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ABSTRACT

The result of the work of a special task force, the design for an early childhood education program for California is given which formulates goals, performance objectives, program content standards, and an evaluation system for an overall articulated program. Chapters are presented on: the rationale for change; parent-community involvement; physical, social, and psychological services; a diagnostic/prescriptive approach to learning; proposed curriculum; the learning environment; teacher preparation; implementation of the plan; a review of the related literature; contributions from other countries; nationally funded sources or information; the White House Conference on Children, 1970; and recommendations and alternatives of the Education Commission of the States. The task force recommendations call for publicly-supported primary schools for children aged 4 to 8, clearly defined goals, adequate funding, the involvement of the community, parent education and involvement, appropriate school environment, the availability of health and social services, and continued emphasis on staff preparation. Selected references are included. (LH)

Early Childhood Education

Report of the Task Force on Early Childhood Education

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Photo by Gail Ellison Milder

Foreword

Last year, in response to my invitation, a team of leading specialists in child growth and development assembled in Sacramento. I asked that they design an early childhood education program of the highest quality for California's children – a program based on the best information available in this field. After several months of intensive work, the task force completed its work. This report represents the results of its efforts.

In accordance with the recommendations of the task force, early childhood legislation has been written, endorsed by the State Board of Education, and introduced in the state Legislature. The implementation strategy is described separately in a document entitled *The Early Childhood Education Proposal.*

I am pleased to endorse the decision of the Task Force on Early Childhood Education to dedicate this document to the late Milton Babitz. He served as chairman of the task force and contributed significantly to the development of a master plan for early childhood education in California's public schools.

Milt was my long-time friend and professional associate, but more importantly he was a friend of education and of children. A leading authority on preschool and early childhood education, he was also a strong advocate of parent participation and involvement in the educational process. The implementation of the task force's recommendations would be the finest tribute we could make to the memory of Milton Babitz and to the children – the future citizens of California.

Wilson Riles

Superintendent of Public Instruction

Members Task Force on Early Childhood Education[1]

Mrs. Marian P. Anderson
California Association for the Education of Young Children; Instructor in Sociology and Home Economics, Sacramento City College

Mrs. Alvia Barfield
United Teachers, Los Angeles; President-Elect, Association of Classroom Teachers, National Education Association

Leslie Brinegar
Associate Superintendent of Public Instruction; and Chief, Division of Special Education, California State Department of Education

James A. Collins
Superintendent, Mill Valley Elementary School District

Ramon C. Cortines
Assistant Superintendent, Secondary Education, Pasadena Unified School District

Edith M. Dowley
Professor of Psychology and Education; Director, Bing Nursery School, Stanford University

John Goodlad
Dean, School of Education, University of California, Los Angeles

Frederick B. Hodges, M.D.
Chairman, Governor's Advisory Committee on Preschool Educational Programs, California State Department of Public Health

James S. Jordan
Coordinator, Follow Through Program, Bureau of Compensatory Education Professional Development, California State Department of Education

Dennis Mangers
Director, Educational Services, American Learning Corporation, Long Beach

Dan Moore
Manager, Educational Programs, Los Angeles Times-Mirror Company

Mrs. Loren Peterson
Preschool Education Chairman, California Congress of Parents and Teachers, Stockton

Robert Ponce
Consultant, Office of the Ventura County Superintendent of Schools

Mrs. Mabel C. Purl
Director of Research and Evaluation, Riverside Unified School District

Tom W. Robinson, M.D.
Chairman, California Medical Association Committee on School and College Health, Newport Beach

Mrs. Elaine Rosendahl
Member, California School Boards Association, Cupertino

Robert Ruddell
Professor of Education, University of California, Berkeley

Frank T. Sata
Architect; Instructor, Pacific Oaks College, Pasadena

Mrs. Edith Schwartz
Reading Specialist, Sacramento City Unified School District

Mrs. Gloria H. Searls
Director, International Children's Center, Los Angeles

Faustina Solis
Associate Professor, Department of Community Medicine, University of California, San Diego

Mrs. Naida West
Parent, Fair Oaks

Mrs. Docia Zavitkovsky
Director, Children's Centers, Santa Monica

Mrs. Jeanada H. Nolan
Coordinator of the Task Force; Chief, Bureau of Compensatory Preschool Educational Programs, California State Department of Education

Mrs. Dorothy Blackmore
Staff Consultant to the Task Force, Bureau of Compensatory Preschool Educational Programs, California State Department of Education; principal author of the *Report of the Task Force on Early Childhood Education*

[1]The titles and locations given for persons acknowledged here are those that were in effect when this report was written.

Dorothy Green

Contents

The Charge to the Task Force[1]

Research findings consistently document that as much as 50 percent of a child's intellectual potential is developed before he reaches school age and that 80 percent is developed by the age of eight. I am not satisfied that we have focused a sufficient portion of our energy and resources in this critical area.

If our goal is to equip our children so that they may successfully continue their education, we must revise our priorities. No child should leave the third grade without being

[1]Wilson Riles, "Recommended Educational Priorities – 1971," A report to the California State Legislature, March, 1971, p. 4.

able to read, write, and calculate in accord with accepted standards. The need for costly and frequently unsuccessful remediation programs can be sharply reduced if we increase the intensity and quality of educational programs during the early growth period.

To attack this problem, I am naming a high level task force composed of leading professionals in the field. This task force will develop a comprehensive, integrated Master Plan for Early Childhood Education for consideration during the 1972 legislative session.

During the past few years, we have witnessed a proliferation of federal, state, and local programs in elementary instruction. Now is the time to examine the role and relationships among preschool, children's centers, and Miller-Unruh Basic Reading Act programs, plus related federal projects, and the traditional kindergarten and elementary curriculum. This will be done with an eye toward consolidation and continuity. In the development of the Master Plan, we will formulate goals, performance objectives, program content standards, and an evaluation system for an overall articulated program.

In its final stages, the Master Plan might consider such innovations and improvements as:

1. Expanding the number of preschool day care centers and placing them where they can best serve mothers
2. Converting the first three grades into an ungraded primary system with individualized instruction and comprehensive diagnostic evaluation
3. Encouraging our best teachers -- including more men teachers -- to go into the primary grades
4. Emphasizing and strengthening teacher preparation for early childhood education

A Statement of Philosophy

The Task Force on Early Childhood Education hereby dedicates itself to the proposition that since all men and women of every race and creed indeed do have inalienable rights to life, liberty, and the pursuit of happiness, it is the business of society to assure these rights for every child. He is, we emphasize, tomorrow's adult.

The past decade has produced a new body of educational, psychological, and medical research documenting the crucial importance of the first eight years of life.[1] And we are convinced that these early years are critical in determining the future effectiveness of our citizens and in the long-range prevention of crime, poverty, drug addiction, malnutrition, neurosis, and violence. Even though research is still in progress and conclusions continue to evolve, we believe there is enough evidence to indicate that the following actions are clearly warranted now:

1. The people of the state of California must make a long-range commitment of funds to the proposition that the first eight years of life are the most important period in determining the future effectiveness of all our citizens.
2. Implicit in this commitment is the recognition of the desirability of providing equal educational opportunities for all children. Certainly every child aged four

[1] Benjamin S. Bloom, *Stability and Change in Human Characteristics*. New York: John Wiley & Sons, Inc., 1964.

through eight, regardless of his environmental, emotional, and physical needs, should be included in this recognition. Programs must provide for identifying these needs, for ways of meeting them, and for means of assessing and reassessing program effectiveness. Since it is clear that early diagnosis, intervention, and prevention are dependent upon a close liaison among educational, social, and health services, a cooperative, working relationship among persons in these fields is vital.

3 School should be a happy place, a stimulating environment in which children can make continuous progress, in which they will want to learn, and in which they can achieve success, both personal and academic. In order to make the early years of learning truly effective, assessment of appropriate and significant developmental levels must be the basis for planning the educational program for each child. If and when needed, corrective social, medical, and psychological facilities must be made accessible to permit the young individual to reach his full potential.

4 Because we recognize the importance of parents in the education of their children, we strongly affirm that parent education and involvement must be an integral part of all programs. Parents should be included in both the planning and evaluation of individualized instruction for their children.

5 There must be encouragement of local autonomy and creativity in program development, with provision for maximum flexibility within broad state guidelines. School districts and other agencies involved in the programs must be allowed freedom to experiment and individualize to meet the needs of the children they serve.

6 Accordingly, then, we believe it is essential that California establish at once for primary-age children a broadly based educational program that includes children at least one year younger than those beginning school now. This proposal will require school districts to restructure and expand existing programs in order to bring about the maximum development of every child aged four through eight. Implicit in this proposal, too, is the recognition that the individual child is the unique recipient of instruction. We therefore believe the present large-group approach to the education of primary children must change significantly in order to make possible the necessary personalized instruction.

School should be a happy place, a stimulating environment in which children can make continuous progress.

Dorothy Green

Summary of Recommendations

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1 *All children in California between the ages of four and eight should have the opportunity to be served by a publicly supported primary school.*

The individual differences, capabilities, and needs of all children must be provided for. Basic needs must be met by society if they cannot be met in the home.

Children with special handicaps should be provided for within the primary school if possible; if not, the necessary facilities must be made available for them.

2 *Goals must be clearly defined so that the results of the program can be evaluated.*

All children must acquire the basic tools of learning in reading, oral and written language, and arithmetic by the time they are ready to leave the primary school.

Assessment of children's verbal abilities must be made in the language with which they are most familiar.

The design of the primary school must include a plan for continuous evaluation of the effectiveness of the school's program.

3 *Adequate funds must be allocated for the successful operation of the proposed expanded primary school.*

Financial resources should be equitably distributed in terms of the needs of the children to be served.

A State Department of Education task force, project team, or unit should be developed to implement the proposals contained in this report.

4 *The primary school must become a community educational center, combining all the resources of the family and the community in order to serve children and their parents.*

All existing public and private educational, physical, social, and psychological services of the community must be coordinated with the resources of the school to identify, assess, and provide for the needs of children.

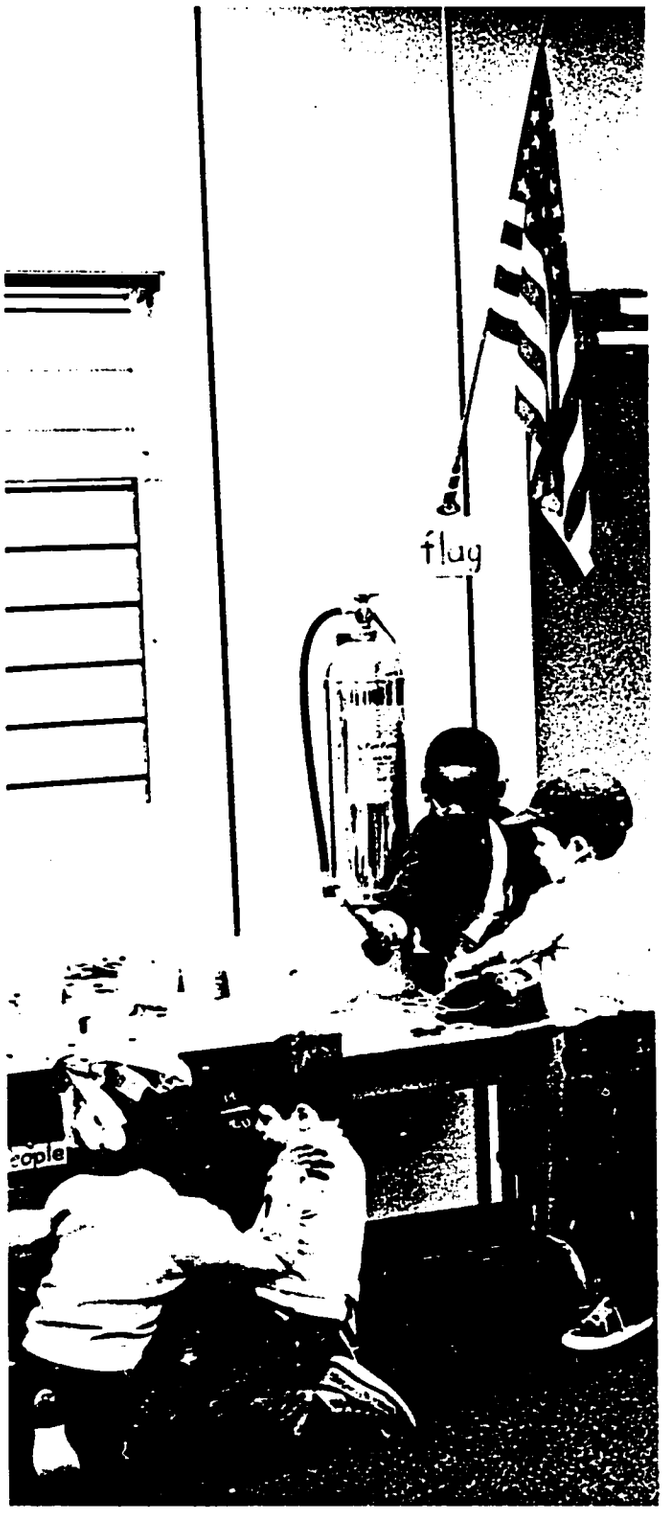
The school should offer to the community the widest possible dissemination of information about the services available for children and their parents.

To carry out the responsibilities of initiating, implementing, and evaluating the program at the local level, each school district should appoint an early education advisory committee that is representative of all segments of the community, including parents.

5 *Parent education and involvement must be an integral part of the primary school program.*

Early preparation for parenthood is essential, and junior and senior high school students, as well as college students, should therefore be given opportunities to help in the primary school.

Parents must be included in the planning, implementation, and evaluation of the educational experience of their children.



The individual differences, capabilities, and needs of all children must be provided for in the new primary school.

Charles Reilly

Far West Laboratory for Education Research and Development

An environment appropriate for primary education must reflect the nature and needs of the young child.

6 *An environment appropriate for primary education must reflect the nature and needs of the young child.*

Since the school environment is critically important for children of all ages, but especially for young children, a completely new look at school design is indicated. State and local building codes must be reexamined and revised to facilitate the construction of low-cost, easily modified structures with maximum flexibility.

An emotional climate must be ensured that will facilitate inquiring, reflecting, and reasoning and that will show recognition of the importance of play in children's learning.

Every aspect of school organization should contribute to the enhancement of the child's self-concept. Grade level barriers between the preschool year, the kindergarten, and the present primary grades should be removed so that children may make continuous progress through the primary school.

The program should provide for a differentiated teaching staff that will definitely ensure a ratio of at least one adult to every ten children.

Aides and volunteers should be recruited from all segments of the community and should include men and women, both young and old.

7 *The pupils' medical, dental, and nutritional needs should be met, and social services, day care, and counseling must be made accessible.*

All existing county, district, and community services should be coordinated to assess the vision, hearing, health, and social needs of children early enough for effective intervention when necessary.

Special programs for children with severe or multiple handicaps should be continued and expanded where necessary. With regard to special programs, careful needs assessment should precede program development.

8 *The preparation of staff for early childhood education should receive continued emphasis in California.*

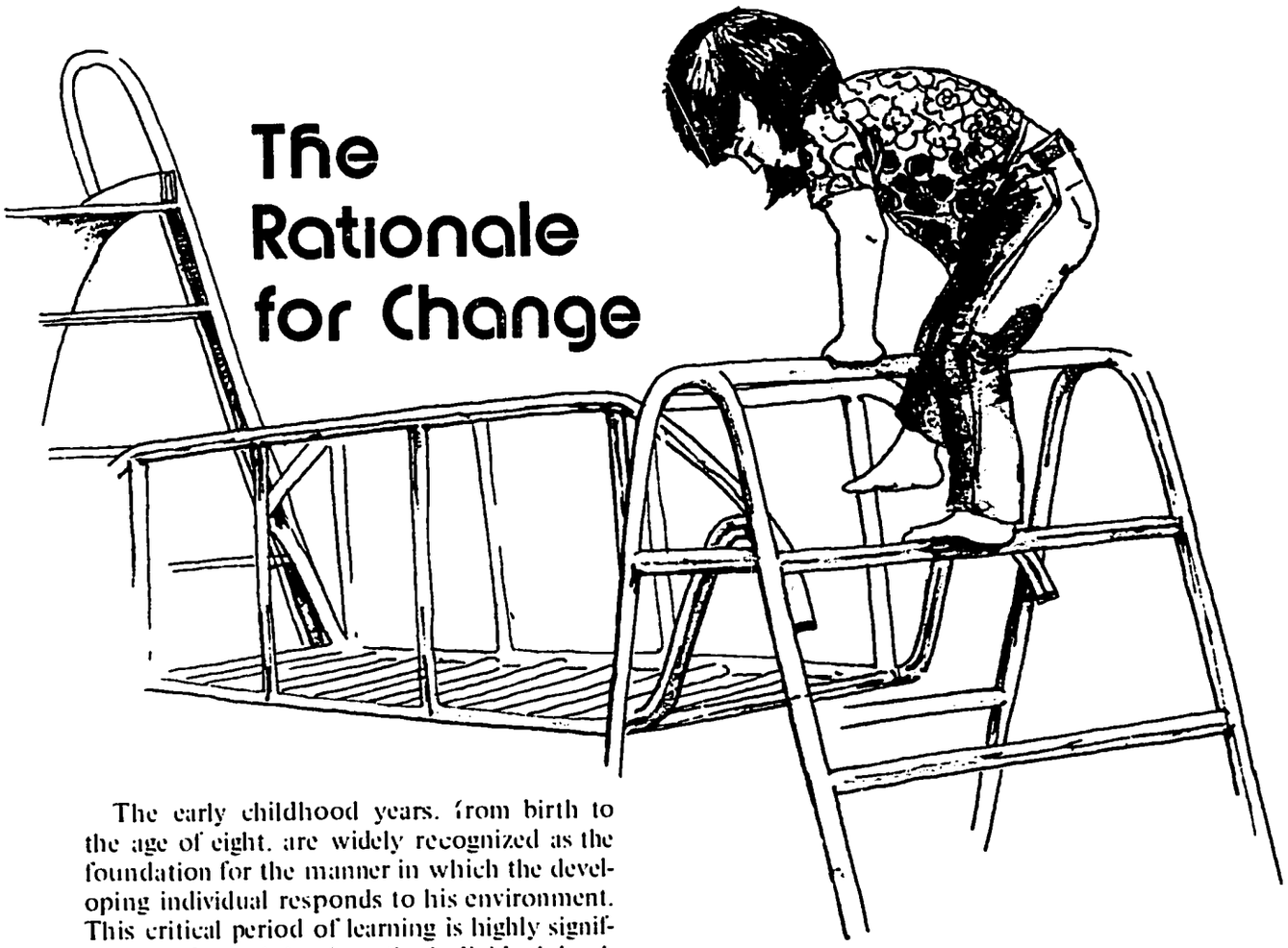
In the implementation or enactment of new credential legislation, demonstrated competency should continue to be required for certification. Selection of candidates for early childhood teacher education programs should be made on the basis of demonstrated effectiveness with small children.

Every member of a differentiated teaching team should have the attributes and preparation necessary to function in a manner consistent with the goals expressed in this report.

Implicit in the early childhood education proposal is the recognition that the individual child is the unique recipient of instruction.

Dorothy Green

The Rationale for Change



The early childhood years, from birth to the age of eight, are widely recognized as the foundation for the manner in which the developing individual responds to his environment. This critical period of learning is highly significant in determining how the individual develops feelings toward himself and reacts to his family, peers, and the individuals around him, and it certainly dictates his readiness to learn. And yet, at the present time, fewer than 14 percent of California's preschool age children are enrolled in any group program designed to foster their growth, enhance the probability of their later success in school, or meet any of their physical, social, or educational needs. This fact, plus the mounting evidence of the value of an earlier start in the right kind of educational environment, leads us to conclude that children should begin school a year earlier than they do now.

The Need for Early Intervention

By the time a child is four years old, schooling at public expense should be available to him and should continue as long as it is beneficial. There is considerable evidence that intervention with some children even younger than age four is imperative in certain

cases, as in the case of children with profound and multiple handicaps or of those from homes of extreme poverty and deprivation. Compensatory programs must therefore be provided to meet the unique needs of such children.[1] For the vast majority of children, beginning primary school at age four would be an advantageous step. This is assuming, of course, that a truly appropriate primary program, such as will be described in this report, can be effectively realized.

The Importance of a Multiage Varied Mix

It is extremely important that young children be provided a learning environment that includes children from all walks of life, all races, all socioeconomic levels, and all levels of ability. In growing together, these children will learn together and will develop a mutual respect for each other. Actually, a cultural, sex, and age mix of both staff and children should be effected to introduce children to the broad spectrum of American society and to develop their appreciation for the contributions of each segment to our culture.

It is undeniable that American society, with the family as the dominant unit, is rapidly changing. There is a need to strengthen and support the family as never before, and if the strengthening of a child's family can occur early in his development, there is a much greater chance of his building the kinds of competencies needed for growth and development.[2]

A desirable primary school program would provide the child with a sense of belonging and a belief in the importance of his own world that comes with the whole-hearted involvement of knowledgeable human beings of all ages who really care about him and all aspects of his development. In the kind of primary school visualized by the Task Force on Early Childhood Education, the child would find an emotional climate conducive to inquiring, thinking, and reasoning. He would receive direction and guidance in developing self-understanding, independence, self-control, and a positive self-concept. This is necessary for any significant intellectual growth.

Encouragement of Children's Abilities

An exemplary educational program provided for young children should stimulate and challenge each child according to his unique pattern of growth and development. A growing body of research is now revealing that early educational experiences that are suitable result in superior achievement without negative personality or social effects. Research also indicates that we have underestimated the ability of children and that children's creative as well as intellectual energies should be guided more appropriately than they have been in the past.

Essential to the commitment to early childhood education is the view that intelligence is not entirely fixed by genetic factors; it also emerges as it is nurtured. Each stage of development carries with it possibilities for the acquisition of new abilities and new ways of processing information. Unless each of these abilities is sufficiently exercised as it emerges, it will not develop fully and will contribute little, if at all, to the demands of the next stage.[3]

It is time to do a better job of what we already know should be done for young children in school. Let us combine the best of what we have learned from all the various kinds of preschool programs, from kindergarten, and from the primary grades with the most promising results derived from a continual review of new research. Given the time, effort, thought, and public resources necessary, the task force believes that the primary school described in this report would welcome rather than fear the increasing emphasis on accountability.

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[1] Edward Zigler, *Training the Intellect Versus Development of the Child* (ERIC No. ED 034 573). New Haven, Conn.: Yale University Press, 1968.

[2] Glenn R. Hawkes, "Human Needs and the Community," in *The Disadvantaged Child* (Second edition). Edited by Joe L. Frost and Glenn R. Hawkes. Boston: Houghton Mifflin Co., 1970, pp. 459-66.

[3] Joseph McV. Hunt, *Intelligence and Experience*. New York: The Ronald Press Company, 1961.

Parent-Community Involvement

The community should be involved in the initial planning and development of primary school program models that will meet the needs of the children to be served and in the ongoing process of evaluation and change. When people are involved from the beginning, there is greater chance for lasting interest, concern, and identification with programs. The joint effort of professional and nonprofessional people better ensures the extension, reinforcement, and integration of innovations.

The community as a whole encompasses all agencies related in any way to the educational program. Figure 1 illustrates the range of the desired involvement. As the proposed plan is being initiated in each community, each school district concerned would be obliged to take its own inventory of the agencies serving its constituency and show the district's willingness to take the initiative in organizing and coordinating a joint effort.

The Need for Parent Involvement

Parent involvement and parent education are essential elements of early childhood education, for certainly parents, teachers, and other citizens of each community share responsibility for understanding the goals of early childhood education and for participating in their implementation. In fact, parent involvement is so important that it should be

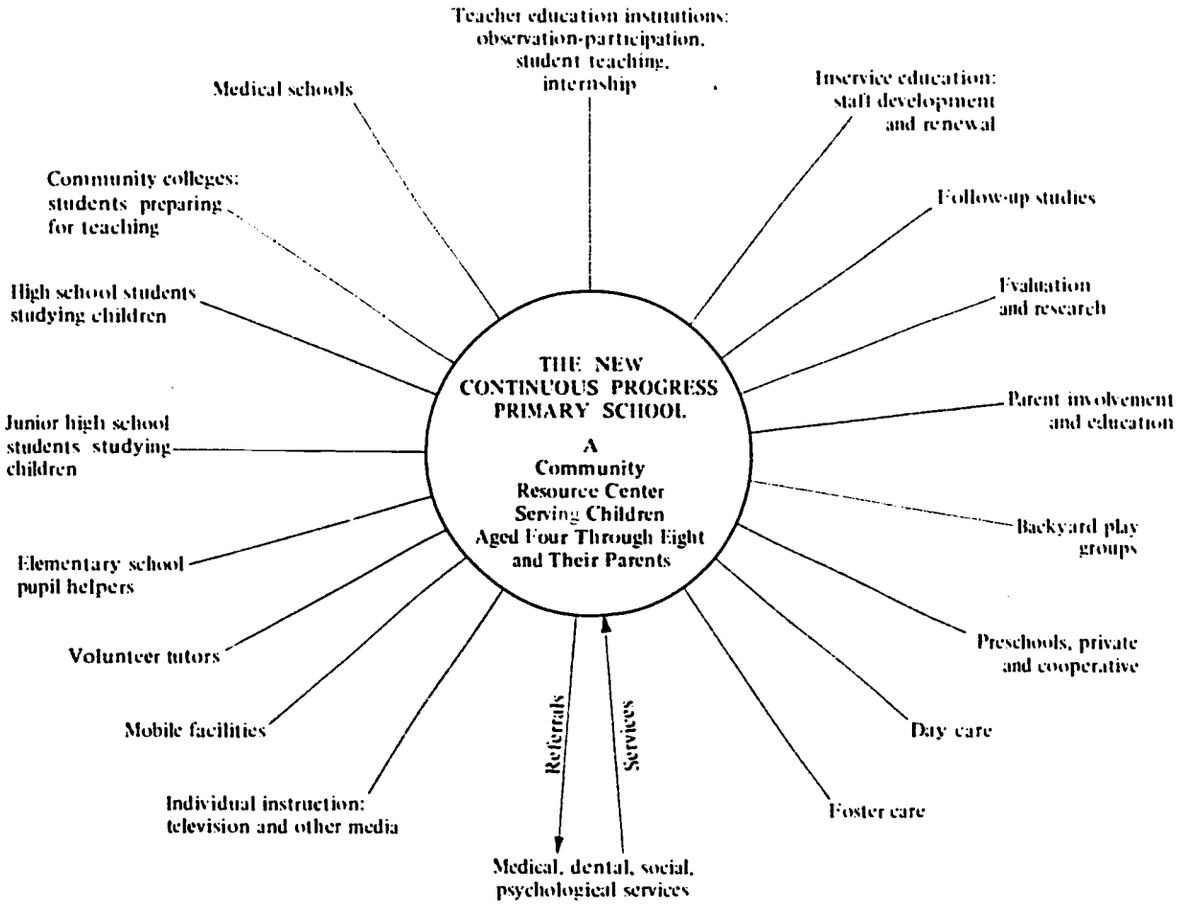


Fig. 1. A Tentative Model of Community Involvement in the Proposed New Primary School

required wherever feasible, although flexibility in this matter is necessary to allow for individual parent needs, desires, and capabilities.

Meaningful involvement of parents in the primary school program will undoubtedly include a wide range of functions and activities. Some parents may be engaged in studying and identifying community goals for their schools, while others may be participating regularly in classroom activities. Still others, through contacts with the school, may simply be developing an awareness of the importance of school for their children. In the latter case, it is important that the school assume responsibility for helping parents become aware of the need for and the rewards of education. Schools that serve minority communities must seek ways to inform and involve parents so that they may become familiar with the ideas presented in this report. The task force recognizes that minority parents can be an essential resource to the school, too, in helping contact and inform other minority parents about the importance of primary education.

All possible ways should be utilized to build bridges to the families served by the school. This means scheduling meetings at times when the parents can come and in a variety of convenient locations, not necessarily always in the school building. Informal, small group meetings are a most desirable sup-

plement to the customary larger, more formal gatherings. Moreover, provision should be made for the regular scheduling of child-parent-teacher conferences, thereby encouraging the child to assume some personal responsibility in his own education.

Dissemination of Information

Every available type of mass media newspapers, radio, and television as well as church bulletins and other informal means of communication should be used to disseminate information to the public about the school and its activities. The district must reach out to all the parents in such a way as to make them feel truly welcome in the genuine partnership effort the school will represent. The time is ripe for cooperative efforts to be made by educational, medical, social, business, and all other services within the community to meet the family's needs.

Parent education programs or classes should be considered from several viewpoints, among them developing of training programs *with* and not just *for* parents and providing enabling and enriching "learning together" experiences for the family. Another component of the parent program should be parent education that includes the child when he is very young, perhaps at a developmental age of three or even younger. And, most certainly, such an opportunity for parent education should be available for parents of those children for whom enhancement of communication skills and emotional development has been indicated by early diagnostic testing.

Much more, in other words, can and should be done in recognizing the parent as the child's pre-teacher in much the same way that the medical and social services in many communities have recognized the potential and promise of parent involvement in immunization programs and health services.

The Role of Volunteers

The promising practice of using parent volunteers, even before the child enters school, should be encouraged, perhaps more for the values to the parent himself in terms of his own guidance and understanding than for his service to the school, helpful though that may be. Parents, grandparents, older students, and siblings could be used in many volunteer capacities. Benefits could be multiple, including strengthening of the child's self-image in knowing his parents recognize his importance, developing in the child a more positive attitude toward the educational process, and increasing the parents' understanding of their own child and of that child's association with his peers. In essence, here is an excellent opportunity for inservice parent education. The teacher is helped to understand a child by being acquainted with that child's parents, and the teacher is freed to use his skills more advantageously for programming and responding to the needs of children in the class or group. The child benefits by being given individual attention according to his special needs.

James S. Jordan

Early preparation for parenthood is essential; students should therefore be given opportunities to help in the primary school.

Gail Ellison Milder

The present large-group approach to the education of primary children must change significantly in order to make possible the necessary personalized instruction.

The many abilities and cultures of parents who volunteer could enhance the educational opportunities of the children in the school and also enhance their appreciation for various cultures and their professional, technical, artistic, and living skills. But it must be pointed out that orientation of parents and teachers to the use of volunteers is as essential to the success of a volunteer program as the orientation of the volunteers themselves to their work.

The rising interest in parents as volunteers has been instrumental in recruiting for teaching many persons who might otherwise not have realized their potential as teachers. Volunteer or aide experience has stimulated many parents to seek their own professional advancement in the teaching profession. Indeed, a most valuable resource for the schools has thereby become available, and it is one that especially encourages the advancement of minority adults to positions of professional leadership.

It has also been suggested that a comprehensive primary school program might also, through its parent education program, help to alleviate the scarcity of trained personnel available for infant and child care. Trainees in such a program would learn child care principles that would equip them for an occupation in child care and help them to be better parents.

Early Education for Parenthood

Perhaps one of the most important questions today is this: When should the education of parents begin? The task force is convinced that it should begin long before marriage, parenthood, or even adulthood. The junior high school years are an optimum time for both boys and girls to start learning the principles and acquiring the attitudes and concepts of effective parenthood. The task force believes that what is presently being done regarding parent education is being done too late. If we are going to help the future adult members of our society accept responsibility for solving their own problems, we must provide learning opportunities at the junior and senior high school levels through contact of students with very young children.

The majority of these high school students will be parents some day. If, at the senior high school level, skilled persons can provide direction to students so that they may learn to deal with the frustrations of being with young children, the development of happy and successful parents as well as of happy, successful, well-adjusted young children can become an increasing reality.

Physical, Social, & Psychological Services

Because we believe that attention should be given to the physical, mental, and emotional health of each child, the task force proposes as a first step that existing services be coordinated so that needs for medical and dental care, social services, day care, and counseling may be met through one resource center. Ultimately this should become a joint agency effort within the expanded primary school.

No longer can the school exist in relative isolation from other agencies in the community that provide fundamental services to children. Moreover, all essential supportive services should be available to all children. If health services cannot be provided by the parents, it is the responsibility of the school to arrange for community resources to meet the health needs of the children concerned. When there is an identifiable need, there must be provision for nutrition, rest, medical and dental care, a healthy environment, and planned physical activity. This should not be construed as suggesting the lessening of parental responsibility; however, when an identified need cannot be met by the parents, it must be assumed by the community.

It is important that a community resource center like the one just described be located

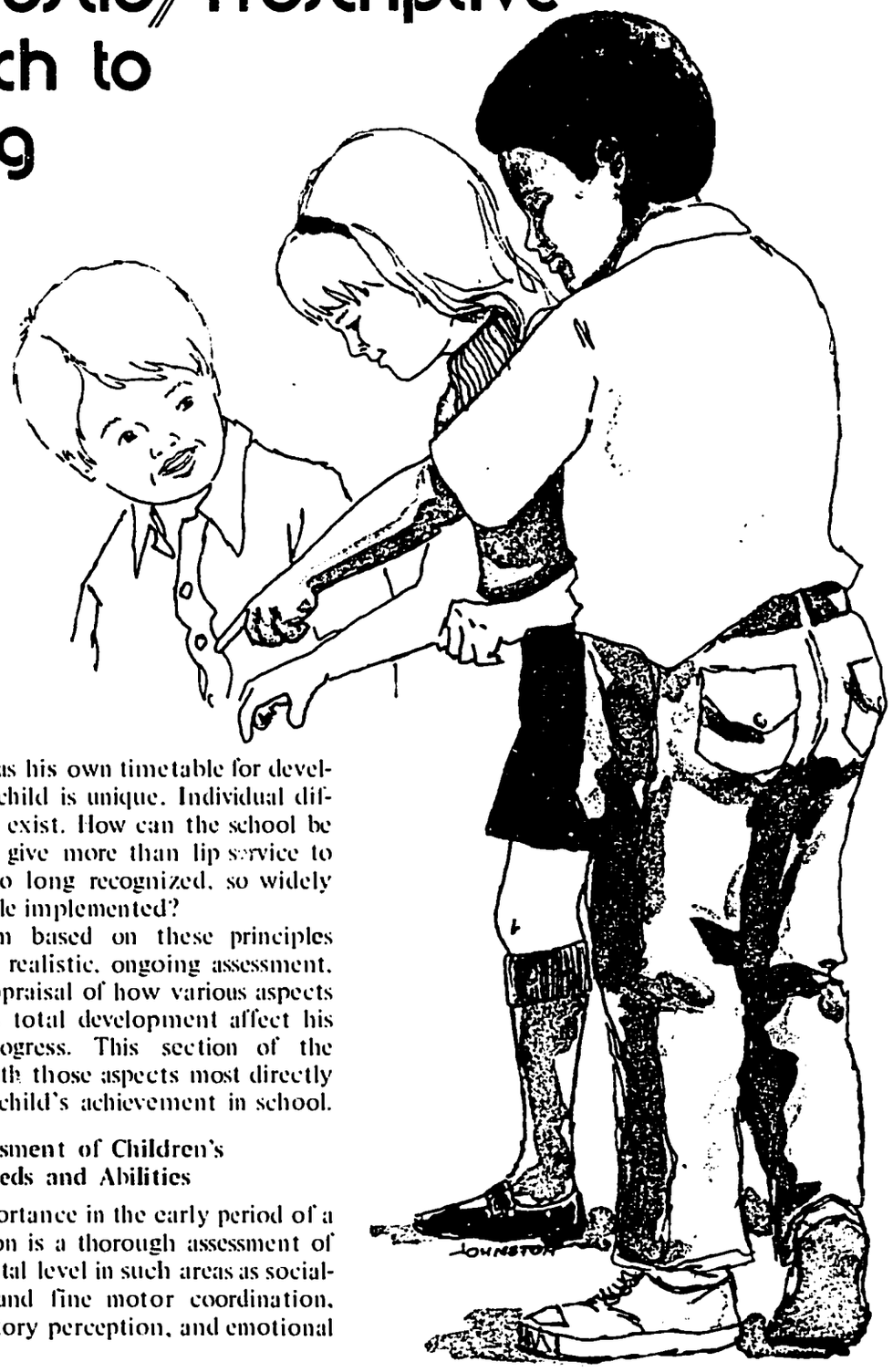
so that its facilities are accessible to all members of the community. And since experience suggests that such facilities will not be used by the uninformed, an effective advertising and educational campaign using all possible media should be undertaken to disseminate information on the justification and need for and the ready availability of the variety of services offered.

There is much evidence to indicate that children with special handicaps should be integrated into the regular school program whenever possible. Research tells us that these children progress faster under such circumstances than when they are isolated, to say nothing of the gains in human concern, understanding, and acceptance made by the normal children with whom they are placed. Some seriously handicapped children may require highly specialized services that necessitate alteration of facilities and equipment, and this may not be feasible in each early education center. In such instances, other, more innovative ways must be found to meet the needs of every child, perhaps in programs such as those provided in California's development centers for handicapped minors.

An emotional climate must be ensured that will show recognition of the importance of play in children's learning.

James S. Jordan

A Diagnostic/Prescriptive Approach to Learning



Each child has his own timetable for development. Each child is unique. Individual differences clearly exist. How can the school be restructured to give more than lip service to these beliefs, so long recognized, so widely held, and so little implemented?

Any program based on these principles must include a realistic, ongoing assessment, diagnosis, or appraisal of how various aspects of each child's total development affect his educational progress. This section of the report deals with those aspects most directly related to the child's achievement in school.

Assessment of Children's Needs and Abilities

Of great importance in the early period of a child's education is a thorough assessment of his developmental level in such areas as socialization, gross and fine motor coordination, visual and auditory perception, and emotional

security. It would also be highly desirable to be able to ascertain each child's cognitive style or how he learns: that is to say, through what channel he attains knowledge most efficiently and is best able to transfer and make it available in a variety of situations. This determination may be possible in the near future.

Also important is an assessment very early in life of any specific learning disabilities and, of course, of obvious and significant physical and emotional disabilities. Because we are at the dawn of a new era of developing knowledge in this field, any new primary school program must be flexible enough to change rapidly as new information becomes available.

To make the early years of learning truly effective, educational assessment of the broadest type should take place with regard to both the developmental levels that the child has attained in each area and the development of optimal programs to utilize his strengths and offer early remedies for his weaknesses. Each child, in other words, should progress toward the prescribed objectives by the method and at the pace determined by his own uniqueness.

It is important to reiterate that every child's accomplishments and strengths must be realistically recognized in any program of educational diagnosis and assessment. An unfortunate clinical connotation of the word "diagnosis" may lead one to assume that the sole focus of the recommended assessment program would be one of remediation. Such is not the case. The child who is already reading at the age of four or five should be provided for just as surely as the one who is a nonreader at seven or eight.

On the other hand, it must be pointed out that the program should provide the necessary flexibility to allow for whatever individual treatment and instructional strategies may be needed to remediate or compensate for serious deviations in intellectual abilities or emotional, social, sensory, or physical defects that may be identified in individual children.

Definition of Diagnosis and Assessment

Diagnosis, assessment, testing, and evaluation are terms that need clarification in the context of primary school programs. These terms refer to the various processes used by the teacher and other knowledgeable, concerned adults to make informed decisions

Dorothy Green

Each child has his own timetable for development. Each child is unique.

about a child's needs so that these needs may be immediately and effectively met. It is essential that the teacher have the preventive-diagnostic-appraising viewpoint. Without it, appropriate prescription and intervention are obviously impossible.

Diagnosis, then, is broader than simply testing. Some tests have proved to be valuable diagnostic tools; since assessment instruments vary widely, however, it is important that all persons who use children's test data be aware of the degree of validity and relevance of those data. Obviously, tests that require expertise for their administration and interpretation should be used only by trained persons.

Any humanistic, personalized view of curriculum and instruction demands that teachers emphasize both the objective and subjective dimensions of diagnosis and assessment. Diagnostic tests help identify the needs of children as they progress through school by pinpointing the skills necessary to take the next step, indicating the need for review, or confirming the teacher's judgment.

If a teacher is to look at children's progress from a diagnostic viewpoint, he must know the structure of the subject he is teaching. He must be able to determine where the child is, for example, in the hierarchy of skills in reading. And he must be familiar with Piagetian levels of cognitive growth. Such expertise cannot be taken for granted. The requisite depth of knowledge must become part of the teachers' professional preparation, and the teacher must demonstrate competence in applying his knowledge in assessing children's needs.

Identification of Program Objectives

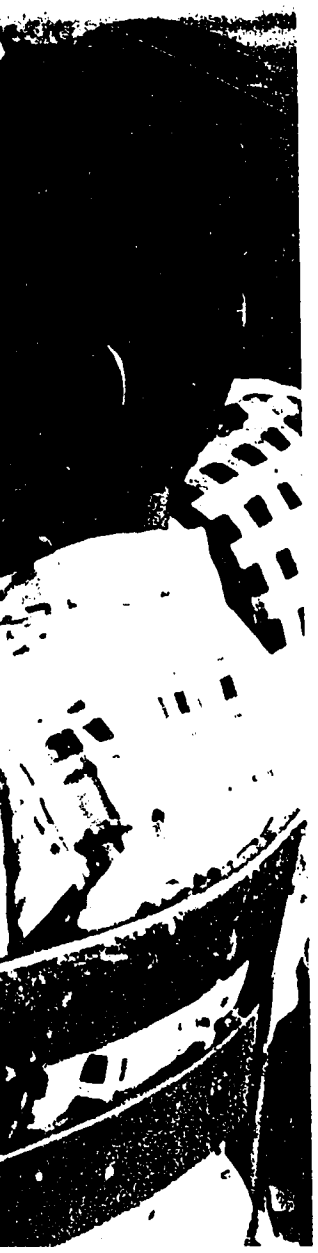
All testing, characterizing, observing, and assessing must be done with a distinct focus on well-identified program objectives. These objectives should be developed in accordance with sound, albeit eclectic, learning theories; for example, Piaget's work on cognitive development. Furthermore, the task force believes the objectives should be criterion-referenced, with the goals clearly understood and accepted by everyone connected with the program. In some cases such criterion-referenced measures are still to be specified, making use of what we are beginning to know about developmental stages in a number of cognitive areas. Efforts to provide quality education for young children must be continually reassessed and evaluated in the light of experience, promising innovations, and ongoing research.

Continuity of evaluation must be built into the primary school program in order to ascertain individual attainments and make possible immediate intervention as needed. Children change so rapidly that it is mandatory for programs to be planned in such a way that they can be immediately responsive to new data. The idea that an instructional reading group could remain the same for an entire year is unacceptable, for instance, since frequent reevaluation and regrouping would be considered absolutely essential. Accordingly, provision for reassessment and the capacity for responding immediately with appropriate alternatives are imperative in the kind of primary program proposed in this report.

A critical look at primary education has clearly revealed that it is not the children who are failing — it is the system. How can we say otherwise when we see so much evidence? For example, we have seen immutable three-slice ability grouping that carries a message of failure to one-third of the class; or a judgment of intelligence in a language a child has not yet learned to speak and understand; or teachers who teach lessons instead of children, oblivious of their interest or understanding.

Enhancement of the Child's Self-Concept

The task force is committed to changing the psychosocial components of the present educational system so that children's self-concepts may be enhanced, not damaged; and so that they may know success, not failure. This is an especially critical need of our minority pupils, whose drop-out rate continues undiminished despite massive "remedial" efforts. In short, we are convinced that serious attention to the affective area is long overdue.



spontaneously. For the child, these are all beginning forms of communication.

The teacher should focus on language difficulties that impair children's reading and listening comprehension and clarity of oral and written expression. This will require consideration of those principles of simple structural grammar, such as word order and substitution, that can contribute to the language development of primary children. The teacher should base each child's reading-language program on his specific reading-language needs and interests, as determined through informal evaluation.

Listening comprehension skills can be taught and would seem to enhance reading comprehension skills. It is essential to take this fact into consideration in the instructional program if the child is to obtain maximum benefit from the language environment that surrounds him.

Mathematics Skills

One should not infer from the foregoing that the only area of the curriculum to be emphasized is that of reading and the language arts. While it is probably true that they hold the key to successful achievement in school, the other areas of the curriculum should not be neglected. Children in primary school should have rich experiences in art, in music, in movement exploration, and in the scientific exploration of their world, to mention only a few of the many aspects of the curriculum that are appropriate for young children.

Number skills and mathematical concepts are so important that they deserve special recognition in this context. As was pointed out in relation to language skills, experience must be the basis for all learning. Nowhere is this fact more essential than in mathematics learning in which quantitative experience is necessary for concept development. And accurate mathematical concepts are basic to the acquisition of number skills.

In the teaching of both science and mathematics, we should unquestionably capitalize on young children's natural curiosity. It is hoped that in the expanded primary school, greatly increased emphasis will be placed on utilizing the innate desires of children to explore, wonder about, and discover their environment.

In the teaching of both science and mathematics, we should unquestionably capitalize on young children's natural curiosity.

San Diego City Unified School District

The Learning Environment

The task force believes that classifying children according to age and placing them in "30 x 30 boxes" is obsolete and unjustified when we have so much data about individual differences and the values inherent in a multiage mix. There should be no attempt to classify by age, grade, or accomplishment. This does not imply, however, that there should be no grouping of children. Quite the contrary. Groups can and should be organized naturally in a great number of situations; for example, children with like interests or diagnosed needs may be grouped together. But groups should not be formed on the basis of "ability," a practice that is damaging to children's self-esteem.

The danger of any kind of permanent grouping or labeling of children deserves to be emphasized in this context, not only because of the negative effect such a situation has on the self-concept of children but also because of the unfortunate effect that labels of "low achiever," "slow learner," and the like have upon the expectations of the teacher.[1]

[1] R. Rosenthal and Lenore Jacobson, *Pygmalion in the Classroom*, Holt, Rinehart & Winston, Inc., 1968.

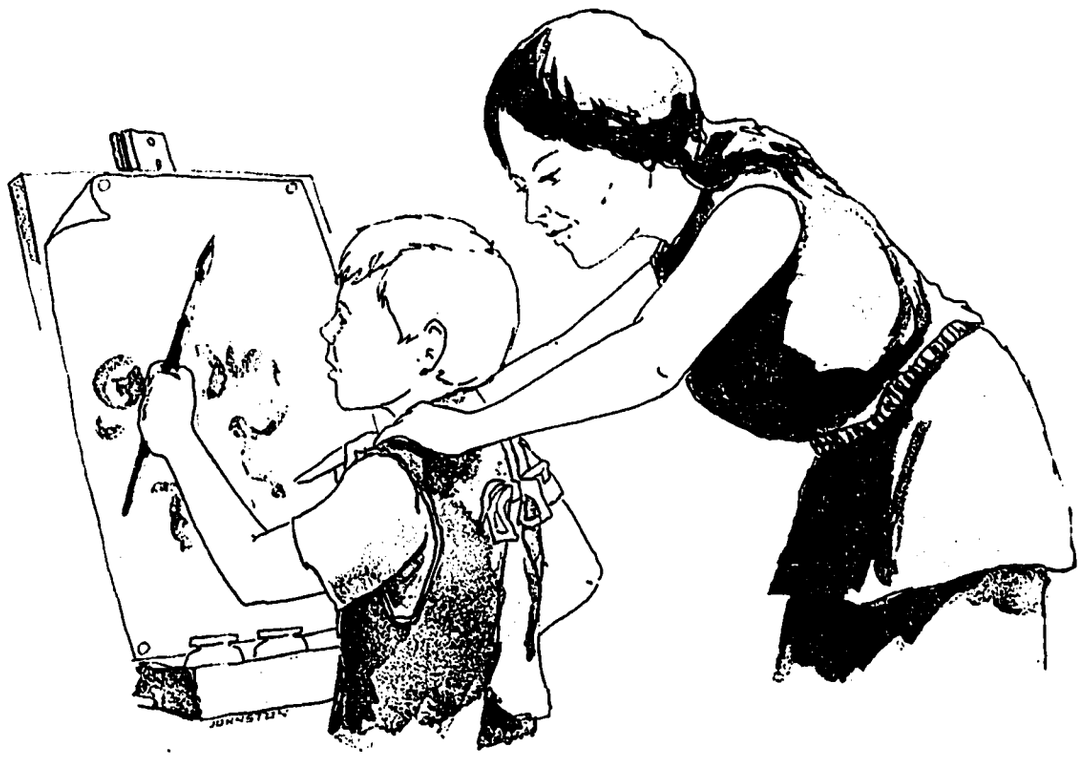
There must be maximum flexibility in the use of space so that the cost of rearranging facilities will be minimal. Existing state and local building codes must be changed when necessary to allow this flexibility.

Too long we have tolerated a system that is unresponsive to the needs of children. We must give attention to the mental health aspects of the young child's learning environment. Small children deserve to have windows, not just windowless air-conditioned buildings. They should have trees and gardens to enjoy. And as for playgrounds, we believe lawns, sand, and, yes, even ordinary dirt and mud would be preferable to the sterile asphalt that now surrounds them. In other words, nature should be part of the environment as well as part of the curriculum.

An exemplary educational program for young children should stimulate and challenge each child according to his unique pattern of growth and development.

William T. Stabler

Teacher Preparation



There is much evidence to indicate that "the significant people in a child's life, particularly in early childhood, exert a tremendous influence in determining the kind of person the child becomes, the kinds of motivations he has, and the kinds of aspirations he holds for himself. Significant people include his parents, his teachers, his older siblings, and his classmates. More and more it seems that we have been looking to content to improve the outcomes of early childhood education when we should be looking to people."[1] The selection of teachers, then, becomes of the utmost significance when we consider the issue of teacher preparation for the expanded primary school.

Qualities of Effective Teachers

The critical agent of change in the instructional program is not to be found in even the best and most innovative curriculum methods and materials – it is in the teacher, a competent, personally secure individual with special qualities.[2] Such qualities vary widely, but there seems to be one common characteristic that is noted quite consistently among good teachers of small children. This is the ability

[1] Annie L. Butler, *Current Research in Early Childhood Education*. Washington, D.C.: American Association of Elementary-Kindergarten-Nursery Educators, 1970, p. 150. Reprinted with permission of the American Association of Elementary-Kindergarten-Nursery Educators and the author.

[2] Evangeline Burgess, *Values in Early Childhood Education* (Second edition). Washington, D.C.: National Education Association, Department of Elementary-Kindergarten-Nursery Education, 1965.

Teachers must be taught the diagnostic and prescriptive skills to do the job.

Certification Guidelines

The gains made for children by the establishment in 1969 of the new early childhood credential will, it is hoped, be preserved in the new credential requirements that are now the purview of the Commission for Teacher Preparation and Licensing. Guidelines adopted by the Accreditation Committee of the State Board of Education for the early childhood credential embody many of the exemplary practices described in this report. The task force therefore urges that those guidelines be considered when the commission determines criteria for approval of programs leading to the specialist authorization in early childhood education.

A note of caution should be inserted here regarding the use of an examination system for the certification of teachers. In general, the kinds of teacher qualities and competencies that have been identified here are not measurable with ordinary tests. They have to be demonstrated with children. Therefore, it is hoped that the commission will supplement with performance-based criteria any examination involved in certifying teachers of young children.

The contribution of the community colleges in providing instruction and transfer programs for teaching assistants and aides has been significant, and the community colleges have an important role to play in the successful implementation of the new primary school programs. Communities served by these colleges should take into account their great potential for assistance in the development of the program suggested in this report.

Implementation of the Plan

Recognizing that a variety of patterns of organization will be desirable to serve the needs of the various school districts and communities in California, the task force believes that state guidelines for the expanded primary program should be broad and flexible, rather than narrowly prescriptive. The overall guidelines should specify that school districts include the following elements in their planning for the primary school:

1. Identification and active involvement of an early education advisory committee to carry out the responsibilities of initiating, implementing, and evaluating the program at the school district level. Membership should be representative of every segment of the community, with emphasis on the parents of children to be involved in the program. Where existing community groups are already organized, this fact should be taken into consideration to avoid duplication of effort.
2. Provision for identifying and assessing the basic health, social, and educational needs of the children to be involved in the program and creation of a school and community plan for meeting these needs.
3. An unstratified, continuous progress plan of organization for the educational experiences of primary-age children, with differentiated staffing and a pupil/staff ratio not greater than 1:10.

4 Parent involvement and education to the greatest possible degree.

5 A built-in design for evaluation that is based on clearly defined goals and objectives by which the outcomes and success of the program can be determined.

6 Adequate provision for dissemination of information about the goals, operation, and evaluation of the new primary program.

7 Cooperation with the coordinating and monitoring efforts of the State Department of Education and with personnel in offices of county superintendents of schools who are concerned with the field of early childhood education.

State Responsibilities and Resources

The responsibilities of the State Department of Education with respect to primary school programs are to provide leadership, coordinate school district efforts, facilitate among the districts an interchange of information on problems and promising practices, monitor an evaluation and reporting system, and provide feedback to the districts, the Legislature, and the people of California.

The program must contain built-in guarantees of flexibility and freedom so that districts can innovate and experiment to meet local needs.

An adequate program of funding must become a reality. The resources of the state should be equitably distributed in terms of the needs of the children to be served. This means that children whose minimum basic needs are far greater than those of others should receive the greater amount of financial support.

The funding necessary to incorporate four-year-olds into the proposed primary school should be equal to that provided for other levels of public education. In the first stages of establishing the new plan, extra money would be required to allow for start-up costs.

One of the valuable resources of the state is the number of excellent privately owned and operated schools at all levels, but especially in the preschool area. Private schools should be encouraged to participate in the new plan for primary education if they wish, and a *mechanism* must be developed to make this possible. We need to utilize the strengths and expertise of the private school sector whenever possible, making the improvement of primary education a joint effort of the private and public schools.

Target Dates

An exploratory project for the 1972-73 school year to include a manageable number of districts is recommended. There are a number of districts in various geographic areas, serving a diversity of school populations, that already have the personnel and facilities necessary to institute the kind of expanded primary program described in this report. Many have nongraded classes, some with and some without modern open-space classrooms. Many have committed themselves to some kind of differentiated staffing. Large numbers of them have achieved parent and community involvement. From the number of districts with so much potential for beginning this program, a representative group could be selected with which to begin a trial run. The progress of such initial efforts would need to be carefully monitored and researched at the state level in order to provide data for later implementation on a broader scale.

A Review of Related Literature

The abundance of research accumulated over the past five years leads to the indisputable conclusion that "A big social decision is in the making: to start organized education earlier . . . It is going to come. Once the facts are known there will be no stopping it."[1] These are the recent words of a nationally recognized authority, Fred T. Wilhelms, Senior Associate, Association for Supervision and Curriculum Development. He further states:

> Maybe it won't be necessary for all children. Maybe it need not be completely within the regular school organization. But, one way or another, we are going to have early childhood education on a massive scale. And we are going to have it soon, for we are beginning to recognize what can be done, and we are not going to pass up the opportunity to do it.
>
> The general public still does not comprehend what might be. We ourselves have many intermediate questions. But this much can be said: we can stimulate small children so that their perceptiveness is sharpened in every mode. We can teach them to listen and to hear thoughtful discussion. We can build their vocabularies and teach them to speak (and think) in full, coherent sentences. We can begin the development of the level of precision language – and thought – that our complex society and advanced technology demand. We can bring children to the first grade ready to learn to read and to use numbers as naturally as ducks take to water. We can take Deutsch's word for it: Except for the brain-damaged and the severely disturbed, we need not have any children who cannot master the standard school tasks.
>
> Along with all this, we shall be able to intercept and prevent nascent health and nutrition problems and to build positive mental health through wholesome self-concepts and open human relations. It is a magnificent opportunity to break the chain of ignorance and incapacity – these are not "born into" babies, but they develop because we let them. We need to relay these concepts to citizens, because when they think of early childhood education, they tend to see only a little "more of the same" – and more expense – and are not yet properly excited by a vision of what is possible.

[1] Fred T. Wilhelms, "The Early Years: A New Investment Opportunity," *The School Administrator* (Newsletter of the American Association of School Administrators), October, 1971, p. 2.

"Preschool" education is not just pre-reading and pre-arithmetic. It is a fundamental process in which the learner is tooling up for a new level of productivity. Its success depends on rich stimulation and progressive challenge, with something that might be called a forcing of vivid response. It includes the awakening of precise perception, whether in the eyes or ears or fingertips. It includes endless attention to accurate, coherent, expressive language. It demands full play for creativity. And it must take place in an atmosphere of affection, with unfailing regard for each child as a person.

. . . . . .

Only a handful of educators realize the real significance of recent discoveries of what can be done with small children. The findings may well be the great breakthrough of our time. We must study them to find out how the gains are produced. Then we must adapt them to the later years to continue to produce cumulative gains.[2]

Importance of the Early Environment

Benjamin Bloom, after summarizing 1,000 research studies, concludes: "Put in terms of intelligence at age 17, from conception to age 4, the individual develops 50% of his mature intelligence, from ages 4 to 8 he develops another 30%, and from ages 8-17 the remaining 20%."[3]

Bloom also derives from the research three reasons why the early environment is of crucial importance: (1) selected characteristics that develop rapidly are shaped by variations in the early environment in their most rapid periods of formation; (2) development in the early years provides the base upon which later development depends; and (3) it is much easier to learn something new than it is to eradicate a set of learned behaviors and replace them with a new set.[4]

As Butler has pointed out, it is important to note that Bloom is quite specific in his statement that attempts by some parents and some preschool programs to teach children to read, to write, and to do simple arithmetic are misdirected education. His view of preschool education is that it is a complex process of "learning to learn" that requires a well-prepared teacher rather than a poorly prepared amateur or temporary volunteer.[5]

William T. Stabler

In the new primary school program, every child's right to be a child will be protected, and it is hoped that school may thus become for him a joyous, self-actualizing experience.

Skeels' 21-Year Study

One of the classic studies in the research literature is that of Harold Skeels, which shows the long-range effects of early intervention over a period of 21 years. The following is Butler's account of these now famous results:

> Skeels' original experimental group consisted of 13 children in an orphanage, all under three years of age and with a mean I.Q. of 64. These children were all so delayed in their development that no adoptive placement had been made for them. The

[2] *Ibid.*

[3] Bloom, *Stability and Change in Human Characteristics*, p. 88.

[4] *Ibid.*, p. 215.

[5] Butler, *Current Research in Early Childhood Education*, p. 26.

treatment consisted of placing the children in an institution for mentally retarded under the care of some of the older female inmates. The children, who had been in an overcrowded orphanage with limited resources and staff, became the pride of the patients who took over as mother-surrogates. Each mother-surrogate spent large amounts of time talking to, playing with, and training a child. The children had an outdoor playground with appropriate materials, attended nursery school and kindergarten, and were exposed to other kinds of enrichment experiences.

Skeels' contrast group was composed of 12 youngsters who were considered normal in mental development and placeable but who were still in the orphanage at four years of age. The mean I.Q. when tested prior to two years of age was 86.7.

As soon as each child in the experimental group showed normal intelligence, as measured by intelligence tests and substantiated by qualitative observations, the experimental period was considered complete. Every child showed a gain of from 7 to 58 I.Q. points. The mental growth pattern for the children in the contrast group was quite the reverse. Losses were between 9 and 45 I.Q. points. In the first follow-up study, 11 of the 13 experimental children were placed in adoptive homes. They then had a mean I.Q. of 95.9. The mean I.Q. of the contrast group was 66.1, mean gain of 5.6 points over the last test of the experimental period.

Adult follow-up 20 years after the post-experimental follow-up provided striking contrasts. Skeels found that the mean grade completed by the experimental group was 12.8 while only one subject in the contrast group had an education beyond the 8th grade. Eleven of the 13 experimental subjects had married and had a total of 28 children who had a mean I.Q. of 103.9. None of the children showed any abnormality. In the contrast group only two men and none of the girls had married. All members of the experimental group were self-supporting with incomes within the average range. The incomes of the contrast group were markedly lower. The gains made in the experimental group were maintained, but the contrast group also continued to show the adverse effects of their early environment.

Susan Gray . . . in analyzing this study pointed out that the placement of the children in the institution for the mentally retarded appeared to have two desirable aspects of early intervention programs -- a high adult-to-child ratio in a presumably consistent environment and a high stimulus potential as compared to their earlier situation. Beyond that there was continuous intervention over a long period of time.[6]

Up until about a decade ago, there had been a great deal of research, with conflicting results, directed toward the issue of the effect, of early schooling upon intellectual achievement as measured by intelligence tests. The turning point did not come until the early 1960s, when translations of Piaget's work began to make widely known the Piagetian concepts of cognitive development. Burgess has identified the following implications for early childhood education that have emerged from the theory of Piaget and his followers:

1. The importance of sensorimotor experience is underlined.
2. Language, especially that which relates to labeling, categorizing, and expressing, is intimately tied to developing greater facility in thinking.
3. New experiences are more readily assimilated when built on the familiar.
4. Repeated exposure to a thing or an idea in different contexts contributes to the clarity and flexibility of a growing concept of the thing or idea.
5. Accelerated learning of abstract concepts without sufficient related direct experience may result in symbols without meaning.[7]

Early Intervention for Health

Interaction between social conditions and health problems is the rule, not the exception. Fifty percent of children from low-income groups have health problems unknown to their parents, as Katrina deHirsch has pointed out. She further emphasizes the following:

> For purposes of intervention, health problems must be identified very early in the child's life. Hypothyroidism, for instance -- reversible only if detected quite early -- may stunt intellectual growth. One to three percent of preschool children need glasses. Even slight deficits in auditory sensitivity at the age of maximal linguistic growth, that is to say, between 16 and 36 months, will drastically interfere with children's comprehension and use of language. Amplification at very early

[6] *Ibid.*, pp. 26-28.

[7] Burgess, *Values in Early Childhood Education*, p. 35.

ages -- medication or surgical intervention in the case of conductive hearing losses – may determine whether a child does or does not function in the early academic grades. Undetected high-frequency losses -- and they are not easy to identify -- may cause the preschool child to be wrongly labeled as withdrawn and are bound to interfere with subsequent reading comprehension. This is not the place to discuss ways in which such badly needed services should be delivered. The point to be emphasized is that for effective intervention we need the earliest possible identification of problems. We need examinations directed to often subtle aspects of the child's functioning which affect his potential as a learner: and we need close coordination between health and educational personnel.[8]

Many communities, recognizing the need for infant health supervision, have set up "well-baby" clinics that offer periodic examinations, immunizations, and certain disease-screening procedures. However, it has been pointed out that a "health gap" often exists for toddlers and preschool children during which no supervision is obtained. It is important that the community recognize and fulfill its responsibility to provide facilities for such care.[9]

In certain special areas, preschool physical examinations are of crucial significance. One of these is a dental examination. The preschool child often receives the poorest dental supervision of any age group. Experts believe preventive efforts should be aimed at arranging early dental evaluation with appropriate follow-up care and the encouragement of reasonable dental hygiene practices in the child.[10]

Another critical area is the field of protein nutrition. As a result of an eight-year study by the International Conference on Prevention of Malnutrition in the Preschool Child, as well as of other experiments, Aaron Altschul of the Research Service of the U.S. Department of Agriculture stated in 1966: "This [protein deficiency] is especially serious for preschool children. Their brains reach 90 percent of full weight before age four. If they don't get enough protein in the critical period, the brain just never does develop properly."[11]

In connection with malnutrition, it is important that educators not assume that hunger is a problem only of the underdeveloped countries of the world. It also exists in America. Recent studies have shown that although the most severe cases of nutritional deprivation are extremely rare in this country, there are obviously many cases of malnutrition-related diseases. And furthermore, "Current data indicate that the younger the individual, the greater the likelihood that malnutrition will cause permanent physical and mental damage."[12]

Effective Programs in Early Childhood Education

The late Senator Robert F. Kennedy was one of the first to pose the question of what works in early childhood education: "If we gave all the schools all the money they could use, would they know how to use it? Do we at the federal level know how to use it?"[13] To answer questions such as these, the U.S. Office of Education appointed the American Institutions for Research in the Behavioral Sciences of Palo Alto (AIR) to "identify, select, analyze, and describe educational programs for culturally disadvantaged children from preschool through grade 12 which had yielded measured benefits of cognitive achievement."[14] Eleven preschool projects

[8]Katrina de Hirsch, "Preschool Intervention," in *Reading Forum*. Compiled and edited by Eloise O. Calkins. Bethesda, Md.: The National Institute of Neurological Diseases and Stroke, National Institutes of Health, U.S. Department of Health, Education and Welfare, 1971, p. 75.

[9]Florence S. Cochrane and Theodore Di Buono, M.D., *Health Care of Children: A Challenge*. Syracuse, N.Y.: Syracuse University, School of Social Work, 1970.

[10]*Ibid.*, p. 33.

[11]Willard Johnson, "Protein and Poverty, or School Lunches Are Too Late," *Child Welfare*, XLVI (June, 1967), 339-41.

[12]Joe L. Frost and Billy L. Payne, "Hunger in America: Scope and Consequences," in *The Disadvantaged Child*, p. 79.

[13]*Preschool Breakthrough*. Prepared by the editors of *Education, U.S.A.* Washington, D.C.: National School Public Relations Association, 1970, p. 16.

[14]*Ibid.*

that met the following criteria were selected from among 1,000 projects during 1963-1968:

1. Improvement in achievement scores must be measured through standardized tests.
2. Gain must exceed the gain made by a control group over the same time period or must exceed national norms.
3. Pupil gains must be made in language or numerical skills.[15]

The following brief descriptions of the successful programs are based on information supplied in *Preschool Breakthrough*.[16]

Infant Education Project, Washington, D.C.

The only infant project to be selected by AIR, the Infant Education Project involved 58 black male babies from Washington's poverty area and was designed to discover how they would respond to intellectual stimulation. There were 28 babies in the experimental group and 30 in the control group. The IQs of the groups, measured primarily in terms of sensorimotor skills, averaged 105 and 108, respectively.

Eight women tutors, specially trained, visited each child in the experimental group one hour daily until the child reached age three. By that time, the mean IQ of the experimental children had remained about the same, but the control group, with no tutoring, showed a decline of 17 points. The tutored babies also did significantly better on picture, vocabulary, and perceptual tests. The daily intellectual exercise received by the stimulated group developed the verbal and intellectual skills that count most on an IQ test at age three.

Academic Preschool, Champaign, Illinois

The directors of the Academic Preschool, Carl Bereiter and Siegfried Engelmann, believe in intensive teaching of the subjects children will need to know to get along in school - language, arithmetic, and reading, carefully organized and presented in logical sequence. Emphasis is on rapidity of learning. In the program reported on by AIR, 15 children of

[15] *Ibid.*

[16] *Ibid.*, pp. 17-31.

Parents must be included in the planning, implementation, and evaluation of the educational experience of their children.

San Diego City Unified School District

Dorothy Green

Small children deserve to have playgrounds composed of lawns, sand, and, yes, even ordinary dirt rather than the sterile asphalt that now surrounds them.

unskilled and semiskilled laborers were compared with a control group of 28 children in similar situations. The experimental group participated in the Bereiter-Engelmann program for two years, while the control group had one year of traditional preschool education and one year of kindergarten. In both cases the teacher-pupil ratio was one to five.

The experimental group gained 17.14 IQ points after the first year and an additional 8.61 IQ points after the second. In comparison, the control group gained only 8.07 IQ points the first year and actually lost 2.96 of those points after the second year. When they entered the first grade, the children in the experimental group had a mean reading level of 2.60, a mean arithmetic level of 1.87, and a mean spelling level of 1.87. The investigators add that they also had something else: "A notable confidence in their abilities to meet a challenge."

It should be noted here that other research has indicated that when children are given instruction that is too specific, it may interfere with their ability to think creatively for themselves.[17] Further, Esther P. Edwards has recently expressed the view that "learning which takes place when the teacher 'doles out candy or brandishes a switch,' (hypothetical or not), is learning without intrinsic satisfaction. Performance can be evoked temporarily through pressure but it will not last."[18]

Ameliorative Preschool Program, Champaign, Illinois

The rationale of the Ameliorative Preschool Program was that if disadvantaged youngsters spent one year in a structured preschool setting in which they had a great deal of practice in talking, manipulating, and using language games and then received one hour per day of supplementary teaching in the kindergarten, they would be prepared for the first grade.

A group of 30 four-year-olds took part in the first experiment in 1965, their achievement being compared with a control group attending a traditional nursery school. With a teacher-pupil ratio of one to five, the children engaged in three formal learning periods daily.

[17] Constance Kamii and Louise Derman, "The Englemann Approach to Teaching Logical Thinking: Findings from the Administration of Some Piagetian Tasks." An unpublished paper written for the Ypsilanti Public Schools, Ypsilanti, Mich., February, 1969, p. 25.

[18] Esther P. Edwards, "Kindergarten Is Too Late," in *As the Twig Is Bent: Readings in Early Childhood Education.* Edited by Robert H. Anderson and Harold G. Shane. Boston: Houghton Mifflin Co., 1971, pp. 272-85.

These were devoted to mathematical concepts and language arts, including reading readiness and social studies/science. There was also music, directed playtime, and juice time.

When the experimental children completed first grade, they scored significantly better on achievement tests of reading, language, and arithmetic than did their peers in the traditional program.

The researchers in this program are definite in their opinion that the special experimental programs showed that a disadvantaged child needs intensive interaction with the teacher to gain maximum language skills. The kindergarten teacher with a large class simply doesn't have time for such ceaseless face-to-face dialogue. One year of a kindergarten-type situation is not enough.

Early Education Project, New York City

Martin Deutsch has been working in the field of early childhood education since 1958, and his studies have been carried on through the Institute for Developmental Studies at New York University. The curriculum emphasis is on the cognitive areas of language, perception, concept formation, and self-image. Learners proceed by small steps through a carefully ordered sequence, with success and immediate feedback of results. The curriculum is organized into five programs: prekindergarten and kindergarten, reading, mathematics, science, and creative dramatics. Parents are heavily utilized as are community aides and community resources.

The program is not static, according to the director, and constantly undergoes revision and refinement. Children in the preschool enrichment group make IQ gains they are able to maintain. AIR concludes that the long-range study is a "detailed and complex experimental program which is appreciated by its participants, both parents and children."[19]

Preschool Program, Fresno[20]

Aiming primarily at three- to five-year-old children who speak English as a second lan-

[19]Quoted from the report of the AIR study in *Preschool Breakthrough*, p. 23.

[20]A California state preschool program, funded jointly with ESEA, Title I.

Creativity should be provided for, enhanced, and fostered, for each child is creative in his own way.

Gail Ellison Milder

guage. Fresno's program emphasizes verbal communication and vocabulary development. The adult-child ratio is one to five. Some children remain for two years and some for one, depending on when they are ready for kindergarten. Parents do not function as just "helpers"; they are really incorporated into an instructional role.

AIR studied the results of one year's instruction in three ethnic groups Caucasian, Mexican American, and Negro and found that all three had made significant gains. Of the 47 classes tested, children in 38 of them made significant gains in IQ.

Diagnostically Based Curriculum, Bloomington, Indiana

Three studies done between 1964 and 1967 compared children placed in experimental preschool (EPS), kindergarten contrast (KC), or at home contrast (AHC) groups. The EPS children received the diagnostic treatment, the KC children attended a traditional kindergarten, and the AHC children received no treatment at all.

Unlike the other programs reported, the experimental program used no parent help. It emphasized both tangible and verbal rewards, concrete examples, and training in such behaviors as listening, planning, concentration, delay of gratification, group attention behavior, and working for the satisfaction of working.

The EPS group scored significantly higher in language development, IQ, and motor development than did their fellow pupils in the kindergarten, and both groups exceeded those remaining at home.

Project Early Push, Buffalo, New York

Project Early Push, operating since 1966, is reported by AIR to be one of the more successful of the big-city programs. In the year it was studied, it involved 650 preschool chil-

Each stage of development carries with it possibilities for the acquisition of new abilities and new ways of processing information.

Gail Ellison Milder

dren organized into classes of 15 children each. While the program was relatively unstructured, it featured a great deal of educational equipment and material and involved parents extensively. Parent participation was 85 percent the first year and 95 percent the second year. On the average, the children in the program gained ten IQ points.

Language Stimulation Program, Auburn, Alabama

In the Language Stimulation Program, 32 first grade children, aged six to eight, were compared with a group matched for age, IQ, and language development. The mean IQ was 75, with a range of 62 to 91. The language development of the children was almost two years below their age level.

The experimental group received special training for one hour a day, four days a week, outside their regular classrooms. The curriculum consisted of 280 language stimulation lessons developed by Peabody College for Teachers, with supplementary language activities. The question was whether such activities could raise the children's IQ, language age scores, and reading ability.

After ten weeks of the program, the experimental group had gained significantly in IQ and language age over the control group, and this superiority was maintained to the fourth grade. The experimental group also scored significantly higher than the control group in reading ability although both groups remained below grade level in this skill.

Preschool Program, Oakland[21]

Designed to augment the children's conceptual and cognitive development, the Oakland Preschool Program leans heavily on teacher aides, unpaid parent volunteers, and school-community workers. The program, begun in 1966, features an adult-pupil ratio of three or four to fifteen. There is coordination with the nurse, psychologist, and community workers who also serve the target group.

AIR reports that the gains made by children in the Oakland program place them nine IQ points above children from the same neighborhoods without this experience.

Perry Preschool Project, Ypsilanti, Michigan

The Perry Preschool Project featured "verbal bombardment" with both formal and informal instructional activities and a once-a-week home visit by teachers to involve each child's mother in his education, to demonstrate techniques, and to tutor the child on a one-to-one basis.

The 24 preschool children in the experiment, with IQs up to 85, were compared with children in a traditional school, once at the completion of the first grade and again at the

It is the business of society to assure every child's rights to life, liberty, and the pursuit of happiness.

Dorothy Green

[21] A California state preschool program.

end of the second grade. The experimental group showed significantly higher scores in reading, language, and mathematics achievement.

Learning to Learn Program, Jacksonville, Florida

The Learning to Learn Program emphasized giving children the skills to cope with problems rather than factual content or knowledge. In the year under study, 72 disadvantaged children were divided into groups of 24. One was the experimental group, one a traditional kindergarten group, and one a group of children who stayed at home, unexposed to any preschool training.

The experimental group was exposed to both large and small group learning activities, with continuous regrouping to provide for various levels, depending upon the children's needs. Each child was always assured of success because he was introduced to new games and activities at his own pace. Total involvement of parents was reported for the experimental group.

Tests in 1966 showed that the experimental group scored approximately 21 IQ points over the stay-at-home group, the IQs of the children in this group having actually decreased during the year. The scores of the children in the traditional kindergarten group remained constant. Tests in 1969 revealed that the children in the experimental group were still doing better in school than their counterparts.

Contributions from Other Countries

In addition to the work in preschool education that has been done in the United States, significant efforts have been made in other countries, and these efforts have also affected the direction of early childhood education. Two of the most widely known and discussed are the work of Montessori in Italy and the development of the British infant schools.

Montessori Education

The unparalleled interest in early childhood learning has sparked a resurgence of inquiry into the effectiveness of Montessori education. When the Montessori method was first introduced in Italy in 1912, it was used with retarded children. It is interesting to note, however, that most of the recent Montessori work in this country has been done with privileged children.

Little definitive research on the outcomes of Montessori education exists. What data there are appear to indicate that in some cases Montessori-trained preschool children achieve in the areas of cognitive task learning, autonomous learning, and perceptual discrimination skills. Additional research is needed.

The British Infant Schools

A great deal continues to be written on the subject of the British infant schools, but definitive research remains to be done. Much conflicting information abounds, and yet there is an excitement about the descriptive literature that captures the imagination of American educators.

Joseph Featherstone has recently pointed out the following:

> In a world increasingly organized into large bureaucracies, an entire nation's school system is attempting with some success to give teachers and principals a mixture of support and autonomy. Within a generation, a decent and humane atmosphere has begun to prevail in a powerful cohort of primary schools. These schools set the pace, so that a majority of primary schools are touched by the mood, even if they don't completely share it. These developments run counter to how schools are organized in most countries. In most, a school is an outpost of a public administration system; it

William T. Stabler

The first eight years of life are the most important in determining the future effectiveness of all our citizens.

d. *Center for Research and Development in the Early Education of Handicapped Children, University of Oregon, Eugene.* The work at the center is organized around two major activities: a critical behavioral task approach to the definition, diagnosis, and teaching of exceptional children, and effecting desired behavior change in preschool and primary children.

e. *Demonstration and Research Center in Early Education, George Peabody College for Teachers, Nashville.* In addition to the curriculum materials and classroom procedures developed for four- and five-year-old children at the Peabody Center, materials are now designed for teacher training and for the training of home visitors, usually mothers, who can supplement or substitute for the classroom program by working on educational experiences with the parent and the child in the home.

2. *Regional Educational Laboratories with Projects in Early Childhood Education*

a. *Appalachia Educational Laboratory, Charleston, West Virginia.* This program for three-, four-, and five-year-olds provides a home oriented preschool education program utilizing television, home visitations, and mobile classroom instruction.

b. *Center for Urban Education, New York City.* This center aims at creating interaction among universities, public schools, and local communities which can improve the quality and relevance of urban education through instructional materials, curriculum units, and teaching strategies. One very significant outcome has been the involvement of Puerto Rican and Black parents in the ghetto schools.

c. *Northwest Regional Educational Laboratory, Portland, Oregon.* Special materials have been developed for kindergarten children. Especially interesting are the materials which have been created to develop the motor-perceptual skills of kindergarten children in a prereading program. Units are grouped into four areas: general coordination, balance, body image, and eye-hand coordination.

d. *Far West Laboratory for Educational Research and Development, Berkeley.* This laboratory is involved in six programs for early childhood education. The Responsive Model Head Start Teacher Training Program aimed at Head Start Delegate agencies will produce a learning package for teachers of young children both for program content and for teacher training techniques. The Responsive Model Follow Through Program for low income students is aimed at Follow Through teachers. The Parent/Child Toy Library for parents of children ages 3 to 9 is designed to establish toy libraries and train parents for participation in educating their children. The Responsive Model Learning Booth is to help children in kindergarten and first grade of participating Follow Through districts to learn to solve problems and find their own answers. A Guide for Learning Booth Attendants has been developed to enable booth attendants to use the Learning Booth as an integral part of the learning experience. The minicourse Thought and Language Skills for Teaching Primary Children with Minimal Language Experience has been developed as in- and preservice teaching packages to increase teacher skills that

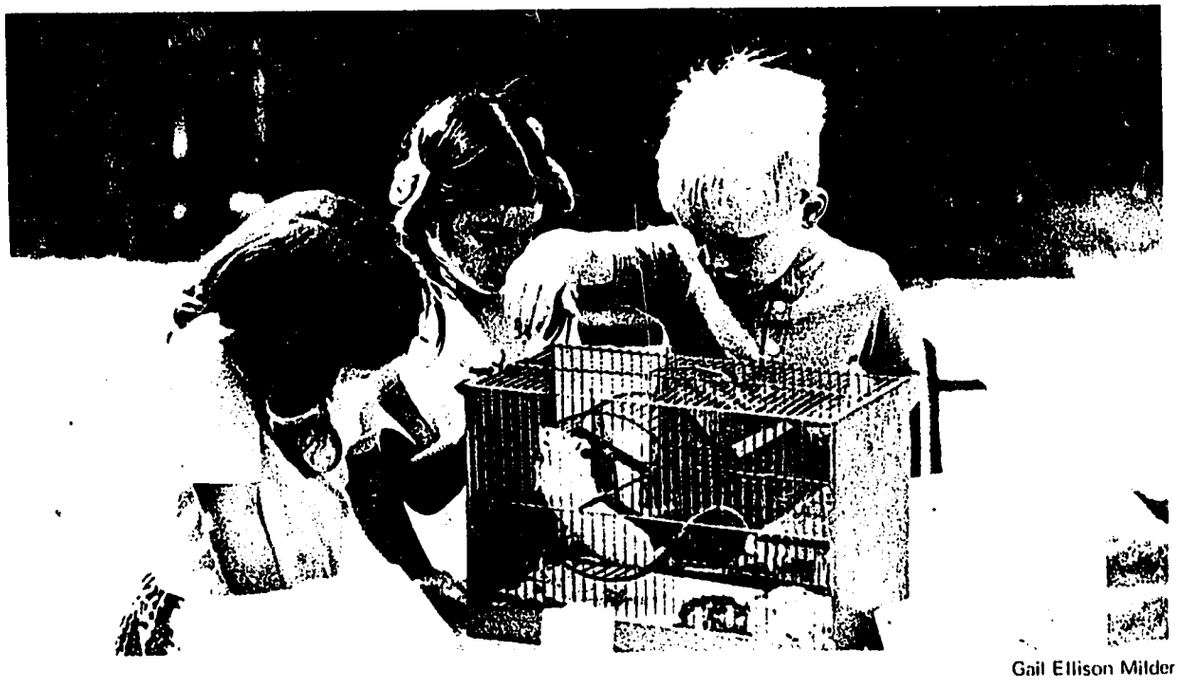
encourage the acquisition of language. The minicourse Organizing the Kindergarten for Independent Learning and Small Group Instruction was developed in preservice packages for kindergarten teachers to enable them to instruct uninterrupted a group of five children for 10 minutes while the remaining children work independently.

e. *Southwest Educational Development Laboratory, Austin, Texas.* One segment of the Early Childhood Education Learning System provides both curriculum and teacher training materials for a complete sequential program for disadvantaged children ages 3 through 5. The program includes materials in Spanish as well as English, and these materials are used bilingually with Spanish speaking populations. The program includes five training areas: thinking and reasoning, auditory training, language skills, visual skills, and motor skills.

While traditional programs generally emphasize the physical, social, and emotional development of the child, the laboratory program additionally provides for intellectual development with a planned curriculum adapted to the age and ability of the children. The Early Childhood Education Learning System includes curriculum materials, teaching strategies, and materials for parents to use in teaching their children at home in areas that correspond to what they are being taught in school.

f. *Southwestern Cooperative Educational Laboratory, Albuquerque.* SCEL seeks to improve the primary education of Indian, Negro, and Spanish-American children through: (a) a preschool program to develop English oral language skills, (b) a primary grade program to improve English oral language, and (c) a program to facilitate the transition from oral language to reading.

g. *Southwest Regional Laboratory, Inglewood.* SRL seeks to change the nature of instruction to performance referenced, computer managed, and learner controlled bases and to develop a technology of instruction through: (a) comprehensive computer managed kindergarten and primary curriculums which include communications and problem solving skills and the humanities and (b) administrative planning systems utilizing computer technology and simulation to assist school administrators in decisions on staff, curricula, facilities, and instructional procedures.



Gail Ellison Milder

The learning environment should provide the child space for discovering or adventuring with his peers.

3. *Research and Development Center*

Learning Research and Development Center, Pittsburgh, Pennsylvania. This research and development center has developed four programs focusing on the education of young children. The Early Learning Program was designed to develop instructional materials and environments suitable for the education of children from 3 through 8. The Follow Through project is designed to train school staffs in the competencies and skills needed to operate an individualized instructional model. The Perceptual Skills Program for preschool and elementary grade children includes a curriculum on individualized perceptual skills. The Children's Learning Research project for personnel engaged in curriculum design and implementation will conduct detailed experimental analyses of problems originating directly from LRDC's curriculum design and implementation efforts.[1]

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[1] Lynne Glassman, "Directory of Resources on Early Childhood Education," in *The Exceptional Child's Early Years* (Special issue of *Exceptional Children*, XXXVII, May, 1971). Edited by June B. Jordan, 706-708. Reprinted with the permission of The Council for Exceptional Children and the author.

The White House Conference on Children, 1970

The following are excerpts from the recent national conference on children. Space forbids more than a representative sampling of the recommendations relating to improving education in general and early childhood education in particular:

We must actively aim toward a future in which the promise of American public education is truly fulfilled when quality education, broadly conceived, is accessible to every American of every age and in every walk of life. We believe that the following three recommendations summarize what must be done if we are to move toward our Utopia:

We recommend that national priorities be reordered, with spending of money, materials, and energy for war and defense subordinated to wars against racism, poverty, and pollution, and action on behalf of education.

We recommend that a Department of Education, with full cabinet status, be established and backed by a National Institute of Education in addition to the present United States Office of Education. The Department of Education shall contribute significantly to the reordering of national priorities, establish national educational policies, and promote constructive change in educational practice, all directed toward the full development of individual potential and the welfare of our society.

The immediate charge to this Department is:

Provision of resources for salvaging the growing number of school districts now on the verge of financial collapse

Comprehensive implementation of what we now know to be quality education

Increased educational experimentation through a wide variety of educational institutions, with public accountability

We make our recommendations in light of our conviction that school is a concept, not a place, and that schooling and education are not synonymous.

We recommend that a continuing dialogue on the findings and conclusions of this Conference be commenced now, to be held in towns and cities throughout the land, and culminating in the celebration of our 200th birthday as a nation with learning as the theme.

The first step toward implementing these three recommendations is moral commitment. Like all moral commitments, it must be backed by re-

sources and action. There is much talk about the need to reorder national priorities. We add our voices to the millions seeking life-giving rather than death-dealing, conservation rather than the wanton pillaging of our resources, and the freeing and nurturing of the human spirit rather than the proliferation and worship of material objects. We sound a special call for full and genuine commitment to the right to learn.[1]

We urge that support be given to schools endeavoring to abolish grade levels, develop new evaluation procedures, use the full range of community resources for learning, automate certain kinds of learning, explore instructional techniques for developing self-awareness and creative thinking, reschedule the school year, and more. Most of all, we urge that substantial financial support be given to schools seeking to redesign the entire learning environment, from the curriculum through the structure of the school to completely new instructional procedures.

Especially needed are well-developed models of early learning. We know now that the first five years of life largely determine the characteristics of the young adult. And yet, we fail these years shamefully either through neglect; or through narrow, thoughtless shaping; or through erratic shifts from too little to too much concern. Although health is the special province of several other Forums of this Conference, we believe that it is impossible to provide the kind of learning environment we envisage in the absence of coherent, well-planned, and integrated health services to children from birth on. We believe also that early childhood centers are appropriate places for mothers-to-be to receive prenatal medical care and education and we urge their widespread establishment. There is ample evidence that commercial interests exploit the undiscriminating drive of many Americans to see to it that their children are well prepared for school. There also is abundant evidence that millions of parents fail to provide their children with the guidance, support, and social and intellectual skills they need for productive independence.

Two successive governments have promised and failed to deliver on a vast effort for expansion and improvement in the education of young children. A National Laboratory in Early Childhood Education suffered a crippled birth under one adminis-

Dorothy Green

The educational system should establish the child's needs as a first priority by creating an educational environment in which children are free to inquire and discover.

[1] *Report to the President: The White House Conference on Children.* Washington, D.C.: U.S. Government Printing Office, 1970, p. 80.

tration and is now starving to death under another. We need research on the developmental processes of the young: educational programs based on what we now know; thousands of adequately prepared teachers to staff nursery and play schools; and exemplary models of programs stressing cognitive, aesthetic, motor, and affective development.[2]

The creative child whom we wish to nurture is curious, wonders, and questions; seeks new experiences; is open to the world; independent and free from social and group pressures to conform at the cost of individuality; willing to risk error, play with ideas, and experiment; willing to change and live with change. Such a child is in the heart of every child but presently our schools and communities are not providing the atmosphere and resources for the development of such creative persons.

In response, we must foster in each community the development of total educational programs available to every child through a more diverse and flexible educational system, more creative approaches to learning, a stress on early childhood education, the expansion of cultural and creative learning centers, and the integration of esthetic education in every school, institution and agency which serves children. To meet that goal will demand a new way of thinking for all of us who claim concern for tomorrow's children.[3]

Our children cannot thrive as creative persons in a climate of dehumanization; it denudes the seeds of creativity before they have taken root, and it stabs the heart of learning before its beats are firm. Our nation can and must address itself to the societal ills that confront it, or it will build passive cripples who cling to yesterday rather than active children of tomorrow. The utilization of the learning process to foster creativity among children is but one facet of our goal to improve the quality of life of all people. Obviously then, the evaluation and rebuilding of the environments in which children learn, live, and grow are essential.

The school with limiting walls creates a vacuum around the urges of the child; the school without walls creates a ladder out of those same urges and enables him to climb. We must free outselves from our antiquated and erroneous beliefs that school is the only environment in which creativity is enhanced and learning takes place, or that the

Dorothy Green

Through sensitive and perceptive guidance, direction, and challenge by a mature leader or educator, the child's learning opportunity will have no limits.

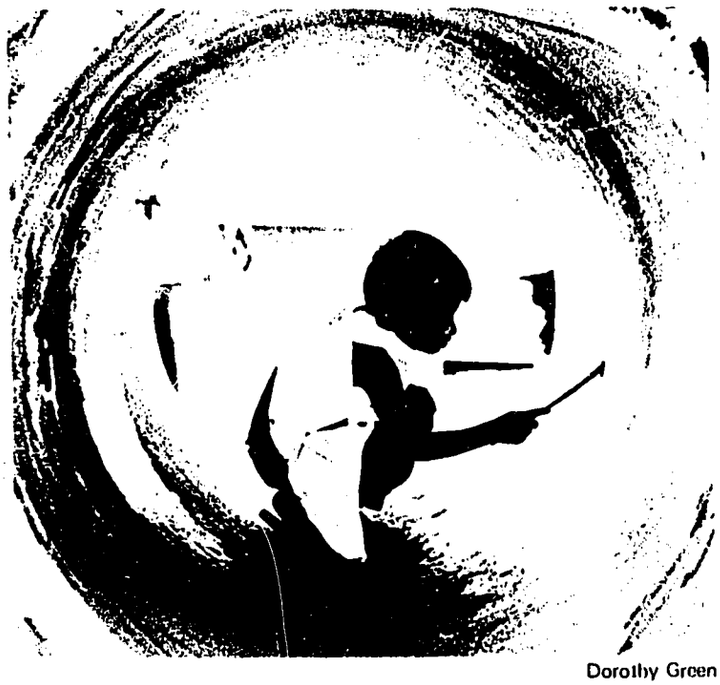
[2] *Ibid.*, pp. 81-82.

[3] *Ibid.*, p. 97.

teacher is the sole agent of such achievements. The whole community is that environment and all its resources which must provide those experiences children are denied by being confined within classroom walls and regimented spaces, or within the home.

At the same time, we must fully recognize what the school can become. One of the neglected possibilities of our schools is to provide the basis for the vicarious experiences which are necessary to broaden a child's horizon and introduce him to a larger world. In days gone by, children came to school information-poor but experientially rich, and the school's task was clear – provide broader information. Today a child comes to school information-rich but experientially poor. Although he brings with him a wealth of information, he lacks the skills to handle what he knows. Thus, the school must now provide the child with those experiences that can develop those skills . . . a reversal of the former role of the school in American society. Teachers and children must now be equipped with those skills that foster creativity and learning, skills that will build children of *knowing*, rather than children of knowledge.[4]

[4] *Ibid.*, p. 98.



Dorothy Green

Children are individuals who have a right to enjoy learning and to be themselves.

We believe that:

Learning begins in earliest childhood, and further that the child's intellectual and emotional development cannot be separated from his physical development.

The child's caretaker, whether the parents or other adults, has a potentially crucial role in the facilitation of this development.

We therefore propose support at all levels of education of parents and prospective parents in the principles of early childhood education. We further propose that such a program include full medical care, beginning with pregnancy.

We endorse the concept of a full program of preschool education to supplement that obtained through the family.

We recommend that a greater emphasis be given to effective preschool programs and facilities for those who wish to utilize them. Such programs should be articulated with the elementary school programs.

We recommend immediate action for the development and funding of programs for early childhood-parent learning experiences involving full utilization of community human and physical resources.

To develop respect for the dignity of *all* work and to provide occupational awareness, we urge the Federal government support the development of meaningful programs of occupational orientation for preschool and elementary children.

In view of our rapidly and continually changing society, we recommend that greater priority be given at all levels to preservice and inservice teacher education.

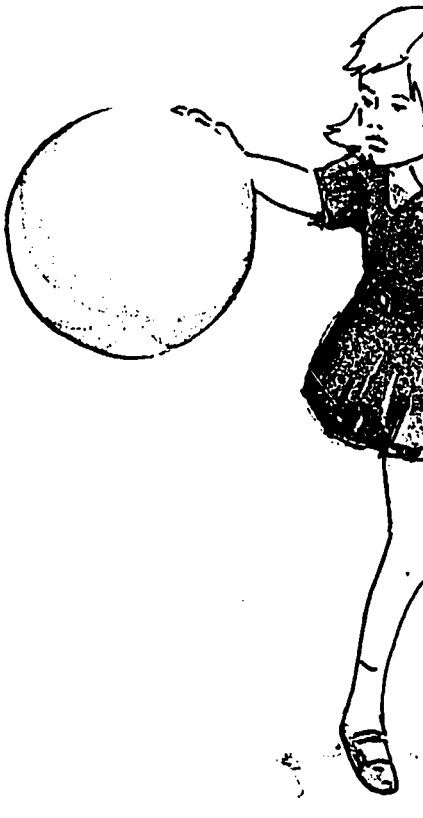
To improve schools it is necessary that programs preparing people for alternative educational approaches be developed. These training programs should include all contributors to the educational experience, and their training should be consistent with the approaches they will be expected to use.

We therefore urge the Conference to recommend immediate changes in teacher education and proceed to develop the facilities for reeducating the teacher in the approaches which are in harmony with the democratic processes in our society. The teacher's role should be reconceived as one of facilitator, guide, and partner in the learning process rather than the sole dispenser of knowledge.[5]

[5] *Ibid.*, pp. 136-37.

Summary

Recommendations & Alternatives for the Education Commission of the States



appointed by the governor, to administer all state programs for children younger than six. A special advisory board of heads of public and private agencies concerned with early childhood should be created.

3. The establishment of a state child care coordinating council in the governor's office. Members would represent parents, public agencies and private groups with an interest in children's services. The council would be responsible for statewide planning, coordination and evaluation.

Alternative State Program Approaches

The recommendations and alternatives suggested for state action are based upon four assumptions: (1) the state has a responsibility to the total population; (2) the states must develop some equitable basis for the allocation of funds; (3) a state program should take into consideration the possible participation by other agencies in the funding of programs; (4) a state will probably have to phase in the program over a number of years.

The alternatives include:

1. States should consider a comprehensive approach including children younger than three and their parents because, after the initial expense, such a program could be operated at low cost; the ability to make early diagnosis would strengthen all other programs; and some day care services will be required for the age group in any case. Such a program would be developed through demonstration/parent education centers with diagnostic services and day care programs.

2. States should consider programs for three-, four-, and five-year-old children which provide training for them and their parents in their homes.

a. Several programs could be developed which provide limited training for parents to work with their own children, such as a parent/child-toy lending library.

b. Parent-oriented television programming building on Sesame Street or a similar series, could be used to assist parents to work with their children and maximize existing children's television programs.

c. Either of the two above approaches could be rendered more effective at relatively little additional cost by adding a home visit by a qualified professional teacher or aide who would work with both parents and children in the home situation.

Gail Ellison Milder

A desirable primary school program would strengthen the child's belief in the importance of his own world.

Methods of Providing State Financial Support

The states must develop sound principles of financing for their early childhood programs, including provisions so that (1) early childhood education is treated as an integral part of the state's overall education program, (2) it will benefit from a steady flow of state funds, and that (3) funds can be provided on an equalization basis to insure that particularly needy districts benefit.

Cost estimates are included for the alternative program approaches outlined.

Within this framework states should consider some or all of the following techniques:

1. Inclusion of early childhood programs in the state foundation formula, if the foundation program has proven to be an effective method of distributing state aid.
2. Establishment of a special early childhood education fund within the state's education budget, if there is not an effective foundation program and no immediate plans for establishing one.
3. Establishment of a special state fund to include all expenditure for early childhood programs (including education, health, nutrition, day care, etc.).
4. Provision for construction funds for early childhood facilities.
5. Provision to ensure maximum use of federal matching funds and adoption of the principle by the state agency administering early childhood programs that priority will be given to plans using matching funds or joint federal or other public or private funding.
6. Development of a program of incentive grants to state colleges, universities, junior and community colleges for offering graduate, undergraduate and associate degree specializations in early childhood education.
7. Adoption of the principle that salaries for early childhood teachers should be equal to those of elementary school teachers and provision made so that whatever state support is provided for elementary teachers' salaries is also provided to early childhood teachers.
8. Provision of parent education as an integral part of the state early childhood and/or adult education programs.

Implementation

Included among the steps a state should devise to insure consideration and assist in implementation of the alternatives outlined in this report are (1) public examination of the issue at a prominent level of government; (2) collection of essential data; and (3) identification of an interagency committee to oversee the implementation process. A governor's conference on early childhood education might be the first step.

The key decision will be the structure to be adopted for administration of early childhood programs. Alternative program and funding approaches will be largely determined by this decision. The Education Commission of the States stands ready to assist the states in development of model legislation, identifying consultants to assist with legislative and administrative matters and program development and to conduct continued research on best practices across the country.[1]

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[1] *Early Childhood Development: Alternatives for Program Implementation in the States.* A report of the Education Commission of the States, Denver: Education Commission of the States, 1971, pp. 5-11

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