

DOCUMENT RESUME

ED 026 124

PS 001 426

By-Bouchard, Ruth A.; Mackler, Bernard

A Prekindergarten Program for Four-Year-Olds, with a Review of the Literature on Preschool Education. An Occasional Paper.

Center for Urban Education, New York, N.Y.

Spons Agency-Office of Education (DHEW), Washington, D.C.

Pub Date Nov 67

Note-54p.

Available from-Center for Urban Education, 3rd West 42 Street, New York, N.Y. 10038 (\$0.25).

EDRS Price MF-\$0.25 HC-\$2.80

Descriptors-Culturally Disadvantaged, Curriculum Planning, Intelligence Quotient, *Literature Reviews, *Nursery Schools, Parent School Relationship, Preschool Children, *Preschool Programs, *Program Effectiveness, *Program Evaluation, Social Development, Student Characteristics, Testing Programs

Identifiers-Head Start

In a prekindergarten program in the economically disadvantaged area of Harlem, the teacher, curriculum, daily activities, behavior, school, and parents of the 15 enrolled children were studied. Evaluations emphasized the outcomes of learning rather than the social, emotional, and intellectual processes of learning. The following conclusions were reached: (1) nursery school attendance seems to make its greatest contribution in the development of social skills, (2) nursery school seems to help children become more independent and achieve greater emotional maturity, (3) whether or not it accelerates intellectual growth is unclear, and (4) there is some question as to whether development of disadvantaged children is enhanced by nursery school. A review of literature on nursery school, preschool, and Project Head Start is included with data covering the subjects of social, emotional, and cognitive development of children. (DO)

**U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION**

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION PREPARING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL POSITION OR POLICY.

EN026124

A Prekindergarten Program For Four-Year-Olds

© 2010 All rights reserved by the author. On permission to copy, distribute, or display.

1990-1991 *Journal of Health Politics, Policy and Law*

The CENTER FOR URBAN EDUCATION is an independent nonprofit corporation founded in 1965 under an absolute charter from the New York State Board of Regents. In June 1966, it was designated a Regional Educational Laboratory under Title IV of the Elementary and Secondary Act of 1965. There are approximately twenty regional laboratories throughout the country. The CENTER is in part a social research agency, in part an educative institution in the university tradition, in part an engineering laboratory where invented solutions to problems in urban educational form and policy are tested in cooperation with participating educators. The CENTER's major goal is to clarify and improve education in the urban complexes of our pluralistic and democratic society.

Under the direction of its Communication Resources Unit, the CENTER publishes a wide variety of reports, monographs, books, and bibliographies, as well as a bimonthly journal. A complete list can be found at the end of this publication. The essential aim of this material is to provide a basic source of useful and immediately relevant information.

The publications of the CENTER are chosen on the basis of merit and should not be read as expressions of official policy.

A Prekindergarten Program for Four-Year-Olds

**With a Review of the Literature
on Preschool Education**

**by Ruth A. Bouchard
and Bernard Mackler**

RUTH A. BOUCHARD received a master's degree in developmental psychology from Columbia University and has been both a social worker and a psychologist in institutions that serve young people. Her work on this study was done while she was a staff member of the CENTER.

BERNARD MACKLER is an assistant director at the CENTER and heads its community relations committee, and is an associate professor of education at Teachers College, Columbia University. He has published in many professional journals and is the co-editor (with Robert Dentler and Mary Ellen Warshauer) of *The Urban R's* (published for the CENTER by Frederick A. Praeger, Inc.). He is currently at work completing a three-year study of the successful Negro child.

The research reported herein was performed pursuant to a contract with the United States Department of Health, Education, and Welfare, Office of Education, under the provisions of the Cooperative Research Program.

Additional copies as follows: 1-20, 25¢ each; 21-50, 20¢ each; over 50, 15¢ each. Payment must accompany order.

First Printing: November 1967.

CENTER FOR URBAN EDUCATION
33 West 42 Street, New York 10038
(212) 244-0300

Preface and Acknowledgments

The millions of dollars spent for antipoverty programs emphasize even further an already recognized need to evaluate enrichment and compensatory programs for prekindergarten children from economically disadvantaged areas. The general consensus is that prekindergarten experiences help the disadvantaged child—but little is known about the child himself (his personal experiences, unique characteristics, and development patterns), about the details of specific programs, or about the curriculum needed for the optimum growth of the children. The purpose of this study was to take a close look at a single prekindergarten program—to look, to listen, and to ask as many questions as feasible from as many directions as possible, with the object of providing detailed information about at least one program located in Harlem in New York City.

We are aware of the gaps in our account, but we believe the paper provides a reasonably accurate idea of what such a program is like and what it means—from the viewpoint of the educators, school policymakers, and social scientists for whom the paper was written, and for the children, parents, and personnel of the school in the Negro community, to all of whom we remain warmly attached and deeply grateful. (Actual names have not been used.)

We are appreciative of the support received by the Center for Urban Education and for the freedom and encouragement it gave us to pursue such an exploratory investigation. We are thankful to Colette Tobin, formerly of the Center, who was kind enough to make several visits to the school and provide us with her observations of and candid opinions about the program.

The senior author is especially thankful to a friend and colleague, Polly Armstrong Wass, whose interest, help, and encouraging words were invaluable and inspiring when needed most.

Our greatest appreciation and thanks go to the people in the program—the school administrators, the teaching staff, the volunteers, parents, and especially the children. It is for these Harlem children and all economically disadvantaged young people that the work was carried out and to whom it is dedicated. It is hoped that this account will do them justice and help us come to a better understanding of them and their needs.

Background

In 1964 total preschool enrollment was 3,187,000 children, with 471,000 in nursery schools and 2,716,000 in kindergartens. The Office of Economic Opportunity began its preschool program, Operation Head Start, in the summer of 1965 and estimates that 550,000 children were enrolled in the 1966 summer program at a cost of \$110 million to the federal government. In only two years this one new federal program increased preschool enrollment by 17 per cent

Although we know comparatively little about the effectiveness of early-education techniques, it is increasingly clear that the preschool child is an extremely plastic organism capable of widely varying intellectual behavior under different conditions of environment and training. Jean Piaget's monumental work and other studies of the reception of information from the environment, information processing, and language and communication all demonstrate that the preschool child is developing intellectually as he grows physically and matures in emotional and social behavior. A corollary conclusion is that inadequate stimulation at early ages results in long-term deficiencies in cognitive functioning.

We do not have enough scientific knowledge to design with confidence the kinds of preschool programs that will meet the needs of young children. More research is called for on several levels—in the laboratory, to analyze and understand the relation of those environments to development; and in different settings, to evaluate the effects of many different approaches to early education

A better understanding of the limits of early achievement—intellectual, social, emotional, and physical—is the key scientific problem in this area

—*Editorial, Science, September 9, 1966, p. 1197.*

Sociologists, anthropologists, and educators are in agreement that the culture of poverty has detrimental effects on the growing child and on the adults who try to cope with its conditions as best they can.

To combat and counteract the detrimental influences of poverty on the growing child, the federal government put forth a massive national effort to pro-

vide instruction for preschool-age children from economically depressed areas. The program was called *Operation Head Start* and was initiated during the summer of 1965. It marked the beginning of perhaps one of the most revolutionary changes in our public education—nursery education for disadvantaged preschoolers. Its main aim was to give these children school-oriented experiences during the summer prior to their initial entry into school. It was hoped that this experience would improve the social and educational levels of the children and better equip them to enter kindergarten or first grade in the fall. In New York City, such classes were started during the fall of 1965 to serve four-year-old children from economically disadvantaged areas. The classes lasted throughout the normal school year.

What is a prekindergarten program? Who are the children that attend and what do they do there? What is the program like and what function does it serve?

Children come to the prekindergarten programs to play, and they should come for this purpose, for play is the child's response to life. Indeed, it is not only a response to life, but, in a sense, *is* a child's life. Play encompasses his work, his pleasure, and his frustrations. Play reinforces ideas, clarifies feelings, helps develop a feeling of competence, drains off anxiety, and helps the child gain a better understanding of himself, his world, and others. Play, for the preschool child, offers an intimate and personal way to communicate and cooperate with others at an age when rapid socialization is taking place.

A good nursery program provides each child with the opportunity for individual and group activity, and for quiet as well as vigorous play. It makes available a large variety of art media for self-expression, and daily experiences with literature, music, and science compose the essence of the program. Superimposed upon all of the traditional nursery school experiences is the emphasis upon the development of language and of experiences that foster self-identity and a positive self-concept.

Let us closely look at the unfolding of one such program. The particular program chosen was selected on the basis of the following criteria: that the school was located in an economically disadvantaged area; that no other current research was being carried out in the classroom; that the program teacher and the administrators of the school were receptive to a study of their work. Such a classroom was found in a relatively new public elementary school in Harlem.

On October 4, 1965, the bright, well-equipped kindergarten classroom of the

school was filled with a dozen, well-scrubbed, cautious four-year-old children and their concerned but suspicious parents. Although the program was initiated to serve the most deprived children of the community, the children had come from the most informed citizens of the neighborhood. Even these adults, though, were apprehensive about this new adventure in education.

From the hallway, one could hear the quiet sounds of frightened children, the anxious voices of suspicious adults, and the positive greetings and comments of an optimistic teacher. Before the end of the first session, most of the children were cautiously exploring the attractively displayed and easily accessible materials of the classroom—some actively, by walking around the room and manipulating the materials; others passively, with their eyes and ears while sitting or standing close to their mothers. A few others remained in the hallway but showed their interest by occasionally peeking from behind their mother's skirts.

After a few days most of the children were able to remain alone in the classroom for the two-and-a-half-hour "school day," but a few still needed to have their mothers. The teacher encouraged these mothers to remain and tried to help them understand what was happening to their children. Eventually all of the children—there were 15 in this particular class—were able to be in the classroom on their own.

After several sessions, the teacher gained the interest of the children and was able to introduce the program's daily routines and a general schedule of activities. The main goal of establishing routines to be consistently carried out and reinforced was to help the children help themselves, to give them a certain amount of security in knowing what to expect from day to day. The schedule was a rough guideline rather than a strict program of activities to be followed closely. It changed throughout the year, as the curriculum evolved, in an attempt to meet the rapidly changing needs of the children. The children readily accepted and quickly learned the daily activities of dressing, going to the bathroom, washing, and cleaning up. Self-help was continuously encouraged and praised by the teacher. As we all know, children of this age can do many things on their own if they are given the proper guidance, encouragement, and the opportunity to tackle tasks that are challenging yet within their level of skill. The inner feeling of satisfaction that accompanies the ability of a young child to accomplish a task can contribute to an enhanced feeling about himself. The process was often observed with these children as they achieved success. Joyfully they shared their accomplishment with the teacher, other

assistants, their classmates, and with their parents who came for them at the end of the session. Repeated achievements of everyday tasks seemed to make the children less apprehensive and more eager to explore foreign materials, and facilitated participation in new activities.

The prevalent task orientation of the children, their desire to play with the colorful and appealing toys and materials, the play-centered curriculum of the initial weeks, and the warm and accepting attitude of the teacher, were all factors in facilitating the easy acceptance of the daily routines.

The Teacher

With young children the teacher assumes a monumental importance, for it is she who establishes the classroom atmosphere in which the attitudes about self and school evolve.

We had the good fortune of observing a teacher who has many of the qualities and strengths that we consider to be essentially beneficial in working with disadvantaged preschoolers. What were some of these qualities and strengths? What were some of her weaknesses?

The petite, young, attractive, and energetic Negro woman who taught the class has many years of teaching experience and received an M.A. in early childhood education from Teachers College, Columbia University, several years ago. Most characteristic of this woman was her openness, enthusiasm, and zest for life. Her frequent outbursts of spontaneous laughter as she observed the children at play and her active participation in their imaginary play reveals her love of children and joy in working with them.

The following few paragraphs written by the teacher of the class vividly express her philosophy of children and teaching.

A child's world is filled with activities of wonder, beauty and exploration. For each activity the teacher aims to develop the basic human needs of each child through the voluntary participation of the child. Some of these needs are security, success, and a sense of belonging, recognition, satisfaction and new experiences.

The teacher must be a helper and a guide for each child. She must help each child learn to get along with others, assist each child in learning to use materials, provide a setting in which each child can express himself competently, teach each child to follow directions, listen intelligently, encourage good health and safety habits, foster the development of new skills and interests.

PS 001426

We the prekindergarten teachers are often told by the parents of non-attending children, that our children learn nothing in school and "just play." Children come to play and should play for it is through a child's play world that learning takes place.

One of the most important qualities of a good teacher is the ability to assume the role of a student—particularly a shy student who is at the periphery of the class rather than at its center. Only a person who is aware of the minute but important subtleties of each unique child can really approach individual children in a meaningful fashion, thereby fostering their optimal growth. This all-important and necessary quality of observing children was one of Mrs. X's greatest assets.

Prevalent among children from economically deprived communities is a negative attitude towards authority. Yet all young children need limits if they are to be safe. Of crucial importance here is the way in which limits are introduced and maintained. If they are imposed with love and without humiliation, and if they are clearly defined and consistently reinforced, little resistance will occur.

Clearly defined, firm, and consistent discipline was the rule rather than the exception in this classroom. The teacher's firm disciplining was usually accompanied with a love for and an acceptance of the reprimanded child. This love was communicated by a hug, a pat on the head, or a special smile. Occasionally Mrs. X utilized group pressure to maintain discipline, but generally she herself took the child aside and spoke with him. This teacher had complete control of her classroom most of the time. Chaos and lack of discipline were frequently observed when a substitute teacher or the assistant teacher took over the group.

Everyone liked Mrs. X. Not one child, parent, or adult involved in the program ever communicated a dislike for this woman—which was not the case with another prekindergarten teacher. Mrs. X's appeal was due largely to her casual, accepting, and relaxed attitude. Her classroom door was usually open, and an invitation to observe her class in session was always extended to parents, student teachers, and researchers alike. Openness and acceptance helped establish initial rapport with the parents.

At the same time, this manner also contained a certain lack of professionalism, and it consequently interfered with the amount of work she could have done with the parents. During home visits, chit-chat about trivia assumed

greater importance than discussing the child she was working with. The teacher's desire to be accepted and liked limited what she was able to do for and with the parents. It is not too much to say that her overly friendly attitude and the need to be liked are her greatest liabilities.¹

The Curriculum

The curriculum developed in response to the continuously changing needs of the children. It was flexible and organized around the children's developmental levels, spontaneous interests, and cumulative experiences. The long-range goal of the teacher was to create a meaningful learning environment that would prepare the children for formal learning. She provided the children with a variety of firsthand experiences which were immediately utilized and later used as a basis for more intensive learning challenges. In general, the curriculum introduced the children to a combination of traditional nursery school experiences, in conjunction with an emphasis on the development of language, self-awareness, and self-acceptance.

At the onset of the program, the children were characterized by restlessness, a short attention span, and an inability to sit together as a group. Their previous limited exposure to toys and their desire to play with them and to explore the materials and equipment of the classroom were clearly communicated by their ceaseless questions. What's that? What do we do with this? What is this for? When can we play? Can we play a little longer?

In order to best meet these desires, a large proportion of the earlier sessions were devoted to unstructured play periods, during which the children were given free rein to explore the classroom and its materials at their own pace. Individual interests and needs rather than group activities was the keynote of the early weeks of the program.

Throughout the school year the curriculum continued to possess the dynamic qualities that were evident from the very start. Play orientation eventually gave way to instruction in development of focal skills. The change affected all aspects of the program. Individual activities were largely replaced by group activities; unstructured, free play periods were converted into structured, goal-directed activities; and the process of informal (haphazard) learning through personal experiences was replaced whenever possible with the deliberate inculcation of skills and knowledge. The teacher's goal of preparing

¹For details about the other personnel involved in the prekindergarten program see Appendix 1.

the children for later formal schooling permeated all aspects of the curriculum by spring.

The following detailed description of one representative aspect of the curriculum as it evolved through the academic year illustrates the qualitative changes that transpired.

How were books introduced and utilized in this particular program?

As books are the main avenue for later learning, cultivating an interest in and love for them during the formative years of life is of monumental importance. To create an interest in books was the initial goal of the teacher. This task was facilitated by the availability of a large and varied supply of good picture books. Both the books and the jackets were displayed around the room, adding to the decor and making it easy for the children to pick them up.

During the first month or so, children were individually introduced to books by the teacher. This was made possible by capitalizing on the fact that all the children did not arrive at once. Upon entry, the individual child was taken to the library corner and encouraged to choose a book of his liking. Frequently the teacher and child, on a one-to-one basis, read portions (or all) of a book together. The children soon began to share their favorite books with each other and the adults in the room. This stage was followed by requests to have books read to them. Consequently, storytelling and reading periods were initiated. The slow, clearly enunciated and highly dramatized presentation of the stories enhanced the quickly developing interest in books.

The teacher not only was aware that the children were still in the process of learning the language, but she also realized that many words in the text were unfamiliar to them. Words were defined, questions and comments encouraged, and a good deal of related discussion occurred with most of the readings.

Every day more children voluntarily joined the small group of interested listeners. Eventually most of the children eagerly gathered to listen to the teacher read their favorite books. By January, the remaining outsiders were encouraged to join this "reading" group, and the rule that all children were to participate in this group activity was established. The children's attention span had increased tremendously since the onset of the year. Most of them were now able to listen to the reading of three and four stories in succession, whereas at first they were unable to listen to one complete story.

During the month of March, drastic changes in the functional use of books and storytelling occurred. Books were no longer read for pleasure and entertainment but rather to instruct and impart knowledge. The children's favorite

stories were replaced by books chosen by the teacher to present information about the world around them and the people in it.

At this point, the program became less successful. The teacher's effort to prepare the children for later formal schooling interfered with her initial goal of cultivating an interest in and love for books. Although the attention span of the children continued to increase, enthusiasm diminished and interest at times seemed to wane. Restlessness and inattention during the reading of books was occasionally observed. Now more discipline was needed than earlier. The reason for this changed situation can be easily understood. Who likes to be constantly bombarded with new information?

The tempo of the classroom was accelerated and its atmosphere altered by the prevailing emphasis on instructing, imparting knowledge, and developing school-oriented skills. At the end of the year, individual interests, needs, and curiosity became secondary to the teacher's group activity and group instruction.

Much of the pressure the teacher exerted for group conformity struck the observer as being unconscious. Her ambitious desire to prepare the children for later formal schooling blinded her to their immediate needs. She misinterpreted their progress as readiness for more advanced work, and the stress she laid upon advanced learning deprived them of the necessary time required to assimilate and incorporate the new knowledge they were continuously bombarded with from all sides. This rapid pace seemed to put a damper upon the children's experiences during the latter part of the year. Yet, the children continued to like school and to articulate their pleasure.

In summary, the year's curriculum attempted to (1) introduce the children to traditional nursery-school experiences, (2) foster self-awareness and self-acceptance, and (3) promote language development. The following is a list of techniques used to achieve each goal:

1. *Traditional nursery school experiences.* The following activities were performed by individuals and groups: easel and finger painting; collage construction; cutting and pasting paper; clay modeling; block building; dancing; hopping; singing; experimentation with musical instruments; storytelling; dramatizations; innumerable imaginary activities.

2. *Fostering self-awareness and self-acceptance.* This was advanced through many activities, only a few of which are listed here. A child was encouraged to sign his drawings or to put his name on the place where he worked. Mirrors were included in the classroom furnishings. Photographs of Negroes at work and play were hung in the classroom. Each child made a life-size paper cutout

of himself. Games involving the naming and utilization of body parts were played. Each child was frequently praised and experienced success.

3. *Promoting language development.* Some of the devices used were the following: exposing the children to many varied listening experiences; playing games that utilized auditory discrimination; providing storytelling and play-acting periods; utilizing group and individual conversations to help the children share their personal experiences.

Explanatory Comments

For the reader's clarification, it should be noted that the majority of the data for this study was gathered during daily classroom observations. Systematic information on each child also was acquired by the administration of several individual tests given to the children in March and again in June. The tests utilized were the Goodenough Draw-A-Man Test, a battery designed for Head Start, and sociometric interviews. The main purpose of the tests was to gain further insight into the children. The results of the observation of the children and of the tests given to them will be discussed, respectively, in the next two sections of this account.

Only 13 of the 15 Negro children enrolled in the program are included in this discussion, because two youngsters were not available for retesting in June. One dropped out of the program in April; the other refused to cooperate in the June testing. The latter is a withdrawn, seemingly frightened little girl.

The large Negro community of Harlem encompasses the smaller area where all of the 13 children discussed in the following sections live. Two of these children come from welfare-assisted families who are fatherless. Another two children come from financially independent but fatherless families. The remaining nine children come from financially self-sufficient, intact families.

For gross comparison, the Draw-A-Man test and the Head Start battery were given to a group of economically well-to-do children from a Maine community. Ten children of the same age, five with and five without nursery school experience, were chosen as comparison groups. All come from intact families—the fathers of the five children without nursery school experiences are blue collar workers (e.g., carpenters, mechanics); the fathers of the five children with nursery school experiences are military personnel with a college education.

Trends noted in the Maine children that differ or agree with the Harlem children will be briefly included in the account to provide greater insight. The main focus in such comparisons will be the children from Harlem.

The Children

The typical four-year-old child brags, boasts, bosses, defies others, and vigorously asserts himself. His expanding sense of self and his rapid, multi-faceted development accounts for his vivacious, inconsistent, sometimes violent, and always fascinating behavior. At this age, acculturation assumes great importance and learning takes precedence over maturation. Keen awareness of his rapidly expanding environment is expressed through dramatization and imaginary play activities — dressing up and acting like a grown-up is a particular favorite. Through such activities, the child indicates how he sees the world and what it means to him, and expresses the fears and anxieties that temporarily preoccupy his mind.

Children of this age like nursery school and want to attend. But the central and most important environment for the child is the one provided by his family. Parents determine to a large extent what experiences a child will have and convey the significance of these experiences through their attitudes. And these attitudes build the framework through which the child views the world.

What were the four-year-old children enrolled in this program like at the onset of the year? What were some of their immediate needs, interests, and concerns?

At the onset of the year, the children were unable to sit and work together as a group. This inability can partially be accounted for by the short attention span, restlessness, high activity level, and lack of group experience typical of four-year-olds. At first, they had an overwhelming interest in playing with the many new toys available to them. And none was willing to share anything he had claimed as his own. Parallel and associative play, rather than cooperative play, prevailed. During the free play period, the children spontaneously moved into the usual sex divisions of this age. The boys occupied the block building corner, while the girls busied themselves in the housekeeping corner.

The small, somewhat inadequately equipped but neat and attractive housekeeping corner fascinated the majority of the girls. Almost daily, five or six of the ten girls in the program spent their entire free play period (approximately one hour) in this area. Through assuming adult roles these youngsters reenacted innumerable household chores and activities. Daily, all of the high-heeled, jewelry-glittering little girls tried to attain the all-important role of mother. One of them, Roberta, always managed to assume this most highly valued and prestigious position during the initial weeks. This loud, bossy, domineering girl, who is the biggest child of the group, set the tempo and geared the mode of play. As food was her main preoccupation, all initial ac-

vities revolved around the preparation and eating of imaginary meals. Day after day these little girls reenacted the same chores and household tasks with little variation except to interrupt them with several frequently recurring themes. Apartment burglaries and fires were vividly and elaborately reenacted by the children, undoubtedly revealing some of their fears and concerns. More than any other activity, these reenactments involved almost all of the children (the boys were called upon to help as policemen or firemen, or they were the instigators as robbers) and unleashed great excitement, loud cries, and much running around.

Several months passed before any protest was made by the other girls about Roberta's continuous attainment of the mother role. Only then did the teacher intervene by appointing a specific child for this role from day to day. Nevertheless, the mode of play was still largely managed and controlled by Roberta, and the activities continued along the patterns established by her.

Despite the later curricular changes when individual activities were largely replaced by group instruction, and unstructured, free play periods converted into structured, goal-directed activities and limitations were placed upon the use of this corner, the girls' interest in the area remained high throughout the entire school year.

As for the boys, all five in the program were generally attracted to the block building corner. Almost daily the boys sought activities in this area, but, unlike the situation with the girls, individual and parallel play rather than associative play dominated. At this age, is individual play more characteristic of boys than of girls? Or does the fact that there were only five boys in the group (four at first) explain much of the difference? In this case, we feel that the latter question assumes the greater importance. The relatively well-equipped block corner is large enough for the simultaneous construction of three or four structures, and an ample supply of blocks was usually available to all the builders. But in the small and inadequately equipped housekeeping corner, sharing and associative playing was forced upon the girls.

Another factor which may contribute to the fact that the boys engaged in more solitary and parallel play than the girls is the poor attendance of the boys. Frequently only one or two boys were present, while there were usually at least six or seven girls. (See Appendix 3 for the attendance record.) Occasionally some of the boys joined the girls in their play activities, and frequently they explored the other areas of the room—such as the library, and the science and art areas. But these ventures were usually short-lived.

In addition to the two main groups established along sex lines, there were

several children who engaged in isolated, solitary play. Eventually these few children moved into associative play, some by pairing off with one another, others by joining the activities of the two larger groups. Quiet, soft-spoken, and somewhat submissive—these were the characteristics of the five children (two boys and three girls) who engaged in much solitary play. It seemed to take them much longer than the other children in the program to become an integral part of the whole. Still, they appeared to be very happy in prekindergarten, participated in structured group activities, and expressed a liking for and desire to attend school.

Why do some children engage in such solitary play? This question is not an easy one to answer. Yet it seems worthwhile to put forth a few speculative reasons based on observations of the children in the program. The purpose here is not to answer the question in any definitive way, but to impress upon the reader that not all children who engage in solitary play are withdrawn, frightened, socially inept, and rejected by their peers.

Every child represents a unique blend of needs, goals, desires, anxieties, and fears. For example, Kerry, a well-liked and accepted girl, frequently engaged in solitary play. At the onset of the year, erecting elaborate structures in the block building corner occupied most of her free play time. Her activities almost always seemed to be goal-directed and purposeful. Frequently, self-directive comments accompanied her play, expressing her goal and the steps she planned to take to achieve it. This little girl did not seem to have the tremendous need to play with toys that many of the other children enrolled in this program seemed to have. In addition, her long attention span and calm, placid disposition enabled her to remain with one task for an extended period of time. Undoubtedly, being an only child, from a rich and stimulating home environment, partially explains her behavior.

In contrast, Mark, who seemed frightened most of the time during the initial weeks, also engaged in much solitary play. However, his activities were of short duration and did not seem goal-directed. Often he would stop whatever he was doing to watch the other children play. Although attracted by their activities, he seemed afraid to join them. Eventually, he made crude and awkward attempts to join two of the boys who were then frequently building together, but their rebuffs kept him away. Mark's social immaturities, limited group experience, and insecurity obviously influenced his choice to participate in solitary play. What was his home environment like? Mark is the third of four children who are being reared by their poor, elderly paternal grand-

parents. Taking into consideration this home situation, the boy's classroom behavior can be more readily understood.

The Tests and Their Results

One of the avenues utilized in trying to understand these children was the individual testing conducted in March and again in June. The testing provided several opportunities to interact with each child on a one-to-one basis. Through these private sessions the tremendous individual differences among these children were repeatedly emphasized. One child sucked his thumb between answers; another toyed with whatever test material was available; a third had to explore the testing room thoroughly before answering any question; a fourth immediately attended to the task at hand; another needed to sit on the examiner's lap before engaging in any aspect of the test. More striking than any other insight gained from the testing experience was the one that these children, like children anywhere else, have unique and, consequently, widely divergent approaches to the test situation. Yet, there were several prevalent characteristics observed in most of the children.

During both the March and June testing periods all of them (except for one shy little girl), eagerly expressed a desire to go with the examiner to be tested. "Can I come, too?" "When is it my turn?" "Do you want me now?" "Can I be next?" were a few responses of the excited children. In fact, the investigator had to exercise caution to prevent chaos from erupting in the classroom when picking up a child for testing.

Significant behavioral differences between the first and second testing situation were observed. During the March testing the following behavior was exhibited by the majority of the children: many wanted to stand or walk around the room; a few needed to sit on the examiner's lap (especially during the latter part of the test); all of them had very short attention spans. It became necessary for the examiner to repeat questions and explain, over and over again, the directions for even the simplest tasks. As a result, administration of the Head Start battery (containing approximately 150 questions) took over one hour per child. In June, however, the same test was completed in 30 to 40 minutes by most of the children. During this second testing session most of the children immediately attended to the task at hand with interest and a relatively long attention span. They rapidly answered questions and did not need as many directions as they did earlier.

When trying to understand the behavioral changes that took place between the first and second testing periods, it is important to keep in mind that during

the retesting the children knew what to expect and were familiar with the test items. Also, at this point, they were more accustomed to sitting still for extended periods of time.

Before discussing these behavioral changes further, we will briefly examine the prevalent trends noted in the test results. (The following comments concern only the 13 children who participated in both testing sessions.) The discussion reports on general trends rather than specific test scores.

Draw-A-Man Test

All of the children very eagerly attended to the task of drawing a man. They seemed to know what they were supposed to do and each child handled the crayon quite competently. Many of the children seemed to enjoy the task very much as they asked to do a second and sometimes a third drawing.

In March, the number of body parts included in their drawings of the human figure ranged from 3 to 8 with a mean of 6.3; in June, the range was from 4 to 12 with a mean of 8.0. (For details on individual children see Appendix 4.)

Although there is much distortion of the human figure and poor proportional relationship between the various parts of the body in both the first and second drawings, the latter are somewhat improved. This is especially true in two cases where the first drawings are completely distorted while the second ones are at least recognizable as human figures.

The June performance of the Harlem children and the drawings of the Maine children are very similar in the number of body parts included. However, body proportion and relationship of body parts are much superior in the Maine group, including the children without nursery school experience. The Maine children seem to have a much more integrated concept of the human figure, and no distortion of the figure was seen in their drawings.

Sociometric Interviews

In March, and again in June, each child had an individual sociometric interview with the examiner. Rapport was established by allowing the child to explore the testing room. When he seemed at ease, he was asked the following questions:

1. What do you like to do best in school? Anything else?
2. Is there anything you don't like to do at school? Anything else?
3. Why do you come to school?

The examiner then asked: Whom do you like to play with BEST in school? Anyone else? These questions were followed by questions requesting negative

choices, and the interview was concluded by asking the child whether or not he liked to play with the children whose names he had not volunteered.

All of the children gave spontaneous responses. For the majority of the children, it seemed easier to give positive rather than negative choices. A few children were reticent to give any negative choices at all. With some, eliciting a second or a third choice was difficult. Perhaps the inability to recall the names of their peers may partially account for this difficulty. When asked whether or not they liked to play with the children whose names they had not volunteered, immediate and definite responses were given for each name mentioned. The children not only had preferences but could verbalize them as well.

For both the March and June tests a sociogram was made from the positive spontaneous choices given by the children. The high-status children of the March test—Timmy, Laura, Maxine, and Roberta—retained their positions in June. Similarly, the low status children more or less retained their low positions with slight variations.

It is interesting to note that Timmy (one of the high-status children), who usually pursued independent, self-directed activities, was most preferred by many children. On the other hand, Roberta, the self-chosen leader of the doll corner, despite relatively high status, was not the most preferred child. Along with Roberta, Laura and Maxine, the other high-status children, form the core of the housekeeping corner. All of the isolates, who engaged in such solitary play, held low-status positions in March and in June.

Head Start Test Battery

The Head Start test battery consists of 148 questions and tasks designed to reveal the preschool child's general knowledge by eliciting responses and behavior. The main purpose for administering this test battery, as with the other measures utilized in this study, was to gain further insight into the behavior of our study sample. The Maine children will also be included in this discussion to help us compare our preschool group with others. The overall general performance of the Harlem children was inferior to that of the Maine children, both in regard to those who had nursery school experience and those who had not. Details about comparative results on specific sections of the test battery will be presented below and accompanied by a brief discussion.

Perception of People. When asked what various people in the community do—e.g., doctor, policeman, dentist, etc.—both the Harlem and the Maine chil-

dren were similar in terms of sentence length and vocabulary usage. One-word answers, short-phrase answers, and two-or-three-sentence answers were given by both groups. However, the content of their answers differed. The essence of the prevalent replies of both groups is presented in the table below:

<i>Category of Person</i>	<i>Essence of Harlem Replies</i>	<i>Essence of Maine Replies</i>
Doctor	Gives needles.	Fixes you.
Policeman	Puts people in jail.	Directs traffic.
Dentist	Pulls and fixes teeth.	Pulls and fixes teeth.
Teacher	Learns and lets you do things.	Teaches you (with nursery school). Related to school (without nursery school).
Father	Works and hits children.	Works, plays, and does things for children.
Nurse	Fixes people and sticks needles.	Fixes people and helps the doctor.
Mother	Cooks and cleans.	Cooks and cleans.
Soldier	Marches and shoots.	Marches and shoots.

It is interesting—and may be revealing—to note that Harlem children perceive the behavior of so many of these people as restrictive, while Maine children perceive it as helpful, supportive, and protective.

Body Parts, Colors, and Geometric Forms. Let us now look at three aspects of the test battery that focused on concerns which were integrated into the curriculum in the spring. Although all three concerns—body parts, colors, and geometric forms—were continuously and more or less equally emphasized in the classroom, they had varying effects on the children.

There were continuous references to various parts of the body in the classroom. Among other things, songs and games were sung and played that utilized the name, number, and location of the various parts of the body.

In testing for the effects of this emphasis, the examiner pointed to ten common parts of the human body, asking each child to name the part, i.e., finger, shoulder, elbow, etc. The children were then asked how many of each of these parts they had.

All of the children did extremely well in this section of the test, both in March and June. As a matter of fact, this was the only area where the Harlem children did better than the Maine children. One question gave the Head Start group trouble. When asked how many toes they had, most of them said "two" and a few replied "five." The Maine children were able to tell their number of toes, giving a similar reply of "two" or "five." In addition, they had difficulty with "elbow," "shoulder," and "heel."

In contrast to body parts, classroom emphasis on knowing colors did not produce positive test results. Colors were pointed out to the children almost daily during the latter part of the year, yet they still had considerable difficulty in this area of the test. However, they did improve somewhat from March to June.

On the table in front of the child, the examiner placed eight crayons—red, yellow, orange, green, blue, purple, brown, and black. One by one each crayon was pointed to and the child was asked to give the name of the color. When the child did not answer correctly, the examiner would then say, "Give me the _____ one," naming the color the child had incorrectly identified. The child was also asked to name the color of six familiar objects: fire, grass, snow, cloud, sky, night.

In March, slightly less than half of the children were able to name the colors correctly, and only about one-third were able to give the color of familiar objects. Although there was some improvement in June, still only slightly more than half were able to name the colors, and approximately half were able to give the color of familiar objects.

The Maine children did much better. Those with nursery school experience knew all of their colors and the colors of the familiar objects, and those without nursery school experience knew almost all of them.

Although parents of both groups want their children to succeed in school, they seem to follow different approaches in their attempts to help their children. With the Maine children (at least the group studied), school and home activities are more closely related than they are for the Harlem children.

Why did the children in Harlem excel in body parts and not in colors, even though both were stressed in class? In our opinion, the following factors help explain this difference. The body is the most personal part of the child and, therefore, of tremendous importance to his growing self-concept and sense of identity. Any reference to this precious possession by the classroom teacher would very likely be remembered by a child regardless of his background experience. Furthermore, the children from Harlem, like children everywhere,

probably hear references to their body at home in such comments as "wash behind your ears," "don't forget your elbows and knees," "how pretty you look," "how alert his eyes are." Now consider for a moment the relevance of color names to the child. They are abstract, impersonal, and just something "out there." Consequently, they are not nearly as important or as fascinating to the young child as his own body. And colors only become important as parents continually teach their offspring what colors are, how they differ. Colors seem not to be emphasized in the Harlem homes, at least not before the child reaches four years of age.

To test the child's knowledge of geometric forms, each was presented with four drawings—a line, a circle, a square, and a triangle. The child was asked to name the form and then draw it himself. Then he was asked to point to the form "most like a" wheel (circle), window (square), piece of string (triangle), plate/dish (circle), stick (line).

Most of the children were able to name and draw recognizable copies of the line and the circle, both in March and in June. However, in March, most were unable to name and draw a square or a triangle. In June, most of the children could successfully name these two geometric forms but while ten of the 13 children were able to draw the square, only four could draw the triangle.

Obviously, familiarization with the proper labeling of line, circle, square, and triangle is directly related to school learning. These labels were greatly emphasized in the program with comments like, "put away your square mats," "stand in a straight line," "let's form a circle for this game."

With the Maine children only about one-third were able to name the geometric forms. However, all ten could draw the square, and eight the triangle. When asked to point to the form "most like a" wheel, window, piece of string, etc., the majority could successfully do so without hesitation.

Why was it more difficult for the Harlem children to draw a square and a triangle? Perhaps it is due to their limited experience with crayons, drawing, and coloring in comparison with their Maine counterparts. And this may also explain their relatively poorer recall of colors.

Comparison of Groups of Objects. A small, but important, area that gave the Harlem children a tremendous amount of difficulty was the comparison of two groups of objects.

Two groups of blocks (one with two blocks, the other with eight) were placed side by side on the table in front of the children. Each child was then asked,

"Which group has more blocks in it?" This was repeated with groups of five and six blocks respectively. The comparison was repeated a third time, with six blocks in each group. This last comparison was the most difficult for the children. In contrast to the relative ease with which they handled the first two questions, not one of the 13 was able to say in March that the two six and six groups were the same. In June, one child was able to successfully answer the question.

The entire set of comparisons was repeated with the question, "Which of the two groups has *fewer/less* blocks in it?" This gave the children much more trouble than the "more than" question. Only slightly over one-half of the children correctly answered this part of the task in both the March and June testings.

In contrast, the Maine children easily and successfully answered all the questions other than the one concerning the two similar groups of six blocks each. Only five of the ten children answered this question correctly.

Sequence of Objects. A second area of great difficulty for the Harlem children was identification of five sequentially lined up objects.

Five blocks were placed next to each other in a row in front of a child, who was then asked to give the examiner the blocks in the following order: the middle, the first, the last, the second, and the next-to-last. The majority of the children was able to give the examiner the middle and the first blocks, but was unable to give the others. Not one child in the Harlem group was able to complete this task in March and only two did so in June. In contrast, seven out of ten Maine children were able to complete the task successfully.

What accounts for the wide difference in performance of the Harlem and the Maine children on these two last tasks?

These tasks require the ability to conceptualize two ideas simultaneously. The contrasting performances of the Harlem and Maine children seem to imply a different mode or perhaps a lower level of conceptual thinking on the part of the Harlem children.

General Trends. Administration of the Head Start test battery revealed many things about the Negro children. They were able to follow simple commands such as "show me your teeth," "raise your hand," "say 'hello' very loudly," and "face the door," to name but a few. These children also had a good understanding of on, in, under, behind, large, and small. However, their concept of time was very poor. Most of them knew time in relationship to one day—that

is, morning, noon, and night. The majority of the children knew that there were different days of the week and could even name a few. But they did not know which day was which, what today was, or what day people go to church. Most of them did not know the names of the four seasons or the season in which the testing occurred.

Although the differences in performance between March and June were not significantly large, it must be remembered that there was improvement in most areas and tremendous improvement during the period in the children's behavior while being tested. The short period of time between the first and the second testing, the fact that the children were not tested prior to entry in the program, and the lack of a control group makes it difficult to relate changes noted in the children directly to the school experience.

What were the children like at the end of the year? What were some of the changes seen in them? What may partially account for these changes?

The children as a group have grown emotionally and now seem more mature. They can sit in a group and discuss, listen, sing, and play games together. Their attention span has lengthened considerably. Now without strain they can listen to three and four stories in a row, ask questions that relate to the story being read, and do so with an improved vocabulary. They finish one activity before beginning another. They are aware of a set schedule and go through the day with ease, following directions and signals well. The group is independent and responsible. They undress, dress, wash, toilet, eat, and clean up after an activity without assistance. Some individuals now share toys and have a better idea of cooperative give-and-take. The children now play better with one another and are more apt to help someone in need than they were earlier. The children also have a tremendously increased interest in the larger community. Although they enjoyed their earlier field trips, they now ask many questions during a trip and are able to participate in a discussion about it upon their return.

What may account for the tremendous apparent behavioral differences noted in these children between October and June? First, let us remember that they are chronologically, physically, emotionally, and intellectually older than in October, when they were only four. Most of them are now five. But what are five-year-old children like?

In general, five is a state of equilibrium, whereas four is a state of turmoil and rapid change. In the Head Start group, the older and more mature little child now likes to complete what he starts and knows how to conclude an ac-

tivity. The greater decisiveness of the child is seen in the minimal amount of dawdling he now engages in as compared to earlier in the year. His almost total self-dependence in everyday personal tasks of washing, dressing, eating, toileting, and sleeping leaves him more confident and curious to explore the larger environmental surroundings. He wants to learn about the world for he feels he can now gain mastery over himself. He is now truly ready for education.

The Teacher and the Parents

In good parent-teacher relations, what is the role of the teacher? What are her goals? And how does she accomplish them?

In general, the teacher in a prekindergarten program views parents as a tremendous threat and also as a significant resource. She must be aware of this existing paradox if she is to establish wholesome working relations with them. She must also recognize and respect both the all-important and necessary role of the parents in the upbringing of the child and their influence upon his unfolding personality. She must accept the realities of the parents' life and try to understand and respect their point of view, however distorted or inconsistent it may seem to her, if she is to understand the child she is working with.

Good parent-teacher relations means that both the parents and the teacher work together cooperatively in the interest of the child's growth. Where she can, the teacher makes every effort to help parents become better parents. Of course, the responsibility of rearing children and of solving parent-child problems belong to the parents, and the teacher should not attempt to take them over. However, through sympathetic understanding and sincere interest, she can supply parents with support which will help them help themselves. The teacher seeks to help parents gain confidence in themselves as parents and come to a deeper understanding of their children. She informs them about what is happening in the classroom to enable them to gain further insight into their children. In addition, she must assume the responsibility of helping parents understand the function of the school and clarify for them the roles of the various school personnel.

Initial rapport with the parents is established by the teacher, never as an authority or as a friend, but as a professional interested in the welfare of their child. Accomplishment of the above-mentioned goals can be sought through several direct and indirect avenues. Briefly, these avenues are:

1. Daily contact with parents as they take their children to and from school.

2. Periodic individual conferences with the parents at school.
3. Occasional home visits during the school year.
4. Parent-teacher meetings.
5. Parent participation in school activities and field trips.
6. Teacher observation of parents who remain with their children in the classroom.

Regardless of the avenue utilized, the prekindergarten teacher keeps in mind her major goal in working with parents, that of helping them become better parents.

Now let us return to our specific prekindergarten program. What was this teacher's relationship with the parents like? What avenues available to her did she utilize?

Mrs. X seemed to feel tremendously threatened or confused by the parents. Her main objective in working with them appeared to be that of making friends with them. Initial rapport with the majority of the parents was established through her friendly and accepting manner and through the personalized daily contacts she made with the parents who brought their children to and from school.

At the onset of the school year, Mrs. X encouraged the parents of the shy and problematic children to stay and observe them while class was in session. By this means, she was able to help several mothers gain further insight into their child and the program. However, her desire to be liked and accepted by the parents interfered with what she was able to do with them.

Mrs. X did not utilize individual conferences with the parents to further her knowledge about the children and to help the parents in turn. In a general way, she failed to make herself available to the parents as they participated in school activities and helped out with the field trips. The parents moved towards a greater understanding of their child, the program, and the school on their own through their involvement with various school activities. But much more could have been accomplished through the many casual and informal contacts made by the parents as they helped out with the various aspects of the program through the year.

Each home was visited only once by the teacher during the course of the year, and the majority of the visits were made during the last few weeks of the school year. Here again, this teacher's lack of purpose or vision for home visits came through, for she avoided serious discussion of either the school or the children. She seemed to be visiting because she had to, rather than because of a definite goal or reason. Aside from seeing the home environment of the

children, very little else was accomplished. The short, casual visits consisted mainly of gossipy chit-chat. It seems clear that the parents involved in the program, whose very presence revealed their serious concern, would have benefited from more meaningful encounters with the teacher.

The Parents and the School

The school's relations with the parents of the prekindergarten children were as inadequate and ineffective as the relations of Mrs. X.

Seven months elapsed before the school made any contact with the parents as a group. At that point, the school made its initial contact through a mimeographed announcement regarding a parent-teacher meeting. Through the parents, guardians, and older siblings who brought the children to and from school, 60 invitations for the 60 preschoolers were circulated. Only 20 parents came to the large bright library at two o'clock on March 31, 1966. This was almost eight months after the program had begun. Immaculately dressed and scrubbed, the women curiously and cautiously took seats here and there around the room. Several had infants and toddlers with them, and they, too, remained amazingly quiet and well-behaved throughout the hour-long meeting.

The principal, a white middle-aged man, curtly welcomed the parents and expressed his hope that they would evolve into a "child study group" where the parents help themselves with the school behind to support them. Immediately after his brief talk, he excused himself and left the meeting. What the principal said was appropriate and positive, but his presentation was cold and he seemed aloof. During his presence the atmosphere was uncomfortably tense.

The assistant principal, a young attractive Negro woman, took over the meeting when the principal left. After introducing herself and warmly welcoming the parents, she made a few introductory comments about the other school personnel attending the meeting—the family assistant, the two prekindergarten teachers, and two volunteers. She then gave a brief explanation of Operation Head Start and the antipoverty movement, with specific details regarding the school's program and its plans for next year's kindergarten classes. The assistant principal was hopeful that kindergarten for this group would be different than a "typical" kindergarten. On the basis of the advances that the preschoolers had made, the school wanted to accelerate and enrich the following year's school curriculum. Several mothers expressed an interest in and underscored the need for such acceleration, to guard against the bore-

dom due to repetition and to further challenge their children. The assistant principal then appealed to the parents for their help in reaching the most needy families of the community and informing them about the prekindergarten program. The parents again were asked to comment on the present program. Only one mother had responded to a similar request by the principal earlier, but now several mothers spoke up conveying positive sentiments about the program. The other mothers nodded in agreement.

At a second meeting on May 26, 1966, the last one held, the family assistant presided. This middle-aged, local Negro woman had been given full responsibility for the parent group and she did her best, but limited education and lack of leadership skills and experience affected her performance. This meeting was poorly attended by the school personnel—only one of the prekindergarten teachers and the assistant principal (who stayed for 15 minutes) were present. Eighteen of the parents attended.

The parents (many with infants and toddlers) had to wait for nearly half an hour for the meeting to start. During this time, there was no one to greet them. They waited restlessly, and several voiced their discontent. At the meeting itself, little was accomplished. Many of the suggestions and requests made by the parents at the previous meeting were ignored and not followed through.

It is clear that the school had done very little thinking and planning, if any, in the area of school-parent relations—an area of perhaps central importance in the realization of an effective preschool program.

Summary

The preceding is an intensive descriptive account of the teacher, curriculum, daily happenings, behavior, school, and parents of 15 children enrolled in a prekindergarten program for four-year-olds from October to June 1966. The account is offered as one source of information to fill the current large gap in our present knowledge about such programs. Essentially, the account was prepared by looking, listening, asking questions, and learning. In the review of the research literature on preschool programs that follows this description, it will become clear that evaluations emphasize the *outcomes* of learning rather than the social, emotional, and intellectual *processes* of learning.

Since the teacher of young children must fulfill many demanding roles simultaneously, it is of crucial importance that she be a mature, well-qualified person with much knowledge and a pleasant disposition. After observing the teacher of this program for one year, it was obvious that she was a well-trained, experienced woman who enjoyed her work, had a good understanding of chil-

dren, and possessed a great love of them. And there is no doubt that she accomplished a great deal with the program's children during the school year.

Because of the teacher's keen sensitivity, the curriculum maintained a wide flexibility in accordance with the continuously changing needs of the children. In addition to responding to certain immediate needs, the teacher was also able to promote the long-range goals of creating an environment conducive to social, emotional, and intellectual learning. This was accomplished, in part, by providing the children with many varied experiences that they had not received at home—for example, identifying colors, shapes, forms and playing with paints, crayons—then by intensifying and reinforcing these experiences, and finally, by gradually transforming the program's play-oriented curriculum to one in which instruction and the development of skills were focal. Individual activities were largely replaced by group activities; unstructured, free play periods were converted into structured, goal-directed activities; and informal learning through personal experiences was utilized to develop skills and impart knowledge.

At the onset of the year, these children were unable to function together as a group. They were restless and had very short attention spans. By the end of the year they could sit in a group and discuss, listen, sing, and play games for an extended period of time. They now possessed a longer attention span, an increased language competency, a growing sense of responsibility and independence, and a rapidly expanding interest in the larger community in which they lived. All of these behavioral changes were noted not only in observation in the daily classroom, but also on the improved performance of the test-retest results. Maturation and increase in age, as well as school experience, should be kept in mind when attempting to account for these changes in the children.

The least adequate aspect of the program was the effort to draw on and utilize the interest of the parents, who, despite their own scanty educational background, were eager to see their children succeed in school.

Through this description of one Head Start program, we strove to learn, to see how such a program "focuses." We feel that preschool programs were hastily conceived and that this sort of evaluation is needed to see exactly what is being done and how it can be improved. We did not follow-up the children in this program through kindergarten and further study the effectiveness of their preschool training, nor did we compare them with other four-year-olds who remained at home for the year. Our goal was more limited: to study the day-to-day operations of one program, to see and describe—and to contribute in this way to a more comprehensive evaluation of preschool programs.

Nursery School, Preschool, and Project Head Start/ A Review of the Literature

A prime purpose behind this review was to survey and evaluate early investigations in nursery schools and preschools. We wanted to see how such studies had been carried out; what their outcomes were; and how they might be relevant to our present concerns, especially with regard to enrichment programs and/or compensatory training for so-called disadvantaged preschool children. Note that our review covers only nursery school and does not include kindergarten research. For more general reviews of nursery school literature see: Sears and Dowley (1963)¹ for research on teaching, Fowler (1962) for a review on cognitive learning in infancy and early childhood, and Swift (1964) for an assessment of the nursery school and day-nursery experience on children. A fourth review, by Hunt (1961), examines the literature on nursery school and orphanages to support his view that intelligence is not fixed.

In general, the greatest contribution of nursery school experience seems to be in the development of social skills beyond those that are more or less attributable to the natural process of maturation and growth. The research indicates that with an increase in nursery school attendance, children become more independent, more active, engage in more constructive activity, and interact more frequently with their peers—that is, they become more sociable.

Social Growth: Early Studies without Controls

Early studies in this area that utilized no controls in gathering their data indicate that nursery school produces social change in its students. These studies are suggestive, but the uncontrolled nature of their findings—in particular, the failure of the investigators to control for the all-important factor of maturation and normal social growth due to age—leaves them open to question.

Following is a brief summary of six such studies.

Mallay (1935) observed 21 children over a period of one school year. She made 24 five-minute observations of each child to determine the amount of

¹*A complete alphabetical listing of the material discussed here is found at the end of the review.*

his social contacts. By the spring, the children spent a greater amount of time in social and group contact. In their social contacts, the number of successful involvements increased while the number of unsuccessful involvements decreased. The children were more constructive in their play at the end of the school year, and their attention span had increased, both presumably as a result of nursery school attendance.

Parten (1932) made daily, one-minute observations of 42 nursery school children, ages two to five, over a period of eight months. "Social participation scores" were computed by weighing the following categories from -3 to +3 respectively: unoccupied behavior, solitary play, onlooker behavior, parallel play, associative play, and cooperative play. The tendency was toward increased social participation, as contrasted with solitary and onlooker behavior, with increased nursery school attendance.

Joel (1939), using teachers' ratings, found that with increased nursery school attendance children exhibited more mature behavior—that is, they were more independent, showed more self-control, and tended to "grow up."

Horowitz and Smith (1939) studied the social patterns of children in 13 nursery schools. They observed children for half-minute intervals during the free play periods, and found sedentary behavior to correlate negatively and combative behavior to correlate positively with increased nursery school attendance.

Jersild and Fite (1935) collected data on the influence of nursery school experience on children's social adjustments by observing the behavior of the children systematically during the school day. The researchers gathered additional information from records and reports submitted by teachers. The fall data indicated that children who had previous nursery school experience entered into a larger number of social contacts than did children who had not attended nursery school. Although many of these contacts were due to a carry-over of special friendships from the preceding year, Jersild and Fite found in the course of the year that nursery school experiences improve social behavior over and above the gain that would come with age.

Vitz (1961) studied the changes in five kinds of behavior over a period of seven weeks. The behaviors were aggression, adult-like ("grown-up") behavior, dependency, thumb sucking, and disciplinary behavior. Four trained observers monitored the children's activities. The general trend exhibited in this "fairly typical nursery school" was that adult-like behavior consistently increased and antisocial aggressive behavior decreased as the weeks progressed.

Social Growth: Experimental Studies with Controls

We now turn to studies most of which have similar results but which utilized a much sounder methodological approach. Consequently, these findings lend support to those of the previous studies.

The investigators mentioned in this section compared nursery school children with others who did not attend nursery school. The use of a control group automatically takes into account the maturation factor and the out-of-school influences on the various aspects of change examined.

Walsh (1931) studied 22 nursery school children and a control group of 21 children. Ratings were made for the experimental group at the onset of nursery school attendance and again after periods of two, four, and six months. The general findings were that nursery school children were more socialized, more independent, more self-reliant, and more assertive than non-nursery school children. The results were derived from the changes noted at the various rating periods.

Kawin and Hoffer (1931) compared 22 pairs of nursery school and non-nursery school children by means of mental tests, physical examinations, and "habit status." The latter included eating, sleeping, dressing and undressing, and toilet habits, plus body manipulation, motor coordination, speech, and play activities. Observations of the children at home and interviews with the mothers in the fall and spring were the researchers' main sources of data. They found no differences in the physical characteristics or the degree of mental growth in the two groups, but did find some differences in favor of the nursery school children in the area of eliminating undesirable habits and developing greater independence from adults. The differences were not large, and the reliabilities of the data were not cited.

Thompson (1944) studied the effects of two curricula on the social and emotional development of 23 children. The subjects were divided into two experimental groups matched as nearly as possible in chronological and mental age, socioeconomic status of parents, and personality factors. In group A the teachers were instructed to adopt an impersonal policy, in group B to help the child directly in his relations with other children and his use of play materials. (The master teacher was the same person for both groups.) The children in group B were more assertive, more constructive, and showed greater social participation and leadership. There were no significant differences between the groups in IQ.

Hattwick (1937), using an average of three teacher ratings on 60 personality

~~Characteristics~~ of 106 pupils who had been in nursery school for nine months, compared the children with an equal number of children who had not been in nursery school on age, sex, nationality, race and economic level. The two children were in the same school only six weeks. Hattwick found that children became "more sociable" with longer nursery school attendance—that is, they no longer feared strange people or avoided play with other children or stayed close to adults.

Cushing (1934) compared 33 former nursery school children with 25 non-nursery school children on kindergarten adjustment, as reported by teacher ratings on a list of behavior characteristics. The findings do not reveal a striking difference in adjustment between the two groups, although the nursery school children seemed somewhat superior in total adjustment and exceeded the non-nursery group in amount of material used in school and in their total number of activities.

Brown and Hunt (1961) compared the teachers' ratings on the social adjustment of kindergarten children who were divided into two matched groups, those who had attended nursery school and those who had not. In this study, the nursery children were perceived by the teachers to be better adjusted in personal adjustment and in how they related to other children. The intelligence was perceived to be about the same for both groups.

Greene (1931), using ratings and report cards, also compared kindergarten children with and without nursery school experience. The former appeared to exhibit more independence and social poise.

Allen and Masling (1957) compared 34 children with nursery school experience with 82 children without such experience by means of data collected from a battery of five sociometric questions. The pupils in kindergarten, first, and second grades, were matched in terms of scores on the Vineland Social Maturity Scales, parents' education, age, and sex. No statistically significant differences were revealed in kindergarten and first grade; however, there were differences noted in the second grade. The second grade students with nursery school background were perceived by their peers as more prestigious, more spontaneous, and more intelligent.

Comment

The hypothesis that young children, given the opportunity to interact with peers in a controlled environment over a period of time, will acquire social skills and achieve social development above and beyond what is normally expected with age, seems to be supported by the studies reviewed. However,

there are differences in degree and specific aspect of change from investigation to investigation. These can be accounted for in a variety of ways: (1) kinds of behavior used to measure social adjustment and individual development; (2) different kinds of rating systems used by the teachers and the varying outlooks of the teachers themselves; (3) the tremendous variety in the programs the children were exposed to; and so forth. Such differences render comparisons of the different studies difficult, if not impossible.

The underlying assumption taken by most investigators is that the environmental setting modifies behavior, yet very few investigators explained or attempted to control the environment. Studies which are more specific in this aspect are badly needed to give us more precise information about the influence of the environment.

The main weakness in this area of study is the almost complete lack of knowledge about the permanency of the changes observed. That social development does and beyond what is attributable to age and maturation occurs with nursery school experiences seems unquestionable, but the permanency of these gains is still an unanswered question.

Emotional Growth

The above studies investigated one aspect of the all-important emerging personality of the young child—social development and maturity. There have been fewer studies that investigated emotional growth.

Aslund and Markey (1939) observed the conflicts of 36 children over a period of two years. The trend of the group was to enter into a larger number of fights and quarrels with increased nursery school attendance. The investigators attributed this increase to several factors above and beyond the increase among these children of sheer combative ness. The nursery school experience enabled the children to increase the scope and number of their activities, consequently yielding more opportunities for collisions and conflicts. Another important consideration is the fact that during the second year, a larger number of children occupied the same physical play space.

Hattwick (1937) compared three teacher ratings on children with nine months of nursery school experience against the ratings on children who had only six weeks of such experience. The children were matched on age, sex, nationality, race, and economic level. Hattwick found that with longer nursery school attendance there were fewer nervous tendencies such as twisting of hair, tenseness, and wriggling while sitting.

Joel (1939), using teachers' ratings, found that with increasing nursery attendance children made a higher score on emotional maturity, that is, as reflected in their attitudes about minor injuries and their behavior in the face of difficult tasks.

Koshuk (1947) carefully reviewed the report of records gathered in two nursery schools over a period of three years. The subjects were children of employed mothers. The data indicated that attendance reduced tensions, lessened friction in the home, and reduced insecurity in nonhome situations.

These few studies on the effect of nursery school attendance on emotional adjustment and development seem to agree that such experiences are positive for the young child. As a rule, with increasing nursery school attendance children made higher scores on scales of emotional maturity, were less sensitive to criticism, and exhibited more aggressive behavior.

No investigator attempted to describe the important psychological environment that the child was exposed to while in nursery school. This limitation tends to make the findings general and render practical application difficult.

The Nature-Nurture Controversy: Does Intelligence "Gain" With Preschool Attendance?

The nature-nurture question concerning intelligence was of paramount interest to psychologists and educators in the 30's. During this decade, a large proportion of the studies investigating the effects of nursery school attendance dealt with this question. The first such investigation was conducted at the Merrill-Palmer Institute by Woolley in 1925. The most extensive work in the area was carried out at the Iowa Child Welfare Research Station (by Wellman, 1932 and 1934). The findings of these studies are contradictory, as was prevailing opinion on the basic question. But the studies are extremely interesting and raise unanswered issues.

Woolley (1925) examined 45 nursery and 36 non-nursery school children. The control group was composed of the children on the waiting list for the nursery school of the Merrill-Palmer Institute. No attempt was made to match the children in the two groups. All were given the Stanford-Binet test at the onset of the experimental group's nursery experience and again at the end of the academic year. Among the nursery school children, 33 per cent showed a gain of 20 or more points on the retest and 65 per cent a gain of 5 or more points. Only 6 per cent of the non-nursery school children showed a gain of 20 or more points and only 33 per cent a gain of 5 points or more.

Wellman (1932) thoroughly studied the records of 600 children who attended the preschool laboratories of the Iowa Child Welfare Research Station from 1921-1932. Tests were given to all children, at intervals of about six months beginning at age 3½. The Kuhlmann revision and the Stanford-Binet were the instruments used. Some of the important findings are as follows: marked increase in IQ on repeated tests; significant gains in IQ during the academic year with no gain over the summer months; the greatest gains among children of lower IQ levels (as recorded on the first test), the least gain by those at the highest IQ levels; a positive correlation of IQ gain with numbers of school days attended; and children attending full-day sessions gaining more than children attending half-day sessions.

In Wellman's second study (1934), she studied 68 children of preschool age who were *not* attending nursery school. These children were in the infant laboratory group of the Iowa Child Welfare Research Station. She found that those who were average or slightly above average in intelligence, as recorded on the first test, increased their IQ, while the ones who were superior tended to decrease.

Starkweather and Roberts (1940) examined the records of children who had attended the Merrill-Palmer nursery school. The Merrill-Palmer tests and the Stanford-Binet were given to groups of 107 and 103 children upon entrance to the Merrill-Palmer nursery school. The children were retested after an interval of 6 to 40 months while still at the school. The findings were as follows: IQ gains were made by children attending nursery school; an inverse relationship existed between initial IQ and gains in IQ; no correlation was found between number of days of nursery school attendance and percentile of IQ gain; changes made during nursery school attendance tended to be maintained after withdrawal from nursery school.

Hildreth (1940) compared 41 children with at least four months of nursery school or kindergarten experience with 48 children lacking this experience. The Stanford-Binet was given twice, upon entry into the first grade and a second time 18 months later. On the first test, the nursery school children were superior to the non-nursery school children, with a mean IQ of 119.6 and 113.95 respectively. However, by the second examination, this difference had disappeared. The gain had been only temporary.

Goodenough and Maurer (1940) analyzed test records of 147 children who had attended 40 to 575 days of the University of Minnesota's nursery school and recorded 260 children without such experience. The children from nursery school did no better than the others on standardized intelligence tests.

Frandsen and Barlow (1940), using the L form of the revised Stanford-Binet tests of intelligence, tested and retested a group of 30 children attending nursery school and a group of 28 control children. The latter group was taken from the waiting list for the school and was matched according to age, socio-economic status, habit training in the home, and sex. Tests were given to both groups preceding and following the term in nursery school. The interval between test and retest was 5.5 months. The nursery school group gained 3.34 IQ points, the control group only 0.53 points. The gain approximates statistical significance, but appears very small.

Voas (1940) compared the IQ distributions of nursery school graduates in Winnetka, Illinois, with the distributions among all children and found that the distributions of the former were slightly higher, but the differences were too slight to be significant. From this, Voas concluded that experience in the Winnetka nursery school did not tend to raise IQ.

Bird (1940) studied a group of children (ages 3½ to 6½) who attended the children's school at the Rhode Island College of Education. The school encouraged independent thinking. The effect of a year's training in this special school upon the IQ of children appeared to have been negligible.

Page (1940) was concerned with the permanency of nursery IQ gains. He studied 72 children from kindergarten to the fifth grade, who had 125 to 525 days of nursery school experience. He compared these children with their closest siblings in age who had not attended nursery school, using the results of the Stanford-Binet test. No differences were found between the groups.

Olson and Hughes (1940) compared the subsequent growth of children with and without nursery school experience and found the former to be superior in mental age. However, when comparisons were confined to children of parents in the professional groups, the differences disappeared.

Comment

There are many factors that may account for the wide variety of findings discussed here: the varying nature and content of nursery school programs (rarely examined or discussed by the studies); the difference among the children from study to study, selected primarily on the basis of nursery school enrollment (the reason for a child's enrollment is an important variable that the studies also overlook); differences in the children's out-of-school experiences; and so forth.

Nonetheless, the majority of the studies do not support the hypothesis that intellectual growth is accelerated by nursery school attendance. Possibly this

conclusion is the result of the fact that the majority of subjects studied were from middle- to upper-income homes, where the children had already been exposed to the sorts of enrichment provided by the nursery school—and so would not be likely to derive substantial gains from the school programs. This interpretation is indirectly supported by the findings of several studies in which the children came from other than middle- to upper-income homes.

Barrett and Koch (1930) studied the effect of nursery school attendance upon mental-test ratings of orphan children. An experimental group of 27 was matched with a group on sex, chronological age, and institutional experience. After a period of six to nine months, the nursery school group moved from an average IQ of 91.7 to 112.5, while the control group moved from 92.6 to 97.4. A consistently greater gain was seen in the experimental group on mental test performance.

Crissey (1937) studied the mental development of children with the same IQ in different institutional environments—an orphanage and a home for the feeble-minded. The subjects were matched in chronological age and length of interval between test and retest, as well as in IQ. The Standord and Kuhlmann revisions of the Binet scales were used for all individual tests. Over time the feeble-minded showed a loss in IQ but there was no loss in the orphanage group. (Admittedly, the decline in IQ among the feeble-minded does not support the general notion that the IQ of children from lower-income homes will increase in a learning situation; unfortunately, the study does not provide enough information to account for this finding.)

Gavrin and Sacks (1963) studied the intellectual level of 132 "dependent and neglected" children, ages two through seven. The children were tested at the onset of their stay at a residential institution for dependent and neglected children (during the 2nd and 3rd week) and were retested either two weeks before being discharged or after a period of nine months. The revised Stanford-Binet scale was used. A majority of the children showed statistically significant increments in IQ and the amount of gain seemed directly related to the duration of stay in the institution—at least up until one year. The greatest gain was made by the children who initially scored quite low.

From this study, one might erroneously conclude that a compensatory program that called for such institutional housing of children with low intelligence would yield improvement, at least in IQ. Unfortunately, there are advocates of this position; it is a dangerous and simple-minded solution. Children who are neglected may profit from a setting where they receive care,

but children living at home almost invariably are better fit emotionally and psychologically. Also, many institutions do not function on the same par as the one cited by Gavrin and Sacks. The literature on institutional care for retarded children shows that *typically* retarded children do poorer intellectually, socially, and emotionally after institutionalization. (This general statement applies to psychiatric and penal institutions as well.)

Skeels (1940) summarized studies done at Iowa on the mental development of children subjected to different environments. In one study, 13 mentally retarded orphans under three years of age were transferred from an orphanage to an institution for feeble-minded children. They were placed as singletons in wards with brighter, older girls. The young children were pampered by these girls and were taken to all institutional functions. Twelve children of similar ages but with a *higher* mental level, who remained in the orphanage, were studied as a control group. Over a period of two years, the experimental group made an average gain of 27.5 IQ points, and the contrast group *lost* an average of 26.2 IQ points.

Skeels, Updegraff, Wellman, and Williams (1938), using both teacher ratings and timed observations in a study of orphanage children, found that over a relatively short period of time those who attended nursery school showed marked superiority over those who did not. However, after one and a half years, the children in nursery school revealed losses in social competence and maturity. This finding points out the problem that initial gains occur because people, especially teachers, are paying attention to youngsters. But this halo effect soon wears off if the attention diminishes or as children need and expect more individual help. Most institutions cannot provide such assistance and therefore the child's development, intellectually and emotionally, begins to show deterioration.

Comment

The research on orphaned, dependent, and neglected children has been used by Hunt (1961) and others to argue that intelligence is not fixed. Hunt points out that a child's intellect can go up or go down, depending upon the environment that he has been exposed to. In *Intelligence and Experience* (specifically the chapter, "The Belief in Fixed Intelligence"), Hunt describes the historical and conceptual reasons for believing that intelligence is fixed. To show that intelligence can be modified he leans heavily on the same research reports that we have just finished reviewing — Wooley, Wellman, Skells, etc.

Hunt's work is the cornerstone for the recent efforts to improve the intelli-

gence of poor children attending regular day schools. If intelligence is dependent upon the environment and if one can alter the environment properly, one would then expect children's IQ and achievement to go up. This makes good logical sense, and workers such as Deutsch in setting up preschool laboratories have used Hunt's logic to shape their program. However, it should be clear that the notions of Hunt as derived from orphaned, neglected, and institutionalized children cannot be applied as a matter of course to all minority group children who currently live in urban centers. The crucial difference is simple to state: life in a city neighborhood is far richer and more varied than life in an institution. Yet it is largely on the basis of Hunt's work—and the ostensible equation between a lower-class neighborhood and an institution for orphans—that the concept of "cultural deprivation" has been derived.

Recent Efforts: Project Head Start and Other Compensatory Programs

In the 60's, we have seen a large-scale effort to provide compensatory education to Negro, Puerto Rican, Mexican-American, American Indian, and poor white children in the form of the Head Start programs. There is much to be said in criticism of these programs. They were hastily designed, politically motivated, erratically and sometimes chaotically administered. Nonetheless, research indicates that many of the programs have succeeded in their goals. The largest evaluation of Head Start was undertaken by Coleman, et al. (1966), who found that Negroes who attended its programs scored higher on ability tests (verbal and nonverbal) than did nonparticipants. The lower the SES of the participants, the greater the gain. The Coleman report refers only to pupils who attended Head Start just prior to entering first grade. The analysis was based on the differences between the children who participated and those who did not. No before-and-after comparison was made. To control for selectivity in terms of parental interest in education, the study used a sample that was comprised of three groups: (1) participants, (2) nonparticipants attending the same school as participants, and (3) nonparticipants from communities where the program was not available. Coleman and his colleagues conclude that:

The differences between scores for Head Start participants and non-participants are small in many instances. Considering the short length of the program, it may be unreasonable to assume that participation could immediately and universally affect the verbal and nonverbal reasoning

abilities of pupils. Instead, the program may impart to participants a higher degree of educational motivation—a desire to learn and an interest in school—that would not become evident in the form of higher test scores until a pupil had been in school for several years (Coleman, et al., 1966, p. 516).

Other evaluations of Head Start and preschool programs were completed by Wolff and Stein (1966a, 1966b); Gray, Klaus, Miller, and Forrester (1966); Gray and Klaus (1965); Goldstein and Chorast (1966); Weikart, Kamii, and Radin (1964); and the Research Council of the Great Cities Program (1964). These investigators have found initial gains in achievement and/or IQ; after a year these gains were not sustained.

These studies contrasted the experimental (preschool) group with at least one (and often more) control group. In the use of such controls, present day researchers are more sophisticated than those of the 30's and 40's. However, they can be faulted in another way—their continual use of achievement scores to assess the efficacy of a preschool program. These tests may be indicators of change, but with four, five, and six-year-olds they often yield unreliable scores. Also, these studies seldom include observational data, typically resting their conclusions (and hopes!) on paper and pencil tests. Perhaps the gains they report are *only* indicators of an increased sophistication in taking tests.

This criticism can be expanded. The world of a child, and of a preschool program, is bigger than a Stanford-Binet gain. Researchers rarely seek out and attempt to assess the social and personal gains of such a program. Clearly, assessment of this sort poses difficult methodological problems. But at the least, an investigator can look at the process of growth and describe it to the best of his ability—as, obviously, we attempted to do in the previous part of this paper.

Summary

The following conclusions can be drawn from this review of the literature. Nursery school attendance seems to make its greatest contribution in the development of social skills and the enhancement of social growth in children. It also seems to help children become more independent and achieve greater emotional maturity.

Whether or not nursery school experience accelerates *intellectual* growth is unclear. There is also some question as to whether development of children from impoverished backgrounds is greatly enhanced by such experience.

The *permanency* of any of these changes (emotional, developmental, and intellectual) is an issue that remains undecided. Only extended follow-up studies can give us this information.

Programs designed to meet the needs of a specific population yielded greater change than a general nursery school program. This fact is especially relevant to the education of disadvantaged children and should be kept in mind by educators who are responsible for educational innovations and policies.

References

- Alien, G., and J. Masling. "An evaluation of the effects of nursery school training on children in the kindergarten, first and second grades." *Journal of Educational Research*, 1957, 51, 295-96.
- Anderson, L. D. "A longitudinal study of the effects of nursery school training on successive intelligence test ratings." In the *27th Yearbook of the National Society for the Study of Education*, No. 39, part 2, 1940, pp. 3-11.
- Andrus, R., and E. Horowitz. "The effect of nursery school training: insecurity feelings." *Child Development*, 1938, 9, 169-174.
- Barrett, H.E. and H. L. Koch. "The effect of nursery school training upon the mental test performance of a group of orphan children." *Journal of Genetic Psychology*. 1930, 37, 102-121.
- Bird, G "The effect of nursery school attendance upon mental growth of children." In the *27th Yearbook of the National Society for the Study of Education*. No. 39, part 2, 1940, pp. 81-85.
- Bonney, M., and E. Nicholson. "Comparative social adjustments of elementary school pupils with and without preschool training." *Child Development*, 1958, 29, 125-33.
- Brown, A., and R. Hunt. "Relations between nursery school attendance and teacher's ratings of some aspects of children's adjustment in kindergarten." *Child Development*, 1961, 32, 585-96.
- Castiglione, L.V., and M. Wilsberg. "The expansion of kindergarten instruction and prekindergarten programs in disadvantaged areas of New York City." Unpublished manuscript. New York: Center for Urban Education, 1966.
- Coleman, J.S., E.Q. Cambell, C.J. Hobson, J. McPartland, A.M. Mood, F.D. Weinfeld, and R.L. York. *Equality of Educational Opportunity*. Washington: U.S. Government Printing Office, 1966.
- Crissey, O.L. "The mental developments of children of the same I.Q. in differing institutional environments." *Child Development*, 1937, 8, 217-220.

- Cushing, H. "A tentative report of the influence of nursery school training upon kindergarten adjustment as reported by kindergarten teachers." *Child Development*, 1934, 5, 304-314.
- Eisenberg, L., and C.K. Connors. "The effect of Head Start on developmental processes." Paper presented at the 1966 Joseph P. Kennedy, Jr. Foundation Scientific Symposium on Mental Retardation. Boston, April 1966.
- Ezekiel, L.F. "Changes in ego-centricty of nursery school children." *Child Development*, 1931, 2, 74-75.
- Fowler, W. "Cognitive learning in infancy and early childhood." *Psychological Bulletin*, 1962, 59, 116-152.
- Frandsen, A., and F. Barlow. "Influence of the nursery school on mental growth." In the *27th Yearbook of the National Society for the Study of Education*, No. 39, part 2, 1940, pp. 143-149.
- Gavrin, J., and L. Sacks. "Growth potential of preschool-aged children in institutional care: a positive approach to a negative condition." *American Journal of Orthopsychiatry*, 1963, 33, 399-408.
- Goldstein, K.M., and S.B. Chorost. "A preliminary evaluation of nursery school experience on the later school adjustment of culturally disadvantaged children." Unpublished manuscript. New York: Wakoff Research Center, 1966.
- Goodenough, F. "A preliminary report on the effect of nursery school training upon the intelligence test scores of young children." In the *27th Yearbook of the National Society for the Study of Education*, No. 39, part 2, 1940, pp. 161-178.
- Goodenough, F., and K. Maurer. "Mental development of nursery school children compared with that of non-nursery children." In the *27th Yearbook of the National Society for the Study of Education*, No. 39, part 2, 1940, pp. 161-178.
- Goodenough, F., and K. Maurer. "The relative potency of the nursery school and the statistical laboratory in boosting the I.Q." *Journal of Educational Research*, 1940, 31, 541-549.
- Gray, S.W., and R.A. Klaus, "An experimental preschool program for culturally deprived children." *Child Development*, 1965, 36, 887-898.

- Gray, S.W., R.A. Klaus, J.O. Miller, and B.J. Forrester, *Before First Grade*. New York: Teachers College Press, 1966.
- Greene, K. "Relations between kindergarten and nursery schools." *Childhood Education*, 1931, 7, 352-355.
- Hattwick, B.W. "The influence of nursery school attendance upon the behavior and personality of the preschool child." *Journal of Experimental Education*, 1937, 5, 180-190.
- Hildreth, G.H. "The effect of school environment on the Stanford-Binet tests of young children." In the *27th Yearbook of the National Society for the Study of Education*, No. 39, part 2, 1940.
- Hilgard, J.R. "Learning and maturation in preschool children." *Journal of Genetic Psychology*, 1932, 41, 36-56.
- Horowitz, E., and R. Smith. "Social relations and personality patterning in preschool children." *Journal of Genetic Psychology*, 1939, 54, 337-352.
- Hunt, J. McV. *Intelligence and Experience*. New York: Ronald Press, 1961.
- Jersild, A., and S. Bienstock, "The influence of training on the vocal ability of three-year-old children." *Child Development*, 1931, 2, 272-291.
- Jersild, A., and M. Fite, "The influence of nursery school experience on children's social adjustment." *Monograph of the Society for Research in Child Development*, 1939, No. 2.
- Jersild, A., and F. Markey. "Conflicts between preschool children." *Monograph of the Society for Research in Child Development*, 1939, No. 2.
- Joel, W. "The influence of nursery school education upon behavior maturity." *Journal of Experimental Education*, 1939, 8, 164-165.
- Jones, B. "A study of age grouping in a summer nursery experience." *Journal of Nursery Education*, 1959, 14(2), 26-32.
- Jones, H., and A. Jorgensen, "Mental growth as related to nursery school attendance." In the *27th Yearbook of the National Society for the Study of Education*, No. 39, part 2, 1940, pp. 207-221.
- Kawin, E. and C. Hoefer, "A comparative study of a nursery school versus a non-nursery school group." Chicago: University of Chicago Press, 1931.

- Koshuk, R. "Developmental records of 500 nursery school children." *Journal of Experimental Education*, 1947, 16, 134-148.
- Mallay, H. "Growth in social behavior and mental activity after six months in a nursery school." *Child Development*, 1935, 6, 303-309.
- Martin, W. "An armchair assessment of nursery education." *Journal of Nursery Education*, 1960-61, 16, 90-96.
- Moustakas, C. "Personality studies conducted in nursery school." *Journal of Educational Research*, 1952, 46, 161-177.
- Olson, W., and B. Hughes. "Subsequent growth of children with and without nursery school experience." In the *27th Yearbook of the National Society for the Study of Education*, No. 39, part 2, 1940, pp. 237-244.
- Page J. "The effect of nursery school attendance upon subsequent I.Q." *Journal of Psychology*, 1940, 16, 221-230.
- Parten, M. "Social participation among children." *Journal of Abnormal and Social Psychology*, 1932, 27, 243-269.
- Research Council of the Great Cities Program for School Improvement. Baltimore City Public Schools early school admissions project. *Promising Practices from the Projects for the Culturally Deprived*. Chicago: The Council, 1964, pp. 3-7.
- Sears, P.S., and E.M. Dowley. "Research teaching in the nursery school," in N.L. Gage, ed., *Handbook of Research on Teaching*. Chicago: Rand McNally, 1961, pp. 814-864.
- Skeels, H.M. "Some Iowa studies of the mental growth of children in relation to differentials of the environment." In the *27th Yearbook of the National Society for the Study of Education*. No. 39, part 2, 1940, pp. 281-308.
- Skeels, H.M., R. Updegraff, B.L. Wellman, and H.M. Williams, "A study of environmental stimulation: an orphanage preschool project." Iowa City: *University of Iowa Studies of Child Welfare*, 1938, 15, No. 4.
- Smilansky, M. "Fighting deprivation in the promised land." *Saturday Review*, October 19, 1966.
- Starkweather, E., and K. Roberts. "I.Q. changes occurring during nursery school attendance at the Merrill-Palmer School." In the *27th Yearbook of the*

- National Society for the Study of Education.* No. 39, part 2, 1940, pp. 315-335.
- Swift, J.W. "The effects of early group experience: the nursery school and day nursery," in M.L. Hoffman and L.W. Hoffman eds., *Review of Child Development*. Volume 1. New York: Russell Sage, 1964, pp. 249-288.
- Taylor, M., and G. Frank, "An experiment in nursery school follow-up." *Childhood Education*, 1930-1931, 7, 474-481.
- Thompson, G. "The social and emotional development of preschool children into two types of educational program." *Psychological Monograph*, 1944, 56, No. 5 (Whole No. 258).
- Van Alstyne, D., and L.A. Hattwich, "A follow-up study of nursery school children." *Child Development*, 1939, 10, 43-70.
- Vitz, P. "Some changes in the behavior of nursery school children over a period of seven weeks." *Journal of Nursery Education*, 1961, 16, 62-65.
- Voas, W. "Does attendance at the Winnetka School tend to raise the I.Q.?" In the *27th Yearbook of the National Society for the Study of Education*, No. 39, part 2, 1940, pp. 363-376.
- Walsh, M.E. "The relation of nursery school training to the development of certain personality traits." *Child Development*, 1931, 2, 72-73.
- Weikart, D.P., C.K. Kamii, and N.L. Radin. *Perry Preschool Project: Progress Report*. Ypsilanti, Michigan: the Public Schools, 1964.
- Wellman, B. "Growth in intelligence under differing school environment." *Journal of Experimental Education*, 1934, 3, 59-83.
- Wellman, B. "The effect of preschool attendance upon the I.Q." *Journal of Experimental Education*, 1932, 1, 48-69.
- Williams, R., and M. Mattson, "The effects of social groupings upon the language of preschool children" *Child Development*, 1942, 13, 233-245
- Wolff, M., and A. Stein, *Six months later: A comparison of children who had Head Start, summer 1965, with their classmates in kindergarten*. Unpublished manuscript. New York: Yeshiva University. 1966. (a)
- Wolff, M., and A. Stein. *Long-range effect of preschooling on reading achievement*. Unpublished manuscript. New York: Yeshiva University, 1966.
- Wooley, H.T. "The validity of standards of mental measurement in young children." *School and Society*, 1925, 21, 476-482.

APPENDIX 1/CLASSROOM PERSONNEL

Teacher

Duration: From October to June.
Education: M.A. from Teachers College, Columbia University, in Early Childhood Education.
Experience: 12 years teaching young children.
Description: Negro woman, petite and attractive.
Function: In charge of the classroom; assumed most of the teaching and worked individually with children.

Assistant Teacher

Duration: From February to June.
Education: B.A. in music education.
Experience: 1 year teaching music to fifth graders.
Description: Negro man, tall, handsome, soft spoken, and gentle.
Function: Took over minor teaching tasks; worked individually with the children; assumed much of the paper work — attendance record, office forms, etc.

Teacher Aide

Duration: From February to June.
Background: A mother from the surrounding community.
Description: Negro woman, attractive but heavy set; in her mid-thirties.
Function: In charge of keeping the room clean and setting up for the children's activities; did not work with the children.

Volunteer 1

Duration: From October to March, two days a week.
Background: An unpaid volunteer from the Columbia University vicinity.
Description: A maternal, kind-looking, middle-aged Jewish woman.
Function: Mainly worked with the children on an individual basis and was very much liked by them; helped on special days — parties and field trips.

Volunteer 2

Duration: From October to June, almost daily.
Background: A mother of one of the children enrolled in the program.
Description: Negro woman, very heavy set, pleasant.
Function: Primarily custodial tasks; assisted on special days — parties and field trips.

There were also two local Negro women hired to serve and assist the children with the hot lunches which were provided from February to June.

APPENDIX 2/EQUIPMENT AND MATERIALS

The following is a description of the equipment and materials available for this program, with comments and impressions.

Library Corner

This was one of the better equipped areas of the classroom. It included a large and varied assortment of good picture books, between sixty and seventy. It was set apart from the other areas and had a round table and chairs inviting browsers. The area also housed various science materials such as plants, an aquarium, and a terrarium — establishing a peaceful and tranquil atmosphere.

Books bearing on the following interests were available:

- Negro life and Negro people.
- City living and city experiences.
- Mother Goose rhymes and folk tales.
- Adventures of animals, toys, and children.
- Information about nature — stories about dogs, cats, birds, etc.
- Information about mechanical things — trains, boats, steam shovels, etc.
- Information about the community and community helpers — stores, policemen, firemen, mailmen, etc.

Science materials included the following:

- Aquarium and terrarium.
- Magnet and magnifying glass.
- Turtles (one land and one water).

Materials brought in for study — seashells, stones, seeds, leaves, fruits, vegetables, flowers, etc.

Housekeeping Corner

The equipment in this area was somewhat inadequate although attractive and neat. Most of the girls spent the greater part of their free play periods here.

Below is a detailed list of the available equipment in the area:

Furniture: stove, refrigerator, sink, closets, table and chairs, ironing board, and two vanity dressers with mirrors.

Housekeeping materials: cooking utensils, dishes, silverware, and iron.

Equipment for Music and Listening

No special part of the room was designated for these materials. They were kept wherever space was available.

Instruments:	Piano (from February on)	Hand Snares (2)
	Phonograph	Maracas (4)
	Wrist bells (20)	Rhythm Sticks (12-14)
	Chinese Tom-Tom (2)	Tambourine (2)
	Cymbals (3)	Triangles (3)
	Records (music appreciation, rhythms, songs and stories)	
	Books on musical games, rhythms, and songs.	

Summary

Indoor equipment for the program was varied, appropriate, and in good condition. However, the lack of equipment and poor provision for outdoor play was appalling. The children were taken to the nearby park (slides and swings) or the school yard (with balls, jump ropes, and hoops) for such play.

The following equipment is recommended for outdoor activities:

Climbing apparatus: jungle gym, climbing frame, or tree house.

Sandbox and sand toys.

Varied wheel toys: wagon, wheelbarrows, tricycles, etc.

Large hollow blocks, boards, and packing boxes.

Rocking boat.

Sled, stick horses.

Garden tools, seeds and bulbs.

Most of all, what is needed is a play area with grass, sand, and trees, especially set aside for the children.

Good outdoor facilities and equipment are especially needed for city prekindergarten programs. Roof tops could be converted into play areas for children.

APPENDIX 3/ATTENDANCE RECORD

<i>Name</i>	<i>Date of Entry</i>	<i>Days Present</i>	<i>Days Absent</i>
<i>Boys</i>			
Raymond	10/4/65	144	25
Mark	10/4/65	127	42
Timmy	10/4/65	151	18
Ralph	10/4/65	128	41
Martin	4/19/66	59	9 ^a
<i>Girls</i>			
Kerry	10/4/65	111	58
Linda	10/4/65	123	46
Kathy	10/4/65	151	18
Maxine	10/4/65	149	20
Laura	10/4/65	154	15
Janet	10/13/65	126	38 ^a
Sherry	10/4/65	136	33
Roberta	10/4/65	136	33
Christina	12/1/65	94	44 ^a
Gloria	1/18/66	102	4 ^a

^aThese are children that entered the program after the program was started.

APPENDIX 4/NUMBER OF BODY PARTS IN DRAWING OF THE HUMAN FIGURE

This table shows the number of body parts that the Harlem children included in their drawings of a man in March and in June.

<i>Name</i>	<i>Number of Body Parts</i>	
	<i>MARCH</i>	<i>JUNE</i>
<i>Boys</i>		
Raymond	7	5
Mark	3	7
Timmy	5	5
Ralph	8	10
<i>Girls</i>		
Kerry	5	11
Linda	6	6
Kathy	7	12
Maxine	4	9
Laura	8	7
Janet	8	12
Sherry	5	4
Roberta	8	6
Christina	8	10

CENTER PUBLICATIONS

The Urban R's: Race Relations as the Problem in Urban Education edited by Robert A. Dentler, Bernard Mackler, and Mary Ellen Warshauer. *Paperbound \$2.50. Clothbound \$7.50. Published for the Center for Urban Education by Frederick A. Praeger, Inc.*

A collection of 18 articles—16 published for the first time—that focuses on the general question of how the school, together with the community, can provide a meaningful education for the changing population of the city's children.

Participants and Participation: A Study of School Policy in New York City by Marilyn Gittell. *Clothbound \$7.50. Published for the Center for Urban Education by Frederick A. Praeger, Inc.*

A study that examines the organization of the New York City school system and how it makes its decisions. Dr. Gittell focuses particularly on the question of how much influence the community at large has on the decision-making processes.

Urban Education Bibliography compiled and annotated by Helen Randolph. *Single copies on request. Additional copies \$1.00 each.*

This bibliography, covering the period from September 1964 through December 1965, annotates and classifies over a thousand items, and includes an additional four hundred unannotated items drawn from the same period.

The Negro in Schoolroom Literature by Minnie W. Koblitz. *Single copies on request. Additional copies as follows: 1-20, 25¢ each; 21-50, 20¢ each; over 50, 15¢ each. Payment must accompany order.*

An annotated bibliography of classroom reading materials that portray integrated situations. The bibliography is designed especially for use by elementary school teachers and librarians, and covers material for kindergarten through the sixth grade. Current through September 1966.

Attitudes Toward Israel Among American Jewish Adolescents by Rina Shapira
Single copies on request. Additional copies as above.

An exploratory study of New York Jewish adolescents that relates to the general question of how Americans balance their plural commitments.

The Urban Review. A bimonthly journal published during the school year. Available on request.

The Review takes as its province contemporary urban education — both formal and informal — and ranges in its articles from classroom dynamics to school-community relations to discussions of the mass media. Contributors include staff members and outside authors.

GPO 957-354