FOCUS ON EXCEPTIONAL CHILDREN

CURRICULUM FOR EARLY CHILDHOOD SPECIAL EDUCATION

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EARLY CHILDHOOD SPECIAL EDUCATION CURRICULUM

The place of special education in the early childhood education movement has been a source of confusion and embarrassment for the last decade. The basic problem is that the vast majority of youngsters qualifying for special education programs have been diagnosed as "mildly retarded" with no specific organic etiology. If this group of youngsters were distributed randomly throughout the social classes, as are most categories of other handicaps, there would be no problem; the diagnosis of mild mental retardation would be accepted in the same manner as a diagnosis of a mild hearing loss or vision problem — as unfortunate and without stigma. However, the distribution is extraordinarily skewed; that is, a disproportionate number of "mildly retarded" children come from low income and minority group families, the disadvantaged groups of our society. While this overlap was conveniently overlooked in a more naive era, it is impossible to do so today.

The diagnosis of retardation without specific organic etiology places a stigma on the child, his family, and his culture. What is more, its validity is highly suspect. The case demonstrating the fallibility of tests used for placing disadvantaged children in special education is best illustrated by research concerned with language development. Initially, a number of researchers using tests of language development with disadvantaged children found what they thought were major developmental differences between these children and middle-class children. When other researchers scrutinized these results, however, paying close attention to the items on the tests, it became apparent that what the tests were measuring was sophistication in the standard American dialect and not general language development. When the child was assessed for language development within his own dialect, the language "retardation" disappeared (Baratz & Baratz, 1970). It is recognized today that many items on intelligence scales and standardized achievement tests show a similar "culture bias."

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One of the principal lessons of the civil rights ferment of the sixties was that the individual is a product not only of family and subculture but also of a system of economic distribution and opportunity. There is widespread recognition today that society must take major steps to remedy the problems that this social-economic "system" generates for individuals from low-income and minority groups. The implication of a diagnosis of non-organic retardation is that the problem of educability has originated in the individual, through deficiencies of intelligence, just as the problem with the deaf child has originated in his physical handicap or with the organically retarded child in the abnormality of his brain. However, the fact that the "mildly retarded" children in special education classes are generally from low-income or minority groups points to another conclusion: that such children, because of the environment in which they are growing up, lack the skills and attitudes, not the intelligence, needed to succeed in school. The "deficiency" is to be found in the social order, in its effects on disadvantaged children. From education's point of view, this means that equality of educational opportunity becomes paramount. More specifically, it means that schools must change to meet the special needs of children from poverty environments - environments that are "deprived" because of inequities in the social-economic system.

Any discussion of the relation between special education and early childhood curriculum, then, must clearly distinguish between the organically mentally handicapped child and the environmentally disadvantaged child. For the latter, there is some impressive evidence pointing to the efficacy of a preschool experience; compensatory efforts at

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THE YPSILANTI-PERRY PRESCHOOL PROJECT

The Ypsilanti-Perry Preschool Project (Weikart, Deloria, Lawser & Wiegerink, 1970) assessed the longitudinal effects of a two-year preschool program designed to compensate for the "functional mental retardation" believed to have been found in some children from disadvantaged families. (The diagnosis was based on Stanford-Binet IQ scores.) The program consisted of daily cognitively oriented preschool classes accompanied by weekly hometeaching visits. The project was operated from September 1962 to June 1967. Children were assigned to either an experimental or a control group in an essentially random manner, except that the two groups were matched on socioeconomic status and Stanford-Binet scores.

The preschool curriculum that evolved during the five years of the project was derived in part from Piagetian theory and teacher observation, and focused on cognitive objectives (Weikart, Rogers, Adcock & McClelland, 1971). Emphasis was placed on making the curriculum flexible enough for the teacher to gear classroom activities to each child's level of development. Verbal stimulation and interaction, sociodramatic play, and the learning of concepts through activity were considered more important than social behavior and other traditional concerns of nursery schools. Weekly afternoon home-teaching visits provided each family with an opportunity for personal contact with the child's teacher. The parents were encouraged to participate in the instruction of their children, the goal being to improve their relationship with school and teachers and to involve them in the education process. The teacher's child management techniques indirectly suggested to the mother alternative ways of handling children. Group meetings were used to reinforce the changes in parents' views regarding the education of their children.

The following are the general findings from the project:

1. The children who participated in preschool obtained significantly higher scores on the Stanford-Binet IQ test than the control group children. This superior functioning disappeared by third grade, and (from preliminary data) by eighth grade both group means returned to the scores obtained at the three-year-old level.

2. The children who participated in preschool obtained significantly higher scores on achievement tests in elementary school than the control group children. This difference attained significance in first, third, and fourth grades, but is irregular in higher grades where data are incomplete. The children who participated in preschool received better ratings by elementary school teachers in academic, emotional, and social development than the control group children. This difference continued through third grade.

In general, these findings show a positive impact of preschool education on the performance of disadvantaged children in the elementary grades. One of the specific goals of the High/Scope Foundation projects has been to follow the development of participating children long enough to study the impact of preschool upon special education placement, retention-in-grade, drop-outs, and teenage crime rates, etc., at the junior and senior high levels. Using the most recent data from the original Ypsilanti-Perry project, Table 1 presents information on the current grade placement and special education enrollment for Waves 0 through 4, now enrolled in grades five through nine.

Regardless of the intellectual and achievement differences, the school "treats" the children of the experimental group much differently than the control group children. This difference is evident in the grade and class placement of the children in school. Using the most recent data (spring 1973) for the complete sample of 123, the school assigned 72% of the experimental group to grade level as compared to only 60% of the control group. However, the most striking figures are those regarding special education class placement. In the experimental group 12% have been placed in special education classes as compared to 27% for the control group. When we review the school placement for the 90 children still enrolled in the Ypsilanti Public School system where full special education services are available (the other 33 children have moved to other school districts), 13% of the experimental children are in special education classes as compared to an astounding 34% of the control group children.

Table 1

Ypsilanti Perry Preschool Project

SPRING 1973 SCHOOL PLACEMENT INFORMATION

for

COMPLETE PERRY PROJECT SAMPLE*

(N=123)

	Expected Grade (Spring e 73)	Experimental Group				Control Group			
Wave		Number of Children	Children in Expected Grade	Children in Special Ed.	Children Retained a Grade, but no Special Ed.	Number of Children	Children in Expected Grade	Children in Special Ed.	Children Retained a Grade, but no Special Ed.
0	. 9th	13	8	1	4	13**	7	6	0
1	8th	8	4	4	0	9	5	3	1
2	7th	12	11	0	1	13***	7	4	2
. З	6th	13	8	2	3	14	8	3	3
4	5th	12	11	0	1	<u>13</u>	10	1	2
TOTALS		58	42	7	9	62	37	17	8
%		100% =	= 72 % →	12%	+ 16%	100% =	60% +	27%	+ 13%

^{*}Of the original sample of 123 children, 90 children are still enrolled in the Ypsilanti school system, where full special education services are available. Of these, 13% of the High/Scope graduates are in special education classes as compared to 34% of the nongraduates.

^{**}Two control group children lost from this wave.

^{***}One control group child lost from this wave.

Since special education costs are more than twice that of regular education, the actual cash savings to public education is almost sufficient to cover the costs of providing preschool education to these "high risk" youngsters. When the broader social costs of individuals with inadequate education and poor self-esteem are included, failure to provide preschool education to all children who need the service is financially irresponsible as well as morally objectionable.

THE RANGE OF PRESCHOOL CURRICULA

Since preschool can make a difference under certain conditions, it is important to know the wide range of preschool curricula that are available and in use at this time. Many of the programs that all under the nontraditional categories discussed below were developed in major early childhood education experiments conducted by special educators (e.g., Karnes, Kirk, Hodges, Spicker) and psychologists (Gray, Weikart, among others) with groups of low-income minority-group children, some of whom were diagnosed as "mildly" (non-organically) retarded.

Most early childhood education programs may be placed in one of four categories²: Programmed, Open Framework, Child-Centered, or Custodial. In Figure 1, each of these program types is related to the way teachers and children in such programs participate and interact, in other words to the teachers' and children's "roles." If the teacher's predominant role is to initiate, she plans lessons, organizes projects, and develops activities; she decides what will be done or directly influences what will be done; she presents materials, programs, and ideas; she guides action and directs the efforts of the children. The initiating, or active, teacher usually follows a specific theoretical position, developing her classroom activities from its tenets or following specific procedures prescribed for her. Indeed, an "initiating teacher" can even be a programmed textbook or a sophisticated computer terminal from which a theory of instruction interpreted by a program developer may be supplied through carefully controlled materials. In general, the teacher who initiates is forceful in applying her talents and skills to accomplish specific instructional objectives.

If the teacher's predominant fole is to respond, she watches the actions of both individual children and groups of children in the classroom environment. She responds to their needs and tries to facilitate their interaction with each other and with the materials in the classroom. While

she will introduce materials and activities at specific points, she does this in response to what she feels are the expressed needs of the children. To ascertain these needs, the responding teacher applies the general knowledge of child and social development she has gained through training and experience. On the whole, the teacher responds carefully through her essentially intuitive understanding of the children's behavior.

When the child initiates, he is engaged in direct experience with various objects through manipulation and full use of all his senses; he is involved in role playing and other kinds of fantasy play; and he is active in planning his daily program, determining how he will work in the classroom environment. There is considerable physical movement by the child and a balance among teacher-child, child-child, and child-material interaction patterns. In general, the impetus for learning and involvement comes from within the child.

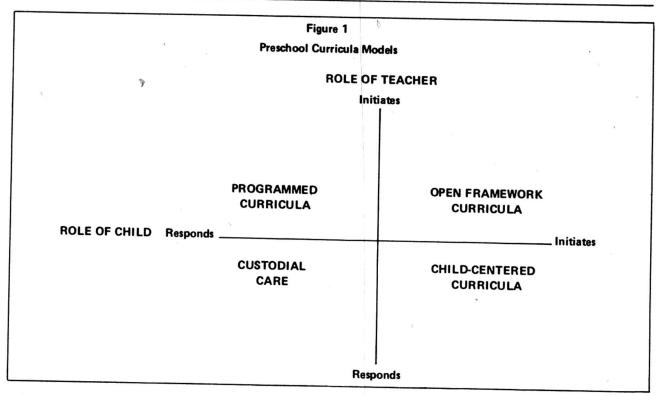
When the child responds, he is attentive or receptive; he listens to the teacher and carries out her requests; and he responds verbally to requests and demands. The responding child tends to move about the classroom less than the initiating child, since his predominant role is to wait for and attend to what is prepared and presented to him. In general, this child is working within a clear framework of acceptable behavior and progressing toward a specified goal. The impetus for learning and involvement comes from the teacher or other extrinsic forces.

Each of the four curriculum types discussed below — Programmed, Open Framework, Child-Centered, and Custodial — is, among other things, a particular combination of these styles of teacher-child interaction.

Programmed

This model combines teacher initiates and child responds. Several major innovative programs in the current wave of compensatory education projects are Programmed curricula. Most organized special education curricula also fall into this group. These curricula tend to be directed at clearly defined immediate educational goals, such as the teaching of reading, language skills, and mathematics skills. The goal of most of these programs is to equip the youngster with the skills necessary to manage the demands of traditional education. These curricula tend to be rigidly structured, with the teacher dominating the child and with a heavy emphasis on convergent thinking - "Say it the right way." - and learning through repetition and drill. The programs tend to be oriented to specific procedures, equipment, and materials, especially in those approaches that are heavily programmed, with technology ranging from a simple language master and tape components to major learning systems with computers and all the trimmings.

^{2.} Of course, any system of categorization is a deliberate simplification of the real world. Categories overlap in practice; many preschool programs are eclectic, mixing parts of various general approaches. These mixed models are to be found usually in situations removed from the requirements of a rigorous research design. For a discussion of these categories from a philosophical viewpoint, see Kohlberg and Mayer (1972).



The key to the programs in this quadrant is that the curricula are teacher-proof; that is, the curricula are prepared scripts and not subject to extensive modification by the individuals presenting the instructions. As one major exponent of teacher-proof methods said: "If you use my program, 75% of everything you say will be exactly what I tell you to say!" Usually these programs are produced by a central group of program developers and then published or distributed for general use by interested school systems and parent groups. Since these programs assume that everything can be taught by the careful control of the student response, many of them use behavior modification techniques. Diagnosis of student skills and careful monitoring of progress in acquiring the prescribed goals are heavily utilized.

The major advantage of the curricula in this quadrant is their ease of distribution to the general field of education, as the performance of the child is keyed to the materials and not to the creative abilities of the teacher. This means that relatively untrained paraprofessionals as well as sophisticated and experienced professionals can effectively use these curricula with little difficulty. In addition, the teacher-proof characteristic appeals to angry parent groups who question the motives or commitment of teachers and who want full teacher accountability for the time their youngsters spend in school. These parents want their children to be taught to read and write and do arithmetic,

and these programs do that job without any nonsense. Many school administrators also like these kinds of programs, as they provide effective control of their teaching staff and lend themselves to ordering equipment and supplies in logical units. The educational accountability fad sweeping state legislators as well as teacher groups almost demands that education be conducted in a programmed fashion with its clear focus on immediate and measurable objectives.

Another advantage of Programmed curricula is the ease with which new components may be added as they become necessary or identified. For example, another innovator in the Programmed area was criticized because of the failure of his methods to permit creative experiences for the children. He commented, "If you'll define what you mean by creativity, I'll develop a program to teach it." Then too, these curricula do not make a priori assumptions about the limitations of individual children. The challenge for the teacher is to find out the present limits of the child's knowledge in the area of concern and begin an instructional program to bring him to a well-defined point of competence.

In general, these curricula have clearly defined educational objectives, present a carefully designed and extensive program sequence to move children toward those objectives, and give the teacher explicit instructions as to how to behave during these learning sequences. Teaching is accomplished through the application of scripted materials supplied by the program developers. Learning is seen as the acquisition of correct responses as determined by the materials; anything can be taught to almost any child if the educational goals and behavioral objectives can be specified. The principles which support these programs tend to be drawn from learning the y, behavior management procedures, and language development theory.

Open Framework

In this quadrant, representing teacher initiates-child initiates, are programs which subscribe to specific theoretical goals, but which depend upon the teacher to create the particular curriculum in which the child participates. These curricula tend to focus upon underlying processes of thinking or cognition and to emphasize that learning comes through direct experience and action by the child. They omit training in specific areas, such as reading or arithmetic, treating these skills as inevitable outcomes of basic cognitive ability. These curricula accept the responsibility of developing the capacity of the child to reason and to recognize the relationship of his own action to what is happening about him. They tend to be skeptical of claims that solutions to problems or academic skills can be taught meaningfully to youngsters. Instead the child is challenged to utilize these developing cognitive processes to observe and record his environment, to generate concerns and content for his attention, and to apply this growing knowledge in his cooperative work with others.

These curricula are usually based upon a theory of child development, the most popular of which is that of Piaget. Using this theory, a curriculum framework is structured so that the teacher has clear guidelines as to how the program should be organized. The curriculum theory delimits the range of education activities, giving criteria for judging which activities are appropriate. The framework generally includes directions for structuring the physical environment, arranging and sequencing equipment and materials, and scheduling the day. The theory also gives the teacher a framework for organizing her perspectives on the general development of children. It is this open framework that provides discipline to the program.

These curricula tend to be criented toward organizing and utilizing the people involved rather than any special equipment. They demand that the teacher create a transaction between the child and his environment to develop his abilities. And they demand that the child learn by forming concepts through activity, not by repeating what he has been told. The curriculum provides guidelines for establishing these conditions, but does not require special commercial materials or equipment.

One of the major advantages of the Open Framework

curricula is that while the teacher must adopt a theoretical position and work within its limits, the specific program she creates is uniquely hers, developed as an expression of her attempt to meet the needs of the children in her group. This personal involvement on the part of the teacher means she becomes deeply committed to her program, and it is highly probable that she will continue to implement her program over a long period of time. At the same time, since the curriculum is based upon a specific theory, her expression of that curriculum can be closely examined by others, who know both the theory and children, to provide the teacher with guidance and assistance, facilitating quality control of the program.

Another advantage of Open Framework curricula is that, since the programs focus on the development of basic cognitive processes rather than on rote skills and since the specific curriculum is created by the teacher by carefully planning activities according to the developmental levels of individual children, they are relatively free of cultural bias and untested assumptions about children's abilities. Thus they can be used effectively with youngsters with varying abilities and from diverse ethnic and socioeconomic backgrounds. The programs are also free of specific linguistic criteria and may be employed with non-English speaking children.

The learning process, structured by the teacher within the Open Framework, is usually paced by the child himself, with adaption of the activities by the teacher to match the child's needs and interests. In well-run Open Framework classrooms teachers frequently report their surprise at the minimal discipline and management problems, which would seem to reflect the range of adaptations the framework allows.

In general, these curricula are organized to accomplish cognitive and language development based upon a theory of intellectual development. An open framework is provided for the teacher as a context within which she develops a specific program for the children in her classroom. Learning by the child is the product of his active involvement within the environment structured by the teacher. The High/Scope Foundation's Cognitively Oriented Curriculum, developed during the Perry Preschool Project (discussed earlier), is an example of this approach.

Child-Centered

In this quadrant, representing child initiates-teacher responds, are the bulk of the traditional preschool programs as found on college campuses and in national projects such as Head Start and many of the programs of the "free school" movement. These curricula tend to focus on the development of the whole child, with emphasis on social and emotional growth. They are characterized by

open and free environments with a generally permissive relationship between the teacher and the children and among the children themselves. Content revolves around things of interest or helpful to the child, such as the community, seasons of the year, and holidays. Academic skills are not stressed. There is a firm commitment to the idea that "play is the child's work" and recognition of the importance of the child's active involvement in his environment. Considerable attention is given to social adjustment and emotional growth through fantasy play, imitation of adult roles, rehearsal of peer relationships, and the careful development of the ability of the child to be independent of direct adult assistance. If theory is involved in one of these programs, it is usually a theory of emotional development. The actual curriculum developed by the teacher comes mainly from her own intuitive understanding of child development on the one hand and her observation of the needs of her children on the other. In general, the hallmark of the Child-Centered curricula is an open classroom with children free to express their individual interests and to create their own environment, and with a careful response by an experienced and intuitive teacher who has developed a sense of how to support this creative environment.

The major advantage of the Child-Centered curricula is the complete openness to the needs of individual children. The program may be in harmony with the goals of both the parents and the professionals, reflecting the specific concerns of all involved. In addition, Child-Centered curricula are highly reflective of the values given considerable prominence in society as a whole: independence, creativity, self-discipline, constructive peer relationships, etc. Also, since this is the predominant program style at the preschool level, there is a vast reservoir of trained talent throughout the country, in colleges and universities, in organized national associations, and in the large number of programs currently utilizing these methods.

In general, these curricula attempt to assist the child in his overall development through careful attention to his individual needs. The teacher draws upon her knowledge of child development to create a supportive classroom where learning is the result of the child's interaction with the materials, his classmates, and his teacher. While there may be agreement on general goals in most Child-Centered programs, each teacher is responsible for the design of almost everything in her work.

Custodial

In this quadrant, representing teacher responds-child responds, are programs which are of minimal value to children. At best these programs protect the child from physical harm and may be some improvement over

extraordinarily bad social conditions. Institutional programs often fall into this category. Some of these are described by Kirk (1958) and Skeels (1966). However, with the knowledge and resources available today, there is little excuse for maintaining custodial centers where teachers and children respond to little more than physical needs.

THE EFFECTIVENESS OF PRESCHOOL CURRICULA

Programmed, Open Framework, and Child-Centered approaches differ widely on a number of important theoretical and practical issues, including curriculum supervision for staff, adaptability of the program to specific educational needs of minority and regional groups, breadth of curriculum focus, recommended procedures for child management, acceptability of the curriculum to teachers, and assumptions about how children learn. The basic question is, however, how does the particular curriculum model affect the immediate and long-term intellectual, academic, and social performance of participating children? Unfortunately, there is little basic information about the relative effectiveness of particular preschool curricula.

There have been several efforts to examine this issue of differential effectiveness over the last five years (Karnes, 1969; Miller, et al., 1971; Weikart, 1973). On the national level, Planned Variation Head Start (Smith, 1973) tested preschool intervention models in a range of sites throughout the country. In general the data from these projects aise more questions than they solve. Differences in population samples, degrees of program readiness for implementation, experience of staff, availability of carefully designed training programs, etc., have all conspired to make unclear the relation between a model's potential and its measured impact.

However, it is increasingly obvious from the comparative research projects that "you get what you pay for." Disorganized or badly run programs produce little gain on the part of the children participating in the day-to-day activities. Generally "bad" programs are the result of severe underfunding, unusual community or other political pressures, major conflict among staff members with no hope of reconciliation, and bureaucratic concentration upon form rather than upon the children and the purpose of the project.

Taken as a whole, the various comparative projects indicate general outcomes in the areas of academic skills, social competencies, and cognitive abilities that do reflect the intent of the models. Programmed models with directed teaching of academic skills tend to accomplish their specific goals even at the preschool level. However, there is little indication that performance above comparison groups on academic skills generalizes to improved

performance in cognitive abilities or to social competencies such as locus of control perceived as internal. Indeed, there is evidence to suggest that programmed instruction introduces a bias in favor of attributing to others the power over the self. The Child-Centered models tend to score below their comparison groups on academic skills but above on general social competency. Usually there is no difference with comparison groups on general cognitive ability. The Open Framework programs tend to produce scores somewhat above their comparison groups in all areas with significant results in cognitive abilities tests such as the Stanford-Binet and Peabody Picture Vocabulary.

RECOMMENDATIONS

When special education considers the issue of curriculum, be it for preschool or the early primary grades, there is a strong obligation to think very clearly about the total impact of the curriculum selected. Each style has specific advantages and disadvantages. The problem of curriculum selection is broader now than it used to be. It must be acknowledged from the outset that the "mildly retarded" group, the vast majority of special education youngsters, is made up predominantly of youngsters from low-income minority populations whose school performance is a consequence of being environmentally handicapped. These children may benefit enormously from well run, clearly focused preschool programs.

It is important to recognize the value of having socioeconomic integration of classroom, so that disadvantaged children will have an opportunity to work in an atmosphere where differences in attitudes, skills, abilities, and talents can be made into productive encounters. Any curriculum selected for application must permit children to progress at differential rates without being failed for slow progress. This means the criteria for success must reflect the wide range of potential accomplishment generated by each child.

Not only should the pace of children's learning vary with the individual, but the actual content should diverge as necessary to accommodate each child. This means the curriculum content should permit individual interests, skills, and achievements as defined by the child himself, not as imposed by arbitrary adult expectations.

Parent involvement should result in adjustment of the content of the curriculum to reflect the cultural and ethnic heritage of the children's families. It is not enough to follow one specific orientation drawn from the majority of families enrolled in the class or school.

The procedures adopted to assess the progress of the children in the program must reflect long-term accounta-

bility, not just immediate accountability. The quality of life that surrounds the child in school is actually more important for his total well-being than attaining immediate objectives forced by narrowly focused teaching.

The challenge we now face is to make our classrooms centers of learning for all children without the pressure to excel in some standard way to some standard mold. The importance of this shift cannot be overemphasized, for in it lies the hope of altering the most basic institution of our society, the school, and of opening up for many children avenues for development that are rightfully theirs. When it is accepted that large numbers of children currently placed in special education either do not belong there or need not have been put there had their educational requirements been recognized and cared for at an earlier age, special educators will have an opportunity to devote all of their energies and resources to those children who need special education by virtue of physical and organic handicaps.

REFERENCES

Baratz, S. S. & Baratz, J. C. "Early Childhood Intervention: The Social Science Base of Institutional Racism." Harvard Educational Review, 40, 1970 (29-50).

Jencks, C. Inequality: A Reassessment of the Effect of Family and Schooling in America, New York: Basic Books Inc., 1972.

Karnes, M. B., et al. Investigations of Classroom and At-Home Interventions, Research and Development Program on Preschool Disadvantaged Children. Final Report. Volume I. University of Illinois, Urbana: Institute of Research for Exceptional Children, May 1969.

Kirk, S. Early Education of the Mentally Retarded. Urbana: University of Illinois Press, 1958.

Kohlberg, L. & Mayer, R. "Development As the Aim of Education." Harvard Educational Review, 42, 1972 (449-496).

Miller, L. B. et al. "Experimental Variation of Heat Start Curricula: A Comparison of Current Approaches." Progress Report No. 9. Psychology Department, University of Louisville, Louisville, Ky., 1971.

Skeels, H. M. "Adult Status of Children with Contrasting Early Life Experiences: A Follow-Up Study." Monographs of the Society for Research and Child Development, 32 (2), 1966.

Smith, M. "Findings of the Planned Variation Study." Presented at the annual meeting of the National Association for the Education of Young Children, Seattle, November 1972.

Weikart, D. P. "Development of Effective Preschool Programs: A Report on the Results of the High/Scope Ypsilanti Preschool Projects." Presented at the High/Scope Educational Research Foundation Conference: Using the High/Scope Cognitive Approach to Learning in Infant, Preschool, and Early Elementary Education, Ann Arbor, Michigan, May 1973.

Weikart, D.; Deloria, D.; Lawser, S. & Wiegerink, R. Longitudinal Results of the Ypsilanti Perry Preschool Project. Ypsilanti, Mich.: High/Scope Educational Research Foundation, 1970.

Weikart, D.; Rogers, L.; Adcock, C. & McClelland, D. The Cognitively Oriented Curriculum: A Framework for Preschool Teachers. Washington, D. C.: National Association for the Education of Young Children, 1971.