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THE DEVELOPMENTAL NEEDS OF STUDENTS

We talk a great deal in education about human development. Often, however, we are not clear about what we mean by development, and what the precise relationship is between development and our educational practices. Most of the literature of developmental psychology is primarily descriptive. It invites the student to observe more closely; it provides a framework for studying changes in behavior, but only infrequently does it lead directly to the understandings that are needed by educators as they intervene to facilitate those changes in behavior that we label steps toward growth and maturity.

We may begin by specifying carefully what we mean by human development and what its relationship is to education. Human development may be defined as those change processes in the physical, mental, and emotional components of personality that are continuous and orderly and that proceed in valued directions. All change in behavior is thus not truly developmental. The mental deterioration of a schizophrenic or the escalating sociopathic behaviors of a juvenile delinquent are obvious examples of change patterns that we are unlikely to term developmental.

Educational institutions are social systems established by the larger society to help insure that the change processes occurring in its children do in fact move in directions that are valued. Schools, then, stand in a uniquely significant relationship to problems of human development. Educators by the very nature of the responsibilities given them by society must be concerned with what we are beginning to call the "ecology of students". That is they are concerned with understanding the nature of the interaction between a developing human being and his physical, social and emotional environment. It is in this interaction that the keys to healthy development or deterioration and alienation must lie.

Let us return now, for a moment, to the tools that are offered us by developmental psychology. What kinds of framework are available to us as we seek to understand something of the ecology of students and attempt to remove the pollutants from the student environment?

At least two of the several traditional developmental frameworks offer the undergirdings around which we as educators can begin to design and evaluate approaches that can "clean up" the environments in school and family with which we are concerned. These frameworks allow us to take the initial steps toward defining healthy and relevant educational processes. They offer us sets of guidelines for healthy growth and can provide direction for evaluation of learning experiences.

The first framework is essentially chronological. This type is well represented by Erik Erikson's "Eight stages of man." Erikson carefully traces normal development from infancy to old age through eight well-defined life stages. At each stage he posits a central developmental task that must be accomplished if the growing person is to continue successfully to the next stage with its correspondingly more complex and difficult demands. The author has drawn elsewhere upon Erikson's concepts to formulate a developmental chronology which outlines not only a sequence of life stages and developmental tasks, but which also specifies the corresponding social roles and coping behaviors that give the individual full effectiveness in his present life stage and prepare him for effective development on subsequent stages.

Chronological frameworks themselves, however, are not sufficient to solve the ecological problems with which we deal. Another kind of developmental framework is needed to supply the full picture. This kind of framework may be called hierarchical. In a sense, of course, these, too, have chronological aspects, yet they go beyond simple chronologies to specify the directions and distance through which we can measure growth and evaluate changes in behavior.

Perhaps the best known example of such an hierarchical framework is represented by Abraham Maslow's steps toward "self-actualization". Maslow's hierarchy traces the growth of an individual through a series of stages that are only loosely chronological in the sense that higher order needs cannot emerge until lower level needs are satisfied.

Maslow's framework is useful because it is directional and value loaded. It can help us identify ways in which developing individuals will transact with their environment and so establish the basis of their ecological balance. Here, Heisler's concept of "dynamic equilibrium" is extremely useful. She conceptualized growth as a function of a dynamic equilibrium between the needs and capacities of the individual and the levels of stress and stimulation in the environment. When these levels are far above the capacity or "readiness" of the individual to cope, he withdraws and precious opportunities for learning and growth are lost. When the levels of stimulation in the environment are below the capacity of the individual, the rate of development is slowed because of the lack of challenge and opportunity. One of the primary responsibilities of the educational system then is to create the dynamic equilibrium or "ecological balance" between the child and his environment that will allow maximum growth to occur.

Let us take these frameworks now and combine them to develop a concrete example. The elementary school years are, according to Erikson, the life stage in which the central developmental task is what he terms "Industry vs. Inferiority". This is the period in which the child wants and needs to learn how to do and make things with others. In learning to accept instruction and to win recognition by producing, he opens the way for the development of work enjoyment. The prime danger to development in this period is the formation of a sense of inadequacy and inferiority in a child who does not receive recognition for his efforts.

Let us now superimpose on the Erikson framework, Maslow's hierarchy of needs, Maslow points out that in order to move toward the highest level of human growth and development, which he chooses to call "self-actualization" the individual must first satisfy a set of lower level needs. These needs that he classified as physiological, safety, love and esteem needs give rise to "deficit" motivations; that is they must be satisfied before positive motivations toward self fulfillment or actualization are released. In terms now of our elementary school child seeking to develop industry and to avoid inferiority, we can check off the list of psychological nutrients that must exist in the environment in order to permit the kind of ecological balance or dynamic equilibrium of which we spoke. Obviously, he must be able to satisfy basic physiological and safety needs. His environment must be dependable and stable enough to provide for these. The really problematical elements in the environment are those that deal with the needs for love and esteem.

It is at this point that the Erikson and Maslow frameworks so neatly coincide to form a complete ecological system. The basic transaction through which growth and development occur in the elementary school years is the interaction between industry or what Robert White calls "competence" in the child, and the capacity of the environment to provide love and through love the growth of self esteem.

In the light of this dual framework then let us examine the ecological system represented by the elementary school classroom. This classroom represents an environment in which the growing child will spend about one-third of his waking hours for the formative periods or life stages that we call middle and later childhood. For about a thousand hours a year for more than six years this environment will determine the transactions that govern the development of the child.

In analyzing this ecological system let us look at three basic subsystems. The first we may call the "opportunity structure" of the classroom. The opportunity structure is represented essentially by the set of tasks, or problems, or situations through which the child is able to attempt to exert mastery or control. An arithmetic problem, a puzzle, a spelling word or a class office all represent parts of the opportunity structure. The nature of the opportunity structure largely determines the level of stimulation in the environments. That level of stimulation is measurable largely in terms of four elements: novelty, intensity, complexity, and ambiguity. As these elements increase in magnitude, they raise the level of stimulation to the point that it may become stressful to particular individuals in the environment. As such individuals experience stress they tend to reduce it by physical or psychological withdrawal from the environment. For given classroom environments to offer an ecological balance or dynamic equilibrium to twenty to thirty children differing considerably in their readiness to cope with stimulation, the classroom environment will obviously need to offer what can term a broad band opportunity structure.

The second classroom subsystem to which we attend is what can be termed the "support structure." The support structure is essentially the set of resources available to students in the environment for coping with stress. Basically, the support structure determines the degree to which the student can manage the stress producing elements of novelty, intensity, complexity, and ambiguity. Two kinds of resources are built into the support structure. These are the affective or relationship resources and the cognitive structures available. Relationship networks that touch the student allow stress reduction to occur through the operation of factors of warmth, empathy, acceptance and involvement of others. In the presence of these relationship conditions, students are better able to manage and tolerate stressful situations. In addition to relationships, there are important cognitive structures that allow for improved coping with stress. These involve understanding, assessing, predicting, and labeling stress factors. Such cognitive structures, particularly help to reduce ambiguity.

The elementary classroom then to maintain an ecological balance must offer an effective and cognitive support structure to all youngsters.

The third and final classroom subsystem with which we can deal is the "reward structure." The reward structure determines the contingencies that intervene between effort expended and need satisfaction. The development of "industry" or "competence" is essentially dependent upon a belief or attitude that we can term "effort-optimism." This is essentially a set or approach to a learning experience or opportunity for growth that yields a prediction that the expenditure of effort will in fact yield important need satisfactions. The key in the elementary school in terms of the reward system is to ensure the highest probabality that effort expended will lead to increase in self esteem. Any aspect of the environment that systematically interferes with that connection, be it a grading system, a teacher or peer bias, or a random distribution of rewards, upsets the ecological balance inherent in the system.

We have described briefly a set of principles and propositions from developmental psychology and applied to educational environments in the form of a set of ecological principles.

If these principles are to yield any values in improving the qaulity of elementary school environments, some kind of monitoring or environmental management function must be built into the educational system. In the Division of Educational Psychology at the University of Minnesota we are now engaged in the exciting task of beginning to prepare workers who can perform this function. At this point we are uncertain about the exact job titles under which they will operate or the final role relationship within which they will be integrated into the school. We believe, however, that they can offer a needed expert who can enhance the qualities of educational programs.

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SOME CONSIDERATIONS FOR THE DESIGN OF A COLLEGE STUDENT T-GROUP TOWARD ENHANCING THE WILL TO LISTEN

This tendency toward modernization—in society makes life problematical for the *individual*. There is already mounting evidence that he is alienated, lonely, anxious, and desperately seeking purpose and identity. . . . It is becoming increasingly clear that organizations have to develop mechanisms for the two over-arching tasks: (1) better means for human *communication* and *collaboration*, particularly between levels of hierarchy and between divergent specialists, and (2) better mechanisms for coping with externally induced stress and changes, *adaptability*.

(Shein & Bennis, 1967, p. 6)

Elsewhere, Bennis (1966) has developed the thesis that "reality testing" is crucial to this above *adaptability*. It is this writer's contention that ability to