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ABSTRACT

This paper reviews and comments on the ways that thought and feeling, cognition and affect, have been balanced in early childhood education at various periods in the last half century. The relationship between educators and psychologists is discussed, and a closer collaboration of the two encouraged. The cognitive-affective interaction view is traced from John Dewey and the Progressive Education Movement to the work of Jean Piaget. Among concepts discussed and evaluated from a historical perspective are the significance of self initiated play, the role of education in bringing about social change, and the debate between the behaviorists and the cognitive psychologists. Also discussed are studies pertaining to research on the relation between thought and feeling. Concluding statements are made on parent trends in early childhood education. (CM)

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### Thinking and Feeling\*

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Barbara Biber

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM

#### Introduction

Perhaps I should explain how I happened to choose to talk about "thinking and feeling" tonight. I, and several others with whom I spoke, were surprised at the title of this conference--"Early Childhood Education: More than Love." It seemed to refer to a bygone issue. As far as I can remember, Learning has had an honored seat beside Love throughout the history of early childhood education. A whole profession should not be stamped with the soft-headedness of some of its practitioners or the cold-heartedness of others. There is an honorable record in early childhood education for having taken the lead in opening up the fusion of thinking and feeling processes for the learning child and the teaching adult as one of the salient paradigms in the broad category of human relationships.

That led me to want to look back and review how thought and feeling, cognition and affect have been balanced in the enterprise of early childhood education at various periods in the last half century. There have been shifting emphases--sometimes generated in response to a social crisis like poverty and education's responsibility for a solution; at other times in response to the excitement of new areas of insight into the learning process itself, from Dewey to Piaget. The disciplines of psychology and education have been centrally involved in the shaping of early childhood education, and often the rationale for educational procedure has drawn on psychological theory. But since we have opposing psychological theories of development, it follows that we have educational enterprises that are strikingly different one from the other. Inside all this institutional

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plurality, which you may regard as good for a democratic society or, by contrast, as evidence of uncertainty in human values, there are people.

What goes on between educators and psychologists, on the whole, is both heartening and disheartening. On the negative side, there is the reality of status, with psychologists accorded, and according to themselves, higher professional status. Status is always dangerous--it has a blinding influence that damages the thinking processes. Very few psychologists, until very recently, though interested in the learning process, considered it important to try to understand what goes on in classrooms where the process of learning lives. For the educators, there have been feelings mixed of envy and scorn--a natural kind of envy for the higher social status, and scorn for the highly restricted image of a learning child that populates so much of the psychological literature. The status feeling, the envy and scorn are all out of place, not good for the children or the professionals.

It is encouraging to see signs of more communication and joint inquiry and collaborative projects--more psychologists studying classrooms, more teachers ploughing into psychological theory. That should not cloud the real differences between the two professions and the advantages of those differences. The educator, the teacher, with a finger on the pulse, contributes insights from experience with the complex totality of a learning environment and its intermeshing of feeling and thought, of joy and sorrow, of hope and defeat, of noble and ignoble impulses, of success and failure in child and adult. There are some meanings that only come clear when we can get a close view of the complex totality of forces. That is one face of truth, of knowledge, of insight. The psychologist contributes another level of knowledge and insight that comes from distance, from moving from the particular to the more general, which adds up the elements of reality but does not mirror it. For this vein of knowledge, one needs other tools--analysis,

hypothesis, tests--all on the road to generalization 'hat is true to the realities in its own way and will serve to add new meanings to the passing show. Some of us have had the good fortune to work and live in both these worlds.

### Anti-traditionalism

It was, of course, the mighty force of John Dewey's contribution that slew the dragon of traditionalism in education. I say that even though, in these days, the back to basics movement may sound as though it is not yet dead. Despite back-sliding and regression, school will never be the same again. It is well to remember that Dewey's goals were far-flung. New forms of education were means, not ends--means toward building a genuinely democratic society. The life of learning in childhood should be such as to create an acting, thinking man--not a scholastic type, cloistered among dusty manuscripts in libraries. He had work to do in the world, to make it over--and so in childhood, in his formative years in school, he needed vital experiences through which to learn how to make a viable partnership of thinking and reasoning and doing and testing, and then thinking it all over again--until the end of time. Full, varied, active experience, in contact with the reality of the world beyond school walls, became the foundation for learning and for guiding the thinking processes. There was a new image--really a new ideal --of a child in the process of learning. and a radically new design, a new template for a school as a learning environment.

I want to draw on my own experience, beginning in the late twenties, as a young psychologist attached to a nursery school later named for its guiding spirit --sensitive, imaginative, keen-thinking Harriet Johnson. The school\* was part of the John Dewey revolution, like other lower school departments of progressive schools, and insomuch had little or no resemblance to other institutions following either the behaviorist ideology of John Watson or the habit training emphasis of some nursery schools or the custodial standards of welfare institutions.

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\*Established in 1919 under the auspices of the Bureau of Educational Experiments; later named the Harriet Johnson Nursery School; now the Bank Street School for Children, New York City.

There was a strong commitment to the stimulation of thinking processes at the Harriet Johnson Nursery School and other schools of the same persuasion, but thinking was not extrapolated as a separate dimension of curriculum. It was rather the basic foundation, intrinsic to every part of the total learning adventure and a major responsibility of the teacher. Everything that happened was potential grist to her mill--to stimulate the children to sharpened perception, to accent for them how they were spontaneously organizing experience along dimensions of similarity or difference or seeing objects in terms of their functional attributes, to help the victim and the aggressor in a fight see each other's perspective--all very different from devising special exercises to reinforce cognitive processes of differentiation, classification, or causal thinking.

The cognitive idiom--what Lucy Mitchell called "relationship thinking," could not be healthy on a thin diet. It had to be fed with rich, varied experience, inside school and out, with direct contact with a wide world of things, people, and processes, arrayed in all kinds of expected and unexpected configurations in relation to each other. Teachers planned for, observed, and enjoyed joining in with the miracle of thought a-borning. But it was equally important that they step aside. So the central position of free play in the program was recognized and nurtured from the earliest days. The young child had ample opportunity to take his thinking away from the discipline of adult logos and explore the frontiers of his knowledge and experience with his own kind of cognitive tools, impure as these may seem to those of us who, as adults, avoid flights-of-fancy in order to be sure that we are grown up. Perhaps the fullest development of play as learning has been realized over the years in the curriculum of the City and Country School.\* In that program, the spontaneous "playing" of the young children matures, as they enter the elementary grades, toward more structured, socialized forms of play-making, still originally created by the children themselves. In the more advanced grades, the dramatic form is utilized as part of the social

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\*Established as The Play School in 1914; later named The City and Country School, New York City.

studies area; it is seen as a means of deepening insights, integrating knowledge, and finding identification on a personal level.

Our interest in cognitive processes in those years was expressed in what we chose to study as important to educational programming. Teachers took records, and I remember several years, in the thirties, when we asked the teachers to concentrate on taking concept records--partly for research purposes, partly for heightening teacher sensitivity to the nature of young thinking. Study of the records yielded a summary of the changing thought processes in the preschool years under such themes as "understanding and interest in a changing world" and "ability to think in alternatives."

There was a mood that characterized the learning atmosphere--a kind of being in love with the mode of questioning--the why and wherefore, how come, how could that be, what if, how did it used to be, what would change it, let's go see, and delight in the pleasures of pursuing the answers through communicating, trying out, and a lot of just plain wondering. It was inevitable that, in an atmosphere of free play, open talking and questioning between children and adults, the teachers could not be completely cerebral in their observations or concerns. The children, in close relation to each other, without rigid behavioral prescriptions, were, of course, loving, hurting, annoying, grabbing, crying, fighting, exulting, shining, heart-warming, and puzzling young human beings. Something more than thinking processes traveled the airwaves from minute to minute.

It is interesting that sensitivity to emotional factors as positive and negative influences on the cognitive processes came, even in the early days, from the teachers more than from the theoreticians. Not surprising that it was true then and, in large measure, still is. A free classroom mirrors and bespeaks life--all of it. Still, it was Dewey himself who used the phrase "collateral learning" to refer to the "formation of attitudes that are emotional and intellectual," and wrote: "The greatest of all pedagogical fallacies is the notion that a person

learns only the particular thing he is studying at the time."

Progressive Education Movement: Educate the Whole Child

As I turn to the decades in which the progressive education movement flourished, people come to my mind as much as ideas, maybe more so. I knew many of the stalwarts of that movement--some in the classrooms with the children, some training teachers, some from the clinical professions. Why should they be nameless? I cannot name them all, but I want to bring back their images to some of you, or at least the sound of their names to the younger members of the profession. Lucy Mitchell, Susan Isaacs, Caroline Pratt, Elizabeth Goldsmith, Elizabeth Irwin, William Kilpatrick, Harriet Johnson, Charlotte Winsor, Terry Spitalny, Jessie Stanton, Agnes de Lima, James Hymes, Alice Keliher, Cornelia Goldsmith, Eleanor Hogan, Margaret Naumberg, George Counts, Harold Rugg, Agnes Snyder, Ralph Tyler, Margaret Pollitzer, Randolph Smith, Ernest Osborne, Jack Niemeyer, Evelyn Orwake, Louise Woodcock, Larry Frank, Mary Langmuir Essex, Joe Stone, and many more. They should be named and recalled since they represented, as people and thinkers, unalloyed devotion to infusing education with the spirit of humanism, too often missing in some of the ideologies that are shaping educational reform today.

For many, though not all, of the educators who had translated Dewey's philosophy of democratic living into new revolutionary educational forms, there came another wave of radical thinking about the course of human growth to be absorbed, respected, and applied--the psychodynamic theory of development and personality, based on the insights of Freud and his followers. In the most general sense, this ushered in an era of sensitivity to the under layers of behavior, and awareness of the depth and power of emotional forces. There was more to healthy growing up than a delicious blossoming of the mind. There were inner struggles, the more disturbing because the capacity for understanding the sources of trouble was still undeveloped in the young child.

On our part, there was increasing sensitivity to the young child's problems



managing the feelings of ambivalence, conflict and guilt about the anger he felt toward the very people he loved; the pull between following impulse mixed with the fear of where it might lead, and the ignominy of accepting restraint; between the lingering comfort of dependence on the strength of adults and the deep wish to be brave enough to test the world in one's own right. As adults, as teachers, we became increasingly more aware of early childhood as a period of emotional weathering, involving pain alongside the opening vistas of the growing mind and its pleasures, all part of a far more complex growth process than had once been envisaged.

Naturally, there was difference of opinion as to how to bring educational practice into alignment with these deeper insights into the emotional life of children. In the progressive education world that I knew most about in the forties and the fifties, this was a central area of interest, lively discussion, and sincere disagreement. For some, this called for building an educational environment that would allow for release of unconscious emotional needs, for helping the child to resolve conflicts intrinsic to psychosexual development, for adjusting the teacher's relation to the child accordingly. The early Walden School\* represented a conscientious effort to translate analytic theory into the context of education. But other progressives made a different interpretation. While they were also invested in the importance of greater understanding of children's feelings and the deeper needs beneath the surface of overt behavior, they relied on offering children a varied, autonomous learning atmosphere in which the children themselves would use their activities, as they needed for expression of feeling, dilemma, or conflict, along with other interests.

Some of us, far back in the thirties, were happy to discover the English educator, Susan Isaacs, who was teacher, analyst and research worker. Through analyzing the voluminous recording of the children in the nursery school she established in the twenties, she set herself the problem of tracing out the interdependence between discovery, reasoning, and thought (the intellectual process)

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\*Established in 1914 as The Children's School; later named the Walden School, New York City.



and social cooperation, hostility, guilt, and sexuality. For the purposes of study, she separated her data--the cognit. from the affective--but pointed emphatically to the unreality of the separation, which was necessary for the sake of analysis, but untrue to the life process. She distinguished the roles of teacher and analyst in a way that seemed to fit our own inclinations. There is great value in the teacher's understanding of the deep symbolism of the child's behavior, but it is not her role to become involved in these deep underlying processes. Instead, she needs to be certain that the learning environment supplies opportunities for the children themselves to find outlets for expressing their feelings and symbolizing their unconscious fantasies. While it was clear theoretically that the teacher was not to take the therapist's role, it had nevertheless become the educator's responsibility to consider the child's emotional well-being as well as his intellectual development, and to establish a relationship with children that had qualities of personal warmth and understanding without becoming psychologically probing.

In this context, the meaning of self-initiated dramatic play gained added importance in program planning. It was perceived as serving two different but simultaneous growth trends in the early years--learning about the world and sorting out its mysteries by playing about it and, at the same time, using the action and the ideas as symbolic carriers of emotional undercurrents--the joy, fear, anger, the whole roster of affective experience. Play was for thinking--reproducing the actual encounter with the things and events in the real world and thereby generating questions for further thinking about the way things really are; play was for feeling--the expression of pleasures, wishes, conflicts, fears, through the use of the objects and surrogate figures that were the symbols in the play action, and thereby gaining greater inner equilibrium. The knowledgeable teacher was not surprised when the five-year-olds built a beautiful block structure

--complete with an inside elevator--and then acted out how an airplane with a giant at the controls struck the building and destroyed it.

Actually, this insight into play as a projective process has a long history in education. Among the earlier sources I was glad to find a pamphlet by Clara Lambert, published originally by the Play School Association in 1938, reporting the play of children in a low economic population. They put on a spontaneous dramatization with three puppets. One was elegantly dressed in red satin and lace, the second was a replica of Charlie Chaplin in his tramp days, the third was a nondescript man. At the height of the action, the elegant lady disposes of the least attractive character with a shove, saying, "Scram, you reliefer." I assume that incident still rings bells for those who are close to children, some 40 years later.

We saw self-initiated play as an integral part of the program. The children moved freely back and forth between reality and fantasy, thinking and feeling their way in recreating the world in their own terms. There could be no more valuable experience by which to start them on the road toward becoming autonomous, thinking, as well as creative personalities. It is a source of great pleasure to me to glance at my bookshelves these days and realize how the significance of play in the course of development--of the individual and the species--has now become a major area of research and a recognized essential in any comprehensive curriculum for young children.

#### Mental Health

While techniques such as self-initiated play were maturing in those schools where the interaction of thinking and feeling was recognized, a closely related movement, national in scope, was gaining prominence. There was a surge of investment in the problem of mental illness, or rather in finding out by what means, by

what changes in the character of our institutions, mental illness could be prevented. The challenge was to conceptualize, first, a psychologically healthy course of development for the individual and, second, to learn how to remake our salient social institutions, one of them, the school, so as to fit the best-known available criteria for developing emotionally healthy as well as intellectually competent people. In a sense, the world had come to our door, so it is not surprising that I and many of the others that I named earlier were enlisted in the national mental health programs which were well-supported in the fifties and the sixties.

One of the first major efforts came from the psychiatric profession in connection with the Fourth International Congress of Child Psychiatry held in August 1962. Several of us who belonged both to child development and education welcomed the opportunity to contribute papers dealing with the integration of mental health principles in the school setting. At Bank Street, we launched a government-supported study of the psychological impact of school experience. Evidence of the importance of the mental health perspective came also in a national program--the Joint Commission on Mental Health of Children--established under congressional aegis. This gave us an opportunity once more to present a position for the role of the school and to formulate the principles and practices involved in sustaining the vital interchange between thought and feeling, between affective-expressive and logical-analytic modes of experience. "The educator," I wrote in the report, <sup>in 1967</sup> "is being asked to exercise a kind of binocular perception of the learning child, so that awareness of associated emotional processes is as naturally and knowledgeably considered as is intellectual gain."

Emphasis on Cognition

But that era of government support for defining the role of education in mental health passed. For me, the complex of forces behind that changing professional scene is indelibly impressed in the image of a particular moment. Our

Bank Street study staff was sitting around a table in a Washington office reporting on progress in our education and mental health project. Leonard Duhl, who had sponsored and supported the project from the beginning, was absent from our morning meeting and returned just before luncheon. "Well," he said, "it's not mental health any more, it's poverty." Now, educational reform was to be the means toward building a more equitable society. The choice of education as the center for the needed social change process pleased us, naturally. It was our home base. We were pleased to put our knowledge on to the stage of national issues, even though some of us may have entertained quiet doubts about how successful it would be to look to educational change for the correction of deep, longstanding social injustice.

Actually, in the period just previous, education had already become the front for trying to meet another national panic. The period of Sputnik anxiety had spawned a curriculum revolution. We had to educate for a higher level of scientific competence if we were to hold a safe position in the world scene. Many of the techniques, master-minded by scholars more than educators, were imaginative adventures with lasting value. They experimented with the forms in which cognitive stimulation is offered, and analyzed how knowledge is gained. So, cognition was already up front on the drawing board for educational change before it gained major importance as the place of emphasis in meeting the disadvantages of growing up poor.

In the anti-poverty program, there were real differences in viewpoint about the most relevant programs to be launched, but there was at least one agreed-upon premise, namely, that the early years of childhood were important. It followed that the field of preschool education would be a good location for testing out the assumption that cognitive deficiency was the sole deterrent to later academic progress. Many of the innovators of the new programs had the much-mistaken idea

that all that had gone before in the field of preschool education had been "thoughtless," as one writer put it, meaning preoccupation with social-emotional processes and indifference to the important place of intellectual development as a function of school experience. As a result of such misperception, there was waste in time and in failure to use available educational expertise.

But perhaps even more costly has been the condition of the psychological profession as a "divided house" within itself. The behaviorists' methods lent themselves to the fastest calendar and the most stripped-down educational programming. There would be time later from this perspective to test which fast superficial gains would last in good enough condition to sustain the complex learning challenges of the later school years. The cognitive psychologists, on the other hand, had a more complex theory and a more comprehensive educational purview. They were developmentalists, schooled in conceiving cognitive processes as ongoing interactions between the growing child and the environmental stimuli that was part of Piaget's monumental contribution. Piagetian theory has provided far more specific insight into what constitutes major leaps ahead in the thinking processes than had been derived from the observational studies of the early years, but it was progress in a common direction. His theory stimulated experimentation with what particular kind of thinking experience might undo the cognitive lag of the underprivileged child as observed in his school performance. This perspective was in opposition to training in the behaviorist sense, but <sup>still</sup> it depended upon developing teaching techniques specifically designed to stimulate the presumably immature cognitive processes of disadvantaged children. While these programs provided for the interplay of cognitive with social interchange processes, in addition to the specific cognitive-directed activities, it was still true that the subjective undersurface of

experience, the psychodynamic wellsprings, the questions about emotional conflicts as part of the developmental stream, the total life perspective of the child in poverty received little or no attention. In the writing of Piaget, Kohlberg or Kasii, you will find reference to the concurrent reality of affect with cognitive processes, but relatively little development of that reality in the sense that it has been well-plumbed by psychodynamic thinkers. The cognitive psychologists, as developmentalists, made an invaluable contribution to advancing preschool education, theory and practice, but in the anti-poverty programs they were still dealing with an incomplete image of the total complex substance and dynamics of learning and teaching in early childhood. In all, the momentum to place greatest weight on advancing the cognitive skills, the earlier the better, was great and stimulated many experimental programs which differed nevertheless in important ways on how this cognitive disadvantage was to be compensated. The differences in programs reflected basic theoretical disagreement. Behaviorists and Piagetians were not likely to find similar cures for the common malady.

In time, it became clear that the position giving cognition training, by whatever theory, a central place in compensatory early childhood programs did not stand up to the promise that had been made for it. Gains made under the experimental programs did not have the power to be sustained in subsequent school years. There is a great deal that needs to be said in criticism of that conclusion, but we will skip that for tonight. The effect it had, however, is relevant to the general cognition-affect issue. There was a level of personal reaction expressed by Silberman in 1970: "I thought I knew what the purpose of education should be: namely, intellectual development....I was wrong. What tomorrow needs is not masses of intellectuals, but masses of educated men--men educated to feel and to act as well as to think."

The Follow Through program, now in its tenth year, represents a large-scale investment of national resources--professional and financial--and represents

those major advance beyond earlier efforts. Variation in educational philosophy and programming in our society is recognized. While the cultivation of intellectual competence is an accepted goal in all the programs, there are now several programs included in the roster in which interaction of cognitive and affective processes is a central guideline for curriculum design and teacher-child relationships. The Bank Street Follow Through program is one of these. In addition, there is recognition in the Follow Through programs of the factor of time where basic institutional change is involved: time for schools and teachers to change their ways, and time for changes in school life to be internalized by the children. There are other explanations beyond the failure to achieve its immediate goals for why the cognition momentum in programs for the disadvantaged lost its inner force.

#### Voices Speaking for Cognitive-Affective Interaction

There were those psychologists and educators who did not accept <sup>the focus on cognition</sup> in the first place as a sound approach with which to mitigate the multiple developmental injuries to healthy childhood attributable to the personal and social condition of poverty. Nevitt Sanford, from a psychiatric position, had a scolding voice. "Where did educators get the idea of a disembodied intellect? We must not permit educators categorically to separate the intellectual or the cognitive from the rest of personality. Conceptually, they may do this. Cognition, feeling, emotion, action, and motivation are easily separated by abstraction, but no "single one of these can function independently of the other."

Richard Jones, in a seriously critical mood, took on none other than Jerome Bruner and the well-sponsored "Curriculum on Man" with which to argue. He criticized that social studies program and its narrowly intellectualistic focus on the way Eskimo life was to be studied by the children. The emotions aroused by what the children were being exposed to should, in his view, have been utilized for deeper learning and not regarded as obtrusive to clear thinking. "One cannot aid



in the development of emotional and imaginal skills without reference to their integral cognitive counterparts...neither can one hope to effectively aid in the development of cognitive skills without reference to their integral emotional and imaginal counterparts."

I admire greatly Irving Sigel's paper in 1969 on the Piagetian System and the World of Education. He clarified the theoretical rationale behind what an observing teacher sees as children grow and change. He indicated where a new body of insight had been provided by Piaget by which to refine the stimulation of the cognitive processes without falling into what Piaget himself had called the American error of acceleration. But he pointed out, in addition, that Piaget's contribution to understanding the course of development should not be viewed as a comprehensive solution to purposes and values of educational planning.

In 1975 he made his meaning clear. I quote: "Preoccupation with cognitive functioning, while no doubt critical, is still, I think, a misplaced emphasis. The place of [the] cognitive apparatus is filtering or processing information and relating the outside through the inside to the outside again....At the same time, we are fully aware that [the] information as it is attended to, perceived, processed, reorganized, etc., is influenced by the heat it generates. The excitement, the interest, or the boredom, the fear that it generates or the pleasure, all of these are concomitants and are intimately intertwined with cognition. For Piaget, affect is the other side of the coin of cognition and I would rather not use that analogy," Sigel says, and I agree, "since it is inaccurate. The analogy, if any is to be used, is that this is a woven set of strands which in their interweaving could create the whole....The cognitive process apparatus...unfortunately, has been segmented for conceptual purposes and I feel this essentially is a glaring and serious error. Thus, we may be in need of a new construct which is neither cognitive alone, nor affective....I'd like to call it a cogno-affect dimension."

From its inception, the Head Start program was on this course and never left it. The statement of principles by the Office of Education made it plain: "It is important to recognize that the total cognitive development is strongly influenced by emotional and social factors and these must be taken into account in guiding the child's learning experience." These were not casual statements from officialdom. The materials produced as guidelines for teachers were specific about ways of stimulating thinking processes within the context of total development. They reflected insight into the nature of young cognition and were imaginative in how to guide teachers toward using the stream of daily experience as material for building a thinking child--a teaching skill that is not easily attained.

At the head of the program, it was Edward Zigler who both planned the action and conceptualized and argued its position vis-a-vis the contemporary currents in the psychological world that were moving in an opposite direction. In 1973, he wrote, "Children are much more than cognitive automatons....Those who insist on approaching the developing child as some sort of disembodied cognitive system to be trained to master academic skills strike one as being simple-minded, not tough-minded." His leadership in conceptualizing and building the program and the support he had from people like Jennie Klein and others represent a landmark in early education.

Without embarrassment, I want to put myself into this picture as belonging with those who kept a steady allegiance to the cognitive-affective interaction position. Looking back, I see that, in each of the seven papers I published in the decade of the sixties, I took occasion to expound and defend this position consistently, not just theoretically, but with illustrations from the programs we had built over the years on a base of both cognitive and psychodynamic theory.

It is one thing to build up support for a cognitive-affective interaction position theoretically with differing weightings of Dewey, Freud, and Piaget, but,

as every teacher knows, it is quite another to put the theory to work in a real-life educational program. I have mentioned Susan Isaacs, Bank Street, the City and Country School, and the Walden School as old-timers on this front. There have been others. Now the current scene is alive with informed, theory-based school experimentation. New theoretical directions appear, some of them philosophically oriented, such as we find in the work of Patricia Carini. She presents a radical shift toward phenomenological theory which she substantiates with systematic documentations of classroom activity and interaction. In general, the scene for research seems to be moving back into the school. Other full images of how teachers and children live and learn together appear in the psychological literature, among them Kamii, Sigel, Duckworth, Piers, Almy, and others.

In this connection, I regret that Almy, in identifying with some psychologists' recent interest in the "whole child," repeats the cliché that the progressive education movement withered away. The truth is that it is the inheritors of the progressive school movement who have applied a differentiated concept of the "whole child" to educational practice consistently over half a century. Similarly, there is historical error in treating the cognitive-affective interaction view as having been discovered by psychologists in the seventies as an explanation for failure with compensatory education. There has been a long history, as I have briefly indicated, during which other psychologists and educators, at the forefront, have been developing the more comprehensive theoretical view and worked at its application in the reality of school life.

#### Beyond the Horizon

Now I would like to take a brief look at the relation between thought and feeling as it appears in other contexts. The joint influence of cognitive and affective functions comes through in many studies which follow formal research design. In one such study, Hoffman has analyzed the developmental steps that

succeed each other in the child's capacity for sympathizing with another person in distress. He has shown how this maturing process between the ages of one to nine years is interlocked with parallel successive steps in cognitive development.

In another study, DeCarie has compared certain Piagetian and Freudian postulates about early development. She followed an experimental design involving 60 children in the first two years of life, in a study of the concept of representation. While she found points of disagreement as well as agreement between the two major theoretical systems, there is no equivocation in her final conclusion: She states clearly "that any study of affective phenomena must take cognitive processes into account, and that any study of intellectual phenomena must not disregard affective modalities. All evidence points to the intertwining of all aspects of development (be it locomotion or learning)." If I were to document this point further, from other research studies, I would need to include studies by Escallona, Yarrow, and Pedersen, and others.

In a different approach Gruber, in his study of Charles Darwin, took a life span perspective on how cognition and affect are intertwined. In his analysis of Darwin's voluminous papers and diaries, he finds specific evidence of how Darwin's feeling affected his thinking and contributed to the long delays between his findings and the publication of his ideas, in certain periods of his work.

Darwin knew his ideas were dangerous in his time. His reluctance to publish, to share his thinking with others, was tied in with his fears. He was on the risky side of creative thought; he loved his ideas, but he worried about how publication of his dissident views in a hostile atmosphere might affect the people he loved. Gruber also analyzes the laborious steps that Darwin took in his search for the truth and the way wrong ideas, well worked-through over time, often lead to later correct insights--in all, a steady slow growth model which Gruber looks on favorably for children as well as for creative, exploring adults.

In comparing the mature creative thought process of a Charles Darwin to child thought, Gruber says, "We would probably discover if we looked a little more closely at those moments when the child's thinking really seems to move, that the child experiences a sense of exhilaration. When we speak of 'insight'... it is not just seeing something new. It is feeling. And what the person is feeling is both the promise and threat of this unknown that is just opening up. When we think new thoughts, we are really changing our relations with the world around us."

You will not be surprised that he regrets some educators' literal-minded interpretation of Piagetian theory. In his own highly imaginative language, Gruber tells us that "over-expectancy can be a form of oppression," and asks us to read Piaget's work as the "model of a man who respects children's thinking for its questioning, searching, inventing, discovering qualities when it is permitted to function freely."

In case any of us should have the illusion that only psychologists and teachers have the gifts for penetrating how thought and feeling are intertwined in human experience, let me bring a playwright of the late nineteenth century to your attention. The playwright, Arthur Schnitzler, in 1922, on the day before his sixtieth birthday, received a surprising, touching letter of congratulation from Sigmund Freud in appreciation of the psychological insight expressed in the plays he had written. I will read a few sentences. "I think I have avoided you," Freud wrote to Schnitzler, "from a kind of awe of meeting my 'double'... whenever I get deeply interested in your beautiful creations, I always seem to find, behind their poetic sheen, the same presuppositions, interests, and conclusions as those familiar to me as my own...your deep grasp of the truths of the unconscious...the way you take to pieces the social conventions of our society, and the extent to which your thoughts are occupied with the polarity of love and death...all that moves me with an uncanny feeling of familiarity, so the impression

has been borne in on me that you know through intuition...everything that I have discovered in other people by laborious work."

Along this road, we could turn for further insight to the work of people like the artist Ben Shahn, or the novelist Dostoevsky, who have provided us with other deeply penetrating images of thinking and feeling mankind.

Having allowed myself to reach such heights in this talk, it is a little difficult to come down to earth and make a suitable summary of our present condition.

In the realm of theory, I think it is fair to say that there is a growing interest and maturing of developmental theory. Psychoanalytic theorists are more interested in cognitive processes; there are more cognitive-oriented psychologists taking the life of affect into account. Some research programs represent radically new theoretical orientation. All that is clear gain. Psychologists and educators talk to each other and understand each other more than they used to--in real-life situations, in classrooms, in joint projects in schools and combined professional meetings. We are all bound to reap benefits from the cross-fertilization of their pooled thoughts and feelings.

But in the world of application, is it the behaviorist ideology that is gaining ground? Will the back to basics passion, combined with cut-down school budgets, wipe out the gains from oper. classroom experience, inadequately fulfilled as it may have been in many schools? Against these negative forces, we need to keep in mind the positive trends--the fact that so many of the experimental programs have moved beyond limited focus on cognition to more comprehensive programming and that there is more room for special alternative educational designs to find acceptance and support.

I have tried to trace the half century course from an early period of concern for stimulating intellectual processes to a time of deeper understanding of the

need to build on the interdependence of emotional and thought processes. That led<sup>me</sup> to deploring how crisis situations can create narrow thinking, and then to reminding us how good sound thinking stayed with us throughout, and can be reinforced if we allow ourselves some imaginative leeway into other spheres. For myself, I have enjoyed this small bit of stretching beyond the horizon of education and psychology, and seeking in the related realms of art and literature and biography another order of insights into thinking and feeling with which to refresh our work-a-day understanding.

In closing, I hope this conference provides us all with some good hard-headed thinking and plenty of deep, generative feeling. Thank you.