Increasing sensitivity toward handicapped children through inclusion

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INCREASING SENSITIVITY TOWARD HANDICAPPED CHILDREN THROUGH INCLUSION

By
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A Thesis
Submitted in partial fulfillment of the requirements of the Master of Arts Degree in the Graduate Division of Rowan University 1998

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The purpose of this study was to observe the benefits for non-handicapped students in an inclusive setting. The hypothesis suggested that regular education students would be more sensitive and aware of handicapped individuals when they are read stories about handicapped individuals and participate in a sensitivity program than regular education students who do not receive this form of intervention. The Acceptance Scale for Kindergarten-Revised (ASK-R) helped to assess fifty-eight second graders' perceptions of handicapped individuals. The difference between the pre-test and post-test scores of Classroom B (experimental group given sensitivity program and read stories regarding individual differences; has included child) to Classroom A (control group; no included child) and Classroom B to Classroom C (has included child; no intervention given) on the ASK-R was evaluated. The independent variable was the type of sensitivity training received in each classroom. The dependent variable was an increase in sensitivity toward individual differences. It was found that Classroom B was significantly more sensitive than Classroom C toward handicapped individuals. However, Classroom B was not significantly more sensitive than Classroom C toward
handicapped individuals. Overall, children who had more contact with handicapped individuals were more accepting of differences than children in low/no contact groups.
This study explored the attitudes of regular education students in three second-grade classrooms toward handicapped students. It was found that students who had more contact with handicapped individuals were more sensitive toward them than students who had little/no contact. Therefore, inclusive settings helped facilitate acceptance of individual differences.
# TABLE OF CONTENTS

Chapter One – The Problem......................................................................1
   Need for the Study...........................................................................1
   The Purpose....................................................................................2
   The Hypothesis...............................................................................2
   The Theory.....................................................................................2
   Definitions.....................................................................................4
   Assumptions..................................................................................6
   Limitations.....................................................................................6
   Overview.......................................................................................6

Chapter Two – Literature Review............................................................8
   Concerns Regarding Inclusion for Non-Disabled Students.....................8
   Benefits of Inclusion for Non-Disabled Students.....................................9
   Benefits of Inclusion for Disabled Students........................................12
   Concerns Regarding Inclusion for Disabled Students.........................13
   Limitations of Studies.....................................................................15
   Summary.......................................................................................16

Chapter Three – Design of Study.............................................................18
   Sample..........................................................................................18
   Measures.......................................................................................19
   Reliability of the ASK....................................................................20
   Validity of the ASK.......................................................................21
   Testable Hypothesis.......................................................................22
   Design..........................................................................................22
   Analysis.........................................................................................24
   Summary.......................................................................................24

Chapter Four – Analysis of Results..........................................................25
   Restatement of Hypothesis..............................................................25
   Interpretation of Results...................................................................25
   Table 4.1.......................................................................................27
   Table 4.2.......................................................................................28
   Chart 4.1.......................................................................................29
   Table 4.3.......................................................................................30
   Chart 4.2.......................................................................................31
   Summary.......................................................................................32

Chapter Five – Summary and Conclusions................................................33
   Summary.......................................................................................33
   Conclusions...................................................................................34
   Discussion.....................................................................................35
   Implications For Future Research..................................................36
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THANK YOU!!!
CHAPTER ONE: THE PROBLEM

Need:

The need for this research is generated from the move towards inclusion versus self-contained classrooms for those with disabilities. Inclusion is an issue that people need to know and learn more about to ensure that both handicapped and non-handicapped children benefit from it. The move towards inclusive schools is a slow process which has fostered both positive and negative practices and attitudes. For some handicapped students, inclusion is beneficial to progress academically and socially. Inclusion has helped students with disabilities become more active and accepted in their school. However, in some inclusive settings, handicapped students may not be receiving the extra support from their teachers or peers to facilitate learning. In addition to this, there is also a concern whether or not handicapped students will have a difficult transition to the general education classroom. Nonetheless, inclusion should not be used as a “dumping ground” where special education students are isolated and receive little or no support from their teachers or peers.

Moreover, inclusion effects non-handicapped students as well. When non-handicapped students are provided with explanations about a handicapped student’s disability, they are more likely to be sensitive to the needs of that child. This
understanding will help to alleviate negative remarks and misconceptions of the handicapped child in the regular education classroom. Promoting positive attitudes at the elementary school level towards handicapped individuals will help foster sensitivity towards them.

**Purpose:**

The purpose of this study is to observe the benefits for non-handicapped students in an inclusive setting. Using a form of direct intervention, reading age-appropriate stories regarding handicapped individuals, participating in a sensitivity program, and encouraging discussions, children will be less apprehensive towards their disabled peers.

**Hypothesis:**

Regular education students will be more sensitive and aware of handicapped individuals when they are read age-appropriate stories about handicapped individuals and participate in a sensitivity program than regular education students who do not receive this form of intervention. The dependent variable is sensitivity towards disabled individuals. The independent variable is the type of sensitivity training given to the students (reading stories and sensitivity program). A questionnaire called the Acceptance Scale for Kindergarten - Revised (ASK-R), will be given twice during the school year to second graders to assess their feelings towards disabled individuals.

**Theory:**

Today’s society is gradually moving towards inclusion, which is an equal opportunity for all students to have their educational needs met within the mainstream of
general education. Historically, inclusion can be traced back to the Supreme Court ruling "separate is NOT equal" in Brown v. Board of Education. As a contributory factor, this ruling applies to inclusion because all children have the right to an education regardless of any disability. Since then, a steady increase in concern and services for children with disabilities has risen. In 1968, PL 90-538, Handicapped Children's Early Education Act (HCEEA), was established and successful in serving young children with mild or moderate disabilities and their families through the program, Handicapped Children's Early Education Program (now called Early Education Program for Children with Disabilities - EEPCD). However, programs for those with severe disabilities were still necessary. Then, in 1973, Congress passed the Rehabilitation Act, Section 504, which mandated that disabled individuals could not be excluded because of their disability from any program activity receiving federal funds. Furthermore, Congress passed federal law, PL 94-142, which is the Education for All Handicapped Children Act (1975). This law, which is now called IDEA, Individuals with Disabilities Education Act, establishes that all children, regardless of disability, have the legal right to free appropriate public education in the least restrictive environment possible. A least restrictive environment must provide students with disabilities an education appropriate to their needs as compared to their age appropriate regular education peers. This could be observed as students considered mildly or moderately disabled were beginning to be integrated into regular education classes for at least part of the school day. Many parents and educators soon recognized the need to educate all students in the mainstream of regular education classes. As a result, inclusion became a way to provide equal educational opportunities for all students.
The impact of inclusion also effects non-disabled students in the regular education setting. Although research on this topic is limited, studies show that the effects are positive and actually beneficial to non-disabled students. Some research studies have shown that the academic progress for non-disabled children is not hampered in inclusive settings and that the presence of students with severe disabilities had no effect on the amount of time teachers lost due to any interruptions of instruction. Also, non-disabled students did not display inappropriate behaviors even if they observed inappropriate behavior in disabled students. One crucial benefit for non-disabled children is that they will be more aware of disabled children. Some non-disabled students even reported feeling good about themselves when they helped their disabled classmates and developed significant friendships.

The purposes of inclusion are pertinent to all children. Children need to feel a sense of security and affection in the school environment. Ultimately, the goal of inclusion is the participation in social relationships across the range of human interaction from casual acquaintance to the maintenance of long-term friendships (T.G. Haring & Breen, in press). If society is to become more accepting of individual differences, inclusion is one route to facilitate this goal.

**Definitions:**

1. **Inclusion** is when handicapped children are educated with regular education students in their age-appropriate regular education setting.

2. **Self-contained** means a class which contains all special education students who do not participate in regular education academics.
3. **Handicapped / Disabled** describes reduced functioning as a result of difficulty in responding or adjusting to the environment because of intellectual, physical, or emotional problems.

4. **Brown v. Board of Education** is a United States Supreme Court case which ruled that "separate but equal" is unconstitutional in educational institutions; beginning of racial integration in U.S. schools and foundation for integration of students with disabilities into regular education classrooms.

5. **Handicapped Children’s Early Education Act (HCEEA) PL 90-538** established experimental preschool programs to serve as demonstration projects for children with disabilities.

6. **Rehabilitation Act, Section 504** states that disabled individuals could not be excluded from any program or activity receiving federal funds.

7. **Education for All Handicapped Children Act - PL 94-142 (1975)** states that all children with disabilities receive "a free, appropriate public education which emphasizes special education and related services designed to meet their unique needs" (now called IDEA - Individuals with Disabilities Education Act).

8. **Individuals with Disabilities Education Act (IDEA)** broadened the scope of eligible disabilities; placed emphasis on preparing students for life in society.

9. **Least restrictive environment** is an educational setting that is closest to full participation in the regular education classroom but still meets the handicapped child’s unique needs.

10. **Integrated** means mixing students with and without disabilities in educational settings.
**Assumptions:**

Some assumptions of this research study include:

1. Students are randomly assigned into grade appropriate classrooms.
2. Teachers are using similar teaching methods.
3. Students will answer the questionnaire honestly.
4. Students will not be test-wise to the pre/post-test.
5. Parents and teachers will not influence answers on the pre/post test.
6. Examiner will not influence students’ answer choices.

**Limitations:**

Some limitations of this research study include:

1. Students prior experiences with handicapped individuals.
2. Limited amount of classrooms with included children in them.
3. Students answers to questionnaire may not be honest but what is expected.
4. More research is necessary to generalize to different grade levels and/or society.
5. Time span of study may have been too short - further research is necessary.
6. Examiner (or other external factors) may have influenced students’ answers to questions.

**Overview:**

In Chapter Two, research regarding the positive effects and concerns of inclusion for non-disabled and disabled students will be reviewed. Next, in Chapter
Three, the research design used to perform an experimental study assessing the positive effects of inclusion on non-disabled students will be described. Then, in Chapter Four, the results of this research study will be discussed and explained. Lastly, in Chapter Five, a summary of the conclusions and implications will be explored to help facilitate future research.
CHAPTER TWO: LITERATURE REVIEW

This chapter will focus on how non-disabled individuals benefit from inclusive settings. There is a limited amount of experimental research on this particular topic but the findings are consistent that non-disabled individuals are not adversely affected but benefit from inclusive settings due to the potential for learning about individual differences. This particular finding will be incorporated into an experimental research design which will be facilitated through the use of grade appropriate story books, group discussions, and a sensitivity program regarding individuals with disabilities and differences in general.

Similarly, disabled individuals benefit from inclusive settings when the proper support is in place to promote their success - support from administrators, special and regular education teachers, in-class support for the disabled child, and especially from parents and advocacy groups. Research supports progress in developmental, social, and behavioral domains for the disabled student. Thus, inclusion is a process that helps facilitate learning in various ways for all children.
Concerns Regarding Inclusion for Non-Disabled Students:

Some concerns individuals have regarding inclusive settings focus on the negative effects it may have on the non-disabled students: decrease in academic progress, lack of teacher attention, and behavioral issues. However, various researchers refute these concerns. For example, Odom and colleagues (1984) found no significant differences in developmental outcomes on standardized measures of cognitive, social, and language development between inclusive and non-inclusive classrooms. Other studies focusing on inclusive preschool settings have found similar findings that no developmental harm occurs to the non-disabled students (Bricker, Bruder, & Bailey, 1982). Surveys aimed at parents and teachers who have been involved in inclusive settings have found again that developmental progress is not hindered (Bailey & Winton, 1989; Giangreco, Dennis, Cloninger, Edelman, & Schattman, 1993; Green and Stoneman, 1989; Peck, Carlson, Helmstetter, 1992). Also, non-disabled children do not lose teacher time and attention in inclusive classrooms. Hollowood and colleagues (in press) found no significant difference between inclusive and non-inclusive classrooms due to interruptions during instructional times. In fact, Hunt, Farron-Davis, Beckstead, Curtis, & Goetz (1992), found that disabled students were more occupied with classroom activities in regular education classrooms than in self-contained, special education classrooms. Moreover, Peck et al. (1992) found that non-disabled students do not learn undesirable behavior from observing their disabled classmates. Another research study done by Staub, Peck, Schwartz, and Gallucci, (1994) found similar results that non-disabled students do not secure maladjusted behavior from observing their disabled classmates.
Benefits of Inclusion for Non-Disabled Students:

There are potential benefits for non-disabled students in inclusive settings such as, increased awareness of individual differences, tolerance of differences, increases in self esteem, decrease in prejudice, and promoting friendships. Peck et al. (1992) found that when non-disabled peers interact with those with disabilities they were more aware and had a reduced fear of individuals who look or behave differently than themselves. Furthermore, Murray-Seegert (1989) found that non-disabled students in an inclusive high school learned to be more tolerant of others when they were aware of individual differences. These students also felt good about themselves when they helped their disabled classmates. In addition to this, Staub et al. (1994) witnessed elementary school children grow to be more supportive of disabled classmates. Voeltz and Brennan (1983) found that many non-disabled students experienced an increase in self-esteem because they enjoyed assisting their disabled classmates, especially when they took on a role as caretaker or tutor. Another positive result of tutoring a classmate with disabilities is that the non-disabled child can enhance their own learning while the disabled student acquires appropriate social and academic skills (Haring, 1991). Non-disabled students (as young as second graders) can help disabled students develop necessary skills to learn by providing cues, prompts, and reinforcements (Hunt, Staub, Alwell, & Goetz, 1994). Parents noted that their non-disabled children were less prejudiced towards individuals with disabilities (Peck et al., 1992) which could have been enhanced by their participation in an inclusive classroom. Significant friendships can arise through inclusive settings between non-disabled and disabled peers. However, Kishi and Meyer (1994), found in their study that although girls seemed to be more inclined to initiate
interactions with disabled classmates, no true friendships were maintained. Yet, Peck, Donaldson, and Pezzoli (1990), reported that non-disabled high school students who became friends with disabled peers developed improved understanding of others, improved self-concept, reduced fear of unusual behavior and appearance, and other positive outcomes.

Furthermore, one particular study by Favazza and Odom (1997), is directly related to the research study which will be described in Chapter Three regarding the beneficial aspects for non-disabled children in inclusive settings. This study, which consisted of forty-six kindergarten children,

"examined the effects of contact, books, and discussions on the attitudes of kindergarten-age children toward people with disabilities. Children in the high-contact group participated in a program designed to promote acceptance of people with disabilities; the low-contact group had incidental contact with the children with disabilities; and the no-contact group had neither direct nor indirect contact with children with disabilities" (p.405).

Children were given the Acceptance Scale for Kindergarten (ASK) twice (pre/post-test) during a nine week experimental period. This scale consists of eighteen questions regarding the attitudes children have towards people with disabilities. Their responses could be either "yes", "no", or "maybe" and were scored on a three point scale. The interventions used in the experimental high-contact group included:

1. Storytime and discussion regarding children with disabilities.

2. Structured play with disabled children.

3. Home component - children take a story already discussed in class home with them each week so their parents could review the story and ask them the provided questions regarding the story.
The results of this experiment revealed that "attitudes of young people can be altered in a relatively short amount of time through social-contact and provision of information about people with disabilities" (Favazza & Odom, 1997, p. 413). Therefore, this particular study reflects other research findings that when children are made aware of individual differences through some form of intervention, preferably direct intervention with a handicapped individual, sensitivity and hopefully acceptance of individual differences can be promoted.

Another researcher, Voeltz (1980) assessed the attitudes of second graders through sixth graders towards handicapped individuals using the original Acceptance Scale. There was a no-contact group (423 subjects), a low contact group (454 subjects), and a high contact group (433 subjects). The high contact group was significantly more accepting towards handicapped individuals than the low/no contact groups. Moreover, girls were more accepting than boys.

**Benefits of Inclusion for Disabled Students:**

Disabled students gain behavioral and social competence through interactions with their non-disabled classmates in inclusive settings (Nisbet, 1994). Some key arguments researchers emphasize are:

1. Maximum exposure to, and experiences with, peers who are not disabled are the primary means by which children with disabilities can learn the ways of the normal world.
2. Settings that include only children with disabilities cannot provide normal socialization experiences. Mainstreaming seems critical to the acquisition, maintenance, and generalization of important social skills.
3. Young children with disabilities must have continuous opportunities to observe and imitate same-age peers who are developing at a normal rate.
4. Early integration encourages positive attitudes and the awareness that children with disabilities are more similar to their peers without disabilities than they are different"(Haring, McCormick, & Haring, 1994; p.107).

In addition to these four key arguments, it was found that disabled students displayed more positive affect and engaged in more interactions with their peers when they were in inclusive settings. Teachers and researchers usually select popular students to model appropriate behavior/mentor disabled students because popular social status typically correlates with social competence (Wasik, 1987). In addition, Ferguson (1992), found that disabled students in inclusive settings were more likely to reach their Individualized Educational Plan, IEP, goals than if they were in a more restrictive environment. Hunt et al. (1994) observed an increase in attention span during school-related activities when disabled children are in regular education classrooms compared to self-contained classrooms. The opportunity for disabled students to participate in inclusive settings helps to promote awareness and acceptance of individual differences and more importantly, prepares them for their future in society.

**Concerns Regarding Inclusion for Disabled Students:**

On the other hand, some researchers emphasize that inclusion could be a horrible solution for students with disabilities. "There are students who may need alternative instructional environments, different teaching strategies, and special materials" (Maloney, 1995, p.25). Teachers and administrators who are promoting inclusion need to be properly trained in order for children with disabilities to excel. Sometimes a problem arises because regular education teachers are “taught to teach curriculum, not
students” (Maloney, 1995, p.25). Some regular education teachers may find it hard to “adapt to another adult in the classroom (aide for disabled child), pressure from time-constraints to cover necessary course material, and by being evaluated by student’s test scores instead of what children have learned” (Maloney, 1995, p.25). Moreover, “many local school boards, state departments of education, and legislators promote full inclusion for the wrong reason - they see it as an opportunity to cut back on expensive special education services” (Shanker, 1995, p.18). Advocacy groups, such as the American Council on the Blind, the Learning Disabilities Association, Commission on the Education of the Deaf, the Council for Exceptional Children, and the Council for Children with Behavior Disorders believe a “one-size-fits-all approach will be disastrous for the disabled children themselves” (Shanker, 1995, p.19). Another issue discussed by Turnbull and Turbiville (1995, p.202), is “when the teacher perceives a disabled student as a major challenge to the classroom, how are the other children going to view them as a possible playmate?” These researchers emphasize the need for the school community to create a sense of belonging for the disabled child without becoming overwhelmed by their participation in the regular education classroom. In addition, “most full inclusionists are concerned primarily about students with mental retardation, who consist of one-tenth of all disabled students, when they demand placement in regular education classrooms” (Maloney, 1995, p. 26). However, recall that PL 94-142 (now called IDEA) states that ALL children with disabilities should receive a free and appropriate public education in the least restrictive environment. Therefore, realistic placement options (based on each individual’s unique disability) and issues regarding proper support for the disabled student need to be addressed because all children with disabilities, regardless of
severity, have the legal right to be placed in a regular education classroom - the least restrictive environment. It is also important to remember that most special educators see inclusion as a process, not as an immediate goal. Also, there is a universal concern not to have regular education classrooms as dumping grounds for disabled children. Some parents of disabled children fear full inclusion because their children will lack needed specialized services. Still another concern for teachers and administrators is behavioral disorders associated with a child’s disability. These behavioral problems could easily impede learning for the disabled child and the other children in the classroom as well.

“There is a provision called “stay-put” in which a child with disabilities in an inclusive environment can not be excluded for more than ten days a year, regardless of their disruptive behavior, without consent from parents or a formal hearing process that could take months (Shanker, 1995; p.20). However, Peck (1995) reinforces that inclusive settings for disabled children should be given a chance as long as the proper support is in place because problems of inclusion can not be worked out in advance. Although inclusion may be appropriate and successful for many disabled children, the reality of possible failures for other disabled students will “continue to be challenged by a majority of the disability community” (Maloney, 1995, p.26).

Limitations of Studies:

1. Most studies are carried out at pre-school level.

2. * Most studies are descriptive or quasi-experimental - results must be interpreted with caution.*
3. Generalizing results - support networks in inclusive settings are very important and without the proper support, these findings may not be generalized.

4. More longitudinal experimental studies need to be done to observe non-disabled students’ enhanced positive attitudes, increased self-esteem, social competence, and friendships with disabled peers over time.

Summary:

There are many beneficial aspects for non-disabled and disabled individuals in inclusive settings. Non-disabled students increased awareness of differences, tolerance to differences, increase in self-esteem, less prejudice towards disabled individuals, and the possibility for friendships to evolve with disabled peers are all potential benefits of inclusive settings. For disabled students, improvements in social skills, behavioral skills, developmental skills and in some cases, academic skills are among the beneficial aspects of inclusive settings. However, it is crucial to remember that the proper support needs to be in place for inclusion to work. When there is collaboration from administrators (Superintendent, Assistant-Superintendent, Principal, Child Study Team members), special and regular education teachers, in-class support for the disabled child, and parents, inclusion is very beneficial and helps to facilitate sensitivity towards disabled individuals (Iskowitz, 1997).

Also, it is important to remember that the placement of a disabled child into a regular education classroom does not necessarily mean that this will promote sensitivity (Guralnick, 1990). Some form of intervention needs to be facilitated (preferably at an early age) for inclusion to be beneficial for all children (Ladd, Price, & Hart, 1990). In
the research design that will be described in Chapter Three, sensitivity is being facilitated through the use of grade appropriate story books which focus on handicapped individuals and differences in general and also participation in a separate sensitivity program. This will encourage students to be more accepting of individuals who may be perceived as “different” through discussions about the stories, “trying on” different disabilities in the sensitivity program, and by encouraging questions from them. Sensitivity towards differences is learned - it is not an automatic response we are all born with. Inclusion can help to facilitate this sensitivity by teaching children that there are individuals who may look or behave differently but that is okay because different does not equal bad, but unique. Helping non-disabled children learn about various disabilities will prepare them for a society full of individuals who may look or behave differently than themselves.

Inclusion is a process that needs to be fostered early on because of the powerful effects it has on the future for all children involved. All children have the right to experience life to their utmost potential and one way to prepare them for their future is through an inclusive environment. “The goal is not to make everyone the same, but rather to appreciate our uniqueness and see a richness there” (Sira, 1994).
CHAPTER THREE: DESIGN OF THE STUDY

In the research study conducted, it was hypothesized that Classroom B would be more sensitive and aware of handicapped individuals than Classrooms A and C. Classroom B, which had an included child, was the experimental group that received grade-appropriate stories regarding individual differences/disabilities and a separate sensitivity program. Classroom A (no included child) and Classroom C (included child) did not receive this form of intervention. Therefore, the independent variable was the type of sensitivity training received and the dependent variable, measured by the Acceptance Scale for Kindergarten-Revised, was sensitivity/awareness of handicapped individuals.

Sample:

The sample in this research study consisted of three second grade classrooms in a southern New Jersey, elementary, public school district whose students were approximately seven to eight years old and were from a low to middle socio-economic class. The socioeconomic status was determined by the amount of children who received free (11 students) and reduced (10 students) lunches. Permission was obtained from the superintendent of the school district and all of the parents to administer a questionnaire
to the second graders. There were twenty-eight females and thirty males (58 total).

There were thirty-one Caucasian students, twenty-six African American students, and one Hispanic student.

**Measures:**

In this research study copyright permission to use the Acceptance Scale for Kindergarten - Revised (ASK-R) questionnaire was obtained (See Appendix A) to assess second graders' attitudes towards handicapped individuals. In addition, parents' permission for their second grader to participate in this research study was obtained by sending home permission letters (See Appendix B). Each of these students was given the ASK-R questionnaire to assess their feelings towards handicapped individuals in the beginning of the year and about three months later. This questionnaire, which took approximately fifteen minutes to administer, was given on Thursday, September 25th, 1997 at 11:45 in classroom “A”, at 12:00 in classroom “B”, and at 12:15 in classroom “C”. The first objective was to ask the second grade children what was meant by the term handicapped/disabled and to discuss it. Furthermore, it was emphasized that the questionnaire was not a test - there were not any wrong answers; one should answer as they honestly felt at that time. Next, each child circled either “YES”, “NO”, or “MAYBE” on all of the eighteen questions read aloud to them (See Appendix C) regarding their feelings towards handicapped individuals. Then a score of 0, 1, or 2 was given based on their answers.

The ASK, developed by Paddy Favazza and Samuel Odom, was normed on kindergartners thus the current experiment has no reliability because the subjects used
are second graders. It is also important to know that second graders were chosen for this experiment instead of kindergartners because the questions seemed more grade-appropriate for them. In addition, the only classrooms containing classified, multiply-handicapped children included into regular education classrooms were in second grade at the time of this experiment.

"The Acceptance Scale for Kindergarten (ASK) was developed to assess the attitudes of kindergarten-age children toward children with disabilities. It was administered to 188 kindergarten children, some of whom had contact with children with disabilities in their school and others whom did not have contact. The ASK provided evidence of criterion-referenced validity by discriminating (a) between children who did and did not have contact with children with disabilities in their schools and (b) between male and female respondents. Children who had contact with individuals with disabilities were significantly more accepting than children who did not were. Girls were significantly more accepting than boys. An overall alpha coefficient of .79 and a Spearman-Brown Split Half coefficient of .76 were found, suggesting that the ASK is reliable for children of this age" (Favazza & Odom, 1996; p.232).

**Reliability of the ASK:**

Twelve of the eighteen questions on the ASK showed a significant correlation with the total ASK score. In particular, question #9, "Would you like to play with a handicapped kid?", had the highest correlation with the total score ($r = 63$). Other questions which helped to differentiate high scores from low scores were respectively: 12, 17, 8, 2, 6, 1, 5, 13, 15, 7, and 10 ($r > .30$). The rest of the questions (4, 18, 14, 3, 16, and 11) were not significantly correlated to the total score ($r < .30$).
Validity of the ASK:

The evaluation process done to determine the propriety of the ASK questionnaire for kindergartners proved to be a success since 185 out of 188 subjects returned a properly answered questionnaire (one answer for each question). A score of zero was given to a non-accepting response, a one was assigned to a maybe response, and a two was assigned to an accepting response. A two-way analysis of variance was used with gender (two levels) and contact (two levels). Those subjects who had previous contact with handicapped individuals had more accepting responses than those without any contact. In addition, it was found that females had higher scores than males. The interaction between gender and contact was not significant.

Also, the ASK proved to be valid after doing a content analysis of the post-survey question, “What does it mean to be handicapped?”. An inter-rater agreement of 100% was found after two researchers separated the responses into particular categories. As a result, thirty-eight phrases were derived from the responses and placed into one of six categories:

1. Physical attributes, prosthesis, or equipment - Someone who is handicapped was defined by the use of some adaptive equipment, prosthesis, or a unique physical characteristic that could result in a disability.
2. Ability or inability - Someone who is handicapped was defined by their ability or inability to perform some action and or function.
3. Alternative terminology - Someone who is handicapped was defined by using a different term to describe their disability.
4. Named a specific individual - Someone who is handicapped was defined by identifying a known individual with a disability.
5. Class enrollment - Someone who is handicapped was defined by their placement or enrollment in a special education class.
6. A specific or general description - Someone who is handicapped was defined using an idiosyncratic descriptor or a very general descriptor” (Favazza & Odom, 1996; 241).
Afterwards, two different researchers categorized the 38 phrases, without prior knowledge of the six categories, and had an inter-rater agreement of 97%.

**Testable Hypothesis:**

Null hypothesis: No difference will be found regarding sensitivity/awareness of handicapped individuals (as measured by scores on ASK-R) between classroom “B” and classrooms “A” and “C”.

Alternate hypothesis: Classroom “B” will be more sensitive/aware of handicapped individuals than classrooms “A” and “C”.

**Design:**

For this research study, a between-subjects design was used. This design compared three levels of training:

Classroom A - (Control Group) No included child; received ASK-R only.

Classroom B - (Experimental Group) Has an included child; received ASK-R, sensitivity program, and read age-appropriate stories regarding individual differences/handicaps.

Classroom C - Has an included child; received ASK-R only.

The independent variable was the type of sensitivity training received, if any, in each of these three classrooms. The two levels of the independent variable were stories regarding individual differences and handicapping conditions and also a separate sensitivity program. One story was read and discussed each week over a period of about three months. The sensitivity program consisted of a video, “trying on” different
disabilities, a discussion, and providing follow up, grade appropriate information to the teacher in Classroom B to promote awareness and understanding of individual differences. The first objective in the sensitivity program was to give the teacher in Classroom B a fifteen-minute video containing daily, functional activities of a multiply-handicapped classroom in their school. A few weeks later, the experimenter visited Classroom B and asked students to recall things they remembered from the video. From this, a discussion about perceived differences emphasized how individuals can be similar in various ways yet unique in others. Then, the classroom was divided into four different groups of students who rotated (after about ten minutes) to different activities. The activities consisted of: putting puzzles together with opaque sunglasses on, playing ball with blindfolds on using only their voices to play catch - sound ball, buttoning their shirts/stringing beads with mittens on, and writing with their non-dominant hand. Afterwards, a story regarding individual differences was read and discussed. This program took about thirty minutes and every student may not have “tried on” all the disabilities because of the large number of students, limited time period, and lack of assistance. However, follow-up activities were provided to the classroom teacher to continue sensitivity training if desired. The dependent variable, measured by the Acceptance Scale for Kindergarten - Revised, was an increase in sensitivity/awareness of individual differences in Classroom B because of the received sensitivity training. The potential range of scores was 0-36 since there were eighteen questions scored on a zero to two point scale (36 was the best possible score).
Analysis:

A One-way Analysis of Variance (ANOVA) was chosen to evaluate the difference between the pre-test and post-test scores of Classrooms B to Classroom A and Classroom B to Classroom C on the Acceptance Scale for Kindergarten – Revised (ASK-R).

Summary:

In the experiment conducted, a questionnaire, the Acceptance Scale for Kindergarten-Revised, helped to assess second graders perceptions of handicapped individuals. Using grade appropriate stories, a sensitivity program, and various discussions regarding handicapped individuals, Classroom B will be more sensitive and aware of handicapped individuals than Classrooms A and C. The original Acceptance Scale by Voeltz, used on elementary aged children (2nd-6th graders), and the Acceptance Scale for Kindergarten by Favazza and Odom both found that children (especially girls compared to boys) who had more contact with handicapped individuals were more accepting of individual differences than children in the low/no contact groups. Therefore, the present experiment conducted will help facilitate awareness and acceptance of individual differences through stories, discussions, and sensitivity training.
CHAPTER FOUR: ANALYSIS OF RESULTS

Restatement of Hypothesis:

Null hypothesis: No difference will be found regarding sensitivity/awareness of handicapped individuals (as measured by scores on ASK-R) between classroom B and classrooms A and C.

Alternate hypothesis: Classroom B will be more sensitive/aware of handicapped individuals than classrooms A and C.

Classroom A – (Control Group) No included child; received ASK-R only.

Classroom B – (Experimental Group) Has an included child; received ASK-R, sensitivity program, and read stories regarding individual differences/handicaps.

Classroom C – Has an included child; received ASK-R only.

Interpretation of Results:

This study failed to accept the null hypothesis. As shown in Tables 4.1 (Pre-test) and 4.2 (Post-test), Classroom B compared to Classroom A revealed a statistically significant difference in scores on the ASK-R, demonstrating that Classroom B is more sensitive than Classroom A towards handicapped individuals. However, Classroom B compared to Classroom C was not statistically significant regarding sensitivity towards handicapped individuals.
Chart 4.1 compares the pre/post-test mean scores for Classrooms A, B, and C.

The potential range of scores on the Acceptance Scale for Kindergarten –Revised was 0-36; there were eighteen questions scored on a 0-2-point scale. In addition, Table 4.3 demonstrates that the difference in the Pre/Post-test mean score values between Classrooms A and B can be attributed to random variation. However, in Classroom C, the difference is beyond the magnitude of random variation and is statistically significant. Moreover, in Chart 4.2, a “Box and Whisker Plot” was selected because:

1. It shows the major distribution of scores between the 25th and 75th percentile which is represented by the shaded box area (bottom of box = 25th percentile, top of box = 75th percentile).
2. The elongated outer box tabs show the distribution of the upper and lower quartiles.
3. It clearly distinguishes the Pre/Post-Test arithmetic means for each classroom.
4. The outer tips of the diamond-shaped overlay signifies 1 standard deviation from the arithmetic mean.
5. A median line indicates the distribution differences from the mean.

As shown in this chart, Classrooms A and B show similar mean values from their respective pre- to post-test. However, Classroom C, from pre- to post-test, shows an upward shift which is statistically significant. Also, two interesting observations are found in the post-test of Classroom B: a recognizable shift upward in the median line while the mean line remains relatively unchanged and the single dot which represents one student’s low test result. This student’s low test score contributed to, but was not the only reason why Classroom B had a lower post-test mean value than was originally predicted.
### TABLE 4.1

Analysis of Variance Procedure  
T-Tests (Least Significant Difference) for variable: PRE-TEST

<table>
<thead>
<tr>
<th>Class Comparison</th>
<th>Lower Confidence Limit</th>
<th>Difference Between Means</th>
<th>Upper Confidence Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-C</td>
<td>-4.336</td>
<td>0.079</td>
<td>4.495</td>
</tr>
<tr>
<td>B-A</td>
<td>0.214</td>
<td>4.629</td>
<td>9.045 ***</td>
</tr>
<tr>
<td>C-B</td>
<td>-4.495</td>
<td>-0.079</td>
<td>4.336</td>
</tr>
<tr>
<td>C-A</td>
<td>0.317</td>
<td>4.550</td>
<td>8.783 ***</td>
</tr>
<tr>
<td>A-B</td>
<td>-9.045</td>
<td>-4.629</td>
<td>-0.214 ***</td>
</tr>
<tr>
<td>A-C</td>
<td>8.783</td>
<td>-4.550</td>
<td>-0.317 ***</td>
</tr>
</tbody>
</table>

Alpha = 0.05  
Confidence = 0.95  
df = 54  
MSE = 44.5738  

Critical Value of T = 2.00488  
Comparisons significant at the 0.05 level are indicated by ***.
TABLE 4.2

Analysis of Variance Procedure
T-Tests (Least Significant Difference) for variable: POST-TEST

<table>
<thead>
<tr>
<th>Class Comparison</th>
<th>Lower Confidence Limit</th>
<th>Difference Between Means</th>
<th>Upper Confidence Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-B</td>
<td>-2.068</td>
<td>2.535</td>
<td>7.138</td>
</tr>
<tr>
<td>C-A</td>
<td>4.037</td>
<td>8.450</td>
<td>12.863 ***</td>
</tr>
<tr>
<td>B-C</td>
<td>-7.138</td>
<td>-2.535</td>
<td>2.068</td>
</tr>
<tr>
<td>B-A</td>
<td>1.312</td>
<td>5.915</td>
<td>10.518 ***</td>
</tr>
<tr>
<td>A-C</td>
<td>-12.863</td>
<td>-8.450</td>
<td>-4.037 ***</td>
</tr>
<tr>
<td>A-B</td>
<td>-10.518</td>
<td>-5.915</td>
<td>-1.312 ***</td>
</tr>
</tbody>
</table>

Alpha = 0.05, Confidence = 0.95, df = 54, MSE = 48.4409

Critical Value of T = 2.00488

Comparisons significant at the 0.05 level are indicated by ***.
CHART 4.1

ACCEPTANCE SCALE FOR KINDERGARTEN - R
PRE-TEST AND POST-TEST COMPARISON

A  B  C
CLASSROOMS

<table>
<thead>
<tr>
<th>MEAN SCORES</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>23.9</td>
<td>23.85</td>
</tr>
<tr>
<td>B</td>
<td>28.5294</td>
<td>29.7647</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>28.45</td>
</tr>
</tbody>
</table>
TABLE 4.3
Difference Between PRE-TEST and POST-TEST Results by Class

| CLASSROOM A:                   | Mean    | Std. Error  | T       | Prob>|T|  |
|-------------------------------|---------|-------------|---------|-------|---|
|                               | 0.0500000 | 1.4150972   | 0.035333  | 0.9722 |

| CLASSROOM B:                   | Mean    | Std. Error  | T       | Prob>|T|  |
|-------------------------------|---------|-------------|---------|-------|---|
|                               | -1.2352941 | 0.7150145   | -1.7276491 | 0.1033 |

| CLASSROOM C:                   | Mean    | Std. Error  | T       | Prob>|T|  |
|-------------------------------|---------|-------------|---------|-------|---|
|                               | -3.8500000 | 0.6816196   | -5.6483119 | 0.0001 *** |
CHART 4.2
Variability in Pre/Post-Test Scores for Classrooms A, B, and C
Summary:

The results of the data analysis show that Classroom B was significantly more sensitive than Classroom A towards handicapped individuals. However, Classroom B was not significantly more sensitive than Classroom C towards handicapped individuals. It appears that having an included child in a regular education classroom may increase awareness/sensitivity towards individual differences since Classroom A (control group; no included child) scored significantly lower than Classrooms B and C on the ASK-R questionnaire.
CHAPTER FIVE: SUMMARY AND CONCLUSIONS

**Summary:**

The purpose of this study was to observe the benefits for non-handicapped students in an inclusive setting. The hypothesis suggested that regular education students would be more sensitive and aware of handicapped individuals when they are read age appropriate stories about handicapped individuals and participate in a sensitivity program than regular education students who do not receive this form of intervention. In Chapter Two, research regarding the positive effects and concerns of inclusion for non-disabled and disabled students was reviewed. This research supports inclusion and encourages the process early on because of the powerful effects it has on the future for all children involved. However, it is crucial to remember that the proper support from administrators, special and regular education teachers, in-class support for the disabled child, and parents need to be in place for inclusion to work and help facilitate sensitivity toward disabled individuals.

In Chapter Three, a questionnaire, the Acceptance Scale for Kindergarten-Revised (ASK-R), helped to assess fifty-eight second graders perceptions of handicapped individuals. The difference between the pre-test and post-test scores of Classroom B to Classroom A and Classroom B to Classroom C on the ASK-R was evaluated.

**Classroom A** – (Control Group) No included child; received ASK-R only.
Classroom B – (Experimental Group) Has an included child; received ASK-R, sensitivity program, and read age-appropriate stories regarding individual differences/handicaps.

Classroom C – Has an included child; received ASK-R only.

The independent variable was the type of sensitivity training received, if any, in each of these three classrooms. The dependent variable, measured by the Acceptance Scale for Kindergarten – Revised, was an increase in sensitivity/awareness of individual differences.

Chapter Four presented the results of the data analysis which showed that Classroom B was significantly more sensitive than Classroom A toward handicapped individuals. However, Classroom B was not significantly more sensitive than Classroom C toward handicapped individuals. It appears that having an included child in a regular education classroom may increase sensitivity/awareness toward individual differences since Classroom A (control group; no included child) scored significantly lower on the pre/post-test ASK-R questionnaire than Classrooms B and C.

Conclusions:

This study failed to accept the null hypothesis. Classroom B was significantly more sensitive than Classroom C toward handicapped individuals. However, Classroom B was not significantly more sensitive than Classroom C towards handicapped individuals.
Discussion:

Based on the outcome of this experiment, inclusion is one way to facilitate acceptance of individual differences. As stated in Chapter Two, non-disabled students in inclusive settings have increased awareness of differences, increased self-esteem, less prejudice toward disabled individuals, and the possibility for friendships to evolve with disabled peers. For disabled students, improvements in social skills, behavioral skills, developmental skills, and in some cases, academic skills are among the beneficial aspects of inclusive settings. The sensitivity program conducted in this experiment and reading age-appropriate stories about individual differences were beneficial because discussions were encouraged to help children understand that even though individuals may be different from them, we are all unique.

Research supports this experiment because children who had more contact with handicapped individuals were more accepting of individual differences than children in the low/no contact groups. The results of this experiment showed that Classroom A (control group; no included child) was significantly less sensitive toward individual differences than Classrooms B (experimental group; included child) and Classroom C (included child). When Classrooms B and C were compared there was not a significant difference in sensitivity. One explanation for this was derived from students pre-test ASK-R scores which showed that Classroom B and C were already sensitive to begin with. Also, Classroom C compared to Classroom B had a characteristically different included child in their classroom. Classroom C had an included child with an observable behavior problem whereas Classroom B had a calm, passive included child in it. This may have led to Classroom C having a higher post-test score on the ASK-R than the
predicted Classroom B since the students in Classroom C were forced to acknowledge the behavior problem of the included child. Also, in Classroom B there was one child who scored very low on the pre-test (score=18 out of 36) and even lower on the post-test (score=11 out of 36) which may have further contributed to Classroom C having a higher post-test score on the ASK-R.

Overall, this study supports inclusive settings due to the promotion of positive attitudes and increase in sensitivity toward handicapped individuals.

**Implications For Future Research:**

1. Conduct this research experiment with various grade levels, especially at the kindergarten level because it is beneficial to increase awareness of individual differences early on.

2. Lengthen the experiment to six months to a year and observe if a significant change occurs in sensitivity over a longer period of time.

3. Make comparisons between other schools in the district using similar grade levels.

4. Follow-up on low-scoring control groups and implement the sensitivity program to them to see if their scores increase.
References


Including students with deaf-blindness in typical educational settings. Baltimore, MD: Paul H. Brookes.


PERMISSION TO USE AND DUPLICATE FOR USE ONLY:
INDIVIDUALS WITH DISABILITY REPRESENTATION (IDR)
ACCEPTANCE SCALE FOR KINDERGARTEN - REVISED
(ASK-R)

I am requesting use of (Circle all that applies): ASK-R IDR

Person requesting use: Christine Brookbank
Affiliation (School, University): Bowlan University
Address for correspondence: (withheld)

________________________

Date this form was completed: September 11, 1997

Expected use of ASK-R and/or IDR

Where (withheld)

When September 97

Project title Increased sensitivity to Handicapped Children

Expected completion date May 98

Age of children tested (ASK-R) 4-7 years old

Number of children tested (ASK-R) 58

Please attach an abstract of the project/study, including a clear explanation of the purpose for which you will be using the ASK-R and/or IDR.

Upon return of this completed form, Christine Brookbank has my permission to use the Acceptance Scale for Kindergarten (ASK-R) and/or the Individuals with Disability Representation (IDR) in this project.

Signed: ___________________________
Date: 12 Sept. 1997

Note: This permission extends to use in this project only. It does not allow dissemination of the ASK-R outside this project or for use in another project without a separate review.
Dear Parents:

My name is Christine Brookbank and I am currently a Special Education Teacher's Assistant at ____________ and a graduate student at Rowan University doing a Masters thesis for the School Psychology program. I am requesting that you allow your child to participate in this research study.

Your child's participation will involve completing a questionnaire, which looks at children's attitudes towards handicapped individuals. This questionnaire will be read to your child on two occasions this school year. The information from the surveys will be used to study the attitudes of second graders toward children with disabilities.

I expect this research will cause no risk to your child. The potential benefit for your child includes a raised awareness about persons with disabilities. If you choose to allow your child to participate, your child will NOT be identified by name or by school and the information collected will only be used for this research project and will not become part of your child's records. Your child's participation is voluntary and if you do not want your child to participate or if you have any questions, please contact me by Monday, September 22nd at (XXX) XXX-XXXX.

Thank you for your time and consideration.

Sincerely,

Christine Brookbank
Acceptance Scale for Kindergarten-Revised (ASK-R) Questionnaire

1. Would you like to be good friends with a kid who can’t talk yet?
   YES  NO  MAYBE
2. Would you like to be good friends with a kid who can’t see?
   YES  NO  MAYBE
3. Would you like to push a handicapped kid in a wheelchair?
   YES  NO  MAYBE
4. Do you play with kids even if they look different?
   YES  NO  MAYBE
5. Would you play with a kid even if he couldn’t walk?
   YES  NO  MAYBE
6. Would you play with a kid even if he was handicapped?
   YES  NO  MAYBE
7. Have you helped someone who is handicapped?
   YES  NO  MAYBE
8. Would you still talk to a kid even if he was handicapped?
   YES  NO  MAYBE
9. Would you like to play with a handicapped kid?
   YES  NO  MAYBE
10. Do you have a friend who is handicapped?
    YES  NO  MAYBE
11. Do you sometimes call kids names like “dumb”?
    YES  NO  MAYBE
12. Do you play with someone who is handicapped?
    YES  NO  MAYBE
13. Have you ever talked to a handicapped kid?
    YES  NO  MAYBE
14. Would you move to another chair if a handicapped kid sat next to you?
    YES  NO  MAYBE
15. Would you like to be friends with a handicapped kid?
    YES  NO  MAYBE
16. Are you sometimes mean to other kids?
    YES  NO  MAYBE
17. Would you like to spend your recess with a handicapped kid?
    YES  NO  MAYBE
18. Do you sometimes pick on kids who are different?
    YES  NO  MAYBE