

1-1-2002

University student attitudes toward the inclusion of students with disabilities

Bridget Kirsty Theakston
University of Nevada, Las Vegas

Follow this and additional works at: <https://digitalscholarship.unlv.edu/rtds>

Repository Citation

Theakston, Bridget Kirsty, "University student attitudes toward the inclusion of students with disabilities" (2002). *UNLV Retrospective Theses & Dissertations*. 1403.
<http://dx.doi.org/10.25669/bxmc-p7cy>

This Thesis is protected by copyright and/or related rights. It has been brought to you by Digital Scholarship@UNLV with permission from the rights-holder(s). You are free to use this Thesis in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself.

This Thesis has been accepted for inclusion in UNLV Retrospective Theses & Dissertations by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI[®]

**UNIVERSITY STUDENT ATTITUDES TOWARD
THE INCLUSION OF STUDENTS
WITH DISABILITIES**

by

Bridget K. Theakston

**Bachelor of Arts
University of Nevada, Las Vegas
1998**

**A thesis submitted in partial fulfillment
of the requirements for the**

**Master of Science Degree
Department of Special Education
College of Education**

**Graduate College
University of Nevada, Las Vegas
May 2002**

UMI Number: 1411221

UMI[®]

UMI Microform 1411221

Copyright 2003 by ProQuest Information and Learning Company.

All rights reserved. This microform edition is protected against
unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346



Thesis Approval
The Graduate College
University of Nevada, Las Vegas

April 26, 2002

The Thesis prepared by

Bridget Theakston

Entitled

University Student Attitudes Toward the Inclusion of Students
With Disabilities

is approved in partial fulfillment of the requirements for the degree of

Master of Science

Examination Committee Chair

Dean of the Graduate College

Examination Committee Member

Examination Committee Member

Graduate College Faculty Representative

ABSTRACT

University student attitudes toward the inclusion of students with disabilities.

by

Bridget Theakston

Dr. Colleen Thoma, Committee Chair
Assistant Professor of Special Education
University of Nevada, Las Vegas

The purpose of this quantitative study was to determine whether graduate special education students attitudes toward inclusion would be more positive than the attitudes of undergraduate special education students. A survey designed to determine how positive university student attitudes toward inclusion are, was distributed to undergraduate and graduate level special education classes at the University of Nevada, Las Vegas. Results indicated that undergraduate special education students were more likely to communicate a positive attitude toward the inclusion of students with disabilities in the regular education classroom, than graduate special education students.

LIST OF FIGURES

Table 1	Question 6.....	25
Table 2	Question 15.....	27
Table 3	Question 17.....	29
Table 4	Question 21.....	31
Table 5	Question 40.....	33
Table 6	Work experience in years for undergraduate participants.....	36
Table 7	Teaching credentials for undergraduate participants	36
Table 8	Type of experience with disabilities. (Undergraduate participants). ...	37
Table 9	The extent to which these experiences have influenced undergraduate participant views of individuals with disabilities	38
Table 10	Work experience in years for graduate participants	39
Table 11	Teaching credentials for graduate participants	40
Table 12	Type of experience with disabilities. (Graduate participants).	41
Table 13	The extent to which these experiences have influenced graduate participant views of individuals with disabilities	42

TABLE OF CONTENTS

ABSTRACT.....	iii
LIST OF FIGURES	iv
CHAPTER 1 INTRODUCTION	1
Purpose of the Study	1
Research Questions	2
Significance of the Study	4
Definition of Terms.....	5
CHAPTER 2 REVIEW OF RELATED LITERATURE	6
History.....	6
Factors that Impact the Effectiveness if an Inclusion Program	11
Teacher Education.....	16
CHAPTER 3 METHOD	20
Participants	20
Materials	21
Procedure	22
CHAPTER 4 RESULTS	23
Undergraduate and Graduate Participant Results	33
Gender.....	47
Type of Experience with Individuals with Disabilities	48
Type of Disability.....	64
CHAPTER 4 CONCLUSIONS.....	80
Relevance to Teacher Education	85
Concerns	88
Potential for Future Research	90
APPENDICES.....	92
Stages of Concern About the Innovation	92
Informed Consent Form	94
Attitudes Toward Inclusion survey	95
REFERENCES	103
VITA.....	105

CHAPTER 1

INTRODUCTION

Purpose of the Study

The purpose of this study is to investigate factors that might affect how university students, currently enrolled in a special education class at the University of Nevada, Las Vegas, feel about including students with disabilities in the regular education classroom. While the Clark County School District has expressed a commitment to offering a full range of services under L.R.E (Charlene Green, personal communication, March 1, 2002), the majority of faculty within the Special Education department at UNLV want to prepare teachers to teach in inclusive settings. The literature shows that one of the most important factors that determine whether an inclusive program is successful, is whether the teachers have positive attitudes toward inclusion (Tapasak & Walther-Thomas, 1999), it is important to attempt to evaluate the attitudes university students currently enrolled in a Special education program in the College of Education, have about inclusion. It is also important to know what factors are most likely to influence these attitudes, and for teacher educators to be aware of which factors impact those attitudes, and whether these factors change depending on the educational level of the student.

The factors specifically being investigated in the current study are level of education (graduate or undergraduate) and experience with individuals with disabilities. The type of experience, i.e friend or family member, is also being investigated. An additional question that became apparent in the literature, was whether the type and severity of a disability had an affect on the way university students felt about including students with disabilities in the regular classroom, and also whether or not previous experience as an educator had an affect on how the participants felt about inclusion, taking into account whether the experience was as a special education teacher, a regular education teacher, or as a cooperating teacher. This last demographic was added as many of the graduate participants were or are currently teachers, and it is important to determine whether simply being an educator made their attitude more or less positive toward inclusion.

Research Questions

The main research question is whether graduate students currently enrolled in a special education class tend to have more positive attitudes toward including students with disabilities in the regular education classroom than undergraduate students also currently enrolled in a special education class. This hypothesis has direct relevance for teacher education programs, as it is important to know whether graduate and undergraduate programs need to be organized differently to resolve any concerns that might emerge during the teacher education program. Hall (1985), hypothesized that teachers presented with a new

innovation related to education would manifest concerns in various stages. Hall developed seven stages of concern based on the Fuller Concerns Model, which was developed to help understand the concerns aroused in university students during their teacher education program. Fuller posited that the sequence and manner in which information is presented in a teacher education program was just as important as the information itself. It was found that if information was not presented at the same time that a concern is aroused, students considered it to be irrelevant, therefore it was important to know when a concern was likely to be aroused so that it could be resolved in a timely manner. Hall's seven Stages of Concern about the Innovation, in this case inclusion, can be used to determine which concerns are more prevalent for undergraduate students as opposed to graduate students, and thus what information is more relevant to each group, and also when during their training it should be provided to them.

Other research hypotheses include whether there is a relationship between previous experience with individuals with disabilities and university student attitudes toward including students with disabilities in the regular classroom, whether there is a relationship between the type and severity of the disability of the individual to be included and university student attitudes toward inclusion (Smith & Smith, 2000). Also, is there a relationship between previous experience as an educator, more specifically experience as a regular or special educator, and the participants' attitudes toward including students with disabilities in the regular education classroom.

Significance of the Study

For the inclusion of students with disabilities in the regular classroom to be successful, a review of the literature shows that it is vital that staff at the school implementing an inclusion program are aware of what is expected of them, are aware of the changes that will need to be made and also have a positive attitude about the program, which also includes making sure that all children, those in regular or special education, receive the support they need to succeed academically and socially (Fox & Ysseldyke, 1997). The research also shows that teacher attitudes are one of the defining factors that determine whether or not an inclusion program will be successful (Tapasak & Walther-Thomas, 1999). It is therefore imperative that teachers are aware and have positive attitudes toward inclusion, especially as research has shown that "Among schoolteachers and administrators, teachers have the least positive attitude toward full inclusion" (Petch-Hogan & Haggard, 1999, p.131). If it was known which factors affected attitudes toward including students with disabilities in the regular classroom, it would be possible to incorporate these variables into teacher training and inservices. It is just as important to know which factors make a teacher less likely to want to work in an inclusive school, as it is to know what makes a teacher's attitudes less positive toward inclusion. By ascertaining the concerns university students may have with regards to working in an inclusive environment, it would be possible to tailor teacher education programs and inservices to alleviate these concerns when they arise. Inservices, specifically have been shown to be one of

the factors, along with advanced planning and careful monitoring, that are essential for successful program (Hay, Courson & Cipolla, 1997).

Definition of Terms

The definition of inclusion used in this study is that the inclusion is viewed as being the “full time placement of students with mild, moderate or severe disabilities in their neighborhood schools, in age appropriate regular education classes, with the necessary support services for both the child with disabilities and the classroom teacher” (Hay et al, 1997, p.97). While mainstreaming focuses, for the main part, primarily on the student’s educational experience and often does not call for full time placement in the regular classroom, inclusion attempts to ensure that the student with a disability is considered a full-fledged member of the regular education classroom, and not just a visitor (Fox & Ysseldyke, 1997).

CHAPTER 2

REVIEW OF RELATED LITERATURE

History

The dictionary definition of inclusion, is 'the act of including, or the state of being included.' In the literature, inclusion can be defined as the "full time placement of students with mild, moderate, or severe disabilities in their neighborhood schools in age-appropriate regular education classes, with the necessary support services for both the child with disabilities, and the classroom teacher (Hay et al, 1997). The implementation of full inclusion incorporates the restructuring of the school system, so that the desired outcome of all schools being able to accommodate all students can be achieved. The term mainstreaming, however, is used when students receive only part of their education in a general education classroom, and the rest in a special education program. Whereas mainstreaming focuses, for the main part, primarily on the student's educational experience, inclusion attempts to ensure that the student with a disability is considered a full-fledged member of the general education classroom, and not just a visitor (Fox & Ysseldyke, 1997).

Special education has evolved over the years, helped along by court cases, legislation, and more often than not, an inspired individual. At first it was only

children who were considered educable who were given an education, and then it was usually only if a place in a private school was available, for example Thomas Gallaudet's school for the deaf which opened in 1817, or Perkins school for the blind which Samuel Howe took over as director in 1831. It was not until 1898 when Alexander Graham Bell stated that "Handicapped children have a right to an education in the public schools", and a 1901 court case determined that "the right given every child to attend public school is not unqualified but is subject to such reasonable regulations as to numbers and qualifications of pupils as the school committee shall from time to time prescribe." (180 Massachusetts 20, 61 N.E 263), that children with disabilities were given the opportunity to receive an education in a public school. Even then it was often at the discretion of the school and teacher to determine if the child could be accommodated. In 1911, New Jersey mandated that local school boards must provide special classes when there are more than 10 children with disabilities, specifically mental retardation, in the school district (Heward, 2000).

It was not until 1954, when the courts ruled in favour of the plaintiff in the Brown vs. Board of Education of Topeka that the practice of segregating students, specifically in this case on the basis of race, was questioned. However, the idea that students should also not be segregated on the basis of disability was also raised in the mind of many, as the Supreme Court decision could also be seen to refer to children with disabilities. "Today, education is perhaps the most important function of state and local governments. Compulsory school attendance laws and the great expenditure for education both demonstrate our

recognition of the importance of education to our democratic society. It is required in the performance of our most basic responsibilities.... In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education" (Brown v. Board of Education, 1954). Other court cases, such as the case of Hobson v. Hansen (Washington D.C., 1967) which declared that the tracking system was unconstitutional because it discriminated against African American children and the poor, and the case, Diana v. State Board of Education (California, 1970) which ruled that children cannot be placed in special education on the basis of culturally biased tests, all contributed to the push towards ensuring the best possible education for all children. In 1972, there were two court cases that had a resounding effect on Special Education. First there was Mills v. Board of education of the District of Columbia, in which the courts ruled that a school district could not refuse to serve a student with a disability for financial reasons, in other words the school district has to provide a special education program regardless of cost. The second court case was Pennsylvania Association for Retarded Citizens (PARC) v. the Commonwealth of Pennsylvania. PARC challenged a state law that denied public school education to children that were not considered able to benefit from a public education. The courts ruled in favour of PARC, stating, "It is the Commonwealth's obligation to place each mentally retarded child in a free, public program of education and training appropriate to the child's capacity..... placement in a regular public school class is preferable to placement in a special public school class and placement in a special public school class is preferable to

placement in any other type of program of education and training. An assignment to homebound instruction shall be reevaluated not less than every 3 months, and notice of the evaluation and an opportunity for a hearing thereon shall be accorded to the parent or guardian". (PARC v. Commonwealth of Pennsylvania, 1972) This court ruling had a major effect on legislation, and in 1975 Public Law 94-142, the Education for All Handicapped Children Act was passed by congress (Heward, 2000). This law was then amended in 1990 and renamed the Individuals with Disabilities Education Act (IDEA).

The purpose of IDEA is to "assure that all children with disabilities have available to them.....a free appropriate public education which emphasizes special education and related services designed to meet their unique needs, to assure that the rights of children with disabilities and their parents or guardians are protected, to assist states and localities to provide for the education of all children with disabilities, and to assess and assure the effectiveness of efforts to educate children with disabilities. (IDEA, 20 U.S.C.1400[c]) The six major principles of IDEA are:

1. **Zero Reject.** Under IDEA, all schools are required to educate all students with disabilities, regardless of its severity.
2. **Nondiscriminatory Identification and Evaluation.** It is mandated that the methods of evaluation used by a school to determine eligibility for special education must be non-biased and multifactored.
3. **Free, Appropriate Public Education (FAPE).** A free, appropriate public education should be made available for all children with disabilities, which

includes the development of an Individualized Education Plan (IEP), in order to meet with each child's unique needs.

4. **Least Restrictive Environment (LRE).** Children with disabilities should be educated with children without disabilities to the maximum extent appropriate. This mandate does allow for students to be removed to separate classes if an appropriate education cannot be received in a general education classroom.
5. **Due Process Safeguards.** Children with disabilities and their parents must have their rights protected by due process safeguards provided by the schools. For example, parental consent must be obtained for evaluations and placement decisions.
6. **Parent and Student Participation and Shared Decision Making.** The parents, and when appropriate the students, wishes must be considered in all educational decisions.

IDEA also offers other provisions such as related services and assistive technology, requiring that the school provide any services or assistive devices that the student needs to succeed in their least restrictive environment (LRE), and also tuition reimbursement if placement in a private school is considered the LRE. In 1997, IDEA was amended, adding several major provisions: increased parent participation, access to general education for students with disabilities and transition services beginning when the child reaches 14 years old. The amendments also mandates the inclusion of positive behavior support plans in

the I.E.P. where appropriate, and also the inclusion of students with disabilities in statewide assessment programs (Heward, 2000).

Factors that Impact the Effectiveness of an Inclusion Program

For full inclusion to be effective, it is imperative that the full cooperation of teachers, both general and special education, principals and all support staff is obtained. If the school staff do not agree with, or are not fully cognizant of the implications of a fully inclusive school, the implementation will undoubtedly fail. Research has shown that many teachers have misgivings towards promoting inclusion in their classroom, for various reasons. Although a majority of general education teachers have shown support for the concept of inclusion, very few believe that they have the expertise, training, material support, time or personnel support required for successful implementation of inclusion (Cook et al, 1999). Results indicated that principals were much more positive towards inclusion than were the special education teachers, although they both indicated that they did not believe that teachers had the appropriate skills to meet the needs of students with mild disabilities in the general education classroom (Cook et al, 1999). Interestingly, principals thought that the general education classroom was the best environment for children with mild disabilities, and agreed with the statement that the achievement of students with disabilities would increase with inclusion, even though they did not believe that the teachers were adequately trained to teach and inclusive classroom. The article does posit that principals see inclusion as a cost saving measure, which might explain their enthusiasm, whereas special

educators felt it was imperative that mandated resources should be protected for students with mild disabilities, and possibly felt that if inclusion was implemented without these resources being protected these students would not receive the special education services to which they were entitled. The authors state that although general educators are less supportive of inclusion than special educators, according to the literature special educators still show negative attitudes towards inclusion. They surmise that these attitudes could be in response to fears that their jobs would be lost, but more likely it is because they fear that inclusion would be implemented without the appropriate resources being made available, and also that the teachers, both in special and general education, would not receive adequate training (Cook et al, 1999).

In the research, it was found that over 60% of general educators surveyed “felt no strong commitment or did not support the concept of mainstreaming” (deBettencourt, 1999, p33), although many indicated that they thought that mainstreaming was beneficial for students with mild disabilities. They did not, however feel that mainstreaming had been successful in improving the social and academic skills of the students with disabilities, and some did not even feel that it had been successful in their school at all. The results from this study indicated that in general very little time was spent collaborating with the special education teachers, and that “the negative attitude toward students with special needs reflects what one might have predicted some 20 years ago when Public Law 94-142 was first implemented” which implies that teacher education on inclusion has not improved since then (deBettencourt, 1999).

Research has shown that while teachers in general supported the abstract concept of inclusion, they had many reservations about its practical application in the classroom. Smith and Smith (2000) surveyed regular education early childhood teachers in a pro-inclusion district on their general perceptions towards inclusion. Their data revealed four themes that for the teachers made the difference between successful and unsuccessful inclusion. The first theme was training, all of the teachers surveyed concluded that their “undergraduate training did nothing to prepare them for inclusion” (Smith & Smith, 2000, p.165), only one teacher felt that their graduate training had helped them with inclusion, and that the bulk of their training had come from in-services provided by their school district.

The second theme was class load, including number of students with special needs, and their type of disability. Research has shown that teacher-child ratio is a major concern for regular education teachers in terms of inclusion, and Smith and Smith (2000) determined that teachers who considered themselves as successful in regards to inclusion tended to have smaller classes, and fewer students with special needs, than unsuccessful teachers. The article also mentioned that teacher attitudes tend to become more negative as the number of children in their classroom with special needs and their type of disabilities increases.

The third theme was support, with research indicating that appropriate and consistent support was invaluable. If the teacher knew that they would be provided with enough support, and that they could rely on that support, then they

are more likely to consider themselves successful with respect to inclusion. Federico, Herrold & Venn (1999), discussed in their article, the responsibilities of the teachers, in terms of team teaching, so that the inclusive class had two teachers, one general and one special educator, both of whom were responsible for the class. Although the general education teacher did the majority of the teaching, the special educator was responsible for teaching at least one subject, and also served as case manager for the students with special needs, and also was available at all times to assist with any concerns that might arise. The authors discussed the need for the teachers to adapt their own teaching and disciplining styles in order to work effectively together, and also to ensure that they did not undermine each other in a way that might disrupt the class (Federico et al, 1999). Research does show, however, a lack of consistency in the area of support and collaboration between professionals in the inclusive classroom, with some teachers complaining that their assistants, and the special education teachers assigned to their rooms, were more often than not called away to assist other teachers, and as a result could not be relied upon day to day. Another concern was administrative support, as research had shown that it is imperative that the principal be openly in favor of inclusion, as the principal's position is one of the strongest predictors of teaching effectiveness in inclusive classrooms (Smith & Smith, 2000).

The fourth theme was time, specifically for lesson planning, and making accommodations for the students with special needs. Teachers felt that they were not being given enough time to prepare for their classes, and had to give up

their free time especially when they were also expected to make accommodations for their students with special needs (Smith & Smith, 2000). Research also shows that many general education teachers do not feel that they are given enough time, if any, to consult with the special education teachers and support staff, and as a result are not implementing accommodations as effectively.

Federico et al (1999) discussed their experiences in an inclusive classroom over a three-year period. The classroom consisted of 24 fifth graders, which included 7 students with either learning or emotional disabilities. Over the three years, the authors noticed many changes: the students with disabilities experienced more success in school learning, the high expectations for the students produced higher than expected academic growth, and there was a change in peer relationships as student's feelings of belonging grew. In the article the authors discuss the requirements and best practices for implementing inclusion in the school.

Successfully implementing inclusion in the school system is not something that can be done over night, it requires a "total commitment from the principal down to the school custodian" and requires a "team of individuals with a variety of capabilities and responsibilities" (Federico et al, 1999, p79). Best practices must be followed, and all members of the team (and indeed the school) must be ready to change their practices to better serve all the students, and is structured to serve a wide range of students; the environment is flexible and organized to meet the unique needs of all students. In an inclusive school, everyone belongs,

is accepted, supports, and is supported while having individual education needs met” (Winzer & Mazurek, 2000).

Teacher Education

Hall (1985) discusses the work of Fuller and the fuller concerns model (1971), which theorizes that university student’s concerns “move through a series of arousal and resolution steps. This model initially consisted of three phases, non-concern, concerns with self, and concern with pupils. The model was later refined into seven concerns codes:

0. Non-teaching concerns.
1. Where do I stand?
2. How adequate am I?
3. How do pupils feel about me? What are pupils like?
4. Are pupils learning what I’m teaching?
5. Are pupils learning what they need?
6. How can I improve myself as a teacher?

Fuller proposed that university students moved through these concerns, and for teacher education to be effective it was important that their concerns were answered when they were raised. In other words, classes that address university students current concerns, are more likely to be deemed by the student as relevant to their teacher training. By determining at what stage students may manifest particular concerns, it would be possible to tailor a teacher training degree to the students particular needs, without compromising content. Fuller

also posited that the way the material in a course is presented is just as important as the material itself. If the course material does not address any particular concern that the students have at that particular time, it is possible, by adapting the way the material is presented, to arouse in the students the concerns that the material does address. It is, however, important to address the concerns soon after they have been aroused.

Fuller's Concerns model is the basis for the Concerns questionnaire developed by the R&D Center for Teacher Education, University of Texas at Austin, that measures a series of seven stages of concern about teaching innovations. The seven Stages of Concern about the Innovation, developed by Hall, Wallace and Dossett (1973) are:

0. Awareness.
1. Informational.
2. Personal.
3. Management.
4. Consequence.
5. Collaboration.
6. Refocusing.

Research has shown that "these concerns can be developmental if the innovation is appropriate and the school principal and other change facilitators do the right type of interventions" (Hall, 1985, p.19). This idea that the need for support, particularly from the principal, but from all school personnel, is vital in order to successfully implement an educational innovation is mirrored in other

research about inclusion. For example Smith & Smith (2000) noted from previous research that “the strongest single predictor of teaching effectiveness in inclusive classrooms was the subjective school norms embodied in the principal’s attitude about inclusion” (Smith & Smith, 2000, p.174). Hall (1985) noted that if concerns were not addressed, then they would tend to “remain aroused at self or task levels with little or no indication of movement toward arousal of impact concerns”(Hall, 1985, p.20).

The arousal and resolution of concerns can be used in teacher education, not only to evaluate and restructure the teacher education program, but also to introduce and excite university students about a particular subject or aspect of teaching, for example inclusion. By following the concerns model, allowing for different levels of knowledge and maturity, the teacher educator could arouse the various concerns that the university students have about inclusion, and then attempt to resolve them. By introducing inclusion to them in a realistic and positive manner, preferably including field experience, it would be possible to elicit their concerns, for example time management, personal ability, and student benefit, and attempt to resolve them. Hall (1985) noted that as a university student prepares for their initial placement as a teacher, it is important that they are properly supported, are given extensive and safe exposure to the classroom and that the support continues, even into their first year as a licensed teacher. This concept can be modified to instill a positive attitude toward inclusion by slowly and safely introducing university students to the concept of inclusion whilst giving them the support and practical experiences necessary to arouse and

resolve their concerns in a positive manner. It would not be necessary to develop courses specifically on inclusion, the courses required for teacher education could just be modified to incorporate the subject matter, and field experiences could be provided in an inclusive school to more realistically involve the university students in the concept.

CHAPTER 3

METHOD

Participants

Participants in this study are graduate and undergraduate students, currently enrolled in a special education class at the University of Nevada, Las Vegas. The majority of the students who participated are currently pursuing an undergraduate or graduate degree in special education, although a few of the participants were pursuing an education degree other than special education. The sample consisted of 91 students; 36 undergraduate, and 55 graduate students. Originally 153 questionnaires were distributed, and 97 were returned, six of which were not used in the sample, as they were incomplete. In total, there was a 59.5% return rate for the questionnaires. In the undergraduate sample, eight students were male, 27 female and one student did not answer that question. In the graduate sample fourteen students were male, 33 were female and 8 did not answer the question. The large difference between the amount of male and female students in the sample is representative of the ratio of male and female students enrolled in an education degree. Overall the sample is representative of the population to be studied: graduate and undergraduate students pursuing a degree in special education. 18.68% of participants indicated

that they had experience in the regular education setting, 26.37% of participants indicated that they had experience in the special education setting, and 2.19% of participants indicated that they had experience as a cooperating teacher. 36.26% of participants indicated that they had a family member with a disability, and 36.26% of participants indicated that they had a friend with a disability. 38.46% of participants indicated that they had taken a class with an individual with a disability, 35.16% of participants indicated that they had worked in a camp or social setting with individuals with disabilities, and 42.86% of participants indicated that they had some formal work experience with individuals with disabilities.

Materials

The questionnaire consisted of seven demographic questions, and 53 questions concerning attitudes towards inclusion. The first 35 questions were adapted from the Concerns Questionnaire, a series of questions developed by the R&D Center for Teacher Education at the University of Texas at Austin to determine where concerns lie when a new educational innovation is introduced. This survey was adapted to specify inclusion as the innovation being studied, for example the original statement "At this time, I am not interested in learning about this innovation." (Hall, 1985), was changed to "At this time, I am not interested in learning about inclusion". The remaining 18 questions were developed by determining areas of concern in the literature, and developing questions around those areas. These questions were specifically concerned with inclusion and

attitudes toward inclusion. The last 18 questions were piloted in an undergraduate special education class in which all the students were close to completing a bachelor degree in special education. To establish content validity, the questions were also reviewed by an expert in assessments, and changes were made in accordance with her recommendations. The questions were scored using a likert type scale, ranging from 0 to 7. An answer of zero on the scale indicates that the statement is considered to be “irrelevant” by the respondent. An answer of one on the scale indicates that the respondent considers the statement to be “not true of me now”, an answer of four on the scale indicates that the respondent considers the statement to be “somewhat true of me now”, and an answer of seven on the scale indicates that the respondent considers the statement to be “very true” of them now. The participants are asked to answer each statement on this scale of 0 to 7, choosing the number that most closely represents their opinion at that time.

Procedure

The questionnaires were distributed to 4 undergraduate special education classes and 3 graduate special education classes for a total of 153 questionnaires. The students in each class were asked to read and sign the informed consent form, and were informed as to their rights as a research participant, that their participation is voluntary, that they have the right to withdraw at any time, and that the information collected will be kept confidential.

The questionnaires were then collected after completion and returned to the investigator for analysis.

CHAPTER 4

RESULTS

The results from the questionnaire were evaluated using an independent t-test with a 95% confidence rate. Descriptive statistics were also run on the demographic information for undergraduate and graduate participants. The results for each research question are reported separately to facilitate the evaluation of the results. Tables 1 to 5 describe the results for questions that elicited the most significant differences between groups.

Undergraduate and Graduate Participant Results

The results of the demographic questions indicated that more undergraduate participants tended to have a friend with a disability, than graduate students, and they also tended to be more likely to have a family member with a disability. Undergraduates were slightly more likely to report attending a class or youth group with an individual with a disability, but were less likely than graduate students to have experience with individuals with disabilities in their formal work or in social settings. Undergraduates were more likely, however, to report having had no experience with individuals with disabilities, although this is probably because most of the graduate students are currently working as a special education teacher. Undergraduate students reported that their undergraduate

Table 1

Question 6, "I have very limited knowledge about inclusion"

Comparison Groups	n	mean	SD
Family member with a disability	33	2.30	1.185
Family member without a disability	58	3.00	1.696
$t(89)=2.086, p \leq .04$			
Formal work experience	39	2.31	1.519
No formal work experience	52	3.08	1.524
$t(89)=2.387, p \leq .019$			
Experience with individuals with disabilities	78	2.55	1.500
No experience with individuals with disabilities	13	3.92	1.441
$t(89)=-3.068, p \leq .003.$			
No experience with disabilities	35	3.06	1.608
Experience with both mild and severe disabilities	18	2.00	1.237
$t(51)=2.439, p \leq .018$			

Table 1 (continued).

Question 6, "I have very limited knowledge about inclusion"

Comparison Groups	n	mean	SD
No experience with disabilities.	35	3.06	1.608
Experience with mild disabilities	16	2.13	.885
$t(49)=2.166, p \leq .035$			
Experience with mild disabilities.	16	2.13	.885
Experience with severe disabilities.	22	3.32	1.783
$t(36)=-2.459, p \leq .019$			
Experience with severe disabilities	22	1.783	.380
Experience with both mild and severe disabilities	18	2.00	1.237
$t(38)=2.654, p \leq .012$			
Scale from 0-7, 0=irrelevant, 1=not true of me now, 4=somewhat true of me now, 7=very true.			

Table 2

Question 15, "I would like to know what resources are available if we decide to adopt an inclusion program"

Comparison Groups	n	mean	SD
Family member with a disability	32	6.03	1.062
Family member without a disability	57	5.21	1.810
$t(87)=-2.345, p \leq .021$			
Worked in camp or social setting	32	5.97	1.470
No experience working in camp or social setting	57	5.25	1.661
$t(87)=-2.052, p \leq .043$			
No experience with disabilities	34	5.12	1.871
Experience with both mild and severe disabilities	17	6.24	1.033
$t(49)=-2.287, p \leq .027$			

Table 2 (continued).

Question 15, "I would like to know what resources are available if we decide to adopt an inclusion program"

Comparison Groups	n	mean	SD
Experience with mild disabilities	16	5.44	1.094
Experience with both mild and severe disabilities	17	6.24	1.033
$t(31)=-2.156, p \leq .039$			

Scale from 0-7, 0=irrelevant, 1=not true of me now, 4=somewhat true of me now, 7=very true.

Table 3

Question 17, "I would like to know how my teaching or administration is supposed to change"

Comparison Groups	n	mean	SD
Undergraduate	35	4.43	2.146
Graduate	55	5.29	1.802
$t(89)=-2.054, p \leq .043$			
Friendship with individual with a disability	33	5.55	1.752
No friendship with individual with a disability	57	4.61	2.033
$t(89)=-2.200, p \leq .030$			
Worked in camp or social setting	33	5.58	1.659
No experience working in camp or social setting	57	4.60	2.069
$t(88)=-2.320, p \leq .023$			

Table 3 (continued).

Question 17, "I would like to know how my teaching or administration is supposed to change"

Comparison Groups	n	mean	SD
Experience with individuals with disabilities	77	5.19	1.850
No experience with individuals with disabilities	13	3.54	2.184
$t(88)=2.909, p \leq .005$			
No experience with disabilities	34	4.41	2.204
Experience with severe disabilities	22	5.68	1.359
$t(54)=-2.439, p \leq .019$			

Scale from 0-7, 0=irrelevant, 1=not true of me now, 4=somewhat true of me now, 7=very true.

Table 4

Question 21, "I am completely occupied with other things"

Comparison Groups	n	mean	SD
Undergraduate	34	2.56	1.501
Graduate	55	3.40	1.978
$t(89)=-2.054, p \leq .043$			
Friendship with individual with a disability	33	2.58	1.733
No friendship with individual with a disability	56	3.38	1.864
$t(87)= 2.005, p \leq .048$			
Male	22	3.68	2.147
Female	58	2.78	1.644
$t(78)= 2.018, p \leq .047$			

Table 4 (continued).

Question 21, "I am completely occupied with other things"

Comparison Groups	n	mean	SD
Experience with mild disabilities	16	2.31	1.493
Experience with severe disabilities	22	3.55	1.738
$t(36)=-2.287, p \leq .028$			

Scale from 0-7, 0=irrelevant, 1=not true of me now, 4=somewhat true of me now, 7=very true.

Table 5

Question 40, "A student is less likely to succeed in an inclusive classroom if their disability is severe"

Comparison Groups	n	mean	SD
Undergraduate	36	3.06	1.772
Graduate	55	4.05	1.799
$t(89)=-2.605, p \leq .011$			
Male	22	4.32	1.585
Female	60	3.25	1.743
$t(80)= 2.517, p \leq .014$			
No experience with disabilities	35	4.03	1.543
Experience with both mild and severe disabilities	18	2.33	1.749
$t(51)=3.620, p \leq .001$			

Table 5 (continued).

Question 40, "A student is less likely to succeed in an inclusive classroom if their disability is severe"

Comparison Groups	n	mean	SD
Experience with mild disabilities	16	4.00	1.966
Experience with both mild and severe disabilities	18	2.33	1.749
$t(32)= 2.616, p \leq .013$			
Experience with severe disabilities	22	3.91	1.900
Experience with both mild and severe disabilities	18	2.33	1.749
$t(38)=2.703, p \leq .010$			

Scale from 0-7, 0=irrelevant, 1=not true of me now, 4=somewhat true of me now, 7=very true.

classes and personal experiences were the factors that they felt had influenced their views of individuals with disabilities the most, and graduate courses and inservice training had influenced their views the least. The graduate students indicated that the factors that had influenced their views of individuals with disabilities the most were their graduate classes and their personal experiences, and that undergraduate courses, working as a cooperating teacher, and inservice training have influenced them the least. Family attitudes tended to be “very much” of an influence for both graduates and undergraduates although undergraduates reported them as slightly more of a contributing factor than graduate students.

Tables 6 to 9 show the mean score and standard deviation for the undergraduate responses on the demographic questions on the questionnaire. The mean score for an undergraduate's level of education is .28, with a score of zero being no higher education degree earned, and 1 being an Associates degree earned. The average undergraduate student feels that their undergraduate courses have influenced their views of individuals with disabilities “very much”, with a mean score of 1.80. Personal experience as an influencing factor for undergraduates has a mean score of 1.97, and family attitudes/background has a mean score of 2.19. Tables 10 to 13 show the descriptive statistics for the graduate participants. The mean for level of education achieved is 2.25, with a 2 indicating a Bachelor degree and a 3 indicating a Masters degree. The mean for the extent to which undergraduate classes have influenced views on individuals with disabilities is 3.11 as compared

Table 6

Work experience in years for undergraduate participants.

Comparison Groups	n	mean	SD
Experience in years in regular education.	36	.583	3.175
Experience in years in special education.	36	.111	.3984
Experience in years as a cooperating teacher.	36	.0	.000

Table 7

Teaching credentials for undergraduate participants

Comparison Groups	n	mean	SD
Regular education credential.	36	1.03	.167
Special education generalist credential.	36	1.11	.319
Special education other credential.	36	1.03	.167
Other credential.	36	1.06	.232

1= No, 2=Yes.

Table 8

Type of experience with disabilities. (Undergraduate participants).

Comparison Groups	n	mean	SD
Family member with disability.	36	1.42	.500
Friend with disability	36	1.39	.494
Attended class or youth group with individuals with disabilities.	36	1.39	.494
Worked in camp or social setting with individuals with disabilities.	36	1.28	.454
Formal work experience/tutoring	36	1.36	.487
No experience	91	1.25	.439
Other experiences with individuals with disabilities.	36	1.08	.280

1=No, 2=Yes.

Table 9.

The extent to which these experiences have influenced undergraduate participant views of individuals with disabilities.

Comparison Groups	n	mean	SD
Undergraduate courses	35	1.80	.797
Graduate courses	23	3.61	.783
Cooperating teacher.	29	2.72	1.066
Inservice training.	29	3.21	.978
Administrator attitudes.	29	2.79	1.013
Professional experience.	29	2.66	1.173
Personal experience.	33	1.97	.984
Family attitudes/background.	32	2.19	.998

1=Extremely, 2=Very much, 3=Somewhat, 4=Not at all.

to the undergraduate mean of 1.80. The mean for graduate courses is 1.87, and for personal experiences. Graduate students feel that graduate courses and personal experience have influenced their views on individuals with disabilities the most, and undergraduate courses influenced them the least, whereas undergraduate students feel that their undergraduate courses and personal experience influenced them the most.

Table 10

Work experience in years for graduate participants.

Comparison Groups	n	mean	SD
Experience in years in regular education.	55	1.100	2.902
Experience in years in special education.	55	2.309	5.884
Experience in years as a cooperating teacher.	55	.109	.685

Table 11

Teaching credentials for graduate participants

Comparison Groups	n	mean	SD
Regular education credential.	55	1.29	.458
Special education generalist credential.	55	1.20	.404
Special education other credential.	55	1.22	.417
Other credential	55	1.22	.417

1=No. 2=Yes.

Table 12

Type of experience with disabilities. (Graduate participants).

Comparison Groups	n	mean	SD
Family member with disability.	55	1.33	.474
Friend with disability	55	1.35	.480
Attended class or youth group with individuals with disabilities.	55	1.38	.490
Worked in camp or social setting with individuals with disabilities.	55	1.42	.498
Formal work experience/tutoring	55	1.47	.504
No experience	55	1.07	.262
Other experiences with individuals with disabilities.	55	1.18	.389

1=No, 2=Yes.

Table 13.

The extent to which these experiences have influenced graduate participant views of individuals with disabilities.

Comparison Groups	n	mean	SD
Undergraduate courses	54	3.11	1.003
Graduate courses	55	1.87	.862
Cooperating teacher.	49	3.08	1.038
Inservice training.	53	3.04	1.143
Administrator attitudes.	53	3.06	1.064
Professional experience.	53	2.17	1.236
Personal experience.	55	1.85	.970
Family attitudes/background.	54	2.39	1.140

1=Extremely, 2=Very much, 3=Somewhat, 4=Not at all.

Although there does not appear to be any overall differences between the attitudes of graduate and undergraduate participants, significant differences were found in particular stages of concerns and questions when an independent t-test was performed at the 95% confidence level. The results of the stages of concern about the innovation showed significant differences on both management and refocusing concerns (see appendix 1). The raw and percentile scores for Management, showed a significantly higher raw and percentile rank for graduate participants than for undergraduate participants. The Management concern indicates that "Attention is focused on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, scheduling, and time demands are utmost" (Hall, 1975). For the Management raw score the mean for undergraduate students ($M=15.58$, $SD=5.448$) is significantly lower than for graduate students ($M=20.09$, $SD=6.802$), $t(89) = -3.335$, $p < .001$. The mean difference between undergraduate and graduate students is -4.51 . For the Management percentile scores the mean for undergraduate students ($M=57.61$, $SD=21.644$) is significantly lower than for graduate students ($M=72.75$, $SD=23.029$), $t(89) = -3.138$, $p < .002$. The mean difference between undergraduate and graduate students is -15.13 .

The Refocusing percentile also showed significant differences between the graduate and undergraduate results, with the graduate participants again receiving a higher percentile rank than the undergraduates. For the Refocusing percentile scores the mean for undergraduate students ($M=51.22$, $SD=22.018$) is

significantly lower than for graduate students ($M=62.42$, $SD=20.568$), $t(89) = -2.469$, $p < .015$. The mean difference between undergraduate and graduate students is -11.20 . Refocusing is concerned with the “exploration of more universal benefits from the innovation, including the possibility of major changes or replacement with a more powerful alternative. Individual has defined ideas about alternatives to the proposed or existing form of the innovation” (Hall, 1985).

On the informational concern “A general awareness of the innovation and interest in learning more detail about it is indicated. The person seems to be unworried about himself/herself in relation to the innovation. She/he is interested in substantive aspects of the innovation. She/he is interested in substantive aspects of the innovation in a selfless manner such as general characteristics, effects and requirements for use” (Hall, 1985), the means of the two groups are almost the same indicating that undergraduates and graduates are just as interested in learning about the innovation, and have the same level of worry. The results of both of the concerns that showed significant differences between the groups indicate that the undergraduates’ attitudes toward inclusion tend to be more positive than the graduates’ attitudes, a finding that was noted by Avramidis, Bayliss and Burden (2000).

Although the other concerns did not show any significant differences, particular questions did show significant differences, all of which indicate a more positive attitude from the undergraduate participants. Certain questions also produced results with significant differences between undergraduate and graduate participants. On question 2 “I now know of some other approaches that

might work better” the results were significantly different for undergraduates ($M=3.67$, $SD=1.707$), and graduates ($M=4.58$, $SD=1.771$), $t(89)=-2.445$, $p\leq.016$, with the graduate mean being higher, indicating that they believe they know of other approaches that would work better than inclusion. The mean difference between undergraduate and graduate students is $-.92$. On question 4, “I am concerned about not having enough time to organize myself each day”, the results showed a significantly higher mean for graduates $M=4.36$, $SD=1.975$) than undergraduates ($M=3.50$, $SD=1.521$), $t(89)=-2.225$, $p\leq.029$, indicating that they feel more overwhelmed than do undergraduate students. The mean difference between undergraduate and graduate students is $-.86$. On question 17, “I would like to know how my teaching or administration is supposed to change” the results showed a significantly higher mean for graduate students than for undergraduates, indicating that graduates have more concern about the changes that would need to be made to the infrastructure of the running of the school and classrooms if the school became an inclusive environment. The mean difference between undergraduate and graduate students is $-.86$. On question 20 “I would like to revise the inclusion program’s instructional approach” the results showed a significantly higher mean for the graduate participants ($M=3.78$, $SD=1.987$), than for the undergraduates ($M=2.97$, $SD=1.671$), $t(87)=-1.987$, $p\leq.050$, indicating that the graduate participants are more likely to want to change an inclusion program than the undergraduate participants. This reflects the results of the refocusing percentile, which indicated that graduate participants were more likely to want to propose alternatives, or modify the current innovation

than undergraduates. The mean difference between undergraduate and graduate students is $-.81$. On question 21, "I am completely occupied with other things", the mean for graduates was again higher than that of the undergraduates, indicating that graduate participants were less concerned, in general, with inclusion. The mean difference between undergraduate and graduate students is $-.84$. On question 22, "I would like to modify the implementation of inclusion based on the experiences of our students" again shows a significantly higher mean for graduates ($M=3.93$, $SD=1.980$) than for undergraduates ($M=2.94$, $SD=1.687$), $t(86)= -2.402$, $p \leq .018$, indicating that graduate students are more likely to want to make changes to the program than undergraduates. The mean difference between undergraduate and graduate students is $-.98$. On question 34, "Coordination of tasks and people is taking too much of my time" the results show a significantly higher mean for graduates ($M=3.17$, $SD=1.788$), indicating that possibly they feel more overwhelmed than do undergraduates ($M=2.12$, $SD=1.629$), $t(86)=-2.772$, $p \leq .007$. The mean difference between undergraduate and graduate students is -1.05 . On question 40, "A student is less likely to succeed in an inclusive classroom if their disability is severe", graduates were significantly more likely to agree than undergraduates, indicating that their attitude toward the inclusion of students with severe disabilities was less positive than the attitudes of undergraduates. The mean difference between undergraduate and graduate students is -1.00 . On question 50, "Students without disabilities in an inclusive classroom will suffer as a result of students with disabilities being included full-time in the regular classroom" graduate

students ($M=3.11$, $SD=1.649$), were again more likely to agree than undergraduate students ($M=2.31$, $SD=1.411$), $t(87)=-2.401$, $p\leq.018$. The mean difference between undergraduate and graduate students is $-.81$.

The questions showing significant differences between the two groups tend to be concerned with the administration and implementation of inclusion, with the exception of questions 40 and 50, and the results indicate that graduate students have more concerns than undergraduate students. Questions 40 and 50 are concerned with the ability of students with and without disabilities to function together in an inclusive classroom. These results conclude that undergraduate special education majors in general tend to have more positive attitudes toward the inclusion of students with disabilities in the regular classroom than were graduate students. Reasons for this phenomenon could be that undergraduate students were more likely to pursue voluntary experiences with individuals with disabilities, for example more undergraduates than graduates indicated that they had a friend with a disability, and also that they were more likely to have had a class with an individual with a disability. These experiences early on may have allowed them to develop more positive attitudes that are less likely to be colored by later experiences. One would expect that university students who had themselves had classes with individuals with disabilities, as long as these experiences were positive, would be more likely to see inclusion as a positive idea. It is also possible that the younger undergraduates were more likely to have positive attitudes toward inclusion because the attitudes concerning inclusion when they were at in high school were more positive than when the presumably

older graduate students were in high school. One could also posit that as undergraduates are less likely to have teaching experience than graduates, they are less likely to have had negative experiences concerning inclusion, and thus base their ideas on the information given to them in their teacher education degree.

Gender

No significant differences were found between gender on any of the seven concerns, but some significant differences were found on individual questions. On question 8, "I am concerned about conflict between my interests and my responsibilities", the mean for males ($M=3.91$, $SD=1.716$) was significantly higher than for females ($M=2.98$, $SD=1.662$), $t(80)=-.202$, $p\leq.030$. The mean difference between gender on question 8 was $-.93$. On question 9, "I am concerned about revising my use of inclusion", the mean for male participants ($M=3.27$, $SD=1.751$) was significantly higher than the mean for female participants ($M=2.43$, $SD=1.522$), $t(80)=2.216$, $p\leq.037$, indicating that, like graduate participants, male participants are more likely to want to modify the instructional approach of inclusion. The mean difference between gender was $.84$. On question 21, "I am completely occupied with other things", the mean for male participants was significantly higher than the mean for female participants, indicating that they are not as concerned with including students with disabilities as female participants. The mean difference between genders was $.91$. On question 40, "A student is less likely to succeed in an inclusive classroom if their disability is severe", the

mean of the male participants was significantly higher than the mean of the female participants, indicating that that they are less likely to have positive attitude about including students with severe disabilities in the regular classroom, than the female participants. The mean difference between gender is 1.07. On question 41, "I would only like to teach in an inclusive classroom if the student's disabilities do not inhibit their own learning or the learning of others" the mean of the male participants ($M=4.27$, $SD=1.980$) again is significantly higher than the mean for the female participants ($M=3.27$, $SD=1.827$), $t(79)=2.145$, $p \leq .035$. The mean difference between gender is 1.00. For all of the questions that showed a significant difference between the means of the male and female participants, the female participants tended to respond in a more positive manner with respect to inclusion, than the male participants. The type of questions that supported the significant differences were some of the same questions that were shown to indicate differences between undergraduate and graduate participants, although the number of questions that are significantly different between the male and female participant scores is not as large as with the undergraduate and graduate participants. In general, female participants tended to respond in a more positive manner than their male counterparts.

Type of Experience With Individuals With Disabilities

When type of experience was investigated, it was noted that there were no significant differences on the seven concerns between participants who had a family member with a disability, and those who did not, there were, however

some significant differences on certain questions. On question 6, "I have very limited knowledge about inclusion", the mean for participants who do not have a family member with a disability was significantly higher than for participants who do have a family member with a disability, indicating that having a family member who has a disability makes it more likely that one would have more knowledge concerning inclusion, than if one did not have a family member with a disability. The mean difference between individuals with or without family members with disabilities is .70. On question 15, "I would like to know what resources are available if we decide to adopt an inclusion program", the mean for participants who have a family member with a disability is significantly higher than for participants who do not. The mean difference between individuals with or without family members with disabilities is -.82. These results indicate that participants with a family member with a disability are more likely to want information about inclusion, and how it could benefit individuals with disabilities and about available resources, than participants who do not have a family member with a disability.

When the effect of having a friend with a disability on attitudes toward inclusion was investigated, it was noted that there were no significant differences in the seven concerns between participants with friends with disabilities, and those without. There were, however, significant differences between the two groups on particular questions. On question 17, "I would like to know how my teaching or administration is supposed to change", the mean for participants who have friends with disabilities is significantly higher than the mean for participants without friends with disabilities, indicating that they have concerns about their

role in an inclusion program. The mean difference between participants who are not friends with an individual with disabilities, and those who are is $-.93$. On question 21, "I am completely occupied with other things", participants with friends with disabilities have a significantly lower mean than participants with out friends with disabilities, again indicating that they are more concerned with inclusion than participants with out friends with disabilities. The mean difference between participants who are not friends with an individual with disabilities, and those who are is $.80$. On question 26, "I would like to know what the inclusion program will require in the immediate future", the mean for participants who have friends with disabilities, is significantly higher than the mean for participants with out friends with disabilities ($M=4.81$, $SD=1.605$), indicating that participants who have friends with disabilities ($M=5.50$, $SD=1.414$), $t(88)=-2.033$, $p \leq .045$ are more likely to be concerned with the requirements of the program, without being concerned about themselves in relation to the program. The mean difference between participants who are not friends with an individual with disabilities, and those who are is $-.69$. On question 30, "At this time, I am not interested in learning about inclusion", the mean for participants with friends with disabilities ($M=1.48$, $SD=.834$), is significantly lower than the mean for participants without friends with disabilities ($M=2.48$, $SD=1.636$), $t(89)=3.266$, $p \leq .002$, indicating that they are more interested in learning about inclusion than those who do not have friends with disabilities. The mean difference between participants who are not friends with an individual with disabilities, and those who are is 1.00 . On question 34, "Coordination of tasks and people is taking too much

of my time", the mean of the participants who have friends with disabilities ($M=2.19$, $SD=1.693$) is significantly lower than the mean of the participants without friends with disabilities ($M=3.09$, $SD=1.781$), $t(86)=2.325$, $p \leq .022$, possibly indicating that they feel more able to cope with the requirements of an inclusion program than those without the experience of friends with disabilities. The mean difference between participants who are not friends with an individual with disabilities, and those who are is .90. On question 44, "I support including students with disabilities", the mean of the participants with friends with disabilities ($M=6.48$, $SD=.755$) is significantly higher than the mean of the participants without friends with disabilities ($M=5.81$, $SD=1.302$), $t(88)=-2.733$, $p \leq .008$, indicating that having the experience of being friends with an individual with disabilities is a factor that might make university students' attitudes toward inclusion more positive. The mean difference between participants who are not friends with an individual with disabilities, and those who are is -.68. On question 49, "I believe that being included will improve the academic skills of students with disabilities", the mean for participants with friends with disabilities ($M=5.94$, $SD=1.029$) is significantly higher than the mean for participants without friends with disabilities ($M=5.40$, $SD=1.266$), $t(88)=-2.067$, $p \leq .042$, again indicating that university students who have friendships with individuals with disabilities, are more likely to feel that being included will benefit students with disabilities, and will have a positive effect on the students. The mean difference between participants who are not friends with an individual with disabilities, and those who are is -.54. Overall, participants who have friends with disabilities tend to have

more positive attitudes toward inclusion, and not only are concerned about the informational and functional side of inclusion, but also how it will impact the students with disabilities.

There were no significant differences between participants who had attended class or youth group with individuals with disabilities and those who had not, when the raw scores and percentile ranks for the seven concerns were compared. There were however significant differences between the means of the two groups on certain questions. On question 19, "I am concerned about evaluating my impact as a teacher, on students", the mean for participants who had attended class or youth groups with individuals with disabilities ($M=5.48$, $SD=1.946$), is significantly higher than the mean for those who had not attended class with individuals with disabilities ($M=4.68$, $SD=1.946$), $t(87)=-2.046$, $p \leq .044$, indicating that they are more aware of the impact that a teacher can have on her students than those who had not had the same experience. The mean difference between participants who never attended class or youth group with individuals with disabilities and those who did is $-.81$. On question 50, "Students without disabilities in an inclusive classroom will suffer as a result of students with disabilities being included full-time in the regular classroom", the mean for students who had attended class or youth groups with individuals with disabilities ($M=3.20$, $SD=1.746$) is significantly higher than for those who did not have those experiences ($M=2.52$, $SD=1.450$), $t(87)=-1.997$, $p \leq .049$. The mean difference between participants who never attended class or youth group with individuals with disabilities and those who did is $-.68$. This indicates that

participants who had attended class or youth group with individuals with disabilities felt that inclusion may be detrimental to the educational experience of the regular education students. The results show that participants who have taken a class with students with disabilities are more concerned than participants who have not taken a class with students with disabilities about the effect inclusion will have on the regular education students.

When the raw scores and percentile ranks are compared for the seven concerns between participants who have experience working in a camp or social setting with individuals with disabilities, and those who did not have this experience, it was noted that the personal raw scores for participants who had not worked in camps or social settings with individuals with disabilities ($\underline{M}=22.16$, $\underline{SD}=7.058$) were significantly lower than the scores of participants who had ($\underline{M}=25.58$, $\underline{SD}=6.384$), $t(89) = -2.299$, $p \leq .024$. The mean difference between the two scores is -3.42 . The personal percentile scores for participants who had not worked in camps or social settings with individuals with disabilities ($\underline{M}=74.95$, $\underline{SD}=20.231$) were also significantly lower than the scores of participants who had ($\underline{M}=83.42$, $\underline{SD}=14.560$), $t(89) = -2.113$, $p \leq .037$. The mean difference between the two scores is -8.48 . The Personal stage of concern indicates that the individual is "uncertain about the demands of the innovation, and his/her inadequacy to meet those demands, and his/her role in relation to the reward structure of the organization, decision making, and consideration of potential conflicts with existing structures or personal commitment. Financial or status implications of the program for self and colleagues may also be reflected" (Hall, 1985, p.24).

The results indicate that participants who had worked in a camp or social setting are more likely to have these concerns than those who had not had these experiences. Certain questions also showed significant differences between the two groups. On question 15, "I would like to know what resources are available if we decide to adopt an inclusion program", the mean for participants who had worked in a camp with individuals with disabilities is significantly higher than for participants who had not had this experience. This result is consistent with the finding that they have significantly higher results on the personal concern area in the Stages of Concern. The mean difference between participants who had not worked in a camp or social setting with individuals with disabilities, and those who had is $-.72$. On question 17, "I would like to know how my teaching or administration is supposed to change", the mean for participants who had worked in a camp with individuals with disabilities is significantly higher than individuals who did not have that experience, indicating that they have a greater concern about their role in an inclusive program. The mean difference between participants who had not worked in a camp or social setting with individuals with disabilities, and those who had is $-.98$. On question 18, "I would like to familiarize other departments or persons with the progress of the inclusion program", the mean score for individuals who had experience working in camps with students with disabilities ($M=5.24$, $SD=1.501$) were significantly higher than for participants who did not have this experience ($M=4.32$, $SD=1.992$), $t(88)=-2.316$, $p \leq .023$, indicating that they are more concerned with working with others than those who did not have the experience. The mean difference between

participants who had not worked in a camp or social setting with individuals with disabilities, and those who had is $-.93$. The results of question 27, "I would like to coordinate my effort with others to maximize the effects of inclusion", also reflects that participants who have experience working in camps with students with disabilities ($M=5.55$, $SD=1.301$), have more concern with working with others than those who did not have the experience ($M=4.82$, $SD=1.723$), $t(88)=-2.082$, $p \leq .040$. The mean difference between participants who had not worked in a camp or social setting with individuals with disabilities, and those who had is $-.72$. On question 28, "I would like to have more information on time and energy commitments required for implementing inclusion", the mean for participants who have experience working in camps with students with disabilities ($M=5.64$, $SD=1.475$), was significantly higher than for participants who did not have this experience ($M=4.86$, $SD=1.64$), $t(88)=-2.175$, $p \leq .032$, indicating that they have more concern about the demands of their role than those without the experience. The mean difference between participants who had not worked in a camp or social setting with individuals with disabilities, and those who had is $-.78$. On question 29, "I would like to know what other faculty are doing in this area", participants with experience working in camps with individuals with disabilities ($M=5.82$, $SD=1.211$), had a significantly higher mean than those without the experience ($M=5.02$, $SD=1.695$), $t(88)=-2.381$, $p \leq .019$, indicating that that they have an interest in learning about other research or programs in this area than those without the experience. The mean difference between participants who had not worked in a camp or social setting with individuals with disabilities, and those

who had is $-.80$. On question 33, "I would like to know how my role would change when I am involved in an inclusion program", the mean for participants who have experience working with individuals with disabilities in a camp or social setting ($M=5.58$, $SD=1.544$), was significantly higher than for participants without that experience ($M=4.65$, $SD=1.778$), $t(86)=-2.455$, $p \leq .016$ indicating that they are concerned with their role in an inclusion program. The mean difference between participants who had not worked in a camp or social setting with individuals with disabilities, and those who had is $-.93$. It appears that the experience of working in a camp or social setting with individuals with disabilities arouses concerns focused on the changes that would be made to their role if they worked in an inclusive environment, and also that they are concerned with what others are doing in that area.

The areas of concern that show significantly different results when the means of participants who have formal work experience were compared with the means of participants without formal work experience, are personal raw and percentile scores, collaboration raw scores and awareness percentile scores. The results showed that the mean personal raw scores were significantly higher for participants with formal work experience ($M=25.28$, $SD=6.262$), than for participants with no work experience ($M=21.98$, $SD=7.218$), $t(89)=-2.283$, $p \leq .025$, indicating that they may be more concerned with how their role may change and also whether they will be able to meet the demands put on them, than participants who do not have formal work experience with individuals with disabilities. The mean difference between the two scores is -3.30 . The personal

percentile scores for participants who had no work experience with individuals with disabilities ($M=74.31$, $SD=20.875$) were significantly lower than the scores of participants who had work experience ($M=82.97$, $SD=14.258$), $t(89)=-2.230$, $p\leq.028$. The mean difference between the two scores is -8.67 . This difference could possibly be explained because participants with formal work experience, are already aware of what their current role and abilities are, and so are more likely to want to know how their role will change, and will also want to know what is expected of them. Significant differences were found between the raw scores of participants with formal work experience and those without this experience when the means of the collaboration concerns were compared. The collaboration raw scores for participants who had no work experience with individuals with disabilities ($M=22.48$, $SD=7.070$) were significantly lower than the scores of participants who had work experience ($M=25.67$, $SD=6.041$), $t(89)=-2.262$, $p\leq.026$. The mean difference between the two scores is -3.19 . The results showed that the mean for participants with work experience was significantly higher than for those without work experience, indicating that they have a greater focus on “coordination and cooperation with others regarding use of the innovation” (Hall, 1985, p.24). This would infer that participants, who have formal work experience, have more experience coordinating on educational matters, and thus would be able to bring that experience to an inclusive environment. The fact that there were only significant differences in the raw collaboration scores, and not in the percentile rank, indicates that although there is a significant difference between the participants in the sample, this significance cannot be

translated into the population. The comparison of the means of the awareness concern percentile, shows that the mean for participants with work experience with individuals with disabilities, is significantly lower than the mean for those without experience. The awareness percentile scores for participants who had no work experience with individuals with disabilities ($M=82.31$, $SD=14.453$) were significantly higher than the scores of participants who had work experience ($M=75.28$, $SD=19.344$), $t(89)=1.984$, $p \leq .050$. The mean difference between the two scores is 7.03. A high score on the awareness concern indicates that the individual has "little concern about or involvement with the innovation" (Hall, 1985, p.24). This infers that participants with formal work experience are more concerned about or involved with the innovation than those without work experience. Significant differences between participants with formal work experience with individuals with disabilities, and those without the experience can also be found in particular questions. On question 6, "I have very little knowledge about inclusion", the mean of participants with formal work experience was significantly lower than the mean of those without any formal work experience, indicating that they are more aware of the concept than those without benefit of the experience. The mean difference between those participants who do not have any formal work experience with individuals with disabilities, and those who do is .77. On question 29, "I would like to know what other faculty are doing in this area", the mean for participants with formal work experience ($M=5.79$, $SD=1.399$) is higher than for those without the experience ($M=4.94$, $SD=1.618$), $t(88)=-2.628$, $p \leq .010$, indicating that they have more interest in what others are

doing in this area than participants without formal work experience. The mean difference between those participants who do not have any formal work experience with individuals with disabilities, and those who do is $-.85$. On question 33, "I would like to know how my role will change when I am involved in an inclusion program", the mean score of the participants who have formal work experience ($M=5.41$, $SD=1.755$) is significantly higher than for those with no work experience ($M=4.67$, $SD=1.693$), $t(86)=-1.990$, $p \leq .050$, indicating that participants with formal work experience with individuals with disabilities, are more likely to be concerned with their role, and more interested in learning about how it might change in an included classroom. The mean difference between those participants who do not have any formal work experience with individuals with disabilities, and those who do is $-.74$. On question 37, "I think students with physical disabilities should be included full-time in the regular education classroom", the mean score of the participants with formal work experience ($M=5.58$, $SD=1.750$) is significantly higher than for those without formal work experience ($M=4.87$, $SD=1.509$), $t(88)=-2.071$, $p \leq .041$, indicating that participants with work experience are probably more aware of what modifications are needed to include students with physical disabilities, and probably already have experience of working with these students. The mean difference between those participants who do not have any formal work experience with individuals with disabilities, and those who do is $-.71$. On question 44, "I support including students with disabilities", The mean score for participants with formal work experience ($M=6.34$, $SD=1.192$), is significantly higher than for those without any

formal experience ($M=5.85$, $SD=1.127$), $t(88)=-2.013$, $p\leq.047$, indicating that prior work experience is an indicator that an individual may be more positive toward inclusion, than an individual without prior work experience. The mean difference between those participants who do not have any formal work experience with individuals with disabilities, and those who do is $-.50$. The results from comparing the scores of participants with formal work experience with individuals with disabilities shows that they are in general more positive toward the concept of inclusion, but that they are also more concerned about how changes will affect them if an inclusion program is implemented.

When the raw and percentile scores for participants with no experience with individuals with disabilities were compared with the scores of participants who had experience with individuals with disabilities, the personal raw scores of individuals with experience ($M=24.12$, $SD=6.580$), were shown to be significantly higher than for participants with no experience ($M=19.08$, $SD=8.026$), $t(89)=2.476$, $p\leq.015$, indicating that participants with experience have concerns about their ability to fulfill the demands of their role, and also concerns about personal commitment to the new program. The mean difference between the two scores is 5.04 . The personal percentile scores for participants who had any experience with individuals with disabilities ($M=79.77$, $SD=17.477$) were significantly higher than the scores of participants who had no experience ($M=67.54$, $SD=23.161$), $t(89)=2.225$, $p\leq.029$. The mean difference between the two scores is 12.23 . The collaboration percentile scores of participants with experience ($M=66.28$, $SD=22.026$) were significantly higher than the scores of participants with no

experience ($M=48.77$, $SD=29.261$), $t(89)=2.527$, $p\leq.013$, indicating that participants with experience were more concerned with coordinating and collaborating with others than were participants with no experience with individuals with disabilities. The mean difference between the two scores is 17.51. Significant differences were also found between the scores of participants with experience with individuals with disabilities, and those without experience with individuals with disabilities on particular questions. On question 6, "I have very limited knowledge about inclusion", the mean for participants with experience with individuals with disabilities is significantly lower, indicating that they are more aware of the concept of inclusion than participants who indicated that they had no experience with individuals with disabilities. The mean difference between participants who have experience with individuals with disabilities, and those who do not is -1.37 . On question 17, "I would like to know how my teaching or administration is supposed to change", the mean for participants with experience is significantly higher than the mean for those without experience, indicating concern about how their role as a teacher will change. The mean difference between participants who have experience with individuals with disabilities, and those who do not is 1.66. On question 26, "I would like to see what the inclusion program will require in the immediate future", the mean for participants with experience ($M=5.19$, $SD=1.496$) was significantly higher than for participants with no experience ($M=4.23$, $SD=1.787$), $t(88)=2.089$, $p\leq.040$, indicating a concern for the functional aspects of inclusion, wanting to know what is required to implement the program. The mean difference between

participants who have experience with individuals with disabilities, and those who do not is .96. On question 27, "I would like to coordinate my effort with others to maximize the effect of inclusion", the mean for participants with experience with individuals with disabilities ($M=5.27$, $SD=1.500$), is significantly higher than for those without experience ($M=3.92$, $SD=1.881$), $t(88)=2.809$, $p \leq .006$, indicating that participants with experience are more likely to want to work with others to reach the goals set in an inclusive classroom. The mean difference between participants who have experience with individuals with disabilities, and those who do not is 1.35. On question 30, "At this time I am not interested in learning about inclusion", the mean for individuals with experience with individuals with disabilities ($M=1.97$, $SD=1.299$) is significantly lower than for those with no experience ($M=3.00$, $SD=2.121$), $t(89)=-2.381$, $p \leq .019$, indicating that participants with experience are more likely to be interested in learning about inclusion than those without experience. The mean difference between participants who have experience with individuals with disabilities, and those who do not is -1.03. In general, participants with experience with individuals with disabilities tend to be more interested in learning about inclusion, and finding out what others are doing, and indicating an interest in collaborating with others. There tended to not be a difference in attitudes toward including students with disabilities between the groups, the differences were focused more on information and collaboration.

The scores of participants who had indicated that they had had other experiences with individuals with disabilities that were not already listed were

compared with the scores of participants who had not indicated that they had had experiences other than the ones listed. When these two groups were compared, it was noted that there were no significant differences on any of the seven stages of concern, there were however some significant differences between groups on specific questions. On question 23, "Although I don't know about inclusion, I am concerned about things in this area", the mean of the participants who had no other experiences than the ones listed ($M=2.99$, $SD=1.907$) were significantly lower than for participants who indicated that they had had other experiences ($M=4.31$, $SD=2.529$), $t(86)=-2.193$, $p \leq .031$. The mean difference between participants with no other experiences and those with other experiences is -1.32 . On question 24, "I would like to excite my students about their part in inclusion", the mean score of participants with no other experience ($M=4.97$, $SD=1.754$) is significantly lower than the mean score for participants who had had other experiences with individuals with disabilities ($M=6.08$, $SD=1.382$), $t(88)=-2.153$, $p \leq .034$. The mean difference between participants with no other experiences and those with other experiences is -1.10 . These results indicate that there may be experiences not listed in the demographic questions that are important factors in instilling a positive attitude toward inclusion in university students. In the two questions that showed significant differences when the scores of participants who had other experiences with individuals with disabilities were compared with the scores of participants who did not have any other experiences, question 23 indicated that participants with other experiences were more likely to be concerned about things in the area of inclusion even if they did not know much

about inclusion itself, than if they had no other experiences. Question 24 indicates that participants with other experiences with individuals with disabilities are more likely to want to involve their students in the process of inclusion than participants who did not have any other experiences.

Type of Disability

The type of disability that participants had experience with was also investigated. The results of a comparison of raw and percentile scores between participants who had no experience with any type of disability and participants who had experience with mild disabilities indicated that there were no significant differences between groups on any of the seven concern stages. There were, however, significant differences between groups on certain questions. On question 6, "I have very limited knowledge about inclusion", the mean score for participants with no experience with any type of disability was significantly higher than the mean score for participants with experience with mild disabilities, indicating that participants that have no experience with any disabilities have less knowledge about inclusion, than participants with experience with mild disabilities. The mean difference between participants who have no experience with individuals with disabilities, and those who have experience with individuals with mild disabilities is .93. On question 7, "I would like to know the effect of reorganization on my professional status", the mean score of the participants with no experience with any disability ($M=3.44$, $SD=1.894$), was significantly lower than the mean score for participants with experience with mild disabilities

($M=4.56$, $SD=1.632$), $t(48)=-2.037$, $p\leq .047$. The mean difference between participants who have no experience with individuals with disabilities, and those who have experience with individuals with mild disabilities is -1.12 . The results of the comparison between the scores of individuals who have no experience with individuals with disabilities and those of the participants who have experience with individuals with mild disabilities, indicated that there were few significant differences. The two questions that did result in significant differences indicated that participants with experience with individuals with mild disabilities have more knowledge about inclusion than individuals with no experience, and that individuals with experience with mild disabilities are more concerned with the effect of reorganization on their professional status than participants who had no experience.

Results indicate that there were no significant differences on any of the seven concerns when the mean scores for participants with no experience with disabilities were compared with participants with experience with severe disabilities, there were, however, significant differences between groups on particular questions. On question 3, "I don't even know what inclusion is", the mean score for participants with no experience ($M=1.51$, $SD=1.173$) was significantly lower than for participants with experience with severe disabilities ($M=2.23$, $SD=1.445$), $t(55)=-2.042$, $p\leq .046$, indicating that participants with experience with severe disabilities are less likely to know about inclusion than participants with no experience with disabilities. The mean difference between individuals with no experience with individuals with disabilities, and participants

with experience with individuals with severe disabilities is $-.71$. On question 17, "I would like to know how my teaching or administration is supposed to change", the mean score for participants with no experience was significantly lower than for participants with experience with severe disabilities, indicating that participants with experience with severe disabilities are more aware that inclusion will change their role than participants with no experience with disabilities. The mean difference between individuals with no experience with individuals with disabilities, and participants with experience with individuals with severe disabilities is -1.27 . On question 36, "I think students with mild to moderate mental retardation should be included full-time in the regular education classroom", the mean score for participants with no experience with disabilities ($M=4.69$, $SD=1.549$) was significantly higher than for participants with experience with severe disabilities ($M=3.32$, $SD=1.912$), $t(55)=2.963$, $p \leq .004$, indicating that they are more positive about including students with mild disabilities in the regular education classroom, than participants with experience with severe disabilities. The mean difference between individuals with no experience with individuals with disabilities, and participants with experience with individuals with severe disabilities is 1.37 . On question 52, "I feel that self-contained classes are more beneficial to students with severe disabilities, than inclusion programs", the mean score for participants with no experience ($M=3.57$, $SD=1.668$) was significantly lower than for participants with experience with severe disabilities ($M=4.50$, $SD=1.655$), $t(55)=-2.052$, $p \leq .045$, indicating that they are more positive about including students with severe disabilities in the regular classroom

than participants with experience with severe disabilities. The mean difference between individuals with no experience with individuals with disabilities, and participants with experience with individuals with severe disabilities is $-.93$. Overall, the results indicated that participants with experience with severe disabilities were less likely to have positive attitudes toward the inclusion of students with disabilities, were less likely to have much knowledge about inclusion, but were more likely to be concerned about the affect their teaching would have on their students than participants with no experience, and were also more concerned about how their role would change if an inclusive program were implemented.

The results of the comparison of the raw and percentile scores of participants with no experience with any disability and those with experience with both mild and severe disabilities, indicates that there is a significant difference between the awareness raw scores of the two groups. The awareness raw score for participants with no experience is significantly higher than for participants with experience with both mild and severe disabilities, indicating that they are less concerned about or involved with inclusion than the participants with experience with both mild and severe disabilities. The awareness raw scores for participants who had no experience with individuals with disabilities ($M=12.17$, $SD=5.859$) were significantly higher than the scores of participants who had experience with severe disabilities ($M=9.11$, $SD=3.644$), $t(35)= 2.019$, $p \leq .049$. The mean difference between the two scores is -3.63 . There were also significant differences in the means of the two groups on specific questions. On question 6,

“I have very limited knowledge about inclusion”, the mean score of the participants with no experience was significantly higher than the mean for the participants with experience with both mild and severe disabilities, indicating that participants with experience with both mild and severe disabilities are more likely to be knowledgeable about inclusion, than those with no experience. The mean difference between participants who have no experience with individuals with disabilities, and those who have experience with individuals with mild and severe disabilities is 1.06. On question 8, “I am concerned about conflict between my interest and my responsibilities, the mean score for participants with no experience ($M=3.54$, $SD=1.837$) is significantly higher than for participants with experience with both mild and severe disabilities ($M=2.22$, $SD=1.437$), $t(51)=-2.657$, $p \leq .011$, indicating that participants with experience with both types of disabilities are more capable of resolving the conflicts between their interests and responsibilities than participants with no experience. The mean difference between participants who have no experience with individuals with disabilities, and those who have experience with individuals with mild and severe disabilities is 1.32. On question 9, “I am concerned with revising my use of inclusion”, the mean for participants with no experience ($M=2.97$, $SD=1.543$) is significantly higher than for those with experience with both mild and severe disabilities ($M=1.89$, $SD=1.278$), $t(51)=2.556$, $p \leq .014$, indicating that participants with experience with both mild and severe disabilities would not be concerned about making changes in an inclusive environment. The mean difference between participants who have no experience with individuals with disabilities, and those

who have experience with individuals with mild and severe disabilities is 1.08. On question 15, "I would like to know what resources are available if we decide to adopt an inclusion program", the mean for participants with no experience is significantly lower than for participants with experience with both mild and severe disabilities, indicating that participants with experience with both mild and severe disabilities are more interested in learning more about the requirements of an inclusion program than participants with no experience. The mean difference between participants who have no experience with individuals with disabilities, and those who have experience with individuals with mild and severe disabilities is -1.12. On question 23, "Although I don't know about inclusion, I am concerned about things in this area", the mean score for participants with no experience ($M=3.62$, $SD=2.216$) is significantly higher than for participants with experience with both mild and severe disabilities ($M=1.88$, $SD=1.900$), $t(49)=2.758$, $p\leq.008$, again indicating that participants with no experience are less likely to indicate that they have knowledge about inclusion, but they do feel that they are aware of things in the area of inclusion. The mean difference between participants who have no experience with individuals with disabilities, and those who have experience with individuals with mild and severe disabilities is 1.74. On question 26, "I would like to know what the inclusion program will require in the immediate future", the mean score for participants with no experience ($M=4.74$, $SD=1.738$) is significantly lower than that of participants with experience with both mild and severe disabilities ($M=5.72$, $SD=1.447$), $t(51)=-2.050$, $p\leq.045$, indicating that participants with experience are more concerned with programming requirements

than participants with no experience. The mean difference between participants who have no experience with individuals with disabilities, and those who have experience with individuals with mild and severe disabilities is -.98. On question 32, "I would like to use feedback from students to change the program", the mean score for participants with no experience ($M=4.18$, $SD=1.732$) was significantly lower than the mean score for participants with experience with both disabilities ($M=5.61$, $SD=1.614$), $t(50)=-2.908$, $p\leq.005$, indicating that participants with experience with both disabilities are more concerned with student needs than participants with no experience. The mean difference between participants who have no experience with individuals with disabilities, and those who have experience with individuals with mild and severe disabilities is -1.43. On question 40, "A student is less likely to succeed in an inclusive classroom if their disability is severe", the mean score for participants with no experience with disabilities is significantly higher than for participants with experience with both mild and severe disabilities, indicating that participants with no experience have a much less positive attitude about including students with severe disabilities, than participants with experience with both disabilities. The mean difference between participants who have no experience with individuals with disabilities, and those who have experience with individuals with mild and severe disabilities is 1.70.

Overall, the results indicate that participants with experience with both mild and severe disabilities are more positive about including students with disabilities, more interested in learning about inclusion, and indicate that they know more about inclusion than participants with no experience with disabilities.

When the scores for participants with no experience with disabilities was compared with the results of participants who had experience with both mild and severe disabilities, the questions that indicated significant differences tended to show that participants who had experience with both mild and severe disabilities had more knowledge of inclusion, were more interested in learning what the requirements of the program are, and are more positive about including students with severe disabilities in the regular classroom than participants without experience.

When the mean scores of participants with experience with mild disabilities were compared with the mean scores of participants with experience with severe disabilities, it was noted that there was a significant difference between groups on one of the seven concerns. The awareness raw scores for participants who had experience with individuals with mild disabilities ($M=10.19$, $SD=3.487$) were significantly lower than the scores of participants who had experience with severe disabilities ($M=13.82$, $SD=4.584$), $t(36)=-2.655$, $p\leq.012$. The mean difference between the two scores is -3.63 . The awareness percentile scores for participants who had experience with individuals with mild disabilities ($M=77.88$, $SD=13.549$) were significantly lower than the scores of participants who had experience with severe disabilities ($M=87.18$, $SD=11.147$), $t(36)=-2.321$, $p\leq.026$. The mean difference between the two scores is -9.31 . There were also significant differences between groups on certain questions. On question 6, "I have very limited knowledge about inclusion", the mean score for participants with experience with mild disabilities was significantly lower than for participants

with experience with severe disabilities, indicating that participants with mild disabilities are in general more knowledgeable about inclusion than participants with experience with severe disabilities. The mean difference between participants who have experience with individuals with mild disabilities, and those who have experience with individuals with severe disabilities is -1.19. On question 21, "I am completely occupied with other things", the mean score for participants with experience with mild disabilities was significantly lower than for participants with experience with severe disabilities, indicating that they do not feel as overwhelmed as participants with experience with severe disabilities. The mean difference between participants who have experience with individuals with mild disabilities, and those who have experience with individuals with severe disabilities is -1.23. Overall, results indicate that participants with experience with mild disabilities are slightly more likely to be positive toward the concept of inclusion than participants with experience with severe disabilities. When the scores for participants with experience with mild disabilities were compared with the scores of participants with severe disabilities, it was noted that there were fewer significant differences than between participants with no experience and participants with experience with both mild and severe disabilities.

When the scores of participants with experience with mild disabilities were compared with the scores of participants with experience with both mild and severe disabilities, the management raw scores for participants with experience with mild disabilities ($M=19.75$, $SD=4.480$) was noted to be significantly higher than for participants with experience with both mild and severe disabilities

($M=15.06$, $SD=7.952$), $t(32)=2.084$, $p \leq .045$, indicating that participants with experience with mild disabilities are more likely to focus their attention on the “processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, scheduling, and time demands are utmost” (Hall, 1985, p.24) than participants with experience with both mild and severe disabilities. The mean difference between the two scores is 4.69. The management percentile scores for participants who had experience with individuals with mild disabilities ($M=72.94$, $SD=14.494$) were significantly higher than the scores of participants who had experience with both mild and severe disabilities ($M=54.00$, $SD=28.936$), $t(32)=2.365$, $p \leq .024$. The mean difference between the two scores is 18.94. There were also significant differences between groups on specific questions. On question 4, “I am concerned about not having enough time to organize myself each day”, the mean for participants with mild disabilities ($M=4.31$, $SD=1.250$) is significantly higher than for participants with experience with both mild and severe disabilities ($M=3.17$, $SD=1.855$), $t(32)=2.084$, $p \leq .045$, which is consistent with the significant differences on the management concern, indicating that participants with experience with mild disabilities are more concerned with managing, scheduling and time concerns than participants with experience with both mild and severe disabilities. The mean of participants who have experience with individuals with mild disabilities is significantly higher than of participants who have experience with individuals with both mild and severe disabilities. The mean difference between participants who have experience with individuals with mild disabilities,

and those who have experience with individuals with mild and severe disabilities is 1.15. On question 8, "I am concerned about conflict between my interests and responsibilities", the mean score for participants with mild disabilities ($M=3.88$, $SD=1.500$) is significantly higher than that of participants with experience with both mild and severe disabilities ($M=2.22$, $SD=1.437$), $t(32)=3.279$, $p \leq .003$, which again is consistent with the significant difference found between groups on the management concern. The mean difference between participants who have experience with individuals with mild disabilities, and those who have experience with individuals with mild and severe disabilities is 1.65. On question 15, "I would like to know what resources are available if we decide to adopt an inclusion program", the mean scores for participants with experience with mild disabilities are significantly lower than for participants with experience with mild and severe disabilities, indicating that participants with experience with mild and severe disabilities are more concerned with learning about resource availability than participants with experience with mild disabilities. The mean difference between participants who have experience with individuals with mild disabilities, and those who have experience with individuals with mild and severe disabilities is -.80. On question 40, "A student is less likely to succeed in an inclusive classroom if their disability is severe", the mean score for participants with experience with mild disabilities is significantly different than for participants with experience with both mild and severe disabilities, indicating that they have a less positive attitude toward including students with severe disabilities in the regular classroom than participants who have experience with both mild and severe disabilities. The

mean difference between participants who have experience with individuals with mild disabilities, and those who have experience with individuals with mild and severe disabilities is 1.67. In general, participants with experience with both mild and severe disabilities seem to have a more positive attitude toward inclusion than participants with experience just with mild disabilities, they also seem to have less concern with their ability to manage what would be required of them in an included environment. The results from the comparison of the scores from participants with experience with mild disabilities and the participants with experience with both mild and severe disabilities indicated that participants with experience in both mild and severe disabilities tended to be less concerned about coping, were more interested in the availability of resources and were more positive about the ability of a student with severe disabilities to succeed in an inclusive classroom than participants who only had experience with mild disabilities.

When the mean raw and percentile scores for participants with experience with severe disabilities were compared with the scores for participants with experience with both mild and severe disabilities, it was noted that there was a significant difference between groups on the awareness concern. The mean raw scores for participants with experience with severe disabilities ($M=13.82$, $SD=4.584$), was significantly higher than for participants with experience with both mild and severe disabilities ($M=9.11$, $SD=3.644$), $t(38)= 3.535$, $p \leq .001$, indicating that participants with experience with severe disabilities have “less concern about or involvement with” (Hall, 1985, p.24) inclusion, than participants

with experience with both mild and severe disabilities. The mean difference between the two scores is 4.71. The awareness percentile scores for participants who only had experience with individuals with severe disabilities ($M=87.18$, $SD=11.147$) were significantly higher than the scores of participants who had experience with both mild and severe disabilities ($M=72.89$, $SD=17.077$), $t(38)=3.187$, $p\leq.003$. The mean difference between the two scores is 14.29. There were also significant differences between groups on particular questions. On question 3, "I don't even know what inclusion is", the mean score for participants with experience with severe disabilities ($M=2.23$, $SD=1.445$) is significantly higher than for participants with experience with both mild and severe disabilities ($M=1.33$, $SD=.485$), $t(38)=2.506$, $p\leq.017$, indicating that they are less likely to know about inclusion than participants with experience with both mild and severe disabilities. The mean difference between participants who have experience with individuals with severe disabilities, and those who have experience with individuals with mild and severe disabilities is .89. On question 6, "I have a very limited knowledge about inclusion", the mean for participants with experience with severe disabilities is significantly higher than for participants with experience with both mild and severe disabilities, again indicating that they are less likely to have knowledge about inclusion. The mean difference between participants who have experience with individuals with severe disabilities, and those who have experience with individuals with mild and severe disabilities is 1.32. On question 9, "I am concerned about revising my use of inclusion", the mean score for participants with experience with severe disabilities ($M=2.91$, $SD=1.716$) is

significantly higher than for participants with experience with both mild and severe disabilities ($M=1.89$, $SD=1.278$), $t(38)=2.091$, $p \leq .043$, indicating that they are more likely to want to change the inclusion program than participants with experience with both mild and severe disabilities. The mean difference between participants who have experience with individuals with severe disabilities, and those who have experience with individuals with mild and severe disabilities is 1.02. On question 16, "I am concerned about my inability to manage everything an inclusion program requires", the mean score for participants with experience with severe disabilities ($M=4.77$, $SD=1.744$) is significantly higher than for participants with experience with both mild and severe disabilities ($M=3.11$, $SD=1.906$), $t(38)=2.875$, $p \leq .007$, indicating that they feel less able to cope with the demands of the program than participants with experience with both mild and severe disabilities. The mean difference between participants who have experience with individuals with severe disabilities, and those who have experience with individuals with mild and severe disabilities is 1.66. On question 19, "I am concerned about evaluating my impact as a teacher, on students", the mean score for participants with experience with severe disabilities ($M=5.38$, $SD=1.532$) is significantly higher than for participants with experience with both mild and severe disabilities ($M=4.22$, $SD=1.957$), $t(37)=2.073$, $p \leq .045$, indicating that they are more concerned about how their teaching affects their students than participants with experience with both mild and severe disabilities. The mean difference between participants who have experience with individuals with severe disabilities, and those who have experience with individuals with mild and severe

disabilities is 1.16. On question 23, “Although I don’t know about inclusion, I am concerned about things in this area”, the mean score for participants with experience with severe disabilities ($M=3.62$, $SD=1.687$) is significantly higher than for participants with experience with both mild and severe disabilities ($M=1.88$, $SD=1.900$), $t(36)=2.982$, $p \leq .005$, indicating again that participants with experience with severe disabilities feel that they have less knowledge about inclusion than participants with experience with both mild and severe disabilities, but that they are concerned with things to do with inclusion. The mean difference between participants who have experience with individuals with severe disabilities, and those who have experience with individuals with mild and severe disabilities is 1.74. On question 32, “I would like to use feedback from students to change the program”, the mean score for participants with experience with both mild and severe disabilities ($M=5.61$, $SD=1.614$) is significantly higher than for participants with experience with severe disabilities ($M=3.95$, $SD=1.889$), $t(38)=-2.943$, $p \leq .006$, indicating that they are more concerned about the impact of the program on the students than participants with experience with severe disabilities. The mean difference between participants who have experience with individuals with severe disabilities, and those who have experience with individuals with mild and severe disabilities is -1.66 . On question 40, “A student is less likely to succeed in an inclusive classroom if their disability is severe”, the mean score for participants with experience with both mild and severe disabilities is significantly lower than for participants with experience with severe disabilities, indicating that they are more positive about including students with severe

disabilities in the regular classroom than participants with experience with severe disabilities. The mean difference between participants who have experience with individuals with severe disabilities, and those who have experience with individuals with mild and severe disabilities is 1.58. The results indicate that participants with experience with both mild and severe disabilities tend to have more positive attitudes toward including students with disabilities, and tend to perceive themselves as more knowledgeable about inclusion than participants with experience with severe disabilities. They also seem less concerned about being able to manage the workload than participants with experience with severe disabilities. Participants with experience with both disabilities were, however, less concerned with evaluating their impact as a teacher on their students, than participants with experience with severe disabilities.

CHAPTER 5

CONCLUSIONS

Overall the results tended to be fairly positive about the concept of inclusion, with the majority of participants indicating that they supported including students with disabilities (M undergraduates=6.14, M graduates=6.00), a result that is supported in the literature (Avramidis et al, 2000). Undergraduate university students tended to have more positive attitudes toward inclusion than their graduate counterparts, a finding that is also reflected in the literature (Avramidis et al, 2000). As a result of this, the alternative hypothesis that graduate students enrolled in a Special Education Masters program at the University of Nevada, Las Vegas must be rejected. Reasons for this phenomenon could be that undergraduate students were more likely to pursue voluntary experiences with individuals with disabilities, for example more undergraduates than graduates indicated that they had a friend with a disability, and also that they were more likely to have had a class with an individual with a disability. These experiences early on may have allowed them to develop more positive attitudes that are less likely to be colored by later experiences. One would expect that university students who had themselves had classes with individuals with disabilities, as long as these experiences were positive, would be more likely to see inclusion as a positive idea. It is also possible that the younger undergraduates were more

likely to have positive attitudes toward inclusion because the attitudes concerning inclusion when they were at in high school were more positive than when the presumably older graduate students were in high school. One could also posit that as undergraduates are less likely to have teaching experience than graduates, they are less likely to have had negative experiences concerning inclusion, and thus base their ideas on the information given to them in their teacher education degree.

The results of comparisons between other demographic groups indicate that one of the main factors that determine whether or not a university student will have a positive attitude toward inclusion is the type of disability that the individual has had experience with. Participants with experience with both mild and severe disabilities were consistently more likely to express positive attitudes toward including students with disabilities in the regular classroom, as well as showing less concern about their ability to cope in an inclusive environment, than participants who had only had experience with individuals with mild or severe disabilities, or had no experience at all. Only having experience with severe disabilities is a factor that indicates the person is less likely to feel positively about including students with disabilities. The results also indicated that participants, who had voluntary experiences such as friendships with individuals with disabilities, were more likely to have positive attitudes toward inclusions. It did not appear, however, that this was as strong a determining factor for developing a positive attitude toward inclusion as level of education, and type of disability.

In the demographic information, it was noted that undergraduate participants listed graduate classes and inservices as the factors that were least likely to have an effect on the way they view individuals with disabilities. This is probably because they would have not taken any, or only one or two, graduate courses and very few of the undergraduates had indicated that they had worked in the schools as yet so they would not have had the opportunity to participate in any inservices. These results, therefore, should not be seen to indicate that graduate level classes and inservices do not affect the way the participants feel. However, as many of the graduate participants are already teachers, the fact that they indicated that their inservice experiences had only been somewhat influential ($M=3.04$, 3=somewhat influential) indicates that possibly the inservices they were receiving were not addressing concerns that they had at the time of inservice, or perhaps the areas in which they currently work, for example regular education, did not require them to go to inservices that may have influenced their views on individuals with disabilities. The results indicating that inservices were not very likely to affect the way they feel about individuals with disabilities, does show that inservices probably need to be better tailored to promote inclusive beliefs, and also to ensure that the concerns of the teachers were being addressed in a timely manner. This is especially important in light of the results of the comparison between undergraduate and graduate attitudes toward inclusion as graduate students, many of whom are teachers already, tend to be less positive about inclusion than undergraduates, who are less likely to have experience as a teacher. Graduate participants also seemed to be more concerned that their role

as teacher would have to change in an inclusive school, than undergraduate participants. These differences could possibly be due to that fact that the majority of the undergraduate participants had yet to teach in a classroom, and thus had not developed their own teaching style that would have to be modified if they taught an inclusive classroom. This finding is mirrored by Hamill and Dever (1998), who found that the confidence teachers feel in their ability to teach and be effective “waned at the prospect of having to teach in inclusive environments and the possibility they will have to change their teaching strategies when asked to participate in inclusion strategies” (Hamill & Dever, 1998, p.23).

Interestingly the effect of administrator attitudes on participants views on individuals with disabilities fell between the “somewhat” influential and “very much” influential range, with the undergraduate response ($M=2.79$) indicating a greater influence than the graduate response ($M=3.06$), which contradicts Smith and Smith’s (2000) finding that the principal’s attitude toward inclusion is one of the most important factors influencing teacher attitudes toward inclusion, and thus their effectiveness in an inclusive classroom.

The fact that graduate students view their graduate classes as very influential, and their undergraduate classes not very influential, whereas the undergraduates view their undergraduate classes as influential to their views, suggests that the most recent classes they had taken, are considered most influential, indicating that continued education is important for teachers, or possibly that the quality and relevance of undergraduate courses has improved since the graduate students were undergraduates. It is also possible that the graduates were not enrolled in a

special education degree at the undergraduate level, but instead pursued a regular education degree, or a degree unrelated to education.

Undergraduate participants responded that their attitudes were more likely to be affected by their families attitude, possibly because undergraduates are more likely to still be living with a family member, or have lived away from home for less time than the graduate students, and as a result are still more highly influenced by family attitudes and background.

There also seemed to be some significant differences between participants who had classes or had been to a youth group with individuals with disabilities. They seemed to be more aware that their role as a teacher would have to change in an inclusive environment, but they also seemed to think that students without disabilities would suffer as a result of including individuals with disabilities in the regular classroom. This could possibly be because their experience as a student in a class with students with disabilities were not particularly positive as the teacher and students with disabilities may not have been provided with the appropriate support to promote a true inclusionary environment to ensure success for all students.

The experience of working in camps or social settings with individuals with disabilities seems to arouse concerns about being able to fulfill the demands of their role in an inclusive classroom. They seem to have more concerns about how working in an inclusive environment will affect them, and also whether they have the personal commitment to succeed in an inclusive classroom. Possibly these types of experiences are more likely to arouse concerns about adequacy

and decision making as they may not feel that they had sufficient training to cope with the demands of an inclusive environment when they were working in a camp. These results mirror the findings of Cook et al (1999), who determined that very few teachers believe that they have the expertise, training, material support, time or personnel support required for successful implementation of inclusion. It would be necessary to resolve these concerns, possibly within the class content in the participants' teacher training program, in order for them to develop a more positive attitude toward the benefits of inclusion for all students.

Another reason that their scores indicate a concern with the role a teacher in an inclusive classroom would have to take on could be because they may have learned cooperation skills that would increase their interest in working with others, or because they have had experiences with individuals with disabilities where they were not sure of their ability to cope, and so would seek out guidance from others.

Relevance to Teacher Education

"Defining desirable competencies and qualities will not result in only one definition of a good teacher but, rather, agreement on a core of essential skills, knowledge, attitudes and behaviors, with the balance of competencies and qualities being dependent upon the particular context within which the teacher will teach" (Hall, 1987, p.6). To ensure that university students become competent inservice teachers who are comfortable with working in inclusive schools, it is important that teacher education programs are aware of the factors

that may influence a teacher's attitudes toward inclusion. Not only is it important for course content in teacher education programs to be relevant to the needs and concerns of the students, but it is also important that the support given to university students is not removed as soon as they complete their training. Hall posited that it was important to continue support into the first year of teaching "enhancing teacher education during this phase will have major long-term benefits for teachers, their students and the educational system" (Hall, 1987, p.13). By becoming involved in the support of new teachers, Hall concluded that the institutions that offered teacher education programs, would benefit as they would be privy to important information that could be used to "restructure their preservice programs so that future students will have the most current skills, competencies and understanding to successfully complete their induction phase" (Hall, 1987, p.15). With reference to this study, as the results indicate that graduate students attitudes are less positive about inclusion than undergraduate students, it can be inferred that comprehensive support in the first years of teaching could help teachers maintain more positive attitudes toward inclusion. It is also important to determine what factors, experienced after completing teacher training, might be a cause of the change of attitudes. If this could be determined, inservice training could be adapted to more adequately alleviate any concerns that may arise as a new teacher. Hall suggested that more time should be assigned to inservices, and that it should be understood that new teachers have different needs than experienced teachers, which should be taken into account

when providing inservices that should be “clearly designed for improvement, not just maintenance of the schools” (Hall, 1987, p.24).

Participants in this study who had expressed the most positive attitudes toward inclusion, tended to be undergraduate students who had friendships with individuals with disabilities. Both of these factors are difficult to control, as undergraduate students graduate and become teachers, and it would not be feasible to make sure that university students pursued friendships with individuals with disabilities. It is therefore important to focus more on how to maintain these positive attitudes once these individuals have become teachers, or instilling these attitudes in university students and inservice teachers who may express concerns about working in inclusive classes. One possible way to initiate friendships between university students and individuals with disabilities would be to require some type of voluntary work with individuals with disabilities, prior or during teacher education. Other suggestions would be to provide university students with more knowledge on different disabling conditions, and also different strategies for meeting the needs of all students. University students should be given more direct experiences with individuals with disabilities (preferably in an inclusive environment), and should be given more training on managing the behavior of students with emotional and behavioral disabilities (Avramidis et al, 2000). It is also important to be aware of when this information should be provided. Hall suggested that all content considered important by the institution or school district can be included in a teacher education program, but Fuller concluded that the “sequence within which that content is presented needs to be

based on the concerns of the teachers” (as cited in Hall, 1985, p.3), and that if content has to be included to meet state requirements, for example, but is not deemed relevant by the university students, it is important to be aware of how the information is presented, in order to make it more relevant and possibly more usable for the university students. Therefore if it were considered important that university students engage in some type of voluntary experience, the timing of the experience would be just as important as the experience itself.

Concerns

One of the main threats to validity in this study is that not all the students who participated in the study were currently enrolled in a Special Education degree, especially in the graduate sample. The questionnaires were distributed in special education classes, but some of the students in these classes were pursuing education degrees other than Special Education, and thus the results may not be an accurate representation of all university students in this field. If non special education students had been more effectively controlled for, there may have been more overall significant differences between groups, specifically undergraduate and graduate samples. Another potential confound is that it is not possible to account for and control all factors that may determine a person’s attitude toward inclusion, therefore history is a potential confound. It is also possible that the institution from which students received their undergraduate degree could affect the students attitude toward inclusion, one potential explanation for undergraduate students having a more positive attitude toward

inclusion could be that the material presented in undergraduate education courses at the University of Nevada, Las Vegas tends to be more pro inclusion than in other institutions that offer undergraduate special education degrees, thus making graduate students attitudes less positive toward inclusion. However, as not all graduate students in the department of Special Education pursued an undergraduate degree in Special Education, this is unlikely to be a major confound. If this research was duplicated it would be prudent to ensure that all participants were enrolled in the Special Education department, and not simply taking the class to fulfill a requirement for another education degree. It would also be interesting to ask graduate students what their undergraduate major was to determine if graduate students with an undergraduate degree in special education are more or less positive about inclusion than graduate students who majored in a subject other than special education for their undergraduate degree. Without this information it is unclear if it is experience working with individuals with disabilities that makes graduate students less positive about including students with disabilities in the regular education classroom, or if it is graduate level course content that is a more important factor.

In terms of developing a more "inclusion-friendly" curriculum, it would also be important to know which special education classes the participants had taken prior to completing the questionnaire, and whether they felt that these classes had aroused or resolved any concerns about inclusion, and also how relevant they felt these courses were. It would probably be easier to obtain this information by asking the participants to complete short answer questions on

these topics. There was evidence that the current questionnaire was too long, which also could have contributed to a lack of significant differences between groups, as participants may not have read the questions as thoroughly as was needed, in order to complete the questionnaire quickly. It is also unclear from the results if questions 36-53, which were specifically developed for this questionnaire, were actually asking what they were supposed to, as very few of the questions actually elicited significantly different answers from the groups. Although these questions were piloted, it would be wise to refine these questions further. It would also be a good idea to shorten the questionnaire before using it again. Another question that arose from notes written by the participants on the completed questionnaires is whether or not the participants truly grasped the concept of inclusion, or whether it was being confused with Least Restrictive Environment, or mainstreaming. Possibly having the participants read a statement about the requirements for full inclusion, or listen to a presentation about inclusion before answering the questionnaire would make the results more accurate. However, one problem with this would be the potential of the speaker to bias the opinions of the participants.

Potential for Future Research

There is great potential for future research in this area, not only to help teacher educators' answer concerns their students have about inclusion, but also to determine how, through coursework, volunteer work and other experiences teachers can be encouraged to develop more positive attitudes toward inclusion,

which in turn will increase the chance of an inclusion program being successful. It would be interesting to conduct a longitudinal study of university students attitudes toward inclusion, beginning when they first start taking education classes, and continuing until they had been working as a teacher for a few years to see if their attitudes change, and to attempt to determine what factors contribute to the change. It would also be interesting to do an international study of attitudes toward including students with disabilities in the regular education classroom, to determine if there are national attitudes toward inclusion, and what, if anything, can be done to make them more positive.

APPENDIX I

STAGES OF CONCERN ABOUT THE INNOVATION

- 6. REFOCUSING:** The focus is on exploration of more universal benefits from the innovation, including the possibility of major changes or replacement with a more powerful alternative. Individual has definite ideas about alternatives to the proposed or existing form of the innovation.
- 5. COLLABORATION:** The focus is on coordination and cooperation with others regarding the use of the innovation.
- 4. CONSEQUENCE:** Attention focuses on impact of the innovation on student in his/her immediate sphere of influence. The focus is on relevance of the innovation for students, evaluation of student outcomes, including performance and competencies, and changes needed to increase student outcomes.
- 3. MANAGEMENT:** Attention is focused on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, scheduling, and time demands are utmost.

2. **PERSONAL:** Individual is uncertain about the demands of the innovation, his/her inadequacy to meet those demands, and his/her role with the innovation. This includes analysis of his/her role in relation to the reward structure of the organization, decision making, and consideration of potential conflicts with existing structures or personal commitment. Financial or status implications of the program for self and colleagues may also be reflected.
1. **INFORMATIONAL:** A general awareness of the innovation and interest in learning more detail about it is indicated. The person seems to be unworried about himself/herself in relation to the innovation. She/he is interested in substantive aspects of the innovation in a selfless manner such as characteristics, effects, and requirements for use.
0. **AWARENESS:** Little concern about or involvement with the innovation is indicated.

Hall, 1985.

APPENDIX II

INFORMED CONSENT FORM

Pre-Teacher Attitudes Toward Including Students with Disabilities in the Regular Classroom

Informed Consent Form

Purpose: This study examines the attitudes of undergraduate and graduate special education majors toward inclusion. You will be asked to complete a questionnaire. The purpose of this study is to examine whether level of education affects attitudes toward inclusion.

Procedures: You will be asked to complete a 53-item questionnaire concerning your attitudes and beliefs about inclusion. After everyone has finished, the researcher will explain the expected results of this study. The entire session should take approximately 20 minutes.

Confidentiality: *All of the information collected will be kept strictly confidential.* The information will be scored and recorded by the researchers. All data collected will be stored in locked files at an undisclosed location at UNLV for at least three years after completion of the study.

Consent: *Your participation in this research is strictly voluntary.* You may ask any questions concerning the research before agreeing to participate, or during the study. You also may withdraw from the project at any time without penalty if you do not wish to complete the interview process. Your signature certifies that you have read and understood the information presented. If you have questions about the research you may contact Dr. Thoma, telephone (702) 895-1112, or Bridget Theakston, telephone (702) 233-6326. If you have any questions about your rights as a research participant that have not been addressed by the investigator, you may contact the UNLV Office for the Protection of Research Subjects, telephone (702) 895-2794.

Signature of Research Participant
Dr. Colleen Thoma, Ph.D.

Date
(702) 895-1112

APPENDIX III

ATTITUDES TOWARD INCLUSION SURVEY

Inclusion can be defined as the "full time placement of students with mild, moderate, or severe disabilities in their neighborhood schools, in age-appropriate regular education classes, with the necessary support services for both the child with disabilities and the classroom teacher (Hay, Courson & Cipolla, 1997).

Demographic Information:

Sex: () Male () Female

Teaching Experience: # of years in Regular Education _____
 # of years in Special Education _____
 # of years as a Cooperating Teacher _____

Degree(s): _____ Bachelor's
 _____ Master's
 _____ Doctorate
 _____ Other _____

Credential(s): _____ Regular Education
 _____ Special Education Generalist
 _____ Special Education _____ Other Specialization (Please
state) _____ Other _____

Which of the following reflect your experiences with individuals with disabilities?
(Check all that apply):

_____ family member with disability
_____ friendship with individual with a disability
_____ attended class or youth group with individuals with disabilities
_____ worked in camp or social setting with individuals with disabilities
_____ formal work experience/ tutoring, etc (describe) _____
_____ no experience

_____ other (Please State) _____

If you have experience with persons with disabilities, please state what type of disability.

To what extent have the following influenced your views of individuals with disabilities?

(1=extremely, 2=very much, 3=somewhat, 4=not at all):

- | | | | | |
|--------------------------------|---|---|---|---|
| a. undergraduate courses | 1 | 2 | 3 | 4 |
| b. graduate courses | 1 | 2 | 3 | 4 |
| c. cooperating teacher | 1 | 2 | 3 | 4 |
| d. inservice training | 1 | 2 | 3 | 4 |
| e. administrator attitudes | 1 | 2 | 3 | 4 |
| f. professional experience | 1 | 2 | 3 | 4 |
| g. personal experience | 1 | 2 | 3 | 4 |
| h. family attitudes/background | 1 | 2 | 3 | 4 |

Please answer these questions on a scale of 0 to 7, choosing the number that most closely represents your opinion.

0	1	2	3	4	5	6	7
Irrelevant	Not true			Somewhat true		Very true	
	of me now			of me now			

1. I am concerned about students' attitudes toward inclusion.

☐ ☐ ☐ ☐ ☐ ☐ ☐

1 2 3 4 5 6 7

2. I now know of some other approaches that might work better.

☐ ☐ ☐ ☐ ☐ ☐ ☐

1 2 3 4 5 6 7

3. I don't even know what inclusion is.

☐ ☐ ☐ ☐ ☐ ☐ ☐

1 2 3 4 5 6 7

4. I am concerned about not having enough time to organize myself each day.

☐ ☐ ☐ ☐ ☐ ☐ ☐

1 2 3 4 5 6 7

5. I would like to help other faculty in implementing inclusion.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
6. I have a very limited knowledge about inclusion.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
7. I would like to know the effect of reorganization on my professional status.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
8. I am concerned about conflict between my interests and my responsibilities.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
9. I am concerned about revising my use of inclusion.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
10. I would like to develop working relationships with both our faculty and outside faculty involved in an inclusion program.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
11. I am concerned about how inclusion affects students.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
12. I am not concerned about inclusion.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
13. I would like to know who will make the decisions in the new system.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
14. I would like to discuss the possibility of implementing inclusion.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7

15. I would like to know what resources are available if we decide to adopt an inclusion program.
- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
16. I am concerned about my inability to manage everything an inclusion program requires.
- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
17. I would like to know how my teaching or administration is supposed to change.
- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
18. I would like to familiarize other departments or persons with the progress of the inclusion program.
- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
19. I am concerned about evaluating my impact as a teacher, on students.
- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
20. I would like to revise the inclusion program's instructional approach.
- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
21. I am completely occupied with other things.
- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
22. I would like to modify the implementation of inclusion based on the experiences of our students.
- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
23. Although I don't know about inclusion, I am concerned about things in this area.
- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

24. I would like to excite my students about their part in inclusion.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
25. I am concerned about time spent working with nonacademic problems related to inclusion.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
26. I would like to what the inclusion program will require in the immediate future.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
27. I would like to coordinate my effort with others to maximize the effect of inclusion.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
28. I would like to have more information on time and energy commitments required for implementing inclusion.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
29. I would like to know what other faculty are doing in this area.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
30. At this time, I am not interested in learning about inclusion.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
31. I would like to determine how to supplement, enhance, or replace inclusion.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7
32. I would like to use feedback from students to change the program.
☐ ☐ ☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6 7

33. I would like to know how my role will change when I am involved in an inclusion program.
- ☐ ☐ ☐ ☐ ☐ ☐ ☐
- 1 2 3 4 5 6 7
34. Coordination of tasks and people is taking too much of my time.
- ☐ ☐ ☐ ☐ ☐ ☐ ☐
- 1 2 3 4 5 6 7
35. I would like to know how inclusion is better than what we have now.
- ☐ ☐ ☐ ☐ ☐ ☐ ☐
- 1 2 3 4 5 6 7
36. I think students with mild to moderate mental retardation should be included full-time in the regular education classroom.
- ☐ ☐ ☐ ☐ ☐ ☐ ☐
- 1 2 3 4 5 6 7
37. I think students with physical disabilities should be included full-time in the regular education classroom.
- ☐ ☐ ☐ ☐ ☐ ☐ ☐
- 1 2 3 4 5 6 7
38. The type of disability does not change the way I feel about including students with disabilities full-time in the regular education classroom.
- ☐ ☐ ☐ ☐ ☐ ☐ ☐
- 1 2 3 4 5 6 7
39. I think students with emotional and behavioral disorders should be included full-time in the regular education classroom.
- ☐ ☐ ☐ ☐ ☐ ☐ ☐
- 1 2 3 4 5 6 7
40. A student is less likely to succeed in an inclusive classroom if their disability is severe.
- ☐ ☐ ☐ ☐ ☐ ☐ ☐
- 1 2 3 4 5 6 7
41. I would only like to teach in an inclusive classroom if the students' disabilities do not inhibit their own learning or the learning of others.
- ☐ ☐ ☐ ☐ ☐ ☐ ☐
- 1 2 3 4 5 6 7

42. I think students with severe and profound mental retardation should be included full-time in the regular education classroom.

☐ ☐ ☐ ☐ ☐ ☐ ☐
 1 2 3 4 5 6 7

43. I believe that only students with disabilities that require little or no modifications should be included in a regular education classroom.

☐ ☐ ☐ ☐ ☐ ☐ ☐
 1 2 3 4 5 6 7

44. I support including students with disabilities.

☐ ☐ ☐ ☐ ☐ ☐ ☐
 1 2 3 4 5 6 7

45. I think students with learning disabilities should be included full-time in the regular education classroom.

☐ ☐ ☐ ☐ ☐ ☐ ☐
 1 2 3 4 5 6 7

46. I believe inclusion is beneficial for students with disabilities.

☐ ☐ ☐ ☐ ☐ ☐ ☐
 1 2 3 4 5 6 7

47. I believe inclusion is beneficial for students without disabilities

☐ ☐ ☐ ☐ ☐ ☐ ☐
 1 2 3 4 5 6 7

48. I believe that including students with disabilities in the regular education classroom would disrupt planned instructional activities.

☐ ☐ ☐ ☐ ☐ ☐ ☐
 1 2 3 4 5 6 7

49. I believe that being included will improve the academic skills of students with disabilities.

☐ ☐ ☐ ☐ ☐ ☐ ☐
 1 2 3 4 5 6 7

50. Students with out disabilities in an inclusive classroom will suffer as a result of students with disabilities being included full-time in the regular classroom.

☐ ☐ ☐ ☐ ☐ ☐ ☐
 1 2 3 4 5 6 7

51. I believe inclusion can improve the social skills and behaviors of students with disabilities.

☐ ☐ ☐ ☐ ☐ ☐ ☐
 1 2 3 4 5 6 7

52. I feel that self-contained classes are more beneficial to students with severe disabilities, than inclusion programs.

☐ ☐ ☐ ☐ ☐ ☐ ☐
 1 2 3 4 5 6 7

53. I feel that resource room programs are more beneficial to students with mild disabilities than inclusion programs.

☐ ☐ ☐ ☐ ☐ ☐ ☐
 1 2 3 4 5 6 7

Adapted from: Copyright 1974. Procedures for Adopting Educational Innovations/CBAM Project, R&D Center for Teacher Education, University of Texas at Austin.

REFERENCES

- Avramidis, E., Bayliss, P., & Burden, R. (2000). Student teacher's attitudes towards the inclusion of children with special education needs in the ordinary school. *Teaching and Teacher Education*, 16, 277-293.
- Cook, B. G., Semmel, M. I., & Gerber, M. M. (1999). Attitudes of principals and special education teachers toward the inclusion of students with mild disabilities: Critical differences of opinion. *Remedial and Special Education*, 20(4), 199-207.
- Daniel, L. G., & King, D. A. (1997). Impact of inclusion education on academic achievement, student behavior and self-esteem, and parental attitudes. *Journal Of Educational Research*, 91(2), 67-79.
- DeBettencourt, L. U. (1999). General Educators' attitudes toward students with mild disabilities and their use of instructional strategies. *Remedial and Special Education*, 20(1), 27-35.
- Federico, M. A., Herrold, W. G., Jr., & Venn, J. (1999). Helpful tips for successful inclusion. *Teaching Exceptional Children*, 32(1), 76-82.
- Fox, N. E., & Ysseldyke, J. E. (1997). Implementing inclusion at the middle school level: Lessons from a negative example. *Exceptional Children*, 64(1), 81-98.
- Hall, G. E. (1985, March). A stages of concern approach to teacher preparation. *Annual Meeting of the American Educational Research Association, Chicago, IL*, 69, 1-27.
- Hall, G. E. (1987). *Beyond the looking glass: Recommendations & critical warnings for teacher education practitioners*. Austin, TX: A synthesis of the Beyond the Looking Glass Conference. (ERIC Document Reproduction Service No. ED270451)
- Hamill, L. B., & Dever, R. B. (1998). Preparing for inclusion: Secondary teachers describe their professional experiences. *American Secondary Education*, 27(1), 18-24.

- Hay, G. H., Courson, F. H., & Cipolla, J. M. (1997). Strategies for success in inclusive classrooms. *Reading and Writing Quarterly*, 13, 97-100.
- Heward, W. L. (2000). *Exceptional children: An introduction to special education* (6th ed). Upper Saddle River, New Jersey: Prentice-Hall.
- Janney, R. E., & Snell, M. E. (1997). How teachers include students with moderate and severe disabilities in elementary classes: The means and meaning of inclusion. *JASH*, 22(3), 159-169.
- Petch-Hogan, B., & Haggard, D. (1999). The inclusion debate continues. *Kappa Delta Pi Record*, 35(3), 128-131.
- Salend, S. J., & Garrick Duhaney, L. M. (1999). The impact of inclusion on students with and without disabilities and their educators. *Remedial and Special Education*, 20(2), 114-126.
- Smith, M. K., & Smith, K. E. (2000). "I believe in inclusion, but...": Regular education early childhood teachers' perceptions of successful inclusion. *Journal of Research in Childhood Education*, 14(2), 161-179.
- Tapasak, R. C., & Walther-Thomas, C. S. (1999). Evaluation of a first-year inclusion program. *Remedial and Special Education*, 20(4), 216-225.

Permission to Use Copyrighted Material
University of Nevada, Las Vegas

I, Gene E Hall _____ holder
of copyrighted material entitled: A Stages of Concern Approach to Teacher
Preparation _____

authored by: Gene E Hall _____

and originally published in _____

hereby give permission for the author to use the above material in total or in part
for inclusion in a master's thesis at the University of Nevada, Las Vegas.

I also agree that the author may execute the standard contract with University
Microfilms, Inc. for microfilm reproduction of the completed thesis, including the
materials to which I hold copyright.

Gene E Hall 26 April 02
Signature Date

Gene E. Hall Dean
Name (Typed) Title

Representing

VITA

**Graduate College
University of Nevada, Las Vegas**

Bridget Theakston

Local Address:

**7200 Pirates Cove #1063
Las Vegas, NV 89145**

Home Address:

**9 Nargate Street
Littlebourne
Kent CT3-1UH
England**

Degrees:

**Bachelor of Art, Psychology, 1998
University of Nevada, Las Vegas**

Thesis Title: University Student Attitudes Toward the Inclusion of Students with Disabilities.

Thesis Examination Committee:

**Chairperson, Dr. Colleen Thoma, Ph. D.
Committee Member, Dr. Sherri Strawser, Ph. D.
Committee Member, Dr. Rebecca Nathanson, Ph. D.
Graduate Faculty Representative, Dr. Greg Schraw, Ph. D.**