CURRICULUM:
TOWARD A COMPREHENSIVE THEORY

By Dr. Donald T. Streets

For years, people in the teaching profession have been satisfied with thinking of curriculum as merely the listing of courses offered by the school. This is understandable, since traditional education has been almost entirely organized around the presentation of factual information with the expectation that a reasonable amount of that information would be retained by the learner and produced when examined. However, in more recent years the limitation of curricula conceived in these terms has become apparent: educational systems based on curricula of this kind are inadequate to prepare individuals for the enormous responsibilities a rapidly changing world requires of them. Consequently, the call has gone out for a redefinition of education which requires a new perspective on curriculum development, what it is, and how it should be modified to meet the needs of a rapidly changing world.

Perhaps in no other area of educational reform has there been greater frustration and less progress than in curriculum development. This is partly due to the fact that it has only been within the last twenty years that educational specialists have regarded curriculum development as a subject of serious inquiry. A second factor in the lack of progress stems from the tendency for curriculum reformers to develop new curricula in the absence of any serious consideration of the nature of the individuals for whom the curricula are being developed.

To initiate and sustain significant curriculum reform, however, involves two monumental tasks: (1) establishing a philosophical basis which explicates the nature of man—identifying the fundamental propositions which define his nature—and (2) using those propositions as a means of integrating the body of existing knowledge about human growth and development into a comprehensive theory which then can serve as a guide to educational practice, including curriculum development.

It comes as no surprise, then, that many curriculum theorists such as Joseph J. Schaub, Arno Bellack, Daniel Tanner, George A. Beauchamp, Jerome S. Bruner, and Arthur W. Foshay suggest a variety of interim procedures to handle the immediate needs for curriculum change, indicating that the creation of a comprehensive curriculum is unlikely in the near future. In spite of this pervasive pessimism among such writers about the likelihood of a comprehensive theory of curriculum being developed, Arthur W. Foshay and Lois A. Beilin have suggested in *The Encyclopedia of Educational Research* what such a theory should be able to do:

> When a comprehensive curriculum theory is built, it will have to take into account not only the learning methods and teaching methods (strategies of instruction and the like), but also the knowledge to be learned, the nature of the student who will learn it, and the nature of societal responsibility shared by teacher and student. For if education is a moral affair before it is a technical affair, then the grounds for moral behavior have to be incorporated in one's theory of educational action.

As a minimum, the above conditions are met in the Anisa theory of curriculum.

Man—The Pinnacle of Creation

The Anisa theory of curriculum is the logical derivative of a broader conceptual framework—a philosophical base which views man as the pinnacle of creation— a spiritual being endowed with an infinitude of potentialities capable of endless expression. Furthermore, this view includes a broad definition of development as the process of translating those endless potentialities into actuality and identifies interaction with the environment as the process by which development is carried forward.

This abstract notion of development provides a broad conceptual scheme for the integration of vast amounts of research data on human growth and development and serves as a guide to the derivation of theories of curriculum and teaching. If growth and development are broadly defined as the translation of potentiality into actuality, then at least part of the curriculum must be directly concerned with the potentialities to be actualized and what has to be done by the child to accomplish their actualization.

If actualization is sustained by interaction with the environment, then the child must have information about his environment—the world he lives in. Therefore, parts of the curriculum must be concerned with imparting factual information about the world. Consistent with these ideas, curriculum in the Anisa Model is defined as a) two interrelated sets of educational goals and b) what children do, usually with the help of peers and adults to achieve these goals.

One set of goals focuses on information we have accumulated about the world and how we live in it. These goals include three basic symbol systems (mathematics, language, and the arts) which are used to convey that information. The other set of goals are process goals and represents the means by which the infinitude of potentialities become actualized. Progressive achievement of both content and process goals by the child results in the emergence of his personal identity—a self, which, through gaining mastery over his environment and over the process of his own becoming, can take charge of his own destiny—the ultimate purpose of the Anisa educational system.

Classification of Potentialities and the Process Curriculum

Prerequisite to identification of the process goals is a classification of human potentialities. An intensive exploration and analysis of the talents, skills and abilities possessed by human beings as represented in all aspects of human performance have led to the organization of psychological potentialities into the following categories: psycho-motor, perceptual, cognitive, affective, and volitional. An intensive investigation of the nature of learning in each of these areas has resulted in the identification of a definition of learning common to all categories. The Anisa theory of development, which establishes learning as the key factor in the actualization of psychological potentialities, defines learning as the ability to *differentiate* aspects of experience, whether internal or external, and *integrate* them into a new entity or whole (usually at a higher level of complexity) and to *generalize* that new integration to different situations. Differentiation, integration, and generalization thus are the processes that constitute the common denominator of all forms of learning reflected in the different categories of potentiality. The purpose of the process curriculum of the Anisa Model is to place the child in control of actualizing his own potentialities by teaching him *how* to learn. To know how to learn rests on the *conscious* ability to differentiate, integrate, and generalize experience, as it relates to all categories of potentiality. This conscious ability is learning competence—the attainment of which is the basic goal of the process curriculum.

PSYCHO-MOTOR COMPETENCE refers to the ability to coordinate, control, and direct the movement and position of the voluntary muscles. Through interacting with the environment in ways that require differentiating, integrating and generalizing movement of body parts, the child gains control of his muscles thereby enabling him to become increasingly more adaptable to the demands of the physical environment and achieve control over it. This experience results in an internal organization and conscious awareness of the body in terms of position and function that enable the youngster to use his body as a reference point in time and space.

PERCEPTUAL COMPETENCE refers to the ability to differentiate sensory information and to integrate that information into generalizable patterns which constitute interpretations of reality. Perceptual organization arises out of the basic processes of differentiation, integration, and generalization as they are influenced by past experience, present needs, and aspirations or intentions.

COGNITION is comprised of those processes which constitute thinking such as deduction, induction, classification, seriation, conservation. It is the extension of the interpretational component of perception, is usually accompanied by muscular reactions and emotions, and is usually guided by intention or purposes. While considerable research is still required to understand the nature of thinking, we do know that it develops as a child interacts with the environment just as the other potentialities do. Through the processes of differentiation, integration, and generalization, internal structures develop which constitute the basis of cognitive competence. The work of Piaget, Bruner, and other leading developmental psychologists and cognitive theorists has been the primary source of information on which the cognitive process curriculum is based.

AFFECTIVE COMPETENCE refers to the ability to organize one's emotions and feelings in a way that supports and facilitates the release of future potentialities. One's emotions are interconnected with all other processes, and if they are not organized well, then there will be adverse effects in other areas of development. Since how one feels about things is largely learned, the Anisa Model, by design, provides experience that will enable a child to differentiate emotions and integrate them with reference to individuals, objects, events and ideals, and then generalize them in ways that foster his stability and contributes to the establishment of a relationship that encourages emotional stability in others.

Ignoring the theoretical vacuum created by psychologists' rejection of volition, or will, as a nation useful in understanding human behavior, the Anisa Model establishes VOLITION as an indispensable concept to a comprehensive theory of development. The philosophical basis of the Model, which upholds a non-mechanistic view of man, rejects the notion that man's behavior is solely determined by external stimuli rather than intention or some intrinsic determinant.

The theory of the Model affirms that one learns how to intend things and carry them through to completion and that we can consciously direct the processes of formulating those intentions, differentiating them into operable goals, and then integrating them into a flow of behavior directed toward the achievement of those goals.

The Model has identified the main processes underlying learning competence in each of the five categories of potentiality. Collectively they constitute the deep structure of human development. The process curriculum of the Anisa Model is designed to actualize potentialities by providing children with the experiences required to internalize these processes.

Classification of Environments and the Content Curriculum

Culture provides the information about the world we live in and information related to patterns of thinking, feeling, and acting in that world. In the Anisa Model, this information is organized around a classification of environments based on the ontological levels of creation established by Whitehead's cosmology: the physical environment—which includes everything except human beings (mineral, vegetable, and animal); the human environment—which includes all the human beings one comes in contact with; the environment of unknowns and unknowables—the ultimate mysteries in the cosmos of which consciousness enables us to be aware, even if we do not know what constitutes them; and the self—a reflection of the above three environments in a particular human being.

The Model identifies three interrelated symbol systems which facilitate the child's interactions with the three environments and therefore the structuring of potentialities as they are actualized: mathematics for the physical environment; language for the human environment; and the arts for the environment of the unknowns. As a composite of these three environments in microcosm, the Self is a fourth kind of environment, information about whom must be assimilated thereby leading to self-knowledge.

It is interesting to note that the traditional curriculum has largely been organized in a way that is consistent with the three classifications of environments set forth in the Model: mathematics, natural sciences, natural history, and technology concern the physical environment; we have language, communications (reading, writing and speaking), the social sciences, human relations, and ethics that concern the human environment; art, aesthetics, philosophy, and religion concern the unknowns.

One of the unique features of the Anisa content curriculum centers around the growing child's coming to know himself—to assimilate information about himself with respect to competencies that reflect the five categories of potentialities: body awareness, self-perception, self-concept, self-esteem, and self-determination. This "curriculum of the Self" also includes information related to physical health (i.e., status of the biological self), social relations (i.e., status of the social self), and developmental aspirations (i.e., status of the ideal self). Thus, the ancient dictum of Socrates, "Know thyself," is formally operationalized in the Anisa Model.

The Formation of Attitudes and Values Through a Fusion of Content with Process

When potentialities become actualized they are manifested as powers or energy use (i.e., it takes energy to perceive, think, feel, act, etc.). As the child interacts with the three environments, a patterned expression of energy use in each of the categories of potentiality develops. In other words, potentialities are not actualized in a random fashion. A structuring of energy use takes place based on the nature and the quality of the interactions with the environments. That structuring or patterning we refer to as attitudes and values. Thus, material attitudes and values are formed as the child interacts with the physical environment; social attitudes and values result from one's interaction with the human environment. Aesthetic and religious attitudes and values are the result of one's interaction with the environment of unknowns through the generation of ideals which then lures or guides the interactional process in specific directions.

Higher-order competencies rest on the three sets of values: technological competence on material values; moral competence on social values; and, philosophical and spiritual competence on aesthetic and religious values. These higher-order competencies are integrations of actualized potentialities from all five categories, the patternings of which (values) are, in part, dependent on the information the organism has assimilated about the environments (i.e., if a child knows that a stove is hot, it has an influence on his actions—energy use—when he is around the stove).

Values, then, are a fusion of content and process. The sum total of these patterned expressions of energy as represented in the attitudes and values emerging in an individual constitute the functional and structural reality of his personal identity; we are identified as unique individuals by virtue of what we know (content) and how we use our energies (process).

Thus, the curriculum of the Anisa Model is directly related to character formation, and its goals are what teachers help children accomplish by guiding their interaction with carefully arranged environments so that their potentialities are actualized and structured in ways that equip them ultimately to direct the process of their own becoming.

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TEACHING COMPETENCE: AN ANISA DEFINITION

By Dr. Magdalene M. Carney

Teaching takes part of its definition from one of the central propositions of the Anisa theory of development which maintains that actualization of potentiality is sustained by interaction with the environment. It takes another part of its definition from the Anisa theory of curriculum which sets forth content and process goals and designates the kinds of interactions and the kinds of environments required to accomplish the goals.

If the definition of teaching is logically derived from the above propositions, teaching means arranging environments and guiding the child's interaction in those environments to accomplish educational goals specified by the curriculum. Teaching competence— knowing how to teach—is the conscious ability to arrange environments and to guide interactions which facilitate differentiation, integration, and generalization as they pertain to the various processes. in each category of potentiality so that children become competent learners at an optimum rate. Teaching competence also depends on knowing what to teach, i.e., knowledge of content as well as process.

The capacity to facilitate the attainment of learning competence for any child presupposes knowledge about his developmental level pertinent to any process from any category of potentiality. Thus, teaching is necessarily diagnostic. Diagnosis comes from a Greek word which means to know or to distinguish and usually refers to the determination of a disease by examining symptoms. In reference to teaching, it means determining where a child is, developmentally, by examining behavior. The diagnosis should describe the nature of a child's current level of functioning on some process (i.e., classification, seriation, etc.) and his level of knowledge of particular content with a view toward prescribing the arrangement of environments and the kinds of interactions necessary to help him achieve a higher level of development on some objective of the curriculum.

The usefulness of the diagnosis is enhanced if the descriptions made are related to an accumulating body of information which reflects the children's immanence and transcendence. In other words, an accurate diagnosis of developmental levels must include an analysis of aspects of the child's past history which bear on the learning experience at hand and must consider the quality of the ideals which lure him forward. Without a careful diagnosis, a teacher may well