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ABSTRACT

The paper is a product of the 3-year project, "Functional Mainstreaming for Success," designed to develop a model for instructional mainstreaming of handicapped children (3-6 years old) in community settings. The literature review examines activities and methods to prepare nonhandicapped children for the mainstreaming of handicapped children. After providing a seven-point definition of mainstreaming, the paper reviews the literature on general awareness and skill building. General awareness activities are intended to provide information about children with handicaps and to model appropriate attitudes and behaviors toward persons with handicaps. The skill training activities are designed to teach and reinforce skills which will allow children to interact appropriately with handicapped persons. Areas discussed include puppetry, simulation activities, working with aids and appliances, inviting guest speakers to class, class discussion, use of children's books and films, videotapes and other media presentations, and participation in role play and problem solving activities. The paper concludes that while there is a general consensus regarding the efficacy of such activities, there is a paucity of data which empirically demonstrate their effectiveness. (DB)

Preparing Regular Classroom Students for Mainstreaming:

A Literature Review

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Abstract

As the mainstreaming of children with handicaps becomes an increasingly important goal, so too does the issue of how to facilitate interactions between children with and without handicaps in the mainstream setting. One potential focus for improving interactions is the child without handicaps whose attitudes and behaviors will play an important role in the success of mainstreaming. Such a focus could include the implementation of simple awareness activities - such as a puppet show about a child who is mainstreamed into a regular education classroom - to more extensive skill building activities such as role-playing a special needs student's first day in a mainstream setting. In the present paper, a variety of activities which have been suggested as a means of making the child without handicaps a more active partner in the mainstreaming process were initially viewed. While many sources for activities were identified, and there appeared to be general social consensus regarding the efficacy of such activities, there is a paucity of data which empirically demonstrate the usefulness of these activities. While preparation activities thus appear to have adequate social validation, and could be a useful component of a mainstreaming model, additional research is necessary to establish their effectiveness.

Preparing Regular Classroom Students for Mainstreaming: A Literature Review

Mainstreaming is a concept that has received increasing attention since the implementation of Public Law 94-142 (Adams, Striefel, Frede, Quintero & Killoran, 1985). PL 94-142 calls for provision of a free and appropriate education for all children with handicaps in the least restrictive environment. Education in the least restrictive environment (LRE) means that the child will be provided with an educational program in a setting which can meet the child's needs with the necessary support from special educational personnel, while placing the child in contact with regular education students as much as possible. Mainstreaming is thus the process of implementing the concept of education in the least restrictive environment.

A Definition

Mainstreaming can be defined in a number of ways (see Adams et.al 1985 for a review of these definitions). For the purposes of the present paper, mainstreaming has been defined as follows:

Successful mainstreaming is a continuing process, rather than a discrete event. It includes the instructional and social integration of children who have handicaps into educational and community environments with children who do not have handicaps. Successful mainstreaming must:

1. Be based on the decision of the IEP team that a child can potentially benefit from placement with children who are not handicapped;

2. Provide a continuum of least restrictive placement options which range from brief periods of interactions, to full-time participation in a regular classroom;

3. Specify the responsibility of students, parents, regular and special education teachers, administrators, and support personnel;

4. Include pre-placement preparation, post-placement support, and continued training for students with and without handicaps, their parents, teachers, administrators, and support personnel;

5. Maximize appropriate interactions between children with and without handicaps through structured activities (such as peer tutoring or buddy systems) and social skills training, as appropriate to specific situations and abilities;

6. Provide functional, age-appropriate activities that prepare the child with handicaps to function in current and future community environments; and
7. Occur without major long-term disruption of ongoing educational activities or other detriments to children with and without handicaps in the mainstream setting.

Impacts

Implementation of the process of mainstreaming has had many impacts on the education system (Madden & Slavin, 1983; National Support Systems Project, 1980). The major impact has been upon the child with handicaps, for it is the child with handicaps who is mainstreamed and who must adjust to a new academic and social environment. However, mainstreaming also impacts others in the educational environment, including administrators, the regular class teacher, and the students in the mainstream classroom. Thus, efforts at enhancing the mainstreaming of students with handicaps must take into account the skills and attitudes of those who will interact with the child being mainstreamed. Although some attention has been paid to the teacher's role in the mainstreaming process, less emphasis has been placed on enhancing mainstreaming by focusing on regular classroom students (Litton, Banbury, & Harris, 1980). Such emphasis is important, according to Zigmond and Sansone (1981) who stated:

> Regular education students need information on handicapping conditions in order to develop some insight to [SIC] and understanding of their handicapped peers. Even more important, they may need to help to develop positive attitudes toward individual differences of all kinds. They must learn to look beyond physical attractiveness, academic success, or athletic ability for other indicators of a person's value and contribution. Their help is essential to make the mainstream environment one that fosters acceptance and support rather than competition and rejection (p. 102).

Additional support for including regular education students in the implementation of the mainstream process comes from attitudinal research which has suggested that students without handicaps often see students with handicaps in negative and prejudiced ways (Gresham, 1981); feel discomfort and uncertainty in interacting with students who have handicaps, and tend to reject them when they are integrated (Rynder, Johnson, Johnson & Schmidt, 1980). Interactions between students with and without handicaps, when they do occur, are generally negative in nature (Gresham, 1981). These conclusions are supported by observational data which indicate that merely placing students with and without handicaps in the same setting does not result in adequate social interaction, especially between children with more severe handicaps and their normal peers

(Gresham, 1982; Guralnick, 1980; Snyder, Appoloni, & Cooke, 1977). Indeed, it appears that acceptance of students with handicaps may actually increase when contact between students with and without handicaps is limited (Frith & Mitchell, 1981).

Successful social integration of children with severe handicaps may thus be difficult to achieve unless attention is paid to the role of children without handicaps in the mainstreaming process. Although the need for preparing children without handicaps has been recognized as a method for enhancing successful mainstreaming of children with handicaps (Stainback & Stainback, 1982; Stainback, Stainback, & Jaben, 1981; Stainback, Stainback, Raschke, & Anderson, 1981), systematic procedures have yet to be consistently implemented for this purpose. A number of authors have, however, advocated the use of various types of activities to prepare children without handicaps for the mainstreaming experience, and some instructional programs have been developed.

Focus of This Review

The present paper will review existing literature on the preparation of students without handicaps for integration with peers who have handicaps. The areas to be discussed include puppetry, simulation activities, working with aids and appliances, inviting guest speakers to class, class discussion, use of children's books and films, videotapes and other media presentations, and participation in role play and problem solving activities. The activities to be discussed fall into two categories: general awareness and skill building. The general awareness activities are ones which have as their goals 1) providing information about children with handicaps and handicapping conditions as well as, 2) modeling appropriate attitudes and behaviors towards persons with handicaps. The skill training activities are those which actually teach and reinforce skills which will allow children to interact appropriately with persons with handicaps.

Awareness Activities

One aspect of preparing children without handicaps for mainstreaming is to provide them with information about handicapping conditions and to model appropriate attitudes and behaviors towards persons with handicaps. The activities discussed in the following sections of this paper have as their goal providing specific information about handicapping conditions such as Down Syndrome and other forms of mental retardation, hearing impairment, visual impairment, physical disability, and learning disabilities. In addition, many of these awareness activities attempt to provide a model of what is appropriate in terms of attitudes and behaviors towards persons with handicaps. Literature dealing with the implementation of these activities will be

reviewed and critiqued, and recommendations for the use of these activities in a mainstreaming preparation program will be discussed.

Puppetry

Cadez (1979) utilized puppetry presentations and subsequent discussions to teach four- and five year old children concepts about cerebral palsy. The sessions utilized two puppets from The Kids on the Block (Aiello, 1978) and focused on dispelling fears and misconceptions about cerebral palsy (e.g., assuring the children that you cannot catch cerebral palsy) and indicating the similarities between children with and without handicaps (e.g., that children with handicaps like and participate in the same activities as children without handicaps). The effects of the puppetry presentations and discussions were evaluated in terms of pre-post performance on a ten question, yes-no format questionnaire. The questions were ones which had been directly addressed in the puppetry vignettes (e.g., "Do handicapped children like to do the same things you do?"). The results suggested that the training package was effective in increasing knowledge about cerebral palsy with four and five year old children. However, the number of subjects in this study was limited, and consisted only of preschool children, and no control group was used for comparison purposes. In addition, reliability and validity information on the dependent measure was lacking, the puppetry presentations and discussions focused primarily on cerebral palsy, and no information was available on the generality or maintenance of results.

Additional research which controls for the shortcomings in the Cadez (1979) study is necessary in order to replicate these results with this population as well as with elementary age children, and to examine the feasibility of teaching concepts about other types of disabilities. Although The Kids on the Block program contains a number of different types of puppets and vignettes depicting children with a variety of handicaps, research dealing with their use is limited. No research studies focusing on puppetry in teaching concepts directly related to mainstreaming were located in reviewing an extensive body of literature. If puppetry is useful for teaching concepts about handicapping conditions it is also likely to be useful in teaching aspects related to mainstreaming. Young children seem to be attracted to the puppets, thus maintaining children's attention is easy when puppets are used.

It is recommended that future research correct the limitations of the Cadez (1979) study, and include the assessment of effects in response domains other than knowledge acquisition. Initial research could consist of single subject designs, such as multiple baseline across subject designs, until replication of procedures results consistently in similar findings. Group studies should then be conducted. Specifically, there is a need for control group studies which use as their dependent measure an instrument with

established reliability and validity and which includes items tapping knowledge about handicapping conditions as well as willingness to interact with children with handicaps. Such research should focus on both preschool and elementary age students. The feasibility and utility of using puppetry presentations in combination with other preparation activities should be examined as well, as should the issues of generalization and maintenance of behavior changes attributable to puppetry presentations.

Recommendations for Future Research

Other questions about the use of puppetry for presenting concepts about handicapping conditions to regular education students also remain to be answered. First, do puppetry presentations have an impact other than increasing knowledge about persons with handicaps? For example, it would be of interest to determine if puppetry presentations are an effective means of improving verbal responses indicating a willingness to help or to play with a child who has handicaps. Direct observation of actual approach or play behaviors between students with and without handicaps would also be a potential target of puppetry presentations. Although it would be unrealistic to expect that a brief puppetry presentation would drastically improve interactions, it might be expected that puppetry presentations would have some effect on interactions when used in combination with other procedures.

Recommendations for Practice

Future research on puppetry presentations should provide a basis for their use as an awareness activity. It might be expected that puppetry presentations would be good as a first exposure to children with handicaps and handicapping conditions, as children tend to be attracted to the puppets and attend well to them. In addition, if puppetry is useful for teaching concepts about handicapping conditions, then it would be expected that puppetry vignettes which present information specifically about mainstreaming could be developed and used.

One might also explore the feasibility of using puppets for teaching actual interaction skills, e.g., having puppets model appropriate interactions and then having children practice those skills. No published data could be located concerned with puppets and their relationship to skill training for mainstreaming.

Simulation Activities

A number of authors have advocated the use of simulation activities as a means of teaching children about their peers who have handicaps. This simulation might be used as an activity for

preparing children without handicaps for interacting with their peers who have handicaps. In general, simulation activities involve the temporary impairment of one or more senses or body movements to allow the child to experience feelings and frustrations which can result from disability. It is assumed that the child's awareness of their affective reactions to the simulation will sensitize them to the affective needs of others and will subsequently change their attitudes and behaviors toward children with handicaps (Ochoa & Shuster, 1980). Typically, participation in simulation activities has been followed by discussion of feelings about being temporarily handicapped and in some cases brainstorming suggestions for improving the environment of the child who has handicaps.

Simulation activities which have been described have been specific to the disabilities of visual impairment, physical impairment, hearing impairment, mental retardation, communication disorders, and learning disabilities. A review of the literature on simulation activities indicates that the majority have been concerned with visual, hearing, and orthopedic impairments. In the following sections, the types of activities used to simulate a variety of handicapping conditions will be described. In the last section, a review of research which has examined the effectiveness of simulation activities will be presented, and recommendations for future research and practice discussed.

Types of Simulation Activities

Simulation of Visual Impairment. Blind walks, in which a child is blindfolded and "led around" by a non-impaired peer or required to perform some activity while blind-folded have been the predominant method of simulating visual impairment (Bookbinder, 1978; Glazzard, 1979; Grosse Point North High School, 1980; Martin & Oaks, 1980; Ochoa & Shuster, 1980; Ward, Arkell, Dahl, & Wise, 1979). Partial visual impairment has also been simulated by placing a translucent material over glasses or goggles and requiring the child to perform a task, such as reading or filling out a form (Martin & Oaks, 1980; Ward et al., 1979).

Simulation of Hearing Impairment. Hearing impairment has been extensively simulated by requiring subjects to wear ear plugs or to view a movie or cartoon with the sound off (Bookbinder, 1978; Glazzard, 1979; Ward et al., 1979). Partial hearing loss has been simulated by presenting instructions to be followed in either a low volume or garbled manner (Ochoa & Shuster, 1980; Ward et al., 1979). Requiring pairs of children to converse without words has also been used to simulate the difficulties of communicating when one has a hearing impairment (Ward et al., 1979).

Simulation of Orthopedic Impairment. Physical disabilities can be simulated in a number of ways (Bookbinder, 1978; Glazzard,

1979; Martin & Oaks, 1980; Pieper, 1983; Ward et al., 1979). For example, children can be required to walk with their legs stiffened with rulers, braces, cords around their ankles, or with sandbags on their wrists. Impaired movements can be simulated by hooking the arms around a pole behind the back or by immobilizing the dominant arm. Fine motor impairment can be simulated by wearing gloves while doing a task or by taping fingers together or stiffening them with tongue depressors. Other physical impairment simulations include the use of wheelchairs and crutches, three-legged potato-sack races, walking a balance beam after being spun around (to simulate balance problems), being required to pick up pencils with the feet only, eating or writing while holding a spoon or pencil with pliers, and playing ball while sitting in a wheelchair or without using arms or legs.

Simulation of Mental Retardation. Simulations of mental retardation have been less frequently described, but generally require the child to complete a task which is far too difficult for him or her. For example, a task with numerous complex instructions which the child must follow can be presented, or the child can be required to read paragraphs containing letter reversals or otherwise undecipherable material. In order to introduce children to multiple impairments associated with mental retardation, activities used for simulating orthopedic impairments can be used as well (Bookbinder, 1978; Ward et al., 1979).

Simulation of Communication Disorders. Reading with cotton pads in the mouth or attempting to communicate instructions without speaking are activities which have been used to simulate communication disorders. Attempting to read while simulating a specific speech impairment has also been suggested (Ochoa & Shuster, 1980; Ward et al., 1979).

Simulation of Learning Disabilities. Learning disabilities can be simulated by requiring children to complete tasks under unusual circumstances, such as attempting to trace patterns in a mirror or reading material in which some letters and words have been substituted for others. In addition, many of the activities which have been suggested for the simulation of mental retardation, such as completing extremely difficult tasks, have been suggested as learning disability simulations as well (Cashdollar & Martin, 1978; Martin & Oaks, 1980; Ward et al., 1979).

Effectiveness of Simulation Activities

Glazzard (1979) had college students participate in simulations of hearing, visual, and motor impairments and describe their feelings about, and perceptions of, the experience in a short paper. Analysis of these anecdotal reports indicated that the students found the impairments frustrating and were able to identify behaviors of the persons without handicaps (helpers) which contributed to these feelings. For example, they indicated that

people often had pain or pity expressions on their faces when helping students in wheelchairs, and that this made the students feel embarrassed and humiliated. Lieberth (1982) found similar results after requiring college seniors majoring in speech pathology to participate in a day-long hearing impairment simulation.

An interesting variation of the use of simulation activities is described by Israelson (1980). Children in a class for hearing impaired students participated in simulations of blindness and orthopedic impairment and role played positive and negative ways of helping people with handicaps. These activities were instituted as a method of improving the children's behavior toward a classmate with physical handicaps. Although an objective assessment of the effectiveness of these procedures was not conducted, the author reported that, subjectively, the activities did enhance the student's sensitivity to other handicapping conditions.

Wilson and Alcorn (1969) examined the extent to which an eight-hour disability simulation would change the attitudes of college students toward persons with handicaps. An experimental and a control group were pre- and post-tested on the Attitudes Toward Disabled Persons (ATDP) scale, for which reliability and validity had been previously demonstrated. The experimental subjects were also asked to write essays detailing their feelings about the simulation. Analysis of the narratives indicated frustrations and insights similar to those reported by Glazzard (1979) and Lieberth (1982). However, no significant differences between the groups were found on the ATDP, indicating that, as measured by this particular scale, the simulation activities did not significantly improve attitudes toward persons with handicaps. However, it is possible that the ATDP is not sensitive enough to detect differences.

Recommendations for Future Research

Although much anecdotal information about the use of simulation activities exists, a major problem with the literature on the use of simulation activities to prepare children without handicaps for mainstreaming is an absence of well-controlled studies which have objectively evaluated their effectiveness with children. If it is assumed that simulation activities make children more sensitive to the feelings and frustrations of persons with handicaps, then the extent to which they achieve this outcome should be assessed. In addition, the extent to which simulation activities may be useful as a way of making the public aware of the mainstreaming of children with handicaps should be the focus of future research. Thus, additional research on the effectiveness of simulation activities should be conducted to answer these questions.

Recommendations for Practice

Simulation activities, if effective as a mainstreaming preparation activity, have several advantages which might make them a useful addition to a preparation program. For example, the activities are easy to implement and require few materials and little teacher training. In addition, subjective information presented by a number of authors indicates that the activities are fun for participating children. Simulation activities are also a way of directing the attention of both children and adults to the needs of persons with handicaps. Simulation activities could thus serve a public relations or public awareness function, and might be considered as a first step in any awareness or mainstreaming preparation program.

A major disadvantage of simulation activities as they have been used in the past is that they do not provide children with any new specific skills which would allow them to interact differently with peers with handicaps. Rather, the purpose of simulation activities has been to provide the participant with an opportunity to experience what it is like to have a handicap. This, in turn, is postulated to result in a greater understanding of the feelings and perceptions of persons with handicaps. Such a postulation has several problems. First, young children may have difficulty understanding how another person would feel in the same situation, (Mussen & Eisenberg-Berg, 1977) and may thus be less likely to benefit from simulation activities. Second, Donaldson (1980) has indicated that, even with adults, disability simulations may have little effect on the ways in which participants view persons with handicaps.

At the present time, the difficulties with simulation activities seem to be: a) the lack of a clearly defined purpose for simulation activities which includes objective measurement of behavior change in interaction patterns (e.g. direct observation); b) the lack of a clearly defined set of questions or activities, at the end of the simulation, directed at identifying new interaction skills needed for dealing with peers who have handicaps; c) the failure to teach the newly identified and needed interaction skills, and; d) the selection of activities for simulation which encompass only a portion, if any, of the situations that a person with specific handicaps encounters. If a decision is made to incorporate simulation activities within a mainstreaming preparation program, it is thus advisable to clearly plan the goals for these activities, to identify the needed interactional skills, and then to incorporate the teaching of these skills into subsequent portions of the preparation program. In addition, it would be useful to discuss the interactional behaviors identified

in terms of more encompassing life situations. Thus, simulationactivities, as they have been described in the past, are not recommended for use in a preparation program. If they are used, then modifications, as described above, must be made.

Working With Aids and Appliances

Exposure to the aids and appliances used by students with handicaps, although not specifically used as a mainstreaming preparation activity, has been described as another method for improving the attitudes of the nonhandicapped toward their peers with handicaps (Bookbinder, 1977; Pieper, 1974; Ochoa & Shuster, 1980; Weikel, 1980; Pasanella & Volkmor, 1981) . Such exposure would include examination of devices such as wheelchairs, hearing aids, and prostheses, as well as learning to use Braille or the manual alphabet. These activities appear to serve two purposes. First, it is assumed that one barrier to the acceptance of persons with handicaps is fear, and that this fear may be generated by unfamiliarity with the devices which many persons with handicaps must use. Exposure to these devices is thus proposed as one way of reducing any fears associated with them. Second, exposure to aids and appliances is assumed to serve as a method of increasing knowledge about the ways in which those with handicaps are able to adapt to their environment. Such knowledge is also expected to improve acceptance. In addition, interaction with individuals who are handicapped would be facilitated when nonhandicapped persons learn appropriate methods of communication, such as sign language and Braille writing.

Recommendations for Future Research

No studies could be located for which there has been a systematic examination of the effectiveness of exposure to aids and appliances as a method for improving positive attitudes towards persons with handicaps. Thus, although working with aids and appliances has been suggested as a useful activity, there seem to be no objective data to substantiate this claim. Future research on the effects of exposure to aids and appliances on the attitudes and behaviors of persons without handicaps should address a number of issues. First of all, there should be some examination of the differential effects of different types of exposure. Learning about the use of a wheelchair would, for example, probably have a different outcome than would learning some simple signs. In the case of the former, knowledge would be imparted, while in the case of the latter, communication between individuals would be facilitated. Second, the extent to which exposure reduces fears associated with interacting with persons with handicaps would be of interest as this is one of the assumed purposes of such exposure. A determination needs to be made of whether the fears are related to the devices used by persons who have handicaps. If so,the effects of fear reduction on actual attitudes and behavior would be

a logical extension of this line of research. Again, the research must also encompass objective measurement of impact not only at the time of exposure to prosthetic appliances and devices, but also later to determine durability and generality.

Recommendations for Practice

Although exposure to aids and appliances has not been the subject of extensive empirical investigation, there are some instances in which their use within a preparation program may be justified. Specifically, exposure to aids and appliances may be necessary if such devices are used by a particular child being mainstreamed. For example, a child may use a walker, a device which is unfamiliar to most young children, and about which they may be curious. Alternatively, a child with a language impairment who uses sign language or a communication board may be mainstreamed; in this case it would make sense to introduce the regular classroom students to sign language or to the child's communication board in order to allow them to effectively interact and communicate with that child. However, exposure to aids and appliances as a general awareness activity per se is not recommended until there is sufficient research to support such an approach. Exposure to aids and appliances as a skill building activity is highly recommended, e.g., teaching children to use sign language, provide them with a functional communication method for interacting with children who have handicaps and who use sign language.

Guest Speakers

Inviting a person with handicaps, someone who works with handicapped persons, or a parent of a child who is handicapped to speak with a class of children has also been advocated as a method for improving attitudes toward persons with handicaps (Bookbinder, 1977; Pieper, 1974; Pasanella & Volkmor, 1981). Such guest speakers can present information about what it is like to be handicapped or to interact with persons who are handicapped on a day-to-day basis. They can also answer any questions that children might have about a particular handicapping condition. Guest speakers who themselves have handicaps can also provide children with an opportunity to interact with a person who has a handicap. Some evidence for the effectiveness of this approach is provided in a study by Lazar, Gensley, & Orpet (1971) which utilized a special instructional workshop on creative Americans and weekly guest speakers who had handicaps as a program for improving attitudes towards people with handicaps in a group of mentally gifted eight year olds. Pre- and posttesting on the Attitudes Toward Disabled Person's Scale (ATDP) indicated significant gains, in comparison to a control group, as the result of participation in the program. However, the reliability and validity of the ATDP for children is

unknown and thus its use as an outcome measure is subject to criticism and leaves these results in question.

Recommendations for Future Research

A number of issues could be examined in future research on the use of guest speakers as a preparation activity. Perhaps the most salient issue is the differential effects of different types of guest speakers: e.g., a non-significant person with handicaps, a person with handicaps who has accomplished a significant goal, or a parent of a child with handicaps. Donaldson (1980) suggested that interventions involving contact with a person who has handicaps are most successful when the person with handicaps acts in a non-stereotypic manner. Thus, one might expect that a guest speaker who displays an unusual skill might be more effective than one who does not. In addition, Donaldson (1980) notes that interventions aimed at changing attitudes toward persons with handicaps should involve at least an equal-status relationship between the participants. Thus, one might expect that an intervention in which guest speakers are carefully selected to ensure that they are approximately equal in social, educational, or vocational status so the persons with whom they are speaking would be more effective than one in which equal-status is not taken into account. Future research in this area should thus incorporate these issues, as well as the broader issues of durability and generality of results.

Recommendations for Practice

There are a number of ways in which guest speakers could be incorporated into a mainstreaming preparation program while taking into account the recommendations of previous research. For example, the mainstreamed child's special education teacher might visit the regular classroom to answer questions that the children might have about their new classmate. This would allow the students to gain specific information about the child being mainstreamed. The special education teacher could also serve as a model for appropriate attitudes and behaviors towards persons with handicaps. A child with handicaps who is older than the children in the class might also be invited to the class to speak about what he or she likes and dislikes about participating in regular class activities, as well as, the types of activities that are carried out in his or her special education class. Using a child who is older would address the suggestion that the guest speaker should be of at least equal status to the participants.

Parents of the child being mainstreamed could also serve as guest speakers, as they are in an ideal position to provide information about their child. In addition, the parent could show a slide show of their child as a way of providing the regular class students with concrete information about their new classmate and

suggestions for appropriate interactional skills. The use of guest speakers to teach particular interaction skills is as yet completely unexplored.

Class Discussion

Most authors who have described the preparation of the nonhandicapped have stressed the importance of class discussions both before and after participation in other preparation activities. For example, Bookbinder (1977) suggests that prior to beginning a program it is useful to discuss the children's experience with people with handicaps and their feelings and opinions about them. She also indicates that the instructor should be non-judgmental in his or her reactions to the children's responses in order to establish a positive environment in which they will learn. During and after participation in various activities, questions should be encouraged and responded to in a straightforward manner.

Class discussions have been suggested as an important adjunct to participation in puppetry and simulation activities. For example, Ochoa and Shuster (1980) see simulation activities and subsequent class discussions as a way of providing students with the opportunity to, "experience situations and events affectively and then to analyze those affective experiences in the broader context of the social environment" (p. 94). The role of the instructor or teacher is to ensure that the goals of an activity are realized; the class discussion provides a forum in which to present and clarify these goals, and to correct any misconceptions which may be present.

There is some evidence, however, that unstructured class discussions may not have the desired effects on attitudes towards persons with handicaps. As cited in Donaldson, (1980), and Siperstein, Bak, and Gottlieb (1977) conducted a study to determine the effects on attitude of having groups of children informally discuss a Down syndrome child who was also depicted as being unable to spell. The investigator found that there was actually a negative shift in attitudes as the result of this discussion. Donaldson (1980) thus cautions against the use of unstructured discussions as a method of attitude change, suggesting that such discussions may actually strengthen attitudes held prior to the discussion.

Class discussions have also been included in investigations which involved the evaluation of a peer preparation training package (Miller, Armstrong, & Hagan, 1981; Lazar, Gensley, & Orpet, 1971). However, the effectiveness of class discussions would necessarily be tied to the effectiveness of other activities, unless an attempt was made to introduce additional concepts during the discussions. In addition, while simulations and other

activities are relatively structured so that their use is somewhat standard, class discussions do not necessarily have a specific format (Donaldson, 1980). Even when suggestions are given for questions which can be asked (e.g. Ward, Arkell, Dahl, & Wise, 1979; Bookbinder, 1977; Cohen, 1977), it is conceivable that other factors such as the skills, knowledge, and attitudes of both the discussion leader and the group will ultimately determine what is discussed.

Recommendations for Future Research

Future research on the use of class discussions to effect attitude change should thus involve the examination of the effectiveness of using a structured discussion format. Within a structured format the goals of the discussion should be clearly identified, and discussion questions and issues should be present in written form. Research in this area should also attempt to evaluate the influence of prior attitudes towards and knowledge about, persons with handicaps, as well as the influence of the skill level of the discussion leader, on attitude change after class discussion.

Recommendation for Practice

Pending the completion of additional research on class discussions, it would behoove the practitioner to carefully link the use of discussion sessions to the goals of other preparation activities being implemented. For example, a class discussion could be utilized in conjunction with a puppet show. Questions which are linked to the objectives of the puppet show e.g., teaching children that certain handicapping conditions are not contagious, could be developed and included in written form with each puppet vignette. Thus, the discussion would be structured and would contribute to the attainment of the objectives of the activity.

Children's Books

Children's books which portray individuals with handicaps have been suggested as a means of increasing positive attitudes towards and acceptance of people with handicaps (e.g. Bookbinder, 1978; Greenbaum, Varas, & Markel, 1980; Mauer, 1979). According to Greenbaum, Varas, and Markel (1980):

> A well-prepared teacher can use trade books to provide factual information as well as to help children explore their feelings. These books offer an opportunity to see a child with a disability as a whole person regardless of the label "handicapped." They give children a chance to realize that all children, regardless of disability,

share similar feelings and interests and that each disabled person is a unique individual (pp. 416-417).

Children's books are conceptualized as a medium for imparting information about handicapping conditions as well as a means of stressing the similarities between those with handicaps and those without. Thus their purpose is similar to that of other methods of changing attitudes towards children with handicaps. Unlike other activities which have been described, however a number of authors (Baskin & Harris, 1977; Bisshopp, 1978; Dreyer, 1981; Greenbaum, Varas, & Markel, 1980; Isaacson & Bogart, 1981) have described criteria for evaluating books about persons with handicaps. For example, Greenbaum, Varas, and Markel (1980) list their criteria for evaluating books about the handicapped: (1) the books should consider the whole person, (2) they should talk about both positive and negative emotions, (3) they should show interactions between persons with and without handicaps, (4) they should be factual and realistic, (5) they should not encourage pity, but rather (6) should encourage acceptance and respect, (7) illustrations should be clear and realistic, (8) the rights of persons with handicaps to a normal life should be stressed, and (9) the books should put their primary emphasis on similarities rather than differences. Appendix B lists a variety of books, which would potentially fit these criteria, grouped according to the handicapping condition with which they deal. This appendix was compiled from a variety of sources (Baskin & Harris, 1977; Bookbinder, 1977; Cadez, 1979; Cadez & Hughes, 1980; Cohen, 1977; Greenbaum, Varas, & Markel, 1980; Grosse Point North High School, 1980; Isaacson & Bogart, 1981; Nash & Boileau, 1980) which had either advocated or evaluated specific books about the handicapped for use in peer preparation activities. Books described in these sources were included in the list only if they (1) were rated as being appropriate for children in the preschool and elementary grades up to grade 3 or 4, (2) received a favorable review from one of the sources (Baskin & Harris, 1977; Bisshopp, 1978; Dreyer, 1981; Isaacson & Bogart, 1981) which provided written evaluations, or if (3) there was no information available about them other than their title and so they could not be excluded from consideration. However, the extent to which any or all of these books would add to a peer preparation package will need to be evaluated.

Leung (1980) conducted a study of the effectiveness of using books about persons with handicaps with four dependent measures: (1) direct observation of interactions between students with and without handicaps, (2) sociometric measures of the social status of students with handicaps, (3) attitudes towards students with handicaps, and (4) teacher evaluation of the procedures. Children in three elementary classrooms, each of which included two children with handicaps, participated as subjects. Teachers in each of the classrooms read one story about persons with handicaps each day, for ten consecutive days, and followed each reading with a class

discussion of the characteristics and behaviors of the people with handicaps in the story. Pre- and posttest assessment revealed significant changes in attitudes towards the person with handicaps, but not in sociometric status of the children with handicaps in each class. Observational data did not reveal a functional relationship between the literature program and interactions between students with and without handicaps. However, teachers favorably evaluated the program in terms of its facilitation of the social acceptance of the children with handicaps in their classrooms. This study thus emphasizes the importance of identifying the specific objectives of a preparation activity and ensuring that the activity selected meets these goals.

Another study which examined the effectiveness of using books to modify nonhandicapped students' attitudes toward their peers with handicaps was conducted by Salend and Moe (1983). Fourth, fifth, and sixth grade students participated in this study, which utilized a pretest-posttest control group design with two experimental conditions. The first experimental condition was the books-only group which was exposed to three books (Lisa and Her Soundless World, Don't Feel Sorry For Paul, and Apt 3) which dealt respectively with deafness, physical handicap, and blindness. The second experimental condition involved additional activities, including group discussion, simulation, explanation, and working with aids and appliances. The dependent measure in this study was the Personal Attribute Inventory for Children (PAIC). The PAIC is an alphabetically arranged adjectives checklist consisting of 24 negative and 24 positive adjectives from which the subjects were asked to select the 15 adjectives which best described children with handicaps. The results indicated no significant effect of the books-only group, but a significant difference on the PAIC between the books plus activities and the control group was found.

These studies both suggest that the specific books used are not in and of themselves an effective means of influencing the nonhandicapped child's attitudes and behaviors towards their peers with handicaps, although the Leung (1980) study did find that attitudes toward persons with handicaps changed as the result of a literature program. However, this study did not use a control group for comparison and hence its results are open to question. In addition, although Leung (1980) found that teachers favorably evaluated the effects of this program in terms of increasing social acceptance of students with handicaps, sociometric and observational data did not substantiate this view.

Recommendations for Future Research

Additional research in this area should focus on the validity of the criteria for book selection proposed by other authors in terms of their relationship to student outcome. In terms of student outcome, additional research utilizing instruments with

demonstrated reliability and validity should be conducted to determine the behavioral and/or attitudinal outcomes associated with a preparation program utilizing books about persons with handicaps.

Recommendations for Practice

Although there is little empirical support for their use alone, the research reviewed suggests that books may contribute to a peer preparation package. The use of books has the particular advantage of being easily implemented by regular classroom teachers, and there is some evidence that teachers would be receptive to such an approach. However, caution must be maintained in the selection of specific books for use and in evaluating the extent to which they add to a peer preparation package. Additional research in this area should thus focus on the validity of the proposed criteria for book selection as well as their effectiveness as a method of improving attitudes and behaviors towards persons with handicaps.

Films, Videotapes, and Other Media Presentations

Like puppetry presentations and books about persons with handicaps, films and other media presentations have been viewed as a way of presenting information about persons with handicaps in a manner which attracts children's attention in a nonthreatening way. Indeed, films are frequently suggested as a component of peer preparation training packages (Barnes, Berrigan, & Biklen, 1978; Bookbinder, 1977; Cohen, 1977; Ochoa & Shuster, 1980; Pasanella & Volkmor, 1981; Pieper, 1974; Ward, Arkell, Dahl, & Wise, 1979).

Westervelt and McKinney (1980) conducted a study to evaluate a brief film designed to point out how the aspirations and interests of a child with handicaps are similar to those of his or her classmates without handicaps. Forty-six fourth grade students who scored low on the Social Distance Questionnaire (SDQ) were selected as subjects. The SDQ involves rating the extent to which the subject views his interests as being similar to children pictured in photographs. Information about its validity and reliability was not presented. In the present study, photographs of an able-bodied and wheelchair-bound child were used. Children in an experimental group viewed a thirteen-minute film showing children with handicaps in wheelchairs participating in physical education and classroom activities with children without handicaps. Both experimental and control children were then posttested on the SDQ with pictures of a wheel-chair bound child and a child with braces and crutches. The children were also given two activity preference scales which assessed their self-interests and their perception of the wheel-chair bound child's interests. The measures were repeated on

a nine day follow-up. The film was found to significantly increase SDQ scores for the wheel-chair bound child, but not for the child with crutches. Only girls viewing the film showed an increase in similarity of interests, and then only in the physical education activity area. The effects were not maintained on the nine dayfollow-up. The authors concluded that the film would be useful to show to children immediately before a wheelchair-bound child was to join their class. However, these results suggest that one limitation of utilizing a film which depicts one specific type of handicap is that the results do not generalize to other handicaps, nor are positive results maintained without additional programming.

The issue of generalizing the effects of experience with one type of handicapping condition to other handicapping conditions is one which is relevant to most of the preparation activities discussed. The Westervelt and McKinney (1980) study is the first to give an indication that it may be necessary to expose children to a variety of handicapping conditions in order to improve their acceptance of persons with handicaps in general. Thus, it would appear that a more cost-efficient method of preparation would be one in which children with a variety of handicapping conditions are described and/or depicted. Films and other media presentations would lend themselves well to such an approach as, for example, children who are mentally retarded, physically disabled, etc. could easily be shown interacting with children who do not have handicaps.

Recommendations for Future Research

It is recommended that future research on the use of films and other media presentations as a preparation activity focus on determining the effectiveness of a film depicting children with various handicaps interacting with their peers without handicaps. In particular, it would be important to look at not only how viewing such a film would affect children's perceptions of people with handicaps, but their interactions with them as well. The literature on social skills training gives some support to the usefulness of films as a method of teaching social skills and of increasing interactions (Michelson & Wood, 1980). Thus, films may prove to be an effective means of increasing interactions between children with and without handicaps.

Recommendations for Practice

Based upon the fact that films and other media presentations are easy to obtain and use and that their use has some face validity it is recommended that practitioners include them within a preparation program when possible. However, it is important that films being utilized be previewed for their appropriateness as a means of meeting program goals.

Appendix A contains a brief list of films which have been mentioned in a variety of sources (Ahern, 1983; Bookbinder, 1977; Cadez, 1979; Cadez & Hughes, 1980; Cohen, 1977; Weikel, 1980; Westervelt & McKinney, 1980) including advertising material from publishers. Since there is little in the literature which deals with evaluating specific films about persons with handicaps, the films listed in Appendix A would require previewing by potential users for the appropriateness of their content for their potential audience. However, it would be useful to use the criteria suggested for evaluating books, in the evaluation of films and other media, since they do not differ in their goals but only in their method of presentation.

Skill-Building Activities

The awareness activities which have been discussed in previous sections of this paper are ones which have been the most frequently described in the literature. However, in order for a preparation program to begin to address the issue of actually impacting interactions between persons with and without handicaps, the present authors believe that skill-building activities must be an integral component. Although some of the activities which have been described as awareness activities have implications for skill building, in general this has not been their primary focus. The activities described in the following sections can used be used, however, to teach children specific skills which can be utilized to improve their interactions with persons who have handicaps.

Role Play and Problem Solving

The preparation activities which have been discussed up to this point have either focused on providing children with information about persons with handicaps or have attempted to provide them with experiences which are designed to make them more sensitive to handicapping conditions. In general, however, these preparation activities do not directly address the issue of preparing children to interact with a child in their class who has handicaps. In order to address this need, some authors (Ochoa & Shuster, 1980; Salend, 1983; Ward, Arkell, Dahl, & Wise, 1979) have suggested the use of hypothetical examples and role playing as methods of teaching appropriate interactional skills to children without handicaps. For example, Ochoa and Shuster (1980) suggest that students role play a situation involving a new classmate with a facial scar. Ward, Arkell, Dahl, and Wise (1979) provide scripts for a variety of role-play situations, including the first day in class for a child with handicaps; having a wheelchair-bound person over for dinner, and the inclusion of a person with handicaps at a dance. Such activities allow the participants to practice new ways of interacting with persons with handicaps without the usual constraints and consequences which real-life interactions might

entail (Ward et al., 1979). To date, however, empirical data to demonstrate the effectiveness of these procedures are lacking.

Salend (1983) proposes the use of hypothetical examples as a way of preparing regular class students for the specific needs of a child who will be mainstreamed. This approach involves: (1) determining the handicapped child's strengths and weaknesses, (2) analyzing the environmental aspects of the class (e.g. instructional format, classroom rules, etc.) in order to pinpoint potential problem areas, (3) identifying problem areas by comparing the child's strengths and weaknesses to the environmental aspects of the case, (4) translating the specific problem areas into hypothetical examples, (5) presenting the hypotheticals to the class, and (6) brainstorming solutions to the hypotheticals. Such a procedure would be cost-effective in the sense that time would not be wasted on preparing children for handicapping conditions and behaviors which they will not come into contact with directly. However, such an approach would need to be evaluated for its potential to generalize its effects to other children with handicaps who could potentially be mainstreamed into the class.

Recommendations for Further Research

Empirical studies on the use of role play and hypothetical examples to prepare nonhandicapped children for the mainstreaming experience were not located by the present authors. However, there is some evidence, again from the social skills training literature, that role play activities are an effective means of increasing social interactions (Hops, Guild, Fleischman, Paine, Street, Walker, & Greenwood, 1978). Thus, future research should focus on the validation of these methods as a means for improving interactions between children with and without handicaps in a mainstream setting. In particular, it would be of interest to examine the usefulness of focusing on a variety of handicapping conditions versus discussion focused upon a specific child with handicaps who will be mainstreamed.

Recommendations for Practice

Based upon the logical utility of this approach, it is recommended that practitioners attempt to include it within a preparation program. Salend's (1983) discussion would provide a good basis for teachers and others to work from. However, this approach may be somewhat more time consuming than other methods, both in terms of preparation time and implementation. This approach would also require more skills on the part of the implementator, as both a good working knowledge of the characteristics of children with handicaps as well as with the actual implementation of these methods would be necessary. This much planning and time will be necessary if role-play and

problem-solving activities are included within a preparation program.

Experience With Persons Who Are Handicapped

Role play and problem-solving activities can set the stage for learning appropriate interactional skills, but actual experience with persons who are handicapped is necessary for practicing and refining these skills. Some authors have suggested meeting a child who is handicapped or visiting a school or class for children with handicaps as a method of preparing children without handicaps (Ochoa & Shuster, 1980; Pasanella & Volkmor, 1981). This would allow the child without handicaps to gain first-hand experience with the types of handicapping conditions to which they would be exposed to in other preparation activities or on their school and community environments. However, there is research to indicate that unstructured experience with the handicapped may actually be detrimental to achieving the goals of a preparation program. For example, Thomason & Arkell (1980) note that visiting students who are in institutional settings may result in a more negative view of persons with handicaps. In addition, data cited in an earlier portion of this paper indicated that acceptance of students with handicaps may actually increase when contact between students with and without handicaps is limited (Firth & Mitchell, 1981).

Recommendations for Future Research

Providing experiences with children who are handicapped as a method for teaching appropriate interactional skills appears to be an area which is largely unexplored. Thus, research which looks at the effects of such experiences within a structured format (i.e., as in experiences which are designed to allow children to practice skills learned through previous role play and problem-solving activities) needs to be conducted.

Recommendations for Practice

At the present time it appears that allowing children without handicaps to gain first-hand experience with children who have handicaps would be best implemented in conjunction with other skill building activities. This would require the specification of goals and objectives to be achieved through the experience much in the same way that they would be specified for role play and problem solving activities. Based upon indications that unstructured experiences can have potentially negative effects, it would be unadvisable to use unstructured experience with children who have handicaps as preparation activity.

Preparation Programs

There are a number of programs and curricula for the preparation of students and teachers without handicaps which include various combinations of the preparation activities described in this paper. These programs have been reviewed and described elsewhere by other authors (Ahern, 1983; National Support Systems Project, 1981). However, a number of these programs have been cited in the literature, and will briefly be described below.

Ward, Arkell, Dahl, and Wise (1979) have developed a program called Everybody Counts: A Workshop Manual to Increase Awareness of Handicapped People which includes descriptions of procedures for conducting simulation activities for teachers. They note that these activities would be applicable to children as well as teachers. (However, this authors' review of these activities indicated that some of them appear to be to sophisticated for children below grade 3 or 4 due to reading and other skills which are necessary for participation). Activities for simulating visual impairment, hearing impairment, mental retardation, communication disorders, learning disability, and motor/orthopedic handicaps are included. Compatible role-playing activities and community experiences are also described. The authors have evaluated the effectiveness of the training activities with teachers by having them indicate the extent to which the workshop met the stated objectives and by giving an overall rating of the procedures. Other objective data on the effectiveness of the program are not reported.

Bookbinder (1978) has developed a curriculum for grades 1 through 4 called Mainstreaming: What Every Child Need to Know About Disabilities, which includes activities for blindness, deafness, physical disabilities, and mental retardation. The program has five components: simulation activities; exposure to aids and appliances; guest speakers; books, movies, slides and tapes; and class discussion. The author reports that in the first workshop they asked teachers to distribute a short checklist of attitudes before and after implementation of the program. They found that although they were dissatisfied with the types of questions on the checklist and doubted whether the children understood how to answer them, they nevertheless felt that there were positive outcomes of the program.

Cashdollar and Martin (1978) have developed a program called Kids Come in Special Flavors, which includes sixteen simulation activities dealing with learning disabilities, hearing impairments, mental retardation, visual impairments, and cerebral palsy and spina bifida. For each activity there is a goal, materials list, set of directions, and thoughts for discussion. However, objective data on the effectiveness of the program are lacking.

Sapon-Shevin (1983) describes a program developed by Cohen (1977) called Accepting Individual Differences which can be used to teach children in grades K through 3 about differences in the areas of mental retardation and learning disabilities, visual impairments, hearing impairments, and motor impairments. Simulation activities are a component of the program which also includes games, stories, discussion questions, and problem-solving activities. However, as is the case with other packaged programs, data on the effectiveness of the program are not provided.

A number of authors have, however, attempted to evaluate the effectiveness of preparation programs. For example, Miller, Armstrong, and Hagan (1981), conducted a study in which an experimental group of third and fifth grade children received 30 minutes of instruction twice a week for six weeks. Accepting Individual Differences, Concept Books, and simulation activities based on Kids Come in Special Flavors and Everybody Counts were used as the basis for training. Pre- and posttest scores were obtained on the Scale of Children's Attitudes Toward Exceptionalities (SCATE), which consists of the presentation of handicaps in a cartoon-like format to which subjects respond by attitudinal indicators. No statistically significant differences between the experimental and control groups were found after training. Thus, the study does not support the use of this particular combination of preparation activities as a method for improving children's attitudes toward children with handicaps.

More encouraging results were obtained, however, by Jones, Sowell, Jones, and Butler (1981) in a study in which elementary school children participated in five hours of preparation activities which included speaking with people with handicaps; learning sign language, the manual alphabet, and Braille; working with aids and appliances; viewing a film on blindness; interacting with a severely retarded adolescent; and participating in a blindness simulation. They found that training resulted in significant pre-post gains on an attitude scale which consisted of negative, neutral, and positive characteristics which the children were asked to attribute to people with handicaps. However, although this study does suggest that a combination of preparation activities may be effective, the lack of a control group of subjects leaves these results in question.

Recommendation for Future Research

The research which has been conducted to date on the effectiveness of using preparation programs leaves many questions unanswered. First of all, the research has suffered from a number of methodological flaws, the most serious of which include a lack of control groups and the use of dependent measures without demonstrated reliability and validity. There also appears to be an

attitude among researchers that in this area "more is better". The programs described have included a large number of activities, many of which have no support for their use or for which there may be evidence indicating that they are not effective. Future research must thus address the issues of, (a) defining the specific goals of the preparation program; (b) selecting activities which meet these particular goals, based upon empirical data and/or for theoretical or practical reasons, and (c) evaluating the effectiveness of these procedures using sound research methodology.

Summary

In the proceeding sections of this paper a number of specific activities which can be used to prepare regular education students for the mainstreaming experience have been described, and literature on their effectiveness presented. In general, there are many authors who have advocated and described various preparation activities, but only a handful who have made an attempt to evaluate their effectiveness. Much of the research which has been conducted has, in turn, failed to control for many variables which could potentially affect outcomes. Thus, there is little empirical data to guide the selection of activities which can be included in a peer preparation program. In order to develop a peer preparation package one must determine the objectives of such a program, and select the activity which might best meet these objectives.

When one looks at preparation in terms of its impact upon mainstreaming, it appears that the most important goal of preparation activities would be to facilitate interactions between children with and without handicaps. In order to achieve this goal, one might first attempt to present information about handicapping conditions through media such as puppet shows, films, and books. The purpose of presenting this information would be to provide a basis for teaching interactional behaviors. The next step would then be to implement hypothetical role play and problem solving activities in order to allow the students to practice ways of dealing with the specific children who have handicaps about whom information had been presented. When there is a situation in which mainstreaming will occur, additional training could be conducted in order to prepare the students for a specific child or children with whom they will come in contact. Thus, at this point, additional information may be presented -- e.g., the classroom teacher might describe the strengths and weaknesses of the child being mainstreamed and a videotape of the child in his or her special education classroom or at home might be shown. The class might then discuss ways in which they might interact with the child, and could role play some potential interactions. With preschool children, an effective way of conducting role plays of this type might be to allow them to interact with a puppet who would display behaviors similar to those of the child being mainstreamed. This

would be an especially attractive method if a puppet show had been used previously to present information about handicapping conditions. After mainstreaming occurs, there would also be a need to deal with questions that the children without handicaps might have, as well as to deal with any problems that might arise and formally train interaction skills. In this way, any positive effects that might have been achieved would be more likely to be maintained.

A number of issues regarding preparation programs remain to be addressed. For example, the ages for which the various preparation activities are appropriate must be delineated . Class discussions may be more appropriate for older elementary age students than for preschoolers. Or, if they are used, their content may need to be modified for various age groups.

Another issue is the identification of (a) specific facts which are important within the knowledge domain, and (b) specific initiation behaviors which must be taught. For example, there are existing scales (e.g. Cadez, 1980; Hazzard, 1973) which include knowledge items. However, there are no data available to indicate that these facts are the most salient ones for regular education students to learn. In terms of initiation behaviors, researchers are just beginning to identify those behaviors which are more likely than others to for produce positive responses from the child who is the target of the initiations (Tremblay, Strain, Hendrickson, & Shores, 1981). However, additional work may be necessary in order to determine the initiation behaviors which would be most appropriate as the focus of intervention for children of different ages.

A number of research questions remain to be addressed in the area of preparing children without handicaps for the mainstreaming experience. The implementation of preparation activities for children without handicaps does, however, appear to have great potential for facilitating the mainstreaming process. By preparing and involving students from the mainstream classroom, it is expected that social integration of the child with handicaps can be achieved. It is thus hoped that additional research will be conducted in this area and the results utilized to develop an effective combination of preparation activities.

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Appendix A
Films, Videotapes, and Other Media Presentations

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California Association for Neurologically Handicapped Children. (1972). A walk in another pair of shoes. Los Angeles, CA.

Encyclopaedia Britannica Educational Corporation. (1978). Like you, like me series. Chicago, IL.

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Joyce Motion Picture Co. David and Goliath, and Noah. Northridge, CA.

Lawrence Productions, Inc. Different from you . . . and like you, too, and Special delivery film series. Mendocino, CA.

Learning Corporation of America. (1976). Larry, Phillip, and the white colt, Skating rink, and That's my name, don't wear it out. New York: NY.

National Instructional Television Center. (1973). Donna: Learning to be yourself. Bloomington, IN.

National Foundation, March of Dimes. (1972). Keep on walking. White Plains, NY.

Social Studies School Service. A full life for Sara, and I'm just like you: Mainstreaming the handicapped. Culver City, CA.

Stanfield Film Associates. Hello everybody. Santa Monica, CA.

Walt Disney Educational Films. Truly exceptional people. Burbank, CA.