ABSTRACT

The initial plans for the National Institute of Education (NIE) program in early childhood education are described. The first part of the document contains a discussion of the relationship between planned NIE programs and existing early childhood federal programs. In both planned and existing programs, disadvantaged children are the primary concern. Differences include the greater focus on comprehensive programs planned for NIE as opposed to existing programs. All major areas of child development will be studied across subject populations. Also, NIE programs will focus on education in a neighborhood home rather than in institutions. In the second part of the document, there is a description of rationales and tentative activities for each area of emphasis in the NIE program. Four areas of research and activity development are: (1) development of learning outcomes and assessment instruments, based on the need to identify skills needed for school success, and the need for more precise measurement in program evaluation; (2) establishment and study of home learning centers with neighborhood adults involved as teachers and directors; (3) coordination of school and home center programs to facilitate maintenance of preschool gains during elementary school; and (4) development and study of neighborhood child care information centers to increase knowledge of effective child care and available services.
The National Institute of Education has been created for the purpose of improving practice in all areas of education through systematic planning and support of educational research and development activities. To achieve this goal, NIE will give priority to conducting fundamental research, solving critical educational problems, and building educational resources. A key aspect of the NIE program will be the development of more effective instructional programs and curricula at all levels of education.

The NIE agenda will incorporate research and development programs previously supported by the Office of Education and six new programs selected by the NIE planning staff in consultation with members of the research and development community. Of particular importance in selecting the new programs were their potential for filling gaps in current educational research and development and for contributing to improved educational practice. Each new program will involve a set of directed activities designed to meet the most critical needs in the particular program area. Currently, NIE staff members are preparing planning documents describing each planned program in the NIE agenda.

The purpose of this paper is to describe initial plans for the NIE program in early childhood education, which is one of the six new NIE programs. Presented in the paper are brief descriptions of (1) the relationship between the planned NIE program and existing federal early
childhood programs and (2) the rationale and a set of tentative activities for each area of emphasis in the NIE program. A more definitive planning document for early education will be developed on the basis of consultant recommendations and reactions to the present paper.

Relationship of the Program to Other Federal Early Childhood Programs

Several programs in the area of early childhood education are being supported at present by federal agencies. The early education projects currently being funded by NCERD in the Office of Education will be incorporated into the NIE program. Early childhood programs presently operated by OCD, OEO, NICHD, NIMH and BEH (others?) will, of course, remain independent of the NIE program. However, efforts will be made to establish working relationships with the early childhood programs in several of these agencies.

There are both similarities and differences between the planned NIE program and existing federal early childhood programs. A key difference relates to the particular emphases of the programs. In general, the projects sponsored under existing federal programs do not constitute a well-organized overall effort to improve young children's cognitive, physical and social-emotional development. Many existing projects do not deal with more than one area of the child's development, lack articulation or integration with other projects involving other age levels or areas of personal development, and are not concerned with producing replicable results with subject populations other than the very limited available sample normally involved in the project. In
Contrast, the NIE program will focus upon the development and validation across subject populations of more comprehensive educational programs which cover the major areas of the young child's personal development.

Another important difference between the NIE program and most existing programs relates to the greater emphasis in the NIE program on education in a neighborhood home, rather than in an institution. Several consultant teams working with the NIE Planning Unit recommended various early education activities with home-centered emphases. Their recommendations are supported by recent data indicating that (1) the most significant gains in the child's personal development may come from developing ways to help mothers help their own children (Reference?) and (2) working mothers of disadvantaged children utilize in-home day care in their own neighborhood much more than any other source of child care (Bev has a reference on this that is more specific than my statements).

A key similarity among programs is that both the NIE program and the other current federally supported early education programs are concerned primarily with disadvantaged children. The major purpose of early education programs generally is to enable infants, toddlers, and preschool children to acquire skills and attitudes that will help them to be successful in later life. Middle-class and upper-class children normally acquire these early skills and attitudes in the environment of their own home and in planned activities initiated by their parents. However, opportunities for the disadvantaged child to acquire many competencies necessary to later success are often limited by a number of environmental factors, as well as by a lack of parental money and time. Therefore, disadvantaged children typically have the greatest need for early education programs and realize the greatest benefits from them.
Program Areas

Research and development activities within the early education program will be concentrated in four areas: development of learning outcomes and assessment instruments, establishment and study of home learning centers, coordination of school and home-center programs, and development and study of neighborhood child-care information centers. The rationale and tentative activities for each area are presented in the remaining portion of this paper.

Learning Outcomes and Assessment Instruments. One of the most commonly cited causes for the low school achievement of disadvantaged children is their lack of basic skills when they enter school. Examples of the basic things that a child might be expected to do when he enters school include the following: demonstrate knowledge of the meaning of a particular set of important words, follow oral directions to complete a simple three-step process, cooperate with other children in planning and carrying out group activities, and put together simple jigsaw puzzles. Currently there exists no comprehensive listing of skills that are basic to success for beginning school children. It is not possible, therefore, to determine objectively whether a child entering school possesses the skills assumed to be essential to his success.

A comprehensive listing of specific cognitive, physical and social-emotional skills that children should possess at various age levels would be very useful in early education research and applied programs. Infant, toddler, and preschool programs could then be designed so that some or all of the listed skills served as the learning outcomes to be attained by children in the program. The list of skills, or selected skills from the list, could provide a set of milestones for assessing the individual development of children for both research and educational purposes.

An important complement to a comprehensive list of skills or learning outcomes would be a set of assessment instruments for measuring development
of the skills. Several researchers in child development have reported a serious need for improved assessment instruments and techniques (Chapman, 1972). Also, based on a review of federal research and development activities related to early childhood, Stearns et al. (1971) report that goals for a comprehensive child development research program must be developed to provide a basis for research planning and that assessment instruments and techniques are badly needed. A set of measures keyed to important learning outcomes would facilitate evaluation of infant, toddler, and preschool programs and of the progress of individual children.

Currently, there are no federally supported early education-related programs being conducted either for the purpose of identification of a comprehensive set of appropriate objectives for infants, toddlers, and preschool-aged children or for the development of better assessment instruments and techniques. Most of the current programs supported by federal agencies are input-oriented, with little or no attempt either to define the desired outcomes in advance or to control and systematically study input variables. Those programs which have been designed to implement a well formulated set of specific skills (e.g. Plant, 1972; Sprigle, 1972) have generally been limited to the area of cognitive development. One exception to the programs with either very general desired outcomes or a limited set of outcomes is the Harvard Project (Caldwell, 1972), which includes cognitive, affective, and physical skills among its desired outcomes.

Home Learning Centers. Psychologists and educators generally agree that one very important reason for the educational problems of many disadvantaged children is the lack of opportunity to participate in a wide variety of educational activities such as exposure to a variety of toys, games, and books;
visits to nearby sites with high educational potential; and frequent verbal interactions with a parent or other adult. Whereas the middle class child normally receives frequent exposure to these types of activities in the home, early participation by the disadvantaged child in such activities is often severely limited by lack of parental money and time. For the disadvantaged child, consequently, initial intensive exposure to many important early learning activities occurs in the more structured, formal, and impersonal environment of the school or Head Start center.

An alternative to the more structured environment of a Head Start center or school for providing needed early learning activities would be a program operated for a relatively small group of neighborhood children by one or more neighborhood adults in the adult's own home. Such a program would involve selection and training of a neighborhood adult to serve as the teacher and to operate the program in her own home. Data reported by Gordon (1972) suggest that selected mothers in disadvantaged neighborhoods can be trained to be effective teachers of disadvantaged preschool children in in-home learning centers.

A home learning center program for small groups of neighborhood children (the geographic boundaries for a particular program could be established to include either a fixed area or a relatively fixed number of children) would have a number of positive features. A wide range of important early learning activities could be provided by a familiar adult for small groups of children in a home-like environment. The home learning program could be articulated with the above-described program involving development of a list of skills and related assessment instruments for preschool children, so that critical skills in all areas of individual development could be selected and emphasized in the home center. In addition, the home learning center would enable the child to make a much more gradual transition from his own home environment.
to the school environment. If necessary, the learning center could also provide a day-care function.

Currently, there are a number of home-centered programs, including Head Start programs with a home component; activities sponsored or administered through public school districts or universities; various regional laboratory and center projects; and other Federal and state projects such as the HUD Model Cities Program and OCD Project Home-Start. Although the existence of these programs is encouraging, there are many gaps: (1) Most Federal programs are linked to custodial day-care services and there is little effort to develop new programs with an R&D-based education component; (2) university-sponsored programs are sometimes research-oriented, not representative, and therefore do not have generalizable results; and (3) since most projects deal with both parents and children, it is difficult to isolate the specific effects of the program and consequently, it is impossible to determine whether the services directed to the parents or to the children produce the most favorable results.

Many studies have dealt with programs aimed at training parents at home. This, however, assumes a non-working adult and since those unemployed often have significantly low social and/or cognitive skill levels, little probability of success for the program can be predicted. This suggests that using only selected parents as directors of in-home centers may be both less costly and more effective.

Coordination of School and Home Learning Center Programs. The available research evidence (Coffman and Dunlap, 1971; Lazar and Chapman, 1972; Plant, 1971) indicates that disadvantaged children who demonstrate gains in I.Q. or achievement from preschool programs typically do not maintain these gains or perform better in school than other disadvantaged children. Unless a program it coordinates the preschool intervention and the primary
grade program is established, preschool gains do not appear to make long-term differences in either I.Q. or achievement (Lazar and Chapman, 1972.)

Currently, most preschool and school programs exist quite independently of one another. There is little articulation between programs or exchange of information that leads to modifications in curriculum or in the instructional programs for individual children. Children who enter school bearing the "disadvantaged" label are typically treated as if they are indeed disadvantaged, irrespective of their prior educational activities and present skills. There is evidence that (1) the poor performance of disadvantaged children in school is in part due to low teacher expectations for them (Henrikson, 1971), and (2) that as a consequence of these low expectations, primary-grade teachers provide so few appropriate learning opportunities for children that the children have virtually no chance to attain normal standards of achievement, even when they have the capability to attain these standards under normal instructional conditions (Sullivan, 1972).

A research and development program on liaison procedures between the school and home learning center or preschool would have the potential for identifying the effects of several manipulable variables which could result in improvements in the child's school achievement. Included among these variables are factors related to the teacher's expectation level for disadvantaged children; attempts to articulate the objectives of the programs and to maintain continuity of learning tasks for individuals; initial part-day attendance at school by the child for reading and/or other instruction, combined with continued preschool attendance to facilitate further social development; and tutoring in the home learning center on skills for which the child's school achievement is sub-standard.

There are presently very few efforts to produce significant correlation between school and home learning center programs. Therefore, long-term gains
n achievement are infrequently realized. One program which does attempt this is the Head Start-Follow Through continuum. However, there is no explicit attempt to articulate skills or areas of emphasis, and the results are consequently ambiguous. There have also been a number of programs where tutoring by parents or other community people have produced significant increases in the skills which children learn at school, particularly reading skills (Niedermeyer, 1970; Sullivan and LeBeaune, 1971). The most successful programs explicitly provide training and materials in areas of concern.

There is a need to coordinate early intervention and primary grade programs, possibly through individual instruction, and to encourage summer programs for children. It will probably be necessary to provide intervention earlier (White, Gordon, Schaefer, Jordan) and maintain it well into the elementary grades. Current efforts are beginning to realize these problems.

Neighborhood Child-Care Information Programs. The danger of impairment to healthy human development is greatest during the period from conception through the first few years of life. Parent practices in caring for the child (diet management, exposure to appropriate learning activities and social experiences, etc.) during this period are extremely important to the child's subsequent development and to his success in later years. Because of such factors as the increased level of pollutants and other health hazards in many disadvantaged areas and the limitations in types of health-related goods and services purchasable by low-income groups, use of good child-care practices may be even more important with disadvantaged children than with their more advantaged counterparts. Yet, many parents do not know or apply child care practices that facilitate the healthy development of their children.

There is a need for both knowledge and application of good child care practices in the areas of health; social, intellectual and physical development; nutrition. Also needed by many parents are information and assistance in
obtaining child services available to them. An interagency effort to develop effective neighborhood-based programs has the potential for making a significant contribution toward fulfillment of these needs.

There are currently numerous projects designed to provide parents with adequate child-care information. Project Home-Start (OCD), several federal extension services (such as the Expanded Food and Nutrition Education of the Department of Agriculture), and a host of state extension services have already been initiated in this area. Most of the effort, however, has been in the form of community action programs and neighborhood information services. Two basic inadequacies in most of these services are that they are aimed at only one area and deal with problems identified by the researcher rather than the parents. There has been much more concern with simply making the information available than with studying the effects of such provision or insuring its application.

Lazar and Chapman (1972, pp. 7-17) have attempted to explain some of the gaps that must be filled in order to promote the effectiveness of both on-going and proposed efforts in information provision. These gaps must be comprehensively defined and analyzed and corrective action taken.
A. Learning Outcomes and Assessment Instruments

1. Research

   a. Obtain normative data on development without infant, toddler, or preschool intervention in children of the desired cognitive, social-emotional and physical skills and determine recommended minimal levels of satisfactory development at various age levels.

   b. Contrast the effects of (1) early education programs employing as their desired outcomes a list of cognitive, social-emotional and physical skills and (2) programs with no emphasis on development of specific outcomes.

   c. Identify patterns of development of skills within and between areas (cognitive, social-emotional, physical) and between various subject populations.

   d. Determine the relationship between early education outcome variables and achievement in various aspects of an individual's subsequent school career.

   e. Identify effective methods for attaining particular outcomes or related sets of outcomes.

   f. Conduct research for the purpose of costing attainment of the various outcomes and determining the length of time required for their attainment.

2. Development

   a. Develop one or more comprehensive lists of skills to
serve as (1) guidelines for assessing development of children under age 6 and (2) desired outcomes of early education programs.

b. Develop appropriate instruments and techniques for assessing young children's performance of cognitive, social-emotional and physical skills.

c. Develop exportable procedures and materials for training teachers and parents of infants, toddlers, and preschoolers in use of lists of skills and related assessment instruments to identify appropriate outcomes and instructional activities for individual children.

B. Home Learning Centers

1. Research

a. Identify the factors (e.g. hours of operation, geographic boundaries for enrollment, type of program) which promote high rates of enrollment and attendance of children.

b. Identify the characteristics of neighborhood personnel who can be trained to be effective educators of children.

c. Identify the type of home learning center program and environment most conducive to effective learning and social-emotional development.

d. Conduct longitudinal studies of the adjustment to school and achievement of children participating in home-centered programs.
c. Compare the costs and benefits of home learning centers and other types of early education programs.

2. Development

a. Develop replicable, but simplified, programs for selection and training of neighborhood personnel as home learning center teachers.

b. Develop replicable procedures for identifying resources (persons, organizations, places to visit, etc.) that can contribute to the learning center program within a city, accompanied by descriptions of related desirable instructional activities, learning outcomes, and procedures for obtaining the use or cooperation of these resources.

c. Develop exportable comprehensive programs, including instructional materials and procedures, that are effective in promoting children's attainment of important sets of skills.

d. Develop, field test and refine a balanced home learning center curriculum (including recommendations for outcome and input characteristics, time requirements, teacher characteristics and training, estimating costs, etc.) to meet the needs of infants, toddlers, and preschool children.

e. Develop and field test a comprehensive plan to cover all phases of installation and coordination of home
learning center programs throughout a single community or various types of communities.

f. Develop operational specifications for quality home learning centers.

C. Coordination of School and Home Learning Center Programs

1. Research

a. Investigate (1) methods for raising teacher expectations for achievement of disadvantaged children and (2) effects of induced raises in teacher expectations upon subsequent input and outcome variables.

b. Study the effects of attempting to establish higher teacher expectations for performance on selected important outcomes by increasing the amount of time that disadvantaged children spend on the outcome. This procedure would contrast with the common practice by primary-grade teachers of establishing low expectations for disadvantaged children and allocating equal or, more often, much less time to the desired outcomes.

c. Study the effects of (1) determining the time of entry of children from the home learning center into the school program on the basis of their social development and skill acquisition, and (2) phasing the child into the school program by gradually increasing the length of instruction and variety of school subjects.
d. (1) Obtain normative data on the achievement levels of primary-grade disadvantaged children on desired learning outcomes when the children have been involved in instructional programs judged to be effective, and (2) determine recommended minimum levels of achievement at various times with each grade.

e. Study the effectiveness of various procedures, including use of paid adults or teenagers, for providing tutorial assistance in the home learning center for children not succeeding in specific skill areas at school.

2. Development

a. Develop a recommended list of objectives or skills to be attained by children in the primary grades. This list would be articulated with the preschool list for continuity of skill development and to avoid unnecessary overlap between programs and omission of important skills.

b. Develop criterion-referenced tests for regular use in the school program to assess children's attainment of objectives and to identify children needing remediation.

c. Field test and revise the materials and procedures for articulation of various aspects of the school and home learning center programs, followed by development of a detailed plan for wide-scale implementation of the program coordination techniques that are effective in promoting children's adjustment in school and achievement.
D. Neighborhood Child-Care Information Programs

1. Research

a. Identify the health habits and the incidence of various health problems among groups of high-risk individuals in order to determine areas of greatest information need.

b. Investigate the use of various publicity procedures and incentives for acquiring and use of child-care information by parents.

c. Provide both breakfast and lunch for preschool children and investigate the effects on various aspects of their development.

d. Determine (1) the most effective combination of means (mass media, neighborhood campaigns, home calls, etc.) for improving child care information and practices and (2) the type of location that results in most frequent use of the information center.

2. Development

a. Provide child-care information centers where parents and expectant mothers can come for help and can learn child-care practices that will promote better development of their children.

b. Develop a program through the information centers that coordinates and utilizes existing resources within a community to provide needed services for children,
including both preventive and treatment services.

c. Develop procedures for identifying and securing child services that are needed but do not exist within a community.

d. Develop simple programs for regular child care that include free materials (toothbrushes, vitamins, recommended foods, game sheets, recommended parent-child activities, etc.) and distribute the programs through the child-care information center.

e. Develop buying assistance programs that train parents in nutrition and consumer education, and that give food stamp bonuses or free guided buying trips to those who participate.