

AFFECT AND AFFECT COGNITION AND COGNITION:

A Reciprocal Relationship

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COGNITIVE psychologists have been fond of quoting Piaget as a major source of our ideas about how intellectual development occurs. We have been busy attempting to engineer this profound developmental theory into an instructional theory. We have, however, focused on only some aspects of the theory, and have usually singled out the classes of behaviors, such as conservation, which mark transitions from stage to stage, as the basis for curriculum innovation.

Piaget's new book (Piaget and Inhelder, 1969) may come as a surprise to those of us who have had such tunnel vision. The dichotomy between cognition and affect is destroyed in such statements as, "There is no behavior pattern, however intellectual, which does not involve affective factors as motives. . . . Behavior is therefore of a piece. . . . The two aspects, affective and cognitive, are at the same time inseparable and irreducible" (p. 158). I see (with the affective components of joy, excitement, and relief) that Piaget depicts a fully integrated developing child. He helps us get out of our trap of cognition versus affect, and gives us the subject of this paper, affect implies cognition, cognition implies affect.

Many who were involved in education reform treated affect and cognition as though they were mutually exclusive territories of human behavior. The "new curricula" were seen by friend and foe as stressing cognition.

The recommendations emerging from developmental psychologists and others concerned with the young child were assailed by early childhood educators because they were "cognitive."

Somehow cognition was viewed as cold, distant, mechanistic, and therefore "bad" by those who saw themselves as warm, loving, and accepting.

Correspondingly, "cognitive" people made equally nasty comments about those whom they saw as concerned "only" with the self-esteem and personal-social development of the child. In effect, this split destroyed what used to be a central notion in progressive education, the concept of the "whole" child. I should like to put the body back together again.

The Synthesis

The synthesis of affect and cognition is first demonstrated in the infancy period in the way the child relates to the objects and people in his environment. There is a very close connection between the discovery by the infant of the cognitive principle that objects have permanence and his affective ties to people who now begin to take on a life of their own (Guin-Decarie, 1965). The

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mother, for example, is an object who attains some permanence, is assigned a host of meanings, and influences the emergence of further object relations.

A special tie between affect and cognition exists in the development of language and symbolism. The years from two to six are the time in which the child, through fantasy, imagery, and the acquisition of language, all of which are cognitive tasks, learns to see himself as separate and unique and finds ways to cope with the conflicts that exist between his needs and the demands of the environment. In this effort, affect and cognition serve each other. The child uses language not only to communicate with those around him but also to enable him to comprehend what is happening, to role-play, to talk to himself, to think out loud. Language and thought processes develop from these efforts to assimilate and accommodate; the growth in turn creates new tensions which require further cognitive development.

The human being is a meaning-seeking animal and has strong needs to order and organize the environment so as to deal effectively with it. The child is constantly engaged in ordering and reordering his experience (Gordon, 1969). The existence of disequilibrium created from the transactional relationship between internal growth and external social pressures acts as a motivating force for development. "The formation of personality is dominated by the search for coherence" (Piaget and Inhelder, 1969, p. 158).

A product of this transactional process of inner \longleftrightarrow outer and, within the inner, affect \longleftrightarrow cognition, is the emergence of concepts of self, which are inseparable syntheses of cognition and affect, subject and object, actor and evaluator, internal and external. The child moves along the egocentric \rightarrow de-centered dimension as he grows in ability to reconcile the inner and external worlds. The growth of intelligence proceeds along this transactional exchange point. As the child incorporates aspects of the external world to fit his views, and as he changes some of his ideas and patterns because of his contacts with reality, he grows in competence and in

self-esteem. He becomes more able to search for (and build) coherence.

This search goes on not only in the infancy and childhood periods, but also during adolescence when youngsters are able, because of their cognitive development, to examine their world through language and logical systems but are faced with the discrepancy between neat, intellectual propositions and disorderly patterns of social action which surround and overwhelm them. Their search for coherence is an affective search, which provides the motive power which can be used in schools for cognitive growth, provided the cognitive demands and tasks are so organized and instituted that they are seen by youth as relevant to their affective strivings.

At all ages, from birth to death, cognitive organization, development, and change are inspired and fed by a search for meaning which is affective. As cognitive development takes place, the person moves toward resolutions of states of disequilibrium, but each resolution, because of the cognitive element, is at a higher and more complex level of organization. Each resolution is thus both inseparably affective and cognitive.

Application to Education

So what? What does this contribute to school organization or teacher behavior? It means that a good classroom cannot be understood if we take apart these two elements and focus only on one. It means that any teaching act or learning behavior is an inextricable mix. It means that the child or learner is an active agent who will seek out, master, and devour intellectual activities when they are matched to his present resolution and so challenge him because they create some disequilibrium in his present system. As Don Snygg (1966) indicated, "The optimum level of difficulty is one which allows a student to win success after difficulty" (1966, p. 93).

What do we know about the "mix" in the classroom? *First*, data show relationships between affective climate and cognitive development. Soar (1967) showed that

various patterns of teacher affective behaviors related differentially to pupil growth in reading and vocabulary. Schaefer's (1969) analysis revealed that maternal affective behavior at home was predictive of intellectual performance on the Stanford-Binet at age three. Children whose mothers were classified as "hostile—noninvolved" did poorest. What is striking is the close relationship between Soar's teacher dimensions and Schaefer's maternal dimensions. Adult behavior which was both aloof and hostile produced deleterious effects on cognitive learning in both home and classroom. If these studies had focused only on cognitive elements, they would not have yielded the information on adult affective behavior which relates highly to intellectual growth.

Second, data show the predictive relationship between self-esteem and attitudes toward self in relation to school (affective) and academic performance (cognitive). Wattenberg and Clifford (1962) and Lamy (1965) report that the best single predictor of beginning reading achievement in first grade was children's perceptions of self in kindergarten. The best single predictor of freshman grade point averages of black male junior college students was their perceptions of self in relation to teachers and school. Those favorably disposed to teachers and school tended to have higher grade point averages, regardless of achievement test scores, than those who did not have this view (Clarke, 1968).

Third, Sears and Sherman (1964) present a model depicting the linkages between affective and cognitive variables and demonstrate, through case studies, how these function in both directions.

Any way in which children learn a skill, can demonstrate adequacy, or are treated as adequate in real-life settings has both affective as well as cognitive payoff. The entry point can be along either the affective or the cognitive dimension. Children are not easily fooled by phony situations. They learn best when learning is "real" and respects their integrity. Heightened arousal and affective drive for learning are most likely to occur when what is to be learned is interesting, exciting, worthwhile, and real, and provides

the child with some measuring rods against which he can assess himself. Watch the concentration of a kindergartner doing a difficult jigsaw puzzle. Note his facial expression, note his body movements, and especially note the smile, the glee, the hand-clapping, the reward he gives his own performance when he succeeds. This is the mix.

If we can provide the high schooler with that intensity of experience in facing the social problems of his day, if we can approach the beginning reader in ways that create the same excitement, then the reciprocal relationship of affect and cognition will lead to effective learning. In these examples the learner is faced with something real outside himself to which he must accommodate, with which he must cope. This type of challenge stretches him and relates to Syngg's optimum level of difficulty. In this type of setting, possibilities and goals are unlimited and cognitive power enhanced. It does not stress affect as precursor of cognition nor does it stress a dry, intellectual, flat affect exercise. It is a far cry from turning inward or turning off; it capitalizes instead on the motive power of the learner's presently developed intellectual organization and his urge to comprehend his world.

The reciprocal relationship of affect and cognition requires the types of learning tasks in school which turn youngsters on and outward. Their minds can then expand from contact with the world, not from drugs. They go forward to the world; they do not retreat into themselves. To be competent is motive to behave competently. Knowing self and world heightens affect and creates that measure of discontent which, in turn, can spur us on to achieve our human potentialities.

References

- J. R. Clarke. *Identification of Disadvantaged Junior College Students and Diagnosis of Their Disabilities*. Final Report, July 1968. St. Petersburg Junior College. Grant No. OEG-1-7-070020-3905. Project No. 7-D-020. U.S. Office of Education.
- I. J. Gordon. *Human Development: From Birth*

Through Adolescence. Second edition. New York: Harper & Row, Publishers, 1969.

T. Guin-Decarie. *Intelligence and Affectivity in Early Childhood*. Translated by Elizabeth and Lewis Brandt. New York: International Universities Press, Inc., 1965.

M. W. Lamy. "Relationship of Self-Perceptions of Early Primary Children to Achievement in Reading." In: I. J. Gordon, editor. *Human Development: Readings in Research*. Chicago: Scott, Foresman and Company, 1965. pp. 251-52.

J. Piaget and B. Inhelder. *The Psychology of the Child*. Translated by Helen Weaver. New York: Basic Books, Inc., Publishers, 1969.

E. Schaefer. "Home Tutoring, Maternal Behavior and Infant Intellectual Development." Paper presented at the meeting of the American Psycho-

logical Association, Washington, D.C., September 4, 1969.

P. Sears and V. Sherman. *In Pursuit of Self-Esteem*. Belmont, California: Wadsworth Publishing Company, Inc., 1964.

D. Snugg. "A Cognitive Field Theory of Learning." In: Walter Waetjen, editor. *Learning and Mental Health in the School*. 1966 Yearbook. Washington, D.C.: Association for Supervision and Curriculum Development, 1966. pp. 77-98.

R. S. Soar. "Optimum Teacher-Pupil Interaction for Pupil Growth." *Educational Leadership* 26 (3): 275-80; December 1967.

W. Wattenberg and C. Clifford. *Relationships of Self-Concept to Beginning Achievement in Reading*. Final Report, 1962, Wayne State University, C.R.P. No. 377, U.S. Office of Education. □

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