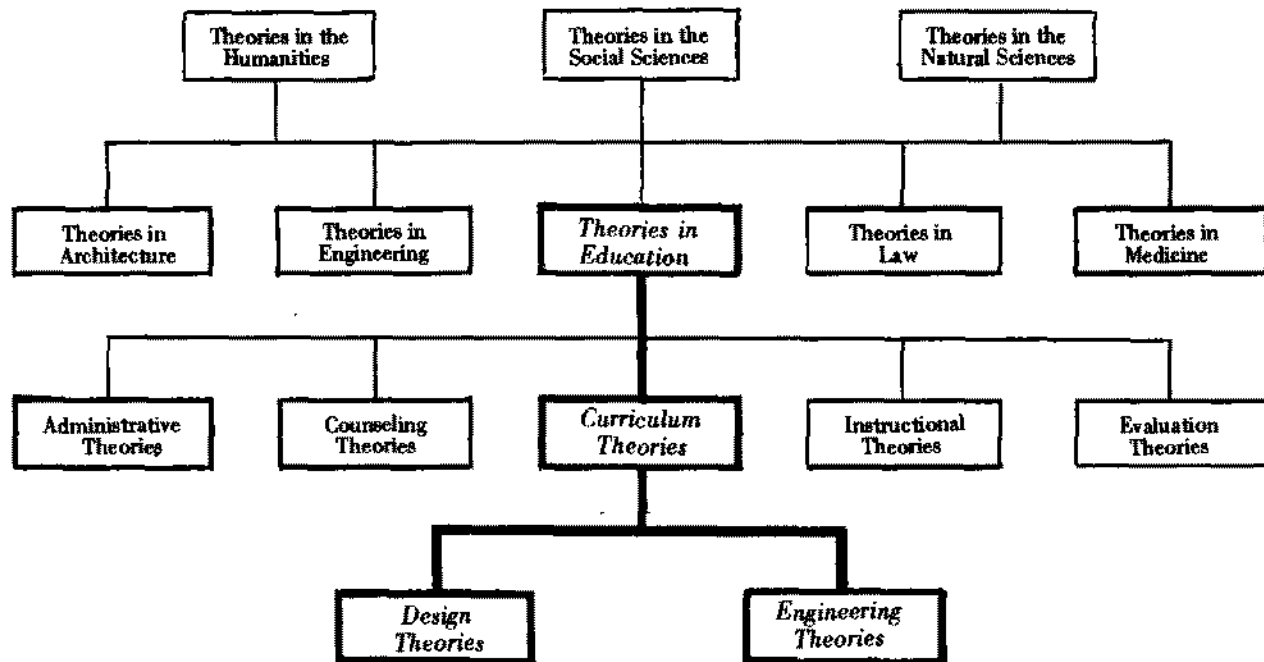


Figure 1. Curriculum theory in perspective.

Our focus of attention in this book is upon curriculum theories; therefore, in the diagram, solid lines have been used to identify and to show direct connections between supra- and sub-theories of curriculum. Most attention, therefore, must be spent upon theories in education, curriculum theories, design theories, and engineering theories. Although theories in law or engineering may contribute to administrative theories or curriculum theories, they are of secondary importance to this discussion since all of the groups of theories listed at the third level are sub-theories to theories in education. Similarly, at the fourth level in the chart, administrative theories, counseling theories, instructional theories, and evaluation theories are of secondary importance to this discussion. They may influence curriculum theories, and they may influence the sub-theories of curriculum. Again, the chart does not include sub-theories for administrative, counseling, instructional, or evaluation theories because our main line of concern has to do with the theory domains boxed in by heavy lines. What Figure 1 does is show vividly how curriculum theory is an educational problem. Curriculum theory is a necessary link in a series of events which in combination explain education.

CONCEPTS IN CURRICULUM THEORY

The specific dimensions of curriculum theory reside in the concepts and derived generalizations that are unique to the field of curriculum. At least in the very early stages of his work, a theorist must concentrate upon the identification of the most important concepts in his field. In this way, he delimits the subject matter of his field of work. When relationships among concepts are established as generalizations, the scientific theorizer begins to form a classification scheme for phenomena within his field. This state of affairs is what Braithwaite referred to as a natural history stage in the development of science.⁵ Perhaps this is the stage in which curriculum theory is at the present moment because those who exhibit interest in curriculum are striving to define their basic concepts and to establish relationships among them.

Chief among the problems for the curriculum theorist, however, is the establishment of precise meanings associated with

⁵Richard B. Braithwaite, *Scientific Explanation* (New York: Harper and Row, 1960), p. 1.

✓the basic concepts of curriculum. The words have been chosen, but the meanings to be attributed to them are diffused. The important term for curriculum theory is *curriculum*. From a theoretical point of view, it is impossible to develop subordinate constructs, or relationships, with other components of education, until ground rules are laid down through meanings ascribed to the basic term *curriculum*.

In my opinion, there are three ways in which the term curriculum is most legitimately used. An individual, for instance, may legitimately speak of *a curriculum*. A curriculum is a written document which may contain many ingredients, but basically it is a plan for the education of pupils during their enrollment in a given school. It is the overall plan that is intended to be used by teachers as a point of departure for developing teaching strategies to be used with specific classroom groups of pupils. A second legitimate use of the term curriculum is to refer to *a curriculum system* as a sub-system of schooling. A curriculum system in schools is the system within which decisions are made about what the curriculum will be and how it will be implemented. A third legitimate use of the term curriculum is to identify *a field of study*. Persons most concerned with curriculum as a field of study are undergraduate and graduate students enrolled in professional education work at colleges and universities, professors of curriculum, and curriculum theorists.

There are other interpretations associated with curriculum, but they are difficult to relate to the three so briefly described here. For example, curriculum and instruction frequently are depicted as interchangeable terms. At other times, instruction is conceived to be part of curriculum, or curriculum is thought to be subordinate to instruction. When terms are intermingled in this way, communication is complicated, and it is difficult for anyone to develop research designs that can penetrate the profuse number of variables involved.

With so many uses and interpretations of curriculum as the basic concept in the field, it is easy to imagine the confusion that reigns among subordinate concepts. The problem for organized thinkers in the area is to search out the relationships that need to be established and which will lead to explanatory and predictive generalizations. In the process, operational constructs can be

developed that will clarify many of the subordinate concepts within curriculum.

All of these matters constitute the specific dimensions of curriculum theory as an educational problem, and thus they are the subject matter of this entire book. The plan of presentation in this book essentially follows Figure 1. The next chapter contains an examination of basic principles of theoretical work derived from those disciplines related to education. Chapter 3 is a discussion of theory developments in education. Chapters 4 through 8 contain detailed discussions of the more specific dimensions and problems of theory building in curriculum beginning with developments in curriculum theory, followed in order by discussions of values as determinants in curriculum decisions, curriculum design, curriculum engineering, and curriculum as a field of study. In the final chapter, I have tried to set forth the principal ingredients of my curriculum theory as it has evolved up to now. Admittedly, it is incomplete in many details, but it does set forth the rudiments of one explanation for that series of events we call curriculum.

It is hoped that this treatment of curriculum theory will stimulate two kinds of activity — more precise theory building and more theoretically-oriented research. Theory-building efforts will help to identify gaps in our knowledge. Theoretically-oriented research will help to fill in those gaps. In this way, we can move away from a purely technological operation and toward a behavioral science. Certainly, if there is any hope for developing a discipline of education, sub-theories of education such as curriculum theories will have to be built using the skills and the procedures of the social scientist. It is also hoped that any ideas or procedures herein presented will be checked, challenged, and/or repeated by others who are concerned with the growth of curriculum theory.