

Curriculum Design and the Knowledge Situation

WILLIAM F. PILDER*

THE task of curriculum design can be thought of on the basis of the two poles that constitute the knowledge situation: the subject pole (knower) and the object pole (what is known). Characteristics of design activity vary, depending on which of these two poles is given primacy in curriculum thinking. This question of primacy arose early among educators concerned with the development of curricula, and most of the controversies that have been waged during the history of the curriculum field are related to the differences in design activity resulting from the different perspectives possible in the knowledge situation.

It is the intent of this discussion to consider the task of curriculum design in the context of how one views the knowledge situation. First the precedent aspects of this design problem will be examined by considering some of its history. Present design problems will then be examined inasmuch as they relate to this context of the two perspectives on the knowledge situation. Then, on the basis of these reflections upon the past and present dimensions of the design enterprise, an attempt will be made to describe the future design task for curriculum thinking.

Some Curriculum History

By 1926 the curriculum field had become conscious of the tensions produced by the two views on the knowledge situation in the design of curricula. Harold Rugg, who

acted as chairman of a prestigious national committee assembled to produce the *Twenty-Sixth Yearbook* of the National Society for the Study of Education, was especially vocal about the weakness of designing curricula by way of the mere accretion and elimination of courses.¹ Rugg and many others on the Yearbook Committee were not satisfied with considering the knowledge situation only on the basis of subject matter-set-out-to-be-learned; instead they focused on the knower acting in a knowing situation. The task of curriculum design became quite different from that of adding or subtracting different courses.

Thus, early in the development of curriculum thinking, two views of the place and function of subject matter emerged. These two views were at the heart of the most significant educational controversies relating to the school curriculum: the child-centered school as opposed to the subject-centered school; the project or activity curriculum as opposed to traditional emphasis on subject matter categories; and in general the essential aspirations of Progressive Education as opposed to a tradition focused on what is to be known in a school curriculum. Analysis of these two conceptions of the place and

¹ National Society for the Study of Education. *Twenty-Sixth Yearbook*, Part I. *Curriculum-Making: Past and Present*. Bloomington, Illinois: Public School Publishing Company, 1927. p. 429.

* William F. Pilder, Assistant Professor, School of Education, Indiana University, Bloomington

function of subject matter reveals the different types of design activity they entail.

The first position defined subject matter as "primarily matter-set-out-to-be-learned" and as such was "the conscious and specific end of school activity. . . ." ² Here, primacy is given to the object pole in the knowledge situation. The design task is then devoted to deciding on the categories of subject matter to be employed in a curriculum, the internal refinement of these categories, and their relation to each other. Objectives involved in curriculum design reside within subject matter categories when primacy is given to the object pole of the knowledge situation, since the end of school activity is the mastery of subject matter.

The second view of subject matter made "normal life activity or experience already under way from other considerations" ³ the end of school activity. Subject matter was a means toward permitting the continuation of experience. Experience was seen as being synonymous with the educative process. Whenever experience "has been balked for lack of a certain way of behaving" then "this needed *way of behaving*, as it is sought, found, and acquired," ⁴ is what is properly called subject matter. Its function is thus seen as one of permitting experience to proceed.

Problems of Design

In this context, the design enterprise is not one of arranging categories of matter to be learned, but one of designing a situation or environment that will enable the experience of a person to continue in a direction previously established. Primacy is given to the subject pole in the knowledge situation. However, it is important to note that part of the design activity involved here is the provision of new ways of behaving in the form of subject matter relevant to personal experience.

² *Ibid.*, Part II. *The Foundations of Curriculum-Making*. Bloomington, Illinois: Public School Publishing Company, 1927. p. 9.

³ *Ibid.*, p. 9.

⁴ *Ibid.*

Two distinct types of design activity can thus be discerned in these different conceptions of the place and function of subject matter in the curriculum. One design task is concerned with the shaping of matter to be learned. Its starting point is the accepted value of established subject matter categories. The other design undertaking focuses on the shaping of an environment: its starting point is the experience of the persons for whom the environment is designed. Though these two activities are distinct because of their varying perspectives on the knowledge situation, it is crucial to the total design of a curriculum that the complementary nature of these separate activities be realized. In order to design an environment that provides "new ways of behaving," it is necessary to draw upon well-designed subject matter categories that can relate to a person's experience.

The design of environment centers on the creation of a personal space that permits and encourages those within to seek new and creative ways of behaving. Yet the intellectual means necessary to new behaviors that are integrally possessed reside in established subject matter categories that constitute the depositories of culture.

Historically, the complementarity of these design activities has been stressed less than their difference. Their fundamental difference is one of assuming varying perspectives on the knowledge situation. Those curriculum thinkers who assumed the perspective of the subject or knower in this situation were primarily concerned with environmental design. Those who concentrated on the object pole in the knowledge situation were concerned with refining subject matter designs. The tradition of curriculum construction, before it became a specialized field among educators, focused on the object pole and the subsequent concern with subject matter design. This focus caused much of the early thinking among educators who specialized in curriculum matters to react against a tradition that failed to concern itself with environmental design.

The fundamental tensions extant in the early history of the curriculum field can be

interpreted in terms of this reaction against the traditional failure to consider the subject in the knowledge situation. Unfortunately, reactions tend to extremes, and curriculum thinking addressed to the task of designing environments to honor personal experience has continually been accused of neglecting subject matter.

Study of the controversy that swirled about the notion of a project or activity curriculum⁵ is a case in point. Two psychologies of learning likewise emerged as another aspect of this same basic difference in perspective on the knowledge situation.⁶ Here also subject matter was perceived as in need of defense.⁷ Throughout the early history of the curriculum field, no real recognition of the complementary nature of the two design tasks is discernible. Even to the present, the design of subject matter receives more emphasis and attention than does the design of environment, and the imbalance of the past haunts the present.

The Present Curriculum Scene

The curriculum reforms during the past decade have been primarily new designs of subject matter categories. Little has occurred in the way of new environmental designs to complement the subject matter reforms. In all of the subject areas the new designs make strong attempts to consider the subject aspect of the knowledge situation emphasizing discovery, reflective thinking, and inductive methods of presentation. However, most of these reforms have been placed into traditional educational milieu in no way intended to complement the subject matter designs.

Current environmental designs in educational institutions usually operate counter to an atmosphere of discovery, reflective

⁵ William H. Kilpatrick. "The Project Method." *Teachers College Record* 19: 319-35; 1918.

⁶ Hollis L. Caswell. "Practical Application of Mechanistic and Organismic Psychologies to Curriculum Making." *Journal of Educational Research* 28: 16-24; September 1934.

⁷ Edward Lee Thorndike. "In Defense of Facts." *Journal of Adult Education* 7: 381-88; October 1935.



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thinking, or imaginative activity on the part of the persons in the environment. The research on recent reforms is discouraging because the new subject matter designs were merely plunked into traditional environmental designs that influence the learner in a direction opposed to the subject matter design.

The criterion measure employed in most of this research is likewise drawn from outmoded educational environments.

An indication of outmoded environmental designs in most educational institutions is found in the theoretical and empirical work of Chris Argyris. Especially interesting in this regard are *Interpersonal Competence and Organizational Effectiveness*⁸ and *Integrating the Individual and the Organization*.⁹ Also of importance is the concept of "total institutions" in the work of Goffman.¹⁰ All of this work stresses the necessity to honor the experience and affective life of individuals in any environment that is to permit as well as encourage personal growth and productivity. However, compared to the work done in the redesign of subject matters, little has been accomplished in recent years to create new environmental designs in educational institutions.

One strong indication of this imbalance in the two design activities can be seen in the psychologies of learning that influence curriculum thinking. The need to increase the intensity of curriculum thinking in the area of a psychology of learning that honors the subjective aspect of the knowledge situation becomes quite evident if one considers the computer and its impact on the curriculum. For the most part, the behaviorist concern in the knowledge situation can be effectively handled by the computer. The teaching machine and its reward system can probably

operate more effectively at the cognitive level than can the human being. Yet the man-machine interface can only accommodate the cognitive level—a machine can deal merely with overt behavior. It provides stimuli in response to specific behavior patterns; this strength points up its weakness.

Strauss begins his recent work on *Phenomenological Psychology* with the notion that there is no one-to-one correspondence between a stimulus and the experience of it.¹¹ In the computer-assisted curriculum the experience of the subject in the knowledge situation can receive new attention. Thus the design of environment becomes one of the most pressing tasks of the present for curriculum thinking. Here the design activity must focus on the creation of a personal space where an individual can seek the new ways of behaving that are necessary to his experience, and thus find his relationship with the machine in the curriculum a meaningful one.

To put these notions in another way: the cognitive dimension of knowing has been better developed than the affective dimension. The distinction between these dimensions is merely a logical one, but in practice it has become a real one. Curriculum thinking must integrate these two dimensions by concentrating on new environmental designs that seek to honor the affective aspects of the knowledge situation. A theoretical base for future curriculum design can be gotten from epistemological descriptions of the personal element in knowing now available. In addition, the experience accumulated by the National Training Laboratories in the Applied Behavioral Sciences provides a praxiological basis for the design of future curricula.

Personal Knowledge and Future Curricula

The pursuit of knowledge is a personal and deeply passionate enterprise. It is intimately related to the pursuit and develop-

⁸ Chris Argyris. *Interpersonal Competence and Organizational Effectiveness*. Homewood, Illinois: Irwin-Dorsey Press, 1962.

⁹ Chris Argyris. *Integrating the Individual and the Organization*. New York: John Wiley & Sons, Inc., 1964.

¹⁰ Erving Goffman. "The Characteristics of Total Institutions." *Symposium on Preventive and Social Psychiatry*. Walter Reed Army Institute of Research, Washington, D.C., April 15-17, 1957.

¹¹ Erwin W. Strauss. *Phenomenological Psychology*. New York: Basic Books, Inc., 1967. p. ix.

ment of the self. To know something is ultimately to believe it is true and to commit oneself to that belief; knowledge rests on a personal judgment for which the person is responsible. Such descriptions of the affective roots of knowledge can be found in the writings of Michael Polanyi,¹² whose work offers theoretical direction to curriculum thinking concerned with the design of an environment where the affective can find expression.

The recent history of philosophical thought has produced a deep distrust of the self and of one's own intuitions in favor of a set of external criteria for the validity of knowledge. If carried to its logical extension, this reliance on purely external, "objective" criteria would result in a paralysis of the subject in the knowledge situation and the subsequent demise of creative thought.

In an attempt to counter the negative aspects of positivism and a resulting ideology of scientism, Polanyi describes a post-critical philosophy that reestablishes the fiduciary framework of knowledge. Application of this program to curriculum design concerned with creating an environment that honors the subject in the knowledge situation provides an excellent description of the power of a personal space in the knowing process.

Such a space would be designed to permit the person within to be intensely aware of the self. This awareness would make feeling of the utmost importance. These feelings are the foundations of one's life-in-the-world and the source of motivation for seeking any knowledge. Merleau-Ponty describes the operating intentionality of Husserl in terms that make clear the importance of such self-awareness:

The latter (operating intentionality) establishes the natural and antipredicative unity of the world and of our life, a unity which appears more clearly in our desires, our evaluations and the general demeanor than in objective knowl-

edge, and which furnishes the text of which our knowledge seeks to be the exact translation.¹³

This is a philosophical description of what, in psychological terms, could be called the self. As Merleau-Ponty states, it is this self that furnishes the text which our knowledge seeks to translate. By designing a space that encourages a real self-awareness, a person can be given the opportunity to seek the knowledge necessary to his own development.

Some twenty years of experience in the design of environment conducive to personal development is now available through the efforts of the National Training Laboratories for the Applied Behavioral Sciences.¹⁴ By drawing on this experience, curriculum design can find the praxiological knowledge needed for integrating the cognitive and affective aspects of learning.

New instructional styles modeled on the behavior of laboratory trainers or facilitators would be especially valuable for use in designing classrooms conceived as personal environments. Such environments could provide the integrity needed in a curriculum that is too often a set of disparate courses and experiences for the young.

When the heart of curriculum design becomes the personal space, then the rest of school experience would be more relevant because of its relation to real self-development. Subject matter need not be neglected in this context. On the contrary, all of the concerns about discovery, reflective thinking, and inquiry that make up much of the recent subject matter developments can be honored in classrooms designed as personal environments. The wealth of information available in the experience of the National Training Laboratories enables such design to be accomplished now. □

¹³ M. Merleau-Ponty. *Phenomenology of Perception*. New York: Humanities Press, Inc., 1962. p. xviii.

¹⁴ Edgar H. Schein and Warren G. Bennis. *Personal and Organizational Change through Group Methods*. New York: John Wiley & Sons, Inc., 1965.

¹² Michael Polanyi. *Personal Knowledge*. Chicago: The University of Chicago Press, 1958.

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