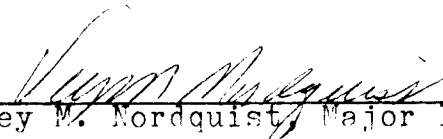
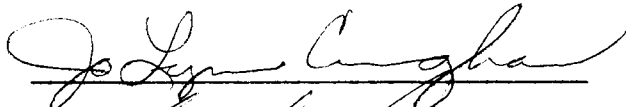
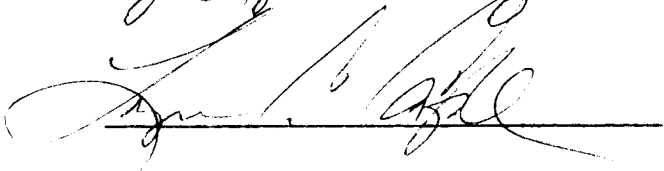


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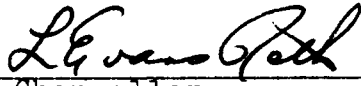
I am submitting herewith a thesis written by Cynthia D. B. Sappington entitled "Educating Nonhandicapped Children about Children with Handicaps: An Experimental Analysis of a Preschool Curriculum." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Child and Family Studies.


Vey M. Nordquist, Major Professor

We have read this thesis
and recommend its acceptance:

Accepted for the Council:


Vice Chancellor
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EDUCATING NONHANDICAPPED CHILDREN ABOUT CHILDREN
WITH HANDICAPS: AN EXPERIMENTAL ANALYSIS
OF A PRESCHOOL CURRICULUM

A Thesis
Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

Cynthia D. R. Sappington

August 1979

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•

ABSTRACT

The purpose of this study was to determine the effects of a curriculum for nonhandicapped preschool children designed to educate preschool children about handicapped children. The population of The Child Day Care Center at the University of Tennessee, Knoxville, served as subjects. Six children between the ages of 32 months and 54 months served as experimental children. Twelve additional children served as control children. One autistic female was selected as the target child.

The curriculum consisted of 20 activities which were presented to the experimental children for two weeks prior to the enrollment of the handicapped child, in two 15-minute activities per day. These activities included stories about handicapped children and simulated handicaps for the "educated" children. Commonalities and differences between the nonhandicapped children and the handicapped children were stressed.

Three measures were used to assess the children's behaviors. Several measures were used because it was not known what type of changes the curriculum would produce or when it would occur during the day. Sociometric testing was conducted two weeks after the enrollment of the handicapped child to assess her social standing with the nonhandicapped children. Additionally, incidental comments of the children were recorded by teachers at the center.

A post-test only control design was used to examine the differences between the experimental and control children on the sociometric and incidental measures. The behavioral data were cast into a frequency table because of the low frequency of the targeted behaviors.

The Mann-Whitney U-test revealed that the experimental children selected the handicapped child as a playmate more often than the control children did. In addition, a t-test comparison revealed several differences in the behavior of the experimental and control children as recorded in the incidental data. The hypothesis was supported by the results of these two measures.

A future study should incorporate several differences. First, the number of children in the experimental and control groups should be equal. A longitudinal study would take into account the "newness" factor of the handicapped child and the possibility of generalization to the control children. Additionally, several handicapped children with varied physical and behavioral handicaps would result in stronger support of the hypothesis. Another study of this type with similar results would certainly add support to the recommendation that all preschool teachers use a similar curriculum to facilitate the integration process.

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INTRODUCTION

Equal access to educational opportunities began in the mid-19th century, though at that time it was unrecognizable. Not until the early 20th century did segregated special education classes for the handicapped begin. This segregation became widely accepted as the proper educational setting for all handicapped children and remained acceptable until 1970 (Lippman, 1973).

In January, 1970, a suit was filed on behalf of nine Mexican-American children against the State of California. In the suit, the plaintiff claimed that the children had been misplaced in educable mentally retarded (EMR) classes because of biased tests based on standardized English. With this case, a new era in the education of exceptional children began (Lippman, 1973).

Integrating handicapped children into regular classrooms is currently an educational alternative to their segregation in special education classrooms. However, there is considerable disagreement among educators concerning the benefits of mainstreaming programs. The following remarks in a recent issue of Exceptional Parent (1976) are illustrative of this point:

Mainstreaming works! It works when a child, failing to achieve as expected, spends a portion of his day in a special class sitting and is thereby maintained in a regular grade. It works when another child moves from a segregated environment to a regular school. Mainstreaming works when a special class child participates in the nonacademic

activities of the regular school. It has achieved its ultimate end when all education is special and no child is beyond its pale. In practice, mainstreaming provides alternatives and reconciles varied levels of ability. Indeed, the exemplariness of education is bound intimately to the accommodation of variance, not as something special but as routine and in the course of ordinary responsibilities. (Ensher, 1976, p.7)

Mainstreaming is a fad passionately embraced by the thrill seekers of special education, and, like other fads, it will surely be abandoned. Mainstreaming is a revolution fired by the disillusionment of professionals grown weary of the struggle and by novices long on rhetoric and short on experience. Mainstreaming is primarily an emotional response to the frustration of our calling. Its rationale is incomplete and its planning haphazard and its pedagogy unproven. While mainstreaming for the mildly retarded has masqueraded as many things-- it is essentially an assault on the special class structure. Unless this movement is stopped, children of limited academic ability will become victims of the competition of the general school. Ultimately, this will cause professionals to relive the early, painful years of growth in special education. (Winshel, 1976, pp. 8-9)

Legality of Mainstreaming

Despite the controversy raised by the mainstreaming issue, most states have enacted legislation that requires education for handicapped children of school age. In Tennessee, Public Law 839 requires the State Department of Education to provide educational services to handicapped children 4-21 years old. On a national level, Public Law 94-142 states that an education for all handicapped children between the ages of 3 and 21 shall be provided in the least restrictive environment. This means placement with normal children as much as possible, eliminating a good portion of

segregation and institutionalization (National Society for Autistic Children, 1979).

Presently the State of Tennessee is meeting this legal commitment in four ways. Total integration of handicapped children into the regular classroom or partial integration of handicapped children into the regular classroom with support from resource teachers are the best solutions. Sometimes, however, severely handicapped children are segregated totally within regular school settings. If children need residential treatment, there are special schools available such as Tennessee School for the Deaf and Riverbend School at Lakeshore Mental Health Institute (Freeman, 1977).

The decision about where to place a child is made by a multidisciplinary team comprised of the child's parents, teacher, and other professionals involved in the case. The team's responsibility is to set goals and determine the best program for each child. It is up to the multidisciplinary team to determine the "least restrictive" educational environment for the child.

With the passage of state and federal laws that guarantee the educational rights of handicapped children, school systems must treat mainstreaming as an educational reality and plan accordingly. As a result, educators on both sides of the issue are re-examining some of their cherished beliefs about the advantages and disadvantages of mainstreaming.

CHAPTER I

REVIEW OF LITERATURE ON MAINSTREAMING

Apparent Advantages

Those who support mainstreaming contend that handicapped children can benefit by exposure to nonhandicapped children. Handicapped children placed in classes with only other handicapped children are deprived of appropriate role models and exposure to the routine and curriculum taught in regular classrooms (Bricker & Bricker, 1971).

Nonhandicapped children may serve as models of appropriate behaviors. Allen, Benning, and Drummond (1972) conducted a case study of a 47-month-old girl who was integrated into a preschool with nonhandicapped children. They found a steady decrease in negative, disruptive social behavior over a 2-month period. Devoney, Guralnick, and Rubin (1974) reported that the integration of five nonhandicapped children into structured activities with seven handicapped children for 3 days per week resulted in an increase in the quantity and quality of the play behavior of the handicapped children. Not only did interactions increase while all of the children were together, interactions among the handicapped children increased when they were in the room alone. The results imply that when nonhandicapped peers are used as models of appropriate play behavior, play skills of handicapped children can be modified.

Another presumed advantage of mainstreaming is the use of peers as agents of reinforcement. Related research reveals that nonhandicapped preschoolers can serve as therapists in changing the behaviors of other nonhandicapped peers (Wahler, 1967). Wahler trained several children to ignore high-frequency behaviors of their peers and to attend to certain low-frequency behaviors. The results indicated a decrease in high frequency behaviors, although infrequently occurring behaviors increased as expected. Experimental control over both behavior classes was demonstrated through the use of a reversal design.

Using a similar approach, Apolloni, Cooke, and Cooke (1977) established a peer model for three developmentally delayed children under 27 months of age. Through adult-directed prompting, a nonhandicapped toddler was taught to use social reinforcement when a handicapped child imitated the model's behavior. The authors also reported that generalized imitation across settings and responses occurred in the absence of adult prompting.

In a related study, Nordquist (1978) found that an autistic child could be trained by two 5-year-old nonhandicapped children to imitate a number of nonverbal behaviors in a preschool setting. During the peer training periods, the autistic child not only imitated directly trained behaviors, but also spontaneously imitated the untrained social behaviors of other children.

Russo and Koegel (1977) successfully integrated a 5-year-old autistic child into a public school classroom. At first, a therapist assisted the classroom teacher in dealing with the child; however, 13 weeks after the integration, the teacher took over all interventions. Follow-up showed that appropriate behaviors were maintained and inappropriate behaviors extinguished.

These studies demonstrate convincingly the positive approaches to integration. They support the beliefs of some educators that placement in regular classrooms can be beneficial to some handicapped children, especially if nonhandicapped children are trained to function as appropriate models and agents of social reinforcement.

Presumed Disadvantages

Those who oppose mainstreaming have argued that nonhandicapped children may begin to imitate undesirable behaviors exhibited by a handicapped child. They also fear that handicapped children may be teased or ignored by the other children (Baldwin & Baldwin, 1974; MacMillan, Jones, & Aloia, 1974). There appears to be no conclusive evidence regarding these assumptions, at least evidence that is based upon the direct observation of handicapped and nonhandicapped children. Evidence that is available is based upon teacher or child responses to questionnaires and sociometric instruments that reflect what people say about handicapped children rather than direct observation of behavior. Verbal responses and observable behavior do not

always correspond. Yet, this research should not be taken lightly. Evidence confirms that nonhandicapped children may not interact with handicapped children if they are given a choice (Guralnick, 1978).

Sociometric Research. Sociometry is the study of populations. It is a method for discovering, describing, and evaluating social status, structure, and development. This is done by measuring the extent of acceptance or rejection of one person another (Johnson, 1950).

There is a small body of sociometric research that currently challenges the pro-mainstreaming position. These studies, although methodologically not as strong as the preceeding behavioral studies (Wynne, Ulfelder, & Dakof, 1975), nevertheless are consistent with the often reported finding that little spontaneous interaction takes place between handicapped and nonhandicapped children without adult intervention (Guralnick, 1978). Physical proximity does not seem to affect interactions or increase the social position of nonhandicapped children (Force, 1956; Gottlieb, 1977; Lapp, 1956).

In an attempt to discover why interactions fail to occur without teacher intervention, sociometric tests have been administered to elementary school children. Results have been discouraging for supporters of mainstreaming. For example, Billings (1963) found that elementary students expressed more unfavorable attitudes about crippled children than noncrippled children. In this

study, the subjects first were shown a picture described as "a little girl" and asked to tell the experimenter about her. Then they were shown the same girl in a wheelchair and asked to tell a story about "a little crippled girl". Judges independently rated the children's responses as social, indicating acceptance or rejection, and value, indicating a judgement of the person. Three major results were reported. Elementary school children in grades one, three, and six expressed more unfavorable attitudes toward crippled children than toward noncrippled children. Children in the first grade were more tolerant of the crippled children than children in the sixth grade. The children in the third grade were less tolerant than the first graders but more tolerant than the sixth graders. Surprisingly, children judged by teachers to be high in adjustment were rated by the judges to have the least favorable attitudes. Goodman, Gottlieb, and Harrison (1972) reported similar findings using EMR children. They found younger nonhandicapped children were more accepting of handicapped children than were nonhandicapped children several years older.

Iano, Angus, and Heller (1974) and Johnson (1950) concluded that mentally retarded students were accepted less by regular students than were their nonretarded peers. In both studies individually administered sociometric tests were employed which required each child to choose a classmate for a particular activity. Based on the number of

times each child was chosen, the responses of the children suggested that mentally retarded children were less accepted than typical children. Moreover, Johnson, found that nonhandicapped children with higher intelligence scores tended to be more accepting than children with lower intelligence scores and that nonhandicapped children rarely said they would reject their mentally retarded peers because of their limited academic ability. Instead, rejection usually occurred because the nonhandicapped children found the behavior of the handicapped children unacceptable.

Kennedy and Bruininks (1974) reported conflicting information regarding the type of handicap and the related amount of rejection. According to them, some studies suggested that the more obvious the handicap, the more rejected the child will be, while others suggested that visible handicaps reduce the amount of awkwardness between the disabled and the nondisabled because the need to explain the handicap is removed. This, in turn, results in more acceptance. Kennedy and Bruininks (1974) examined the status of hearing-impaired children in a regular classroom. They administered sociometric tests to first and second grade children (handicapped and nonhandicapped). No differences were found in the acceptance of hearing and nonhearing children. The authors cited several reasons for the unusual results: (a) hearing impaired children possessed desirable traits and personal competencies necessary for school success; (b) the classroom settings may

have fostered successful integration; (c) the nonhandicapped children were accepting because of their young age; (d) aspects of a preschool program in which the nonhearing had previously been enrolled may have increased their social acceptability in comparison to children in other studies.

With the exception of this last study, the evidence is overwhelming that elementary handicapped children are likely to be less accepted by nonhandicapped children than other nonhandicapped children of the same age. Moreover, other researchers have suggested that rejection may begin as early as age four. Jones and Sisk (1967) found that 4-year-old children consistently perceived the limitations of orthopedically handicapped children. When children between the ages of 2 and 6 years were asked to respond to pictures of children who were identical except that one wore leg braces, 4-year-old children consistently spoke of the handicapped child's inability to run and play and voiced other similar concerns. Children that were 5- and 6-years-old qualified their responses by stipulating conditions under which they believed the disabled would have fun. The authors made no mention of the responses of the children younger than age 4.

Richardson (1970) also found that the nonacceptance of physically disabled children emerged at an early age. He reported that 6-year-old children said they liked their nonhandicapped peers more than they liked children with handicaps. Thus, the sociometric literature tends to

support the notion that integrated programs may not be in the best interests of some handicapped children, particularly those who have extensive physical or behavioral impairments.

Studies of Behavior Change of Handicapped Children

The evidence that nonhandicapped children form negative attitudes toward handicapped children perhaps as early as age 4 may provide a plausible explanation for the finding that handicapped and nonhandicapped children generally do not interact with one another in integrated settings. In light of this, some researchers have attempted to change the social position of handicapped children in integrated settings by modifying behaviors of the handicapped children believed to be related to nonhandicapped children's negative attitudes. In every case, however, the researchers focused their intervention procedures on handicapped children of school age.

Chennault (1967) found that including intermediate and junior high educable mentally retarded children in a single dramatic skit enhanced their acceptance by nonhandicapped as well as handicapped peers. Gottlieb and Budoff (1973) stated that the specific behaviors of educable mentally retarded children which are responsible for their inferior social status should be identified and modified to help them manage peer interactions successfully. They also pointed out that the environment of integration (i.e. the

attitude of the teacher and his/her tolerance of social and intellectual deviance) would affect the social status of the child in the class. Gottlieb and Budoff admit that the parameters of socially acceptable behavior in the classroom need to be expanded to accommodate exceptional children. Unfortunately, they did not offer a strategy for expanding those parameters.

Similar conclusions were reached by Gottlieb and Davis (1973). The purpose of their study was to determine the social status of EMR children in an integrated class and to test whether integration influenced social acceptability. They found nonhandicapped children chose EMRs as playmates less than other nonhandicapped children and concluded that simply enrolling a handicapped child in a class does not make him/her accepted by the other children. They presented two strategies for improving the acceptance of the EMR children: (a) the identification and modification of behaviors viewed by peers as unacceptable and (b) the modification of peers' perceptions of what constitutes appropriate behavior in the classroom. Their strategies were based on the assumption that nonacceptance is caused by dual roles--inappropriate behaviors of the handicapped children and biased peer perceptions of appropriate behavior. Again, unfortunately, neither strategy was put to experimental test.

Studies of Attitude Change of Nonhandicapped Children

Simpson, Parrish, and Cook (1976) and Cohen (1977) focused on the second of Gottlieb and Budoff's strategies. They found positive attitudes toward the handicapped in elementary school students could be fostered through the use of appropriate curriculum materials. Simpson et al. (1976), presented an indepth curriculum to elementary school students. The first part of the study involved combined second and third grade classes and the second part involved fifth grade classes. Both Part 1 groups were given an adopted version of the Attitude Toward Disabled Persons Scale before and after the curriculum was presented. The experimental children went through a 4-week training sequence designed to educate them about the handicapped and promote positive attitudes toward disabled people. The curriculum included information about famous Americans who were handicapped, films showing how handicapped children work and play, role playing, and activities with handicapped children assigned to self-contained classrooms within the same building. Pre and post-tests disclosed that the curriculum did appear to increase the positive attitudes of nonhandicapped children toward the handicapped. However, there were no direct behavioral measures of the children's school behaviors to show they actually behaved differently toward the special children.

One Part 2 experimental group received information about handicaps through discussions and lectures once a week

for 4 weeks. A second Part 2 experimental group received the same information plus 1 hour per week of actual integration with a self-contained classroom of emotionally disturbed children. The results showed no difference between the experimental groups in gains of positive attitudes toward the handicapped. Children in the experimental group did express, however, more positive attitudes toward the handicapped children than did the children in the control group. Again, no behavioral measures were taken.

Cohen (1977) stressed acceptance of those with physical handicaps by children in primary schools. In a descriptive article, she related her work in developing a curriculum to help young children learn about individual differences. The curriculum was developed around a set of themes. They included: some people are different from us. They may look different or learn more slowly. Often, we can learn from those who are different.

In Cohen's (1977) curriculum, handicaps were treated as extensions of everyday individual differences such as hair or eye color. After pilot studies in six kindergartens, seven first grades, and seven second grades, informal teacher feedback was positive concerning the use of the curriculum. For example, one class was shown a videotape of a child with cerebral palsy. Another class, not exposed to the curriculum, also saw the videotape. Children in the experimental class believed the child would participate in

play activities after school, whereas the children in the control class believed the girl would participate in activities related to her disability, e.g., practice walking. Experimental children appeared to see the handicapped child as one who had many of the same interests as they did. The control children, however, saw the handicapped child as someone hampered by her disability.

In a related study, Kleck, Hiroshi, and Hastorf (1966), conducted two interview-like situations. In one situation an interviewer was used who was not handicapped and in the other an interviewer was used who appeared to be physically handicapped. The school-aged subjects interacting with the disabled interviewer tended to demonstrate less variability in behavior and tended to terminate the interaction sooner than the subjects interacting with the nonhandicapped interviewer. Behavior exhibited in the presence of the disabled person appeared to be stereotyped, inhibited, and overcontrolled.

Conclusions

Several conclusions can be drawn from the above studies. Handicapped and nonhandicapped children are not likely to interact with one another in integrated classrooms unless special steps are taken to prompt and reinforce their interactions. Interactions may not occur because of ignorance about how to approach the handicapped, or because of inappropriate behavior exhibited by the handicapped

children. Taylor, Artuso, Soloway, Hewett, Quay, & Stillwell (1972) concluded there were four types of behavioral skills necessary for successful classroom participation. They are: the ability to pay attention, respond, and follow directions; the ability to perform academically; the ability to function in various instructional settings such as small group and individual work; and the susceptibility to regular classroom rewards and reinforcers. Assistance in mastering some of these skills could help handicapped children have a more successful school experience.

Negative attitudes or beliefs held by nonhandicapped children about handicapped children could be another reason for noninteraction. These attitudes and beliefs seem to be formed at an early age, perhaps as early as four, however, it may be possible to modify nonhandicapped children's attitudes by informing them about the myths and realities of various handicapping conditions. This could lead to more understanding of differences and thus acceptance of the handicapped might be fostered.

Unfortunately, limited empirical research exists regarding the attitudes and social behaviors of preschool children toward handicapped children in integrated settings. Most of the relevant research deals with the sociometric preferences of elementary and junior high school children. Even these studies are difficult to compare because of setting, type, and severity of the handicap involved, ratio

of handicapped to nonhandicapped children, and research design. Moreover, none of these studies incorporated direct behavioral observations of the children.

Even less is known about methods that develop positive attitudes toward handicapped children. Cohen (1977) and Simpson et al. (1976) are the only researchers that address this problem. Their studies, too, were limited in that they did not incorporate behavioral observations or deal specifically with preschool children.

In our society, it is not unusual for children and adults to fear and/or avoid that which they do not understand. To a young child, a physical deformity may be very difficult to accept. A mental, emotional, or behavioral problem may be so abstract it is inconceivable. Children who are exposed only to people who appear similar to each other may find it difficult to accept others who are physically and/or behaviorally different. They may not have had the opportunity to develop ideas or beliefs which help them to relate to handicapped people in more appropriate ways. The preceding behavioral and sociometric research reveals that the opportunity, if it occurs, should occur during the early childhood years. Moreover, some educators contend that preprimary children are more accepting of their peers' differences than are children of primary age (Weininger, 1973). If young children could be educated about the handicapped, perhaps positive attitudes could be developed before negative attitudes begin to grow.

Before a handicapped child is integrated into a regular classroom, many hours are usually devoted to preparing that child for transition. Deviant behaviors are brought under control and basic social behaviors are taught to the child. If the child is school-age, academics may be stressed. Preparations during transition also include the regular classroom teacher. S/he usually is informed about the child's special problems at meetings with a multidisciplinary team and almost always meets the child prior to the first day of his/her attendance.

Unfortunately, transition preparations seldom include the nonhandicapped children. They may be told the special child's name and given some background information, but extensive preparation often has been overlooked. Yet, they might react differently if they were given an opportunity to learn about handicapped children. The question is, how does one go about informing nonhandicapped children so that positive attitudes and behaviors are certain to be fostered?

There are currently no guidelines to assist preschool teachers in answering this question. Yet, as the preceding literature points out, this is the time when children begin to form attitudes and beliefs about people who are "different." Thus, the need exists for methods to teach nonhandicapped preschool children about special children and their problems. As Simpson et al. (1976) wrote, "without positive support of his classmates, the handicapped

child may experience few of the humanistic virtues of the regular classroom that have been claimed by the professional community" (p. 49). One way of providing part of that support may be by educating nonhandicapped children about the many things they have in common with handicapped children as well as the few things which set them apart.

CHAPTER II

METHODOLOGY

Hypothesis

The present study was undertaken to test the hypothesis that preschool children who are presented a curriculum that informs them about commonalities and differences between themselves and handicapped children will express more positive attitudes toward an individual handicapped child than those children who are not presented the curriculum. Additionally, the behaviors exhibited toward the handicapped child by "educated" children will also be more positive than the behaviors of "noneducated" children.

Experimental Design

A post-test only control design was used to examine the differences between the experimental and control subjects on two of three measures, sociometric and incidental. In both cases, a significance level of .01 was selected. This level was selected because of the small sample size and the exploratory nature of the research.

Subjects

Six children between the ages of 32 months and 54 months, with a mean age of 42 months, served as experimental children. They were enrolled in the Child Day Care Center at The University of Tennessee, Knoxville. Two boys and two

girls had been enrolled for a period of 3 months prior to the implementation of the present study. The remaining boy and girl had been enrolled for a period of at least 10 months. The experimental children were chosen randomly from the total population of children at the center. Twelve additional children also were chosen randomly to serve as control children.

One autistic child was selected to participate in the study. This child was a 7-year-old female who had been diagnosed autistic by the staff at Lakeshore Mental Health Institute where she had received educational and clinical treatment for 5 years prior to her referral to the day care center. The child had good self-care skills and could imitate verbal as well as nonverbal behaviors. Her social and cognitive skills, however, were far below those of the nonhandicapped children at the center. Her functional language was delayed markedly. For the most part, her language responses were imitational, but occasionally she produced spontaneous utterances of four or five words, particularly when she needed to use the bathroom or wanted something to eat.

Setting

The study was conducted at The University of Tennessee Child Day Care Center. The population at the center consisted of 22 nonhandicapped children whose ages varied from 32 to 54 months. The staff consisted of three

half-time graduate teaching assistants and one full-time master teacher. In addition, there was one undergraduate student assigned to work with each staff member. Because of alternating shifts, the number of staff members working varied during the day. At any given time, there were at least two staff members and one undergraduate student present.

Two of the teachers had been trained at Lakeshore Mental Health Institute to work with autistic and autistic-like children. Their shifts alternated so that one worked in the morning and one worked in the afternoon.

The daily schedule at the day care center consisted of outdoor free play, large group activity, indoor free play, snack, music, outdoor free play, lunch, nap, large group activity, snack, indoor free play, and outdoor free play. During free play, the children could choose to use various materials such as games, blocks, books, or art materials. Teachers also set up various types of pre-academic activities at this time. Treatment children followed the same schedule as the nontreatment children except for two 15-minute activity periods that preceded morning and afternoon outdoor free play.

Apparatus

The subjects' free play behaviors were recorded daily by means of a tele-telemetry system (Nordquist, Kell, Gerard, & Furbush, 1978). Three Sony cameras, each equipped

with a zoom lens, were wall-mounted on Pelco pan/tilt units (model TV-J8C, mount PM 105) in each classroom of the day care center. The cameras were located in the corner of the rooms so that the majority of the room could be scanned easily. They were connected by lines through two television monitors to a Sony Video Recorder (AV-3600). The video recorder and monitors were located in a laboratory adjacent to the main classroom. The camera, zoom lens, and pan/tilt units were controlled by a Pelco variable speed control panel (PT 1500-M joystick). The panel also was located in the laboratory. Thus, a technician could track and record on videotape the behavior of a subject child who was in close proximity to or interacting with the handicapped child by operating the variable-speed control panel.

A Vega wireless microphone and transmitter (model 88) was used to transmit the subject child's voice to a matched receiver (model 89) that was housed in the laboratory. The receiver was connected by a line to a Shure Audio Master (M63). An audio tape recorder with pre-recorded 10-second interval signals also was connected by a line to the audio master. Both the voice and tape transmissions were integrated at the audio master and transmitted to the video recorder by a single line from the audio master to the auxiliary-in jack at the back of the video recorder.

The microphone and transmitter were secured in a smocklike vest worn by the handicapped child. The voice

pick-up of the Vega unit was excellent and transmitted very clearly not only what the handicapped child said, but also anything said to the handicapped child by the nonhandicapped subject children. For several weeks prior to the beginning of the study many of the children at the center wore the jacket so that none of the nonhandicapped children would find it unusual when the handicapped child was asked to wear it.

Measures

Three different measures were used to record the subjects' behaviors. Several measures were used because it was not known what type of changes the curriculum would produce or when the changes were likely to occur during the day.

Behavioral Measures. Indoor free play periods were used to sample the children's behaviors toward the handicapped child. For a period of 2 weeks immediately following the enrollment of the handicapped child, 15-minute samples were collected alternately during morning and afternoon free play sessions. Although cameras were used to track the handicapped child, the behaviors of the other children were the ones of interest. A total of 11 different behaviors were recorded. Some of the behaviors were adapted from the measurement system developed by Wahler, House, and Stambough (1976). Abbreviated definitions are as follows:

1. Social Approach: Any instance of physical or verbal contact with the handicapped child initiated by the subject.

2. Social Interaction: Any instance of interaction when the behavior of both the subject and the handicapped child are interdependent.

3. Adult Attention: Any physical or verbal contact made by an adult with the subject.

4. Derogatory Behavior: Any instance of a subject mocking, teasing, annoying, or rejecting the handicapped child.

5. Assistance: Spontaneous help provided by a subject to the handicapped child.

6. Verbal Interest: Any questions or statements made by a subject about the handicapped child.

7. Sustained Attending: Observation of objects, people, or activities by the target child for a full 10-second interval.

8. Sustained Noninteraction: Any instance of subject noninteraction with people or objects for a full 10-seconds.

9. Object Play: Any instance of inappropriate repetitive manipulation of an object by the subject.

10. Self-stimulation: Any instance of repetitive body movements by the subject.

11. Prompt: Adult instruction to a subject to interact with the handicapped child.

The observation method required an observer to enter a code on a data sheet for each behavior that occurred during a 10-second interval. Regardless of the number of times the same behavior occurred within the interval, only one unit of each behavior was scored. There were 90 10-second intervals in each 15-minute tape segment. When the social approach, social interaction and social attention categories were scored, they were accompanied by a subscript to identify whether the handicapped child was interacting with an adult or subject child.

Two undergraduate students in the Department of Child and Family Studies at The University of Tennessee, Knoxville served as observers. They received course credit for their work. They had previous experience with naturalistic methods of observation and recording but were unaware of the experimental nature of the purpose or the research.

Each observer was given a manual containing definitions for all of the behaviors (see Appendix A). A written exam was administered to the observers after they had had sufficient time to study the definitions. This was done to insure that they understood the definitions and the

codes and could apply them to written behavioral situations. After the observers answered at least 80% of the questions correctly, they were asked to score a training tape that had been scored previously by a trained observer. When the observers scored the behaviors reliably, they began to score data tapes. A score of 80% agreement with the trainer on all behaviors was considered acceptable reliability (computed the same as interobserver reliability).

After observers began to score the experimental tapes, interobserver reliability checks were conducted throughout the study. To check reliability all observers were given the same tape to score. However, they were unaware which tape was used to check reliability.

Reliability for each behavior was computed using Harris and Lahey's (1978) formula for combining occurrence and nonoccurrence percentage agreement scores. The formula is:

$$WA = (O \times U) + (N \times S) \times 100$$

where

O = The occurrence agreement score or the number of occurrence agreements divided by (the number occurrence agreements + the number of occurrence disagreements);

U = The mean proportion of unscored intervals -- i.e., (the proportion of intervals not scored by observer A + the proportion of intervals not scored by observer B) divided by 2;

N = The nonoccurrence agreement score -- i.e., the number of nonoccurrence agreements divided by (the number of nonoccurrence agreements plus the number of nonoccurrence disagreements);

S = The mean proportion of scored intervals -- i.e., (the proportion of scored intervals by observer A + the proportion of scored intervals by observer B) divided by 2;

Overall observer reliability for all behaviors was 86%. Levels of reliability for specific categories were: social interaction with a child, 90%; social interaction with an adult, 85%; social attention from a child, 80%; social attention from an adult, 95%; sustained attention, 61%; self-stimulation, 83%; object play, 93%; and prompt, 100%. Reliability was not calculated for verbal interest, derogatory behavior, or assist because of the low frequency of occurrence. None of these categories occurred on the tapes used to check reliability.

Sociometric Measures. The purpose of the sociometric interview was to assess the subject children's peer preferences in play situations. An adaptation of Boger's (1969) version of the Play Situation-Picture Board Sociometric Technique was used to assess the social preferences of the subject children. This particular technique was chosen because of the young child's inability to focus on the entire population of the day care center within the "mind's eye." This technique was designed to

maintain the children's attention and to minimize the abstract conceptions typically involved in sociometry. A photograph was taken of each child in the center just prior to the sociometric assessment. In addition, five common activities such as toys and pieces of play equipment found inside the center and on the playground were photographed.

During the sociometric assessment, the children were taken individually to a room adjoining the classroom and seated at a child-sized table. The child sat at the end of the table and the teacher sat beside the child. The assessment began by having each child identify the pictures of the other children and the activities. This was done to insure that all of the children were familiar with the handicapped child and to help them differentiate between a set of identical twin girls. The teacher controlled the naming of the children only to make sure that all of the pictures were identified before beginning the selection process. Next, the child found his/her picture which was placed to the side of the table. Then the child was told the following: "I am going to tell you a story, but I need your help. Will you help me?" The teacher waited for a positive answer before continuing the story (see Appendix B for the complete story). This was to insure that the child was attending to the teacher. At point A in the story, the child was asked to choose an activity. The picture of the activity was placed with the picture of the child. At point B in the story, the child was asked with whom s/he would

like to play. If the child said a full name, it was accepted. If the child responded by pointing, s/he was asked to find the picture, identify it, and place it with his/her picture and the activity picture. If there was no response, the child was encouraged by the teacher who said, "Look at all of these pictures. Who would you like to play with on _____?" (the teacher would fill in the name of the play situation chosen by the child). At point C in the story, the child was again asked to select a play-mate. Throughout the story at points D, G, H, I, K, L, and M, the child was asked to select a peer. After each selection the same procedure was followed. At points F and J, the child was asked to choose which of the five activities s/he preferred. Although an activity could only be chosen once, the child was free to choose the same peer for more than one activity. After the selection of the three peers for each activity, all peer photographs were returned to their original position on the table and the photograph of the selected activity was placed aside.

Each play situation had been precoded with a Roman Numeral marked on the back of the picture. Each child's picture also had been precoded in a similar manner. These codes were used in recording the peer or activity selection on the data sheet (see Appendix D).

A reliability check was conducted by an observer who watched all of the sociometric assessments. The sociometric procedure was explained to the observer and she was shown

how to record the child's responses. From that point on, there was no interaction between the observer and the teacher. At no time during the assessments was the observer aware of the expected outcome of the sociometric procedure. Overall teacher-observer reliability was 100%.

Incidental Measures. In addition to the behavioral and sociometric measures, a third measurement system was used in the present study. Incidental observations made by the teachers were recorded for a period of 2 weeks following the enrollment of the handicapped child. All of the teachers working at the day care center were asked to write down comments they heard or behaviors they saw exhibited by the subject children toward the handicapped child. Notepads were located conveniently throughout the center for this purpose. Teachers recorded the date, the child's name, a description of the behavior, and their own initials for each incident. At the end of each day, the notes were collected and the teachers were reminded to continue recording the next day.

It was difficult to conduct reliability checks on the incidental measures because the teachers often were alone in an area. They were asked, however, to confirm their observations whenever possible by having another teacher independently read the observation. If s/he had observed the behavior and if his/her impression of the incident concurred with the recording teacher's description, s/he also recorded his/her initials.

After all of the incidental observations were recorded, they were typed and randomly compiled into a list of 156 incidents. Each incident contained a description of the subject child's behavior and was coded using the child's initials to facilitate the analysis. Five judges, unfamiliar with the purpose of the study, were asked to independently classify each incident according to one of the following categories (see Appendix E for the complete rating booklet):

Interest

Assistance: Peer instructs (using positive or negative imperatives such as "do this," "don't do that") or gives physical or verbal help directly to the subject child, either spontaneously or when asked by the subject child.

Concern: Peer makes a statement or asks a question indicating interest in what the subject child is doing, has done, or is going to do; the peer attempts to correct the situation in order to improve it for the handicapped child.

Inquisitiveness: Peer is curious or interested in some aspect of the subject child's behavior.

Interaction

Sharing: Peer gives the subject child some of his/her materials.

Involvement: Peer encourages the subject to participate in an activity or interacts with the subject child.

Rejection: Peer refuses to interact with the subject child.

Polite Talk: Peer says "hello," "good-bye," "please," or "thank you" to the subject child.

Recognition

Interpretation: Peer offers an explanation of the subject child's behavior to someone else.

Identification: Peer points out, locates, or introduces the subject child to someone else.

Description: Peer produces a narrative account of something the subject child has done, is doing, or is going to do.

Affect

Dissatisfaction: Peer mocks, teases, or expresses discontent or displeasure toward the subject child.

Acceptance: Peer indicates favor toward the subject child or approval of something the child had done.

Procedures

Children assigned to the experimental group participated in an educational curriculum for two 15-minute sessions each day for a period of 2 weeks prior to the admission of the handicapped child to the program. Thus, there was a total of 20 educational sessions. The purpose

of the sessions was to inform the children about commonalities and differences between themselves and handicapped children. The hope was, of course, that by becoming familiar with this information, the nonhandicapped children would be more likely to accept the handicapped child who was scheduled to enroll in the program.

The morning sessions followed snack and preceded outdoor free play. The afternoon sessions followed indoor free play and, again, preceded outdoor free play. All sessions were conducted in a room, adjacent to the main classroom. Experimental children were told not to discuss the sessions with the other children. There were no observed incidents of such discussions between experimental and control children.

Activities. A different activity was planned for each session. However, morning and afternoon sessions were designed to introduce similar themes. Each session was opened with a brief review of the previous session and ended with a positive statement about the session. Sessions are described briefly below (see Appendix E for the complete list).

Week I

Initial discussion centered around similarities and differences between "normal" people. Then the discussion changed to include handicapped children. Eventually the children were shown materials and assistance devices

commonly used by physically handicapped individuals. The purpose of demonstrating the assistance devices was to help the children understand and overcome fears they might have concerning them. After the teacher demonstrated how a device was worn or used, each child was given an opportunity to use it in the same manner. For example, after the teacher demonstrated how to sit in a wheelchair, the children sat in the wheelchair and tried to move around a simple obstacle course in the room. Whenever possible, child-sized equipment was used. At no time were the children forced to use a device.

Week II

During the second week the activities dealt with more subtle handicaps and more specifically with the problems of the handicapped child who was to enroll in the program. Books about mentally retarded children were read to the children. Videotapes about mentally retarded and autistic children also were shown to them. After reading a book or viewing a tape, the children helped the teacher list ways that handicapped children appeared to be different. Then the emphasis shifted toward the things that handicapped children could do and seemed to enjoy. The teacher pointed out that a handicapped child's interests and abilities were much the same as those of the nonhandicapped children. During the discussions, words like "mentally retarded," "autistic," "blind," and "epileptic" also were introduced

but not emphasized. The teacher told the children they might hear these words. She explained them in simple terms and tried to assure the children that they need not be concerned about these words if they heard them because they referred to children who, although different in some ways, were very much like them.

Finally, the last 2 days were devoted to the handicapped child who was scheduled to enroll in the day care center. Pictures, videotapes, and a visit from the child's mother were used to familiarize the experimental children with the autistic child before she entered the program. During the final session the teacher encouraged the children to think about ways they could help the handicapped newcomer when she came to the center (i.e., helping her learn the routines or showing her how to use materials in the center).

Staff Training. The staff members were also introduced to the handicapped child through the use of activities similar to those presented to the experimental children. A weekly staff meeting was devoted to simulating several handicapping conditions and providing the teachers with some information about the handicapped child. Much of the time was spent asking and answering questions about the handicapped child's abilities. Most of the questions from the staff were worded in a way that emphasized what she could not do. The teacher pointed out that the child did have many skills and positive behaviors in her repertoire.

In addition, staff members also were assured that there was little chance of the handicapped child being a behavior problem. They were informed that on her first morning several afternoon staff members and the director of the research would be on hand to answer questions or give assistance if needed.

The staff orientation was conducted in an attempt to prepare the staff for the enrollment of the handicapped child. The hope was that staff members would be less likely to stereotype the child and would feel more comfortable in her presence. Since it is unlikely that an integrated program would not include a similar type of staff orientation, it was decided to include one in the present research.

Data Analysis

The sociometric data were analyzed by the Mann-Whitney U-test. This test was used because of the ordinal nature of the sociometric scores, the unequal number of subjects in each group, and the ranking of the scores according to the subjects' preference of playmates (i.e., first, second, third).

The incidental data were analyzed by t-tests with a correction for the unequal number of subjects in each group. The number of incidents produced by a subject in a particular behavioral category served as frequency data.

The behavioral data were cast into a frequency table. A formal analysis was not conducted because the number of frequencies across all behaviors was extremely low. Some behaviors occurred only one or two times during the videotaped free play sessions and others did not occur at all.

In addition to the above analyses, attendance records were kept for all subjects throughout the study. Children assigned to the experimental group were present every day. Two children assigned to the control group were absent one day each. Absence therefore was not a variable that was likely to contribute to differences between experimental and control children.

CHAPTER III

RESULTS

All of the measures reflected differences between experimental and control subjects in the expected direction. The results for each measure are presented separately below in the order to which they support the hypothesis. The least supportive are presented first.

Behavioral Measures

Table 1 presents the frequencies of child behaviors for both experimental and control subjects as they were recorded during the indoor free play period. It is readily apparent that with few exceptions, neither experimental nor control children interacted with, attended to, expressed interest in, or assisted the handicapped child during free play. (None of the children produced the other previously identified behaviors even once, either spontaneously or prompted.) However, when one of these behaviors did occur, it was more likely to be produced by a treatment subject. Nevertheless, the frequencies of all behaviors were so low, even for the experimental subjects, that a formal analysis was not warranted.

Sociometric Measures

The Mann-Whitney U-test revealed that the treatment children selected the handicapped child to play with in activities of their choice more often than the control

TABLE 1

FREQUENCIES OF CHILD BEHAVIORS
DURING FREE PLAY

Child	Number of Intervals in Which Behavior Occurred			
	Social Interaction	Attention	Verbal Interest	Assist
Experimental Group				
1	25	23	4	4
2	6	8	0	0
3	2	2	0	2
4	2	0	0	0
5	0	0	0	0
6	0	0	0	0
Control Group				
7	4	1	0	0
8	1	0	0	0
9	1	3	0	0
10	0	1	0	0
11	0	0	0	0
12	0	0	0	0
13	0	0	0	0
14	0	0	0	0
15	0	0	0	0
16	0	0	0	0
17	0	0	0	0
18	0	0	0	0

NOTE: The number of possible intervals that could be scored for each behavior was 401.

children, $t(16) = 1.59$, $p < .01$. This finding is somewhat surprising because these interactions were not supported by the behavioral data. The behavioral measure did not reveal high or stable rates of interaction between the experimental children and the handicapped child. This discrepancy might be explained by the often reported finding that what children say and what they actually do may not correspond. Another explanation could be that an indoor free play period might not be the best time for interactions between handicapped and nonhandicapped children to occur.

Incidental Measures

Table 2 presents the results of the t-test comparisons between the incidental behaviors of the experimental and control children. Several of the comparisons were significant.

The major category, "interaction" which included the behaviors of sharing, involvement, rejection, and polite talk was significant, $t(16) = 1.34$, $p < .10$. This largely was because the experimental children were more involved with the handicapped child than the control children, $t(16) = 1.75$, $p < .05$. Additionally, polite talk was used more by the experimental children than by the control children, $p < .05$, when talking to the handicapped child. However, the control children did appear to share more with the handicapped child than the treatment children, $p < .10$ although the mean sharing scores for both groups were extremely low.

TABLE 2

FREQUENCIES OF INCIDENTAL BEHAVIORS FOR
EXPERIMENTAL AND CONTROL CHILDREN

Behavior Categories	Experimental (N=6)		Control (N=12)		t-values (df=16)
	Mean	SD	Mean	SD	
Interest	3.7	27.2	1.9	5.7	1.00
Assistance	1.8	5.8	1.1	3.1	1.00
Concern	0.7	2.2	0.3	0.4	1.00
Inquisitive	1.2	2.1	0.6	0.6	1.05
Interaction	3.2	9.8	1.4	2.1	1.54**
Sharing	0.0	0.0	0.3	0.2	1.32**
Involvement	2.3	7.6	0.5	0.7	2.08*
Rejection	0.2	0.1	0.6	1.0	1.54**
Polite Talk	0.7	0.6	0.1	0.2	1.79*
Recognition	0.7	0.6	0.1	0.2	1.79*
Interpret.	0.3	0.6	0.0	0.0	1.43*
Identi.	0.2	0.1	0.8	0.8	0.53
Description	0.2	0.1	0.8	0.8	0.53
Affect	2.0	2.3	0.5	0.4	2.73*
Dissatis.	0.2	0.1	0.2	0.1	0.00
Acceptance	1.8	1.5	0.3	0.4	3.09*

* $p < .05$ ** $p < .01$

Differences between the experimental and control children also occurred in the major category, "recognition," $p > .05$. This largely was because of the increased rate of interpretative behaviors on the part of the experimental children, $p < .05$. Finally, experimental and control children differed with respect to the amount of affect they produced toward the handicapped child, $p < .05$. This was entirely because of the larger number of acceptance responses produced by the experimental children, $p < .05$.

CHAPTER IV

DISCUSSION AND CONCLUSIONS

Support of Hypothesis

The results appear to support the general conclusion that nonhandicapped preschool children will have different attitudes about and behave differently toward a severely handicapped child if they are first educated about the commonalities and differences between themselves and children who are handicapped. The sociometric measure revealed that educated nonhandicapped children were more likely to view a handicapped child as a potential playmate. This finding is important because most educators believe that children are more likely to approach and interact with other children who are perceived as friends (Lewis & Rosenblum, 1977). Although the behavioral measure did not support this conclusion, the incidental measure did support it, as did the sociometric measure in some respects.

The incidental measure was developed as a back-up to the behavioral measure. Since it was not known when behaviors of interest would occur, the incidental measure was designed to cover a larger portion of the day (theoretically the entire day). It was possible that indoor free play periods, which were videotaped, might not be the best time to look for possible interactions between a handicapped child and nonhandicapped children. For example, although one might expect to observe certain types of

approaches, play, and perhaps assists during free play, other activities such as lunch, group, and transitions might provide more opportunities for these same behaviors, as well as other behaviors, to occur. The findings of the incidental measure seem to bear this out. The treatment children did interact more with the handicapped child than the control children, but not necessarily during indoor free play. Most of the incidents occurred during lunch and transition times when the handicapped child was required to perform a task which tested her skills (i.e., serving herself at lunch or getting ready to go outside). However, several interactions occurred during outdoor free play, where the handicapped child was brought into closer proximity to the children by virtue of the equipment present on the playground. During these activities, the treatment children appeared to be more involved. It was at this time that they seemed to use more polite talk and interpret the handicapped child's behavior to others. Mealtimes and outdoor free play seemed to be associated with the most acceptance responses. All of these findings are positive and certainly encouraging. However, it is just as encouraging that none of the children, control or experimental, consistently rejected the handicapped child by derogatory expressions, refusing to play with her or expressing concern or discontent about her behavior. This might be interpreted to mean that preschool children are not as likely to have negative attitudes or display

inappropriate behaviors toward a severely handicapped child as older children. Another important finding that was revealed by the incidental measures was that both groups of children assisted the handicapped child about the same number of times. This is encouraging, but should be accepted cautiously. Note that the definition of assistance included instructional statements that might not be viewed as good examples of assistance. Is there a difference, for example, between the nonhandicapped child who says, "Don't do that" and the one who shows the handicapped child how to do something? Children who simply give "do this," "do that" instructions may be exhibiting bossiness rather than empathy for a handicapped child. Perhaps if the definition of assistance were modified to take these qualitative differences into account, it would be shown that the treatment children "assisted" the handicapped child more in the sense of actually showing her what to do.

Limitations

Other variables may have affected the results of this study. As Gottlieb and Budoff suggested, an integrated environment contains several factors that may influence the attitudes or behaviors of nonhandicapped children toward a handicapped child. In the present study, perhaps the attitudes and/or behaviors of the staff biased the attitudes and behaviors of the experimental children. Although possible, it is unlikely since all of the children at the

center had equal opportunity to observe staff behaviors. Perhaps, the physical appearance of the child may have been a factor. Despite her severe handicap, she was normal in appearance. The reactions of children to a physically deformed child might have produced different results. Furthermore, if the children had previous experiences with handicapped people, this may have affected their interactions with the handicapped child. No attempt was made in this study to control for this possibility.

Implications

Although the results of the present study are encouraging, they should be kept in proper perspective. The differences between the two groups of children were small in every case. Though they were statistically significant, their social significance is unclear. How important for example, is it that a child interacts with a handicapped child an average of 2.3 times during a 2-week period? It is difficult to see how such a low rate of involvement can benefit either a handicapped child or a nonhandicapped child. Yet, it must be remembered what the goal of such a curriculum is and, certainly, it is important to consider the level of handicap that was involved in the present study. If the goal of curriculum is to begin the process of integration by creating a favorable attitude about handicapped children in the minds of nonhandicapped children and to create a climate in which other training procedures (e.g. training the nonhandicapped children to interact in

specific ways as some researchers have done) might be more effective, then perhaps only small behavior changes are necessary to facilitate the training process.

This seems to be a more reasonable view, than expecting large changes in the nonhandicapped children's behaviors particularly when one considers the behavioral limitations of the handicapped child. After all, she did not possess a repertoire of social or language responses that was likely to maintain the prosocial behaviors of the nonhandicapped children. Thus, it is more reasonable to expect that additional steps would need to be taken to improve her skills as well as to train the nonhandicapped children to model and reinforce some of her responses. Viewed in the present way, the results of the present study are very encouraging indeed.

Finally, the study should be replicated using additional subjects and improvements in the design as well as the measures. The replication should use more experimental subjects and assign an equal number of children to the experimental and control groups. In addition, the behavioral measures could be deleted. They are too costly in terms of equipment, technicians, and observer training. They also limit the amount of observation time that can be sampled.

On the other hand, the incidental measures should be improved by redefining some of the categories and by having trained observers conduct reliability checks on the

teachers' observations. The incidental measures seem to be a much more efficient and perhaps valid assessment of the type and extent of interactions between handicapped and nonhandicapped children. Children with various handicaps should also be the subject of future research. Eventually, a longitudinal study should be done to determine the long term effects of curriculum. It is possible that the effect of these curriculums on "educated" children will be temporary unless steps are taken to strengthen and extend the initial gains. On the other hand, the gains produced by the curriculum may generalize to the "uneducated" children. Through additional research, answers to these questions will be forthcoming eventually. If, as in the present study, the results were positive, considerable support would then be available for recommending that all preschool teachers use a similar curriculum to facilitate the integration process.

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APPENDIXES

APPENDIX A
MANUAL FOR BEHAVIORAL MEASURES

The purpose of this manual is to help you learn the definitions of the behaviors you will be recording during this study. After you have demonstrated that you can answer questions about and code written examples of the behaviors, you will begin scoring training videotapes. After you demonstrate 80% reliability in scoring the training tapes, you will be assigned to score the research videotapes.

Use the manual carefully, studying each behavioral definition. Don't just read it; memorize it and ask yourself questions about it. When you think you have it mastered, turn the page and answer the questions on a separate sheet of paper. DO NOT WRITE IN THIS MANUAL. Others will need to use it. Answers to the questions are found on the last page of the manual. DO NOT LOOK AT THE ANSWERS BEFORE RECORDING YOUR ANSWER, AND DON'T CHANGE A WRONG ANSWER. It is important to know which questions and examples people have difficulty with in order to make improvements in the manual.

If you find that you have answered a question incorrectly, reread the definition and try to determine why you were incorrect ... then, write the correct answer.

Please finish the manual by the date assigned by the trainer. If you have questions, s/he will try to answer them and perhaps ask you to study the definitions again. If not, s/he will ask you to score a short segment of videotape. If you score this tape with 80% reliability, you will be assigned other videotapes. Your reliability will be

assessed weekly. Failure to maintain 80% reliability will necessitate additional meetings with your trainer.

POINTS ABOUT THE MEASUREMENT SYSTEM

1. All of the definitions are written with a child as the subject. The subject (or target) child will always be wearing a denim smock-like jacket (any exceptions will be discussed with you prior to observing the videotape).
2. All of the behaviors to be scored will be performed BY EITHER THE TARGET CHILD OR OTHERS TOWARD THE TARGET CHILD. Certain subscripts will be used to help you identify who is interacting with the target child. It is important that the subscripts be recorded accurately with the behaviors.
3. Look at your scoring sheet. You will see that each 10-second block is divided by a diagonal line. The upper left triangle of each 10-second block is used to record the codes for the behaviors performed BY THE TARGET CHILD. The lower right triangle is used to record behaviors performed BY OTHERS TOWARD THE TARGET CHILD.
4. Since human behavior is complex, it is conceivable and likely that a child will perform the same behavior more than once during a 10-second interval. If this occurs, ONLY ONE OCCURRENCE of this behavior should be recorded. If different subscripts are used, however, the behavior can be scored again. Example: A child approached another child (score Ac) and during the same interval approaches a different child (do not score). However, if a child approaches a child (score Ac) and during the same interval approaches an adult (score Aa), Ac and Aa should be scored in the same interval.
5. In order to maintain reliability, it is necessary to review the definitions briefly before scoring any videotape. It is easy to forget the little details about the definitions between scoring sessions. Also keep your definitions with you when scoring tapes so you can refer to them if you have a question about a part of the tape.
6. Observing behavior on videotape is convenient because you can look at the behaviors many times to make sure that you have scored them correctly. It would be wise to take advantage of this. A good way to proceed is to

look at one 10-second interval. Think about what you saw. Record the behaviors. Look at the same interval again. Check to see if you missed anything. Make sure you are certain about what you are recording. It is sometimes necessary to go back several intervals to be sure. This may seem to take a little longer, but you will be more than compensated by having shorter group meetings and no individual meetings if reliability is maintained.

SOCIAL APPROACH (A)

A. Definition:

The category is scored for any instance of spontaneous physical or verbal contact with another person (subscript identifies that other person, Aa= approach to an adult, Ac= approach to a child) initiated by the subject. It is scored for any instance of physical contact, direct verbalizations, or other nonverbal methods used by the subject to attract another's attention or to initiate an interaction. Spontaneous refers to the requirement that the contact between the subject and another person not be initiated by that other person. If the interaction begun by the subject's approach is terminated in the interval which it was started and is begun again by the subject in the following interval, it is scored as social approach (Ac,Aa) in both intervals. If the interaction started by the subject's approach is carried into subsequent intervals, it is scored as social interaction (see definition).

B. Scoreable instances of social approach:

1. Subject shouts across the room to a teacher, "When are we going to eat?"
2. Subject pats another child on the back as s/he walks by.
3. Subject runs to a teacher and whispers in his/her ear.
4. Subject stops drawing and asks another child a question.
5. Subject leaves the table and walks past another child and hits him/her.
6. Subject whispers to another child seated next to him/her.
7. Subject walks over to another child and puts his/her arm around him/her and says something.

C. Instances not scorable as social approach:

1. Child smiles at subject, subject then walks over to child and says something to him/her. (The subject's approach was preceded by cues from the child.)

2. Teacher says to the subject, "Come here a minute." Subject approaches the teacher. (The subject's approach was instructed by the teacher and was not spontaneous.)
3. Subject is looking at a book. Another child enters and says, "Hi," and the subject puts the book down and walks up to the other child and says "Hi". The subject's approach was cued.

Questions

1. Is it necessary for the other person to respond to the target child in order to score A?
2. Describe the main reason you may not be able to score an instance of contact by the subject child with another person as A?
3. Describe two specific ways an A can be made by the subject child to another child or adult.

Examples

Circle Ac or Aa if either applies.

1. Subject walks up to another child and says, "Can I play?"
Ac Aa
2. Subject child is reading aloud and another child is reading a book silently next to him/her.
Ac Aa
3. Subject child is playing with play-doh next to another child. Subject child takes some of the other child's play-doh and they make eye contact.
Ac Aa
4. Teacher walks by and pats the child on the head. They make eye contact and smile.
Ac Aa
5. Children are making pictures. The subject child says to another child, "You have a pretty picture."
Ac Aa

SOCIAL INTERACTION (SI)

A. Definition:

This category is scored for any instance of the subject's interaction with others (subscript identifies the other person, SIc= social interaction with another child, SIa= social interaction with an adult). Interaction in this instance implies that the behavior of both the subject and the other person must be interdependent. Thus, the subject's behavior must be directed to the other person and that person's behavior must be directed to the subject. Hence, each social interaction is indicated by scoring two categories, social interaction (SIa, SIc) as the subject's response and one of the stimulus categories being a stimulus dispensed by the other person (social attention). If an interaction is initiated by the subject the first interval is scored as social approach (Aa, Ac), while the other person's response is scored as social attention (Sa, Sc). Subsequent intervals are scored as social interaction (SI) until the interaction is terminated. Social interaction with children (SIc) and social interaction with adults (SIa) may be scored in the same interval if the subject interacts with both children and adults. In a continuing interaction (often involving more than two individuals plus the subject) the subject's behavior is continuously scored as social interaction until s/he definitely leaves or moves away from the group. A stimulus category, usually social attention, must be scored in an interval containing SI.

B. Scorable instances of social interaction:

1. The teacher put his/her arm around the subject and s/he looks up at the teacher and smiles.
2. Child throws an eraser at the subject. Subject throws it back to the child.
3. Subject rides on the back of a tricycle holding on to another child.

C. Instances not scorable as social interaction:

1. Subject is turning a wheel on his/her bike. Child approaches and begins to turn the other wheel. (In this instance, there is no social interaction).

2. Child asks subject what time it is. The subject says nothing and continues to read.
3. Subject approaches a child and then says something to another child. The first child does not look up, and says nothing. No social interaction occurs between the two.
4. Subject and another child sit together at a table and begin to draw on a piece of paper. (No social interaction, parallel play).

Questions

1. One of two behaviors must precede the scoring of SI. Name them.
2. Must SI be sustained for a full 10-second interval?
3. When do you stop scoring SI?
4. What behavior must be scored with SI?

Examples

Circle SIc or SIa, if appropriate.

1. Subject child is playing Ring Around the Rosey with other children.
SIc SIa
2. Subject child is sitting next to another child. Each is doing a puzzle.
SIa SIc
3. Subject child is helping a teacher and other children in a joint cookie making project.
SIa SIc
4. Adult walks up, tickles the subject child, and talks to him/her during a 10-second interval.
SIa SIc

SOCIAL ATTENTION, NON-AVERSIVE (S+)

A. Definition:

This category is scored for any deliberate physical contact made by anyone with the subject (placing a hand on his/her shoulder, hugging him/her), verbalizations directed to the subject (Bob, how are you?), and a kind of looking at one another that entails mutual recognition demonstrated through other non-verbal cues (smiling and/or being smiled at, and other mutual changes in facial expression). A subscript identifies the dispenser of the social attention: Sa= social attention from a adult, and Sc= social attention from a child . Note: For special uses of social attention, see Social Interaction.

B. Scorable instances of social interaction:

1. Teacher says, "Looks like you got those right."
2. Child looks at the subject and says something inaudible. (Verbalization directed toward the subject, non-aversive social attention is assumed unless the subject's response demonstrates otherwise.
3. The teacher puts his/her arm on the subject's shoulder while observing his/her work.
4. A child smiles at the subject as s/he leans over the subject child's desk.

C. Instances not scorable as social attention, non-aversive:

1. Teacher says, "Next Thursday is Thanksgiving." The child laughs loudly standing next to the subject, but is observing another child. (The teacher's verbalization as well as the child's laughing are not directed to the subject.

AVERSIVE SOCIAL ATTENTION (S-)

A. Definition:

This category is defined in the same manner as social attention (S), but is also judged to be aversive because of the verbal content, voice quality, or the assertive behavior of the dispenser of the aversive social attention.

Definition of Aversive:

- a. Aversive because of content
 - 1. Social attention results in unpleasant consequences for the subject child (i. e. another child says to the subject child, "I don't like you."
 - 2. Social attention ridicules the subject child (i. e. the teacher says, "You can't do that."
- b. Aversive because of voice quality
 - 1. Social attention is spoken sharply.
 - 2. Social attention is spoken in a threatening tone.
- c. Aversive because of the assertive behavior of the person
 - 1. Another child hits the subject child. The teacher grabs the subject child in order to get him/her to follow an instruction.

B. Scorable instances of aversive social attention:

- 1. The teacher says to the subject, "That's the messiest paper I have ever seen."
- 2. A child says to a subject, "I could beat your head in any day."
- 3. The teacher grabs the subject and pushes him/her into his/her seat.
- 4. Child slaps at subject following his/her attempt to kick him/her.

C. Instances not scorable as aversive social attention:

- 1. Child grabs a milk carton from the subject while laughing (mock aversion).

SOCIAL ATTENTION - Non-aversive (S+), Aversive (S-)

Questions

1. When scoring this behavior, would you enter the code in the upper left triangle or the lower right triangle of the 10-second interval on the coding sheet?
2. Must social interaction occur every time SA is scored?
3. Explain the main difference between social approach and SA.
4. Explain briefly how you would distinguish between SI+ and SI-.

Examples

Circle the correct code(s).

1. Subject child is playing, the teacher gives him/her a hug.
 Sa+ Sa- Sc+ Sc-
2. Child, playing with target child whines and says, "I'm not your best friend anymore."
 Sa+ Sa- Sc+ Sc-
3. Child takes a stick as a pretend gun, points it at the subject child and says, "You're going to get it!"
 Sa+ Sa- Sc+ Sc-
4. The teacher sitting next to the subject child and another teacher says, "Mrs. Jones, it is getting cold in here."
 Sa+ Sa- Sc+ Sc-

SUSTAINED ATTENDING (SA)

A. Definition:

This category is scored for a full interval of attending to or staring at objects, people, or activities. This category requires observer judgement that the child is, in fact, watching those events, thus differentiating it from one of the other autistic categories (NI). Any more active participation by the subject negates the scoring of SA (such as reading and engaging in social interaction or sustained toy play).

B. Scorable instances of sustained attending:

1. Subject continues to watch children riding tricycles after his/her teacher has called him/her to lunch.
2. Subject watches another child for a full 10-seconds.
3. Subject continues to look at the play materials (for a full 10-seconds) after the teacher has told the children to clean up the room. Score sustained attending.
4. Subject stares at a poster on the wall (for a full 10-seconds) while twirling a pencil and jumping up and down. [Score sustained attending, object play (OP), and self-stimulation (SS)].

C. Instances not scorable as sustained attending:

Most instances where sustained attending cannot be scored are instances where a full 10-seconds of the category are not evident and instances of active interaction with the observed object take up part of the interval. This category has proven difficult to score reliably because of its similarity to sustained noninteraction.

SUSTAINED ATTENDING

Questions

1. Name two things you must be certain of before scoring SA.
2. What would negate the scoring of SA?

Examples

Circle if the code is correct.

1. Subject child watches children playing with blocks for 10 full seconds.
SA
2. Subject child sits in a group listening to a story for 10 full seconds.
SA
3. Subject child looks up when an adult walks into the room and then continues playing.
SA
4. Subject child is standing in the doorway, looking into another room.
SA
5. Child watches for a full 10 seconds as a teacher demonstrates an art project to another group of children across the room.
SA

VERBAL INTEREST (VI)

A. Definition:

This category is scored when a peer makes a statement or asks a question about the target child during a 10-second interval. This category should be scored only when the statements and questions are such that they show special interest in the target child.

B. Scorable instances off verbal interest:

1. Why does Tommy talk like that?
2. See, Tommy can play that game!
3. Where is Tommy?
4. Why does he (Tommy) have a special cup?

C. Instances not scored as verbal interest:

1. Teacher asks who was the last one to play with a certain toy. Child says, "Tommy had it last."
2. Child says, "Tommy can't play here. There are already three." (Three being the maximum number of children allowed in a certain area.)

VERBAL INTEREST

Questions

1. Are statements or questions made about any child scored as VI?
2. Name one way to determine whether a statement made about a target child can be scored as VI?

Examples

Circle if the code is correct.

1. Peer says, "-----'s hands don't work right."
VI
2. Peer asks, "Why does ----- have to do that?"
VI
3. Peer says to target child, "You can sing that song!"
VI
4. Peer, responding to teacher's question, says, "-----
is over there."
VI
5. Peer, passing out cups, says, "Here is your cup, -----."
VI

ASSISTANCE (AN)

A. Definition:

This category is scored for any instance of a peer giving help to the target child either when asked by the child (not by an adult) or when voluntarily initiated by the peer. If assistance is begun in one interval and continues for subsequent intervals, score for each interval that it occurs.

B. Scorable instances of assistance:

1. Peer helps target child pour his/her milk.
2. Peer helps target child with a puzzle after the child says, "I can't do this."
3. Peer says to the target child, "The books are over there."

C. Instances not scored as assistance:

1. Teacher asks peer to help the target child put away the blocks. Peer does so.
2. Peer and target child are playing with Lincoln logs. Both clean up to go outside.
3. At snack, teacher says to peer, "Please pass ----- the juice." Peer does so.

ASSISTANCE

Questions

1. Name one thing that would negate the scoring of AN when the target child helps another child.
2. Can help given to any child or adult be scored as AN provided it is not prompted?

Examples

Circle the code if correct.

1. Target child and another child are building a block tower.
AN
2. Target child gives another child a piece of paper when he sits at the art table.
AN
3. Child says to target child, "How do you do this?" Target child show him/her.
AN
4. Target child tells another child where the chalk is.
AN

DEROGATORY BEHAVIOR (DB)

A. Definition:

This category is scored for any instance when a peer annoys, mocks, teases, (in a negative manner), or rejects the target child during a 10 second interval. The target child may respond to a peer's behavior by showing distress (whining or crying), attempting to stop it (fighting or telling a teacher), or leaving the area.

B. Scorable instances of derogatory behavior:

1. Peer steps in front of target child every time the child moves, in order to block his/her movement.
2. Peer mimics what target child says in a derogatory manner.
3. When the target child tries to play with a peer, the peer leaves.
4. The peer offers a toy to the target child and then refuses to give it to him/her. (However, if this occurs while the peer is trying to elicit a better verbal response from the target child, do not score DB).

C. Instances not scored as derogatory behavior:

1. Peer imitates the sounds and actions of the target child as part of a game.
2. Peer holds a block in front of the target child as the child reaches for the block, the peer says "What color is this?" The target child answers incorrectly. The peer says, "No, this is blue," and withholds the block. S/he asks the child to name the color of the block again. The child answers correctly and the peer gives him/her the block.

DEROGATORY BEHAVIOR

Questions

1. Name one reason why teasing may not be scored as DB.
2. Must derogatory behavior last a full 10 seconds?

Examples

Circle if answer is correct

1. Peer pushes target child away when the child attempts to play with him/her.
DB
2. Peer repeatedly asks, "What color is this?" until the child produces the correct answer.
DB
3. Peer imitates the speech of the target child and laughs.
DB
4. Peer says to target child, "You can't play with me!"
DB

SELF-STIMULATION (SS)

A. Definition:

This category is scored for any instance of the subject's manipulation of his/her own body (grooming, picking at skin), or repetitive motor movements. A motor movement is defined as repetitive if it continues for 3 or more essentially identical occurrences during a single 10-second interval. For continued scoring of self-stimulation for repetitive behavior, this criterion must be met in each interval so scored. Behaviors are not scored as self-stimulation. Posture changes that are not repetitive are not instances of self-stimulation.

B. Scorable instances of self-stimulation:

1. The subject picks at his/her nose.
2. The subject repeatedly wipes his/her hands on his/her pants leg.
3. The subject jumps up and down.
4. The subject repeatedly sniffs his/her hand.
5. The subject scratches his/her leg.
6. The subject turns in a circle.
7. The subject makes clicking, howling, or smacking noises with his/her mouth.
8. The subject flaps his/her hands.
9. The subject rocks back and forth from one foot to another.

C. Instances not scorable as self-stimulation:

1. Subject rolls on the floor while shooting a mock gun at another child. (This is an instance of social interaction.)
2. The subject makes vocal sounds like a motor as s/he pushes his/her toy car against another child's car. (Again, an instance of social interaction).
3. The subject and child dance on the carpet while holding hands. (Aother instance of social interaction).

4. The subject kneads clay with one hand while staring out of the window. (An instance of object play).
5. The subject snaps a rubber band against his/her foot. (Again, object play).
6. The subject rubs his/her hand against a book. (Object play again).
7. The subject child laughs while pulling a book held by another child. (This is an instance of social interaction).

Questions

1. In order for a motor movement to be scored as self-stimulation, how many times must it occur during a 10-second interval?
2. Name one instance when manipulation of the body or a repetitive motor movement would not be scored as self-stimulation.

Examples

Circle if the code is correct.

1. The target child rubs a finger on the side of his/her nose 4 times in a row during a 20-second interval.
SS
2. The target child flaps a scarf in front of his/her face at least 3 times during a 10-second interval.
SS
3. The target child sucks his/her thumb during a 10-second interval.
SS
4. The target child twirls a strand of hair around her finger during a 10-second interval.
SS
5. The target child says, "La, la, la, ..." as s/he plays on a xylophone.
SS

OBJECT PLAY (OP)

A. Definition:

This category is scored for any instance of simple repetitive manipulation of an object (i.e. pencil, book) in which the manipulation is not a part of a more complex activity such as toy play (rolling clay on the table to make a figure). A repetitive manipulation is defined as one continuing for 3 or more essentially identical occurrences during a single 10-second interval. For continued scoring of OP, this criterion must be met in each interval so scored. Object play activities are usually termed "absent-minded", and are consistent in fidgeting with objects (i.e. pencil tapping, rotating any small object in the hand, flipping the pages of a book). Object play usually involves the subject's hands and active movement of an object.

B. Scorable instances of object play:

1. The subject flicks his/her shoelaces back and forth.
2. The subject repeatedly taps him/herself on the head with the cardboard top of a puzzle box.
3. The subject kneads clay in one hand while staring out of the window.
4. The subject spins the wheel of his/her bike while staring at another object.
5. The subject chews on the collar of his/her shirt.
6. The subject rolls a pencil across his/her paper.
7. The subject puts a straw in his/her mouth and flips it with his/her finger.
8. The subject taps his/her pencil on the desk.
9. The subject stands beside his/her desk rapidly flipping the pages of a book while talking to another child.

C. Instances not scorable as object play:

1. The subject runs a toy car along the floor, making a motor noise.

2. The subject rolls clay on the table in the process of making a car.
3. The subject taps his/her nose with his/her fingers. (This should be scored as self-stimulation).
4. The subject fold a piece of paper into a glider.
5. The subject turns the pages of a book, looking at the pages.

Questions

1. What differentiates object play from SS?
2. For continued scoring of OP, must it occur 3 times in every 10 second interval?

Examples

Circle if the code is correct.

1. Target child twirls a pencil in his/her mouth.
OP
2. Target child rubs 2 crackers together while watching another child.
OP
3. Target child uses pencil to draw repeated swirls on a piece of paper.
OP
4. Target child twirls his/her mitten while waiting to go outside.
OP

SUSTAINED NONINTERACTION (NI)

A. Definition:

This category is scored when the subject does not interact with people or objects for a full 10-second interval. Object contacts which qualify as object play can be scored during a noninteraction interval, as can self-stimulation (i.e. scratching the head), when these behaviors do not accompany social interactions. Sometimes this category is confused with sustained attending.

B. Scorable instances of sustained noninteraction:

1. The subject closes his/her eyes and lies on the floor.
2. The subject leans his/her elbows on the windowsill and stares out the window.
3. The subject lies on the floor rubbing his/her hands together (self-stimulation would also be scored in this instance).
4. The subject sits at a desk and looks around the room.
5. The subject wanders around the room looking at other children (sustained attention would not be scored because the subject's attention is wandering from one child to another).

C. Instances not scorable as sustained noninteraction:

1. The subject stops drawing and looks out the around the room. In this instance, neither a full interval of sustained noninteraction or sustained toy play can be scored. Therefore, the interval is scored slash.
2. The subject stares out of the window, his/her teacher says his/her name and the subject turns to the teacher and says, "What?" Since this was not a full interval of noninteraction, this cannot be scored NI.
3. The subject is wandering around the room, then stops at a child's desk, leans over the desk, and looks at the child's paper. Again, this is not a full interval of interaction, but obviously, this is an instance of social approach.

SUSTAINED NONINTERACTION

Questions

1. How can you differentiate between SA and NI?
2. What are the similarities between SA and NI?

Examples

Circle if the code is correct.

1. Child sits and rocks in a rocking chair for 10 full seconds.
NI
2. Child looks out of the window and then begins playing with blocks during a 10 second interval.
NI
3. Child lies on a rug and closes his/her eyes for a full 10 seconds.
NI

SLASH (/)

A. Definition:

This category is scored for intervals in which the responses produced by the subject are not scorable under any other category (e. g., eating and drinking). The scoring of the slash category precludes the scoring of any other response category. If sustained categories (categories requiring a full 10- seconds for scoring) are present but do not reach criterion (a full 10-seconds), the slash category is scored. Stimulus categories may be scored in the same interval as slash.

OBSTRUCT (Obs.)

A. Definition:

This category is scored for any instance in which the observer's visual contact with the subject is interrupted. If obstruct is scored, no other category is scored in that interval. An observer may be tempted to score other categories of the subject's behavior when s/he is out of view. However, this must be scored obstruct and the use of this category precludes the scoring of any other category. If the child's absence from the setting constitutes an intervention technique (i.e. time-out), the observer should note this fact on the scoring sheet.

APPENDIX B
BEHAVIORAL CODING SHEET

Subject:

Baseline:

Date:

Intervention:

Session Time:

Reliability Check:

Observer:

Observer:

10	20	30	40	50	1m	10	20	30	40	50	2m
10	20	30	40	50	3m	10	20	30	40	50	4m
10	20	30	40	50	5m	10	20	30	40	50	6m
10	20	30	40	50	7m	10	20	30	40	50	8m
10	20	30	40	50	9m	10	20	30	40	50	10m
10	20	30	40	50	11m	10	20	30	40	50	12m
10	20	30	40	50	13m	10	20	30	40	50	14m
10	20	30	40	50	15m	10	20	30	40	50	16m
10	20	30	40	50	17m	10	20	30	40	50	18m

APPENDIX C

SOCIOMETRIC STORY

"Let's tell a story and pretend like your are in it. One day when you came to school, you decided that you would like to play with something. So you looked around and you found something you liked. Can you find a picture of what you would have chosen? (A) You decided, though, that you did not want to play by yourself, so you chose someone to play with you. Who would you have chosen? (B,G,K,) That's nice! You and _____ played together with/on the _____ a long time, but pretty soon it was time for _____ to go to snack. Since you did not want to play by yourself, you decided to ask someone else to play with you. This time who would you ask? (C,H,L,) Well, you and _____ played really hard with/on the _____ but soon you both had to go to lunch. After nap, you decided that you wanted to play with/on the _____ again because it had been so much fun. This time who did you choose to play with/on the ----- with you? (D,I,M,) You played the rest of the afternoon until your mom came and _____'s mom came and you both went home for dinner.

The next morning when you came back to school, you decided you wanted to play with/on something different. Can you find a picture of what you would have chosen to play with?" (E)

From this point on, the story repeats itself twice to allow each child to choose three activities and three playmates for each one.

APPENDIX D

SOCIOMETRIC DATA SHEET

SOCIOMETRIC TEST RECORD FORM

Child's Name _____

Child's Code Number _____ Date _____

PLAY SITUATION

RESPONSE

1st card selected _____	1st _____	2nd _____	3rd _____
2nd card selected _____	1st _____	2nd _____	3rd _____
3rd card selected _____	1st _____	2nd _____	3rd _____

APPENDIX E

INCIDENTAL MEASURE RATING BOOKLET

INSTRUCTIONS

Listed below are four broad categories of child behavior: Interest, Interaction, Recognition and Affect. Each category is comprised of several definitions. Read each of the definitions very carefully. Then re-read each one a second time to make sure you understand all of them clearly.

INTEREST

<u>Definition</u>	<u>Code</u>
<u>Assistance:</u> Peer instructs (positive or negative imperatives such as "do this", "don't do that") or give physical or verbal help directly to the subject child, either spontaneously or when asked by the subject child. No expression of concern is evident in the peer's verbal behavior. However, the peer may provide approval when the subject child has produced the correct response. In these instances, the proper definition is <u>assistance, not approval.</u> The essential feature is that the peer helps the subject child do something for herself.	A
<u>Concern:</u> Peer makes a statement or asks a question indicating interest in what the subject child is doing, has done or is going to do. The essential feature of the response is that it conveys an expression of emotional concern that is something more than mere interest or description. Statements or acts of concern differ from statements or acts of <u>Protection</u> in that the peer makes no effort to change the situation.	C
<u>Protection:</u> Peer attempts to correct the situation in order to improve it for the well-being of the subject child. For an act to be <u>protection</u>, the peer <u>must do something for</u> the subject child.	P
<u>Inquisitiveness:</u> Peer is curious or interested in some aspect of the subject child's behavior or wants to know where the subject child is. The peer is <u>not</u> concerned or apprehensive about the subject child; she/he shows no emotional interest.	In

INTERACTION

Sharing: Peer gives the subject child some of his/her materials or gives up a turn using a material such as a swing or slide. To score sharing, it must be clear that the child is willing to give up something that she/he is using.

S

Involvement: Peer encourages or asks the subject child to participate in an activity or actually interacts with the subject child. If the peer is willing to give up some of his/her materials score sharing, not involvement.

I

Rejection: Peer refuses to interact with the subject child. Rejection can be expressed in a variety of ways. For example, by not interacting, not sharing materials, discouraging others from interacting with the subject child, or refusing to allow the subject child to come into close proximity.

R

Polite Talk: Peer says "hello", "good bye", "please" or "thank you" to the subject child. Polite talk is scored only for these responses.

PT

RECOGNITION

Interpretation: Peer offers an explanation of the subject child's behavior to someone else.

It

Identification: Peer points out, locates, or introduces the subject child to someone else.

Id

Description: Peer produces a narrative account of something the subject child is doing, had done or is going to do. The essential feature of the account is that it is purely description and does not convey an expression of concern, approval, surprise, curiosity or discontent. It is not directed toward the subject child, but to self or third person.

Des

AFFECT

Dissatisfaction: Peer mocks, teases, or expresses discontent or displeasure towards or about the subject child or the action of the subject child. The peer does not actively try to prevent interaction

D

with self, other people, or materials. Corrective instructions should not be included in this definition.

Acceptance: Peer indicates favor toward the target child or approval of something the child has done. Acceptance may be shown by inviting the subject to come into close proximity, e.g. asking the subject to sit next to the peer. It may also be shown by verbal statements such as "That's a good job", "Very good", or "I like what you have done." Do not score acceptance when it accompanies an assistance response.

Ac

Now that you have carefully read all of the definitions, look at the examples below and assign one and only one of the above codes to each of them.

EXAMPLES

Behavior	Codes
1) "Don't walk on the table, J. A."	_____
2) "Put your coat on."	_____
3) "Did she hurt herself badly?"	_____
4) A peer gives J. A. a towel to wipe the table.	_____
5) "If we read together, J. A. will tear the book."	_____
6) "J. A. is going to play with me."	_____

ANSWERS

- 1) This behavior should have been scored A (Assistance) because all instructions are scored A regardless of their emotional content.
- 2) This, too, should have been scored A. It should not have been scored P (Protection) because the peer is not doing something for the target child. Nor should it have been scored C (Concern) because there is no evidence that the peer was concerned about the subject's welfare. The statement merely indicates the peer is giving the subject an instruction, therefore A should have been scored.
- 3) This behavior should have been scored C (Concern). It should not have been scored P (Protection) because there

was no effort to change the situation, nor would it have been scored In (Inquisitiveness) because it indicates more than curiosity. When emotional interest in the well-being of the child is indicated, C (Concern) should be scored.

- 4) This behavior should have been scored A (Assistance). It should not have been scored P (Protection) because the peer did not wipe the table for J. A. It should not have been scored S (Sharing) because there is no indication the peer gave up something she/he was using nor should it have been scored Des (Description) because the peer is helping J. A. to do something herself, therefore A is the correct code.
- 5) This behavior should have been scored D (Dissatisfaction). It should not have been scored R (Rejection) because the peer does not refuse to play with J. A. It should not have been C because the peer shows no obvious emotional interest in J. A. The statement would not be scored Des because it does convey a feeling of discontent. Thus, D is the correct code.
- 6) This statement should have been scored Des (Description). It should not have been scored I (Involvement) because the peer is not speaking to the subject child. Instead it is a statement about what will happen. Therefore, Des is the correct code.

If you scored five of the six examples correctly, go to the next series of instructions. If you did not score at least five correctly, go back and reread the definitions once again. Then go to the next series of instructions.

On the next page you will find a list of 156 statements that describe various ways in which children respond to the subject child who's initials are J. A. Some statements take the form of questions about J. A. Others describe what was said or done to her. Though these descriptions are in statements form, they should be coded according to the content of the statement. Still other statements are addressed to someone else concerning J. A. Regardless of the form of a particular statement, in every case you should regard J. A. as the subject or focus of the statement. Unless there is evidence to the contrary (e.g. exclamation point or written description) assume a neutral voice tone.

With this in mind, your task is to read each statement carefully and decide how you would classify it according to the preceding definitions. Mark on the line after each statement one and only one that you feel best describes the statement. You may want to re-read the

definitions from time-to-time as you proceed through the statements.

After you have completed all 156 items, you may want to go back and check certain statements to make sure that you are satisfied with the definition that you assigned to it. When you are finished, please return the list and definitions to Dr. Vey M. Nordquist, Department of Child and Family Studies, University of Tennessee, Knoxville, Tennessee.

Thank you for your help!

STATEMENTS

CODES

- | | |
|--|-------|
| 1. A peer led J.A. by the hand to snack. (ER1) | _____ |
| 2. A girl gave J.A. her swing. (AD1) | _____ |
| 3. "J.A., you need to put that back." (KP) | _____ |
| 4. A boy tried to teach J.A. to count while reading her a book. (SW1) | _____ |
| 5. "Do you know what J.A. did? She turned on the water by herself!" a child said to the teacher. (SW1) | _____ |
| 6. A peer and J.A. read a book together. (AB2) | _____ |
| 7. "You can pick the chicken up with you fingers, J.A. It's easier that way." (SW1) | _____ |
| 8. "Is J.A. asleep or what?" a child asked during nap. (SW1) | _____ |
| 9. "That's good, J.A." (KP) | _____ |
| 10. "Come with me, J.A., I'll show you where your locker is." (SW1) | _____ |
| 11. "I will open the door for J.A." (WM) | _____ |
| 12. "It's J.A.'s turn to swing!" one child said to another. (AB1) | _____ |
| 13. A peer asks J.A. to read with her. (AB2) | _____ |
| 14. "Be quiet, J.A." (SW1) | _____ |
| 15. "Who...J.A.? Why, I like J.A." when another child didn't want to sit by "her." (SW1) | _____ |
| 16. "Her name is J.A." (SW1) | _____ |
| 17. "J.A. can sit by me," a peer says with a book to read. (PZ) | _____ |
| 18. Peer refuses to push J.A. on a swing. (KP) | _____ |
| 19. "J.A. is sitting right." (WM) | _____ |
| 20. "Where is J.A. going to sleep?" (AB2) | _____ |
| 21. "Why is J.A. in sit and watch?" (KP) | _____ |

22. "J.A. can sign, too!!" (JH2) _____
23. Peer gives J.A. a paper towel to dry her hands. (WM) _____
24. "Do it this way!" a peer demonstrates music movements to J.A. (AB1) _____
25. "I am going to help J.A. go to snack." (EP) _____
26. A peer offers to give her swing to J.A. (AB1) _____
27. Peer says, "Can the teacher cut up J.A.'s potato so she can eat it better?" (SW1) _____
28. A peer says "Shhh" to J.A. when she made noise during nap. (KP) _____
29. Peer says about J.A., "I like our new friend at school." (WM) _____
30. "Look, J.A., here are four fish and a water-melon. " a peer says while reading a book (SW1) _____
31. "I don't want to be friends with J.A.!" (KP) _____
32. A peer makes fun of J.A.'s speech by mimicking "Please pass the brocolli." (SW1) _____
33. A peer and J.A. push each other on the swing. (AB1) _____
34. "J.A. does a good job!" (ER1) _____
35. "J.A. does not eat like us. We can help her learn to eat, can't we?" (AB2) _____
36. "J.A. had to go to sit and watch because she would not be quiet." (KP) _____
37. A peer says to a teacher, "We are going to help J.A. learn, aren't we?" (AB2) _____
38. "Why is J.A. reading a book during nap?" (BZ) _____
39. "J.A. will knock over my blocks if I play with her." (EP) _____
40. "Good-bye J.A. See you tomorrow." (SW1) _____
41. A peer offers to push J.A. on a swing and then does. (AB1) _____

42. "Yes, I am going to help J.A. too." (AB1) _____
43. "Here's you a flower, J.A." (WM) _____
44. "Poor J.A. She's sick. Can you help her feel better?" (SW1) _____
45. "Good-bye, J.A. See you tomorrow." (AB1) _____
46. "J.A., you need to put your shoes on." (AD1) _____
47. "J.A., What is your name? No, J.A., what is your name? Who are you? Good, J. A.!" (KP) _____
48. "J.A., do you want to play with me?" (AB1) _____
49. A peer offers J.A. her swing. (KP) _____
50. A peer fingerprints with J. A. (ER1) _____
51. "Here is J.A." (JH3) _____
52. "Why can't I ride the bus with J.A.? I want to go with J.A." (ER1) _____
53. "Is J.A. lying on her cot?" a child asked at naptime (lying instead of sitting). (AB1) _____
54. "J.A. can sit here by me." (ER1) _____
55. "Sit by me, J.A." (EP) _____
56. "J.A. has her shoes on and is ready for group." (AB1) _____
57. "J.A. can't do that very well." (AB1) _____
58. "Hi, J.A." (KP) _____
59. "That's my book. J.A. took it away." (WB) _____
60. "J.A., look at me. Where does the book go? Put it on the shelf." (KP) _____
61. A peer shows J.A. how to say, "Please pass the milk." (WB) _____
62. "Come back in the other room, J.A." (SW1) _____
63. "J.A., walk inside" (KP) _____
64. "Here is your favorite book, J.A. Do you want to read with me?" (SW1) _____

65. "You can't have my swing, J.A." (AB1) _____
66. "J.A. is going to sit next to me." (SW1) _____
67. "J.A. is silly," a peer says smiling. (SW1) _____
68. "J.A. is sitting right." (JH2) _____
69. "Why was K.P.'s cot moved and J.A.'s put there instead of putting J.A.'s somewhere else?" (SW1) _____
70. "J.A. pulled my hair when no one was looking." (AB2) _____
71. "J.A. needs to go to lunch, too, you know," a peer said to a teacher. (SW1) _____
72. "Why does J.A. ride the bus?" (a peer referred to the school bus). (WM) _____
73. "J.A., look at me. Go into the other room." (KP) _____
74. "Wash your hands J.A. Yes, that's right." (AD1) _____
75. "I'll push J.A." (on a swing) (SW1) _____
76. "Don't J.A." (BZ) _____
77. A peer says "NO" in response to another peer's derogatory remark about J.A, (SW1) _____
78. "Good-bye, J.A. See you tomorrow." (JH2) _____
79. "Is J.A. on her cot now?" (SW1) _____
80. "Here, J.A. Here is a swing for you." He gave her his swing. (BZ) _____
81. Two peers read a book with J.A. (EP) _____
82. J.A. fingerpaints with a peer. (JH2) _____
83. "I picked this flower for you, J.A. You can take it home and plant it." (SW1) _____
84. "Good talking, J.A.!" (WM) _____
85. "I don't want to sit by J.A.!" (OW) _____
86. "Good girl J.A. Good girl." (SW1) _____

87. "What is J.A. doing? Why is she making noise and waking up the other kids?" (KP) _____
88. "Why is J.A.'s mother coming?" a peer asked when he learned she was not riding the school bus that day. (SW1) _____
89. "I am helping J.A." a peer says to a teacher. (SW1) _____
90. "Wash your hands J.A. Yes, that's right." (KP) _____
91. "Watch me, J.A. I'll show you how." (SW1) _____
92. "Stop that J.A." referring to a rocking movement. (JH3) _____
93. "Don't throw that J.A." after she had thrown a small toy. (SW1) _____
94. A peer and J.A. play a rhyme game together. (ER1) _____
95. "Do you want to play, J.A.?" (SW1) _____
96. "Do you know what I'm going to do with J.A.? I'm going to mash in her face, cut off her arms and legs and cook her and eat her!" (BZ) _____
97. "J.A. you can sit by me!" (BZ) _____
98. "J.A. screamed in here," a peer said to a teacher. (KP) _____
99. When teacher asks, "J.A., are you sick?" a peer says, "Tell the truth. Are you sick?" (SW1) _____
100. "J.A. is moving," referring to a rocking movement. (ER1) _____
101. "Look at me, J.A. Are you tired?" "Teacher, she's tired!" (KP) _____
102. "Why does J.A. ride the bus?" (KP) _____
103. "Hi J.A. How did you get here?" (ER1) _____
104. "Can't J.A. play here?" (SW1) _____
105. "Why is J.A. holding the teacher's hand?" (on the way to the school bus) (OW) _____
106. "J.A. can put her shoes on!" (ER1) _____

107. "J.A. come with me. Here is your locker." (SW1) _____
108. A peer helps J.A. to write. (SW1) _____
109. "Here are your shoes, J.A." (AD1) _____
110. "She (her mom) said hi to you J.A. There's
your mommy." (WM) _____
111. "Wash your hands, J.A." (ER1) _____
112. A peer plays with J.A. in the block area. (SW1) _____
113. "Can I go to the bus with J.A.?" (WB) _____
114. A peer shows J.A. how to climb on the jungle
gym. (TC) _____
115. "J.A. can get over here!" meaning she could
sit with him on the rug. (SW1) _____
116. A peer is reading a book to J.A., pointing
out pictures, describing them, and asking J.A.
to identify them. (SW1) _____
117. "I don't want J.A. to play with me." (WB) _____
118. "Bye" (ER2) _____
119. "Her name is J.A." (WM) _____
120. "I like our new friend at school!" _____
121. A peer tickles J.A. (KP) _____
122. "You can't play here." (OW) _____
123. "Good, J.A." a peer says to J.A. while
reading a book to her. (SW1) _____
124. "Here is your favorite book about bunny rabbits,
J.A. Yes, bunny rabbits. Here are some." a
peer says wanting to read to J.A. (SW1) _____
125. "J.A. knows how to do everything! Except some
of her alphabet." (GR) _____
126. "My locker is right next to J.A.'s" (ER1) _____
127. "Where is J.A.'s mommy?" (OW) _____
128. A peer reads a book with J.A. (AB2) _____
129. "Stop that J.A." (JH3) _____

130. "Where is J.A.?" (SW2) _____
131. "Is he going to help J.A.?" (AB1) _____
132. "Where's J.A.?" (SW1) _____
133. "Can I take J.A. to the bus?" (AB1) _____
134. A peer brings a blanket to J.A. at nap. (SW1) _____
135. "I pushed J.A. on the swing!" (SW1) _____
136. "I want to take J.A. to the bus." (JH4) _____
137. "She wants to eat lunch because she is
starving, I guess." (AB1) _____
138. "I know who is over there... J.A." referring
to noise from the other side of the room. (SW1) _____
139. "Is that J.A. She talks everyday at nap.
She's quiet now." (OW) _____
140. "J.A. made a long chain. She has two blues." (TC) _____
141. A peer volunteers to help J.A. catch a ball. (SW1) _____
142. "When J.A. says 'boo', she means book." (SW1) _____
143. "Hello, J.A." (JH2) _____
144. A peer pats J.A. on the back when she plays
guitar appropriately. (SW1) _____
145. "All she says is yes, yes, yes." when a teacher
was asking J.A. if the problems on her worksheet
were correct, a peer said this. (KP) _____
146. "I don't want to sit next to J.A.!" (JH3) _____
147. "Look! There she is!" a peer said smiling
on J.A.'s first day. (JH2) _____
148. A peer says affectionately to J.A. "J.A.,
you're a silly little turkey." (KP) _____
149. "Why did J.A. open the door? I think she
wanted to look inside." (SW1) _____
150. "J.A. can sit by me!" (OW) _____
151. "I don't want J.A. to play with me!" (OW) _____

152. "I knew that was J.A.'s chair." when a child tried to take J.A.'s seat at lunch when she left it for a minute. (SW1) _____
153. "I didn't know J.A. could flush the toilet!" _____
154. "Why isn't J.A. pumping? (on the swing) She doesn't know how, does she?" (EP) _____
155. "J.A. walks funny." (meaning different) (SW1) _____
156. A peer says to a teacher, "We are going to help J.A. learn aren't we?" (EP) _____

APPENDIX F

CURRICULUM ACTIVITIES

Curriculum Themes

- Day 1 People are alike and people are different.
- Day 2 Physical handicaps can limit mobility.
- Day 3 Common activities often become very frustrating when normal movement is prohibited.
- Day 4 Hearing is important for communication; people that cannot see use their ears to communicate.
- Day 5 Eyesight is also important in communicating.
- Day 6 People who are mentally retarded have many abilities. They are not people to be feared.
- Day 7 Those who are different in some ways may find it difficult to communicate verbally. They may have important things to say, however.
- Day 8 Children who look different often have similar likes and dislikes as those children who look "normal."
- Day 9 Special children have names and parents just as "normal" children do.
- Day 10 The children at the day care center can do many things that the new child cannot do; they can help her learn.

*The entire curriculum is based on the assumption that the children understand the concepts of same and different.

DAY 1, MORNING

OBJECTIVE: The children will be able to list ways that people are alike and people are different.

MATERIALS: Pictures of children who have different color skin, eyes, hair, and clothing.

PROCEDURE: The teacher will introduce the concepts by saying, "Today we are going to talk about how people are alike and how people are different. One way that people are different is that they look different. Some are tall; some are short. Some have brown eyes; some have blue eyes. Who can think of other ways people look different? ... People may be different in some ways and alike in others. Two girls may have different color hair, but they are both still girls, aren't they? A boy and a girl are different, but they may both like to color or to work puzzles."

Have the children compare themselves and find differences. Some suggestions are sex, hand size, height, or hair color. Choose various pictures from the materials. Have the children compare the pictures and themselves.

DAY 1, AFTERNOON

OBJECTIVE: The children will be able to list ways people are alike and different.

MATERIALS: Pictures of children who are different from each other in various ways, including some with physical handicaps.

PROCEDURE: The teacher will begin a review of the morning session by saying, "Who can tell me what you talked about this morning? ... Tell me some ways that people can be alike and people can be different."

The teacher will then show the first picture and have the children describe it. A second picture will be added to the first and the children will be asked to find the differences in the two. The teacher will ask after the children have described both pictures, "How do these children make you feel? ... Do you think they would be good friends to have? ... Why?"

The teacher will continue showing pictures and having the children talk about them until a picture of a handicapped child is shown. If the children respond negatively to having the child as a friend, she will ask, "Who knows someone who like very much, but you thought looked very different the first time you met? ... Tell us about that person." If the children respond positively to the initial question, this last question can be omitted. Instead, ask the children how they feel about the handicapped child; why they feel the way they do. The teacher should impress upon the children how much

they are all alike. S/he should list some things that the handicapped child might like to do, just as the normal children like to do. For example, work puzzles, color, and eat ice cream.

DAY 2, MORNING

OBJECTIVE: The children will be able to list several supportive devices that aid people with motor impairments.

MATERIALS: Crutches, leg braces, I Knew I Could Do It Book.

PROCEDURE: Have the devices on a table within sight of the children. Let them examine the devices for 4-5 minutes before beginning the session for the day. When the children are seated, ask, "Does anyone know what those things are on the table? ... What are they called? ... What are they used for?" Allow the children time to think and answer each question before proceeding to the next.

At this point the teacher should ask the children what they had talked about the previous day. In no one remembers, they may need to be prompted. After all of the children are reminded, the teacher should say, "Some children who are different cannot walk as well as you can. They need help to walk. These things on the table can help them learn to walk." The teacher should then teach the children the names of the devices and show how each works.

To familiarize the children with the way children use devices, the teacher should show pictures from the book. The children may discover items they are familiar with in the background of the pictures (this reinforces the idea that all children may like some of the same things). Additionally, the teacher can ask questions about the pictures such as, "Does the child in the picture look happy? ... sad? What does s/he look

like s/he is doing?" When all of the pictures have been seen, the teacher should encourage the children to use the leg braces and the crutches.

DAY 2, AFTERNOON

OBJECTIVE: The children will be able to list some problems faced by people who ride in wheelchairs.

MATERIALS: Child-sized wheelchair, crutches, leg braces, I Knew I Could Do It book, and small obstacle course set up in the room.

PROCEDURE: Allow the children to examine the devices for a few minutes before starting the session. Once the children are sitting down, ask them what they talked about in the previous session that morning. Prompt them, if necessary. After all of the children have been reminded, ask, "Does anyone know what this funny looking chair is? ...It is another way for people who cannot walk to move around." The teacher should teach the name, wheelchair, and explain to the children how it works. Again, pictures from the book can be used. After seeing the pictures, the teacher should encourage the children to use the wheelchair (and the leg braces and the crutches from the morning session). They can try the obstacle course as soon as they want. After all of the children have had a chance to attempt the obstacle course, have them all sit down again. The teacher should encourage them to talk about how they felt while they were using the devices. Some questions are "Can you think of some things that you like to do that would be hard for you to do if you were in a wheelchair or wore leg braces? ... Who can tell me some things that you could still do if you rode in a wheelchair?" The children should be able to identify several.

DAY 3, MORNING

OBJECTIVE: The children will "play" with small toys from the classroom without using their hands.

MATERIALS: Small manipulative toys such as blocks, puzzles, stringing beads, and yarn.

PROCEDURE: The teacher will begin a review of the previous session by saying, "Who remembers what we talked about last time we were together?" The teacher may need to remind the children. Then the teacher should tell the children, "Some people are different because they cannot use their hands. We are going to do some things that you can do every day in the classroom, but we are going to try to do them without using our hands. Do you think you can do it? If you want to try, put your hands together and I will wrap some yarn around them. Then you'll be ready to try." The teacher should tie the children's hands loosely with yarn (some children may be afraid of this at first, they should not be forced). S/he should have all of the children sit in a circle on the floor, with the toys in the middle. The children can choose the toy they want, and then try to use it appropriately. Some may want to attempt writing. After the activity, have the children describe how they felt. Ask them to think of other things that might be difficult to do without the use of their hands... things that might be easy to do without the use of their hands.

DAY 3, AFTERNOON

OBJECTIVE: The children will participate in an action record without total use of their legs.

MATERIALS: Sturdy yarn or string, record player, "Getting to Know Myself" record by Hap Palmer.

PROCEDURE: Review the morning session by talking about what the children did and how they felt about it. Tell the children they are going to do a similar activity, but they will be unable to use their hands and feet like they usually do. Loop the yarn around their ankles so that their feet are kept together (again, some children may be frightened at first, so let them warm up to the idea). Play the record and let the children participate as well as they can. After the record is finished (or when the children's tolerance level has been reached and they are becoming frustrated), have them sit in a circle and describe how they felt. The teacher may need to prompt the children with questions about what they could and could not do or how much fun various activities would be.

DAY 4, MORNING

OBJECTIVE: The children will find the timer by following the sound of the ticking.

MATERIALS: Kitchen timer, hearing aid.

PROCEDURE: Begin with a review of the previous sessions. Ask the children questions like, "What did we do before when we were together? ... Were you any different because you could not use your hands or feet? ... There were still lots of things you could do and enjoy, weren't there?"

Explain to the children that some people cannot hear as well as they do. These people are called deaf or hard of hearing. Ask if they have thought about what it would be like if they could not hear. Have the children cover their ears while the teacher says something VERY softly. When the children uncover their ears, the teacher should ask how the felt. Could they hear well?

The teacher should then introduce the timer and let the children hear it tick. Tell the children that the timer is going to be hidden and they will have to find it by very careful listening. Hide the timer and let the children find it. Once the timer has been found, have the children sit down in a circle and talk about their experience. Could they have found the timer as easily without using their ears? ... What are some other important sounds they might hear? Introduce the hearing aid as something to help those who cannot hear well. Teach the children the word and let them put it on. Would they like to wear one all of the time? ... Why? ... Why not?

DAY 4, AFTERNOON

OBJECTIVE: The children will demonstrate sign language as a means of communication for those who cannot hear.

MATERIALS: None.

PROCEDURE: Review the morning session. Is hearing important? ... How do people communicate if they cannot hear? Explain that people who cannot hear often communicate or talk to each other by using their hands and eyes. This is called sign language. The teacher should then show the children various words in sign language.

The teacher should ask, "Who wants to learn your name in sign language?" Then she should teach each child the first letter of their name (some may have difficulty with small motor control for this activity). After they have accomplished their name, or at least the first letter, teach them a simple song such as "Twinkle, twinkle little star." Have the children sing and sign at the same time.

DAY 5, MORNING

OBJECTIVE: The children will identify voices while blindfolded.

MATERIALS: Blindfold.

PROCEDURE: Review the previous session by signing and asking them what you are doing. ask, "Who uses sign language? ... Do you have to be able to see to use sign language?"

Some people cannot see as they do. These people may be called blind. Tell the children they are going to do an activity where they will pretend they cannot see. (Remember that some children may be frightened by having their eyes covered). Have one child wear the blindfold and sit in a chair. Quietly signal another child to stand in front of the chair and say hello to the blindfolded child in his/her normal voice. The blindfolded child must guess who is talking to him/her. Then, change and blindfold the child who said hello. Continue until all of the children have done both parts of the activity.

Have the children talk about how they decided who was saying hello to them. Encourage each child to participate in the discussion.

DAY 5, AFTERNOON

OBJECTIVE: The children will be able to recite at least one important function of eyesight.

MATERIALS: Small cups of clorox, lemon juice, perfume, peanut butter, covered with aluminum foil with small holes in it, and a blindfold.

PROCEDURE: Review the morning session by asking how they used their ears when they could not use their eyes. Tell the children they are going to pretend that they cannot see, but their nose is going to tell them what is in front of them. Have the cups on the table. Blindfold one child at a time and have him/her identify the material placed in front of him/her. Continue until all of the children have done it.

Have the children sit in a circle and tell how they identified the materials in the cups. Are there other ways they could identify what was in the cup? ... Would all things be safe to taste to see what they were? ... What if the material had no smell? Have the children all close their eyes and try to identify a carrot or celery. Could they do it? ... How? ... Why are eyes important? ... What do people have to do help them if they cannot see (canes, seeing-eye dogs). Show pictures of children using canes or dogs. What types of things would they do to have fun? ... What would they enjoy? ... Many things just like the children in the class.

DAY 6, MORNING

OBJECTIVE: The children will relate the theme of the story.

MATERIALS: Book, Amy can Learn.

PROCEDURE: Review briefly, the previous week.

Emphasize likes and differences and abilities and limitations of various handicaps. The teacher should explain that people not only look differently, they sometimes act differently.

Then, the teacher should read, Amy can Learn. Afterwards, the children can relate the theme of the story. The teacher should reinforce abilities of Amy by helping the children list them. The children can look at the book by themselves if they want.

DAY 6, AFTERNOON

OBJECTIVE: The children will be able to list some of the abilities of a mentally retarded girl.

MATERIALS: Videotape, monitor.

PROCEDURE: Review the morning. Prompt with the book, if necessary. Emphasize the child's abilities. Tell the children they are going to see a movie about a girl named Sherry and to look for ways she is different. Show the videotape. Have the children tell about Sherry (i.e., she is bigger than other children; she doesn't talk much). Ask, "Does she look happy? ... Does she look sad? ... Do the other children playing with her look happy? ...afraid? ... sad? ... What do you think she likes to do?"

Explain to the children that there are special names used to describe some special children who are different in some ways. Some of these words are mentally retarded, brain damaged, autistic, and handicapped. The words do not mean that the children are frightening. The words simply mean that the children are different in some ways. The children are also alike in some ways, just as the children in the class are alike and different in some ways.

DAY 7, MORNING

OBJECTIVE: The children will define self-stimulation.

MATERIALS: Kitchen timer or stop-watch.

PROCEDURE: The teacher should say, "One way people are different is that they move all of the time. This is something they cannot help; they have no control over it. Have any of you ever seen anyone who seemed to move all of the time and not be able to sit still? ... This movement is called self-stimulation. That is a big word. Can you say it? It is nothing to be afraid of; it just means that a person may move a lot-- like rocking or rubbing their hands on their legs. We are going to do an activity that is a little like self-stimulation. What ways can you think of to move? ... Each one of you needs to decide how you are going to move for this activity." At this point, the teacher should help each child decide on an appropriate movement.

Explain to the children that the timer (or the stopwatch) is going to be set for 3 minutes. They are to move from the time the teacher says go until the timer goes off. After the activity, have the children sit in a circle on the floor. Ask them how they felt? ... Were they tired? ... Were they afraid? ... Would it bother them if someone moved in that manner?

Remind the children that they can stop when they want, but people who self-stimulate cannot stop when they want. The self-stimulation is not something they WANT to do, but they cannot help it. The teacher can compare it to behaviors that others may want to stop such as smoking or drinking.

DAY 7, AFTERNOON

OBJECTIVE: The children will practice trying to understand those who speak differently.

MATERIALS: Tape of speech of mentally retarded children talking, tape recorder, blank tape, saltine crackers, and peanut butter.

PROCEDURE: Ask the children what they talked about in the previous session. Prompt the children, if they need help remembering. Tell them that another way people are different is that they cannot talk as well as they do. They are hard to understand. Ask if they have talked with someone who is hard to understand? ... What was it like? The teacher should explain that some of the people who talk differently have been recorded on tape and they are going to listen to them. The teacher should play the tape of the mentally retarded children talking. Then, the teacher should ask, "Could you understand what the children said? ... How did you feel? ... Were you afraid?" Tell the children they are going to do an activity where it will be hard for them to talk. Give each child, one at a time, a cracker with peanut butter on it, and let him/her talk into the tape recorder while the peanut butter and cracker is still in his/her mouth. After all have had a turn, play back the recording. Have the children try to identify their own voices. Can they understand what was said? ... How did they feel when they listened to themselves? The teacher can compare poor enunciation to children who are just learning to talk.

DAY 8, MORNING

OBJECTIVE: The children will list their reactions to a videotape of an autistic child.

MATERIALS: Videotape of autistic boy, monitor.

PROCEDURE: Review the previous session. Prompt them, if necessary, with questions about what it was like not to be able to understand themselves.

Tell them that they are going to see a movie about a special little boy named Ross (give no further introduction). Show the videotape. After the videotape, ask the children how they felt when they saw Ross. Did they see his continuous movement? ... Did the other children seem afraid of Ross? ... What can they think of that they would like to do with Ross? ... Would he make a good friend? ... Why or why not?

DAY 8, AFTERNOON

OBJECTIVE: The children will list ways that an autistic child can have fun with other children.

MATERIALS: Videotape of Ross, monitor.

PROCEDURE: Review the morning session by asking the children how the movie about Ross made them feel. Tell the children that they are going to see the movie again, but this time to look for things that Ross seems to enjoy doing. The teacher should show the videotape again. Then, she should ask the children what things they saw. What did he seem to enjoy? Can they think of things that he might not enjoy? The teacher should guide a discussin by comparing and contrasting Ross' likes and dislikes to those of the children.

DAY 9, MORNING

OBJECTIVE: The children will see a videotape of the handicapped child scheduled to enroll in the center.

MATERIALS: Videotape of JoAnn, monitor.

PROCEDURE: The teacher should tell the children, "A new child will be starting at the day care center on next Monday. Her name is JoAnn. She is different in some of the ways we talked about and like you in some of the ways we have talked about. Some people call her autistic. Remember when we talked about special words? ... I have a movie of her that I want to show you. Then, you can ask questions and we will talk about the movie."

The teacher should show the videotape of the child. Afterward, ask the children to tell about the videotape. "What was the child doing? ... Did she look happy? ... What did she seem to like? ... Did the other child in the movie look happy? ... sad? ... afraid?" The children also may have other questions that they want to ask.

DAY 9, AFTERNOON

OBJECTIVE: The children will meet the handicapped child's mother.

MATERIALS: The child's mother, a picture of the child.

PROCEDURE: The teacher should ask the children who they talked about in the morning session and encourage them to tell what they know about the handicapped child. Then, the teacher should introduce the child's mother. Have her tell about what she likes to do at home. The children will have the opportunity to ask questions. The teacher may need to model some questions such as "Does she like spinach? ... Does she like to swim? ... What is her favorite food? It would be helpful to brief the mother prior to the session so that she will be prepared to answer those types of questions.

DAY 10, MORNING

OBJECTIVE: The children will list several things they can do to help the handicapped child on her first day at the day care center.

MATERIALS: Picture of the handicapped child, large paper to write on, felt tipped pen.

PROCEDURE: Review past sessions, especially how people are alike in some ways and different in others. Ask, "Who remembers the name of the girl who is going to start here soon? ... She is different from us in some ways and like us in other ways. She will be new here and be just as scared as you were on your first day. What types of things do you think you could do to help her on her first day? ... What types of things can we do to make her feel welcome and not be afraid?" The teacher will write down the suggestions as the children make them (examples might include call her by name, remind her of their names, show her how to use the toys). The teacher should remind the children that it will not be too much longer until JoAnn is actually there at the center.

DAY 10, AFTERNOON

OBJECTIVE: The children will role play ways to help the handicapped child on her first day at the center.

MATERIALS: List of suggestions that the children made in the previous morning session.

PROCEDURE: The teacher will say "Do you remember what you did this morning? ... What was the little girl's name that we talked about? ... What is this list that I have here? ... Tell me some things that are on it. ... We are going to pretend like this is JoAnn's first day. One of you can be JoAnn and the rest of you can show me what you are going to do." At this point, the teacher will choose one child to play JoAnn and the others can role play the situation. After all of the children have had a chance to be JoAnn, they will sit in a circle and talk about the things they will do on Monday. Then, the teacher will end the sessions by saying that they did a really good job with the activities. If they have any questions about JoAnn once she gets there, they should ask a teacher.

APPENDIX G

INFORMED CONSENT FORM

PROJECT SEARCH

INFORMED CONSENT FORM

The purpose of this research is to assess the effect of 20 small group activities and behaviors of several nonhandicapped children toward a handicapped child. During the weeks of September 25 and October 2, your child will meet twice each day with a teacher and five other children to learn about various types of handicapping conditions and the ways in which nonhandicapped children can help a handicapped child adjust to an early education program. The activities will focus on the concepts of similarities, differences, and include such things as looking at pictures of handicapped children, exploring the use of assistance devices (such as a wheelchair or leg brace), and viewing videotapes of retarded and autistic children that depict them interacting with their parents, teachers, and other young children.

On October 9, 1978, one handicapped child will be enrolled in the day care program. At that time, her behavior as well as the behaviors of those children (including your own) who interact with her by their own choice will be videotaped for 15 minutes during the indoor free play period. Videotapes will be recorded everyday

thereafter for a period of two weeks and then analyzed by trained observers for the occurrence of behaviors such as approaches, social interaction, assists, requests, conversation, etc., that nonhandicapped children direct toward the handicapped child. Our hope is that children who participate in the small group activities will be more likely to show attention to a handicapped child in the above ways than children who do not participate in the activities.

In addition to the videotaped observations, each nonhandicapped child will meet individually with a teacher on two different occasions, October 11, 1978, and October 23, 1978, to answer a few questions about the handicapped child. Some of the questions will focus on similarities and differences, for example, "Have you seen JoAnn do anything that you can do?" and "What does she do that is different?" Others will focus on the children's feelings about JoAnn, for example, "Who do you like to play with?" or "Do you like to play with JoAnn?" Again, our hope is that once children learn about handicapped children, they will be more likely to have positive attitudes toward them.

By signing this consent form, you are agreeing to your child's participation in this project, with the understanding that you may withdraw him/her anytime without the risk of prejudice to you or your child. Moreover, you

sign with the understanding that you may observe your child's participation in any of the above activities and may upon request, be informed about the results of this research.

Child: _____

Parent: _____

Project Director:

Date:

Vey M. Nordquist, Ph. D.

Phone: 974-5316 (office)

584-5821 (Day Care Center)

VITA

Cynthia D. B. Sappington was born in Atlanta, Georgia on September 8, 1952. She attended elementary schools there and in Knoxville, Tennessee until she was graduated from Bearden High School in June, 1970. That summer, she entered the University of Tennessee, Knoxville. In November, 1973, she postponed her college career when she married Michael T. Sappington of Knoxville.. After her husband's three year tour in the United States Army, she returned to the University of Tennessee, Knoxville, where she was awarded the Bachelor of Science degree in Child Development in June, 1977. The following fall, she accepted a Graduate Assistantship at the University of Tennessee and Master of Science in Child Development in August, 1979.

The author is a member of Omicron Nu and Pi Beta Phi honor fraternities. She is also a member of the National Society for Autistic Children, the National Association for the Education of Young Children, and the Tennessee Association for the Education of Young Children. After graduation, she will be employed with the University of Tennessee Child Development Laboratories.