

University of Central Florida

STARS

Electronic Theses and Dissertations

2005

Preparing Teachers To Partner With Families

Mary Senne

University of Central Florida



Part of the [Special Education and Teaching Commons](#)

Find similar works at: <https://stars.library.ucf.edu/etd>

University of Central Florida Libraries <http://library.ucf.edu>

This Doctoral Dissertation (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

STARS Citation

Senne, Mary, "Preparing Teachers To Partner With Families" (2005). *Electronic Theses and Dissertations*. 391.

<https://stars.library.ucf.edu/etd/391>

PREPARING TEACHERS TO PARTNER WITH FAMILIES

by

MARY DONLIN SENNE
B.S. University of Florida, 1980
M.S. University of Central Florida, 1983

A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
in the Department of Child, Family and Community Sciences
in the College of Education
at the University of Central Florida, Orlando, Florida
Orlando, Florida

Spring Term
2005

Major Professors: Suzanne Martin and Wilfred Wienke

© 2005 Mary Donlin Senne

ABSTRACT

Decades of research have demonstrated that family involvement significantly contributes to improved student outcomes relating to learning and overall school success. Teachers must be prepared to promote effective family involvement in the education of all children including those students with disabilities. Many factors can be attributed to successful outcomes for a student with a disability both in the school and the broader community. Families of children with disabilities can be one of these significant factors, yet teachers and those who prepare teachers are often ill prepared and lack essential skills and basic knowledge about the process of partnering with families of children with disabilities.

The present study attempted to build on what we already know about family involvement and teacher preparation. The research was situated within an urban metropolitan university college of education. This study sought to determine the effectiveness of a content related module on the knowledge and disposition of pre-service teachers. The module contained content centered on the areas of family involvement, partnerships, and assumptions about families. The study included two dependant variables: level of knowledge and disposition. The independent variable was the experimental treatment, an online instructional module. The module was conceptualized as an instructional tool to expose participants, students preparing to be teachers, to the

role attitudes and beliefs play in developing relationships with others; understanding family perspectives; and examining one's own attitudes and beliefs about families of children with disabilities. The control variables included age, gender and GPA. The research question was: does increasing knowledge regarding family involvement of children with disabilities have an impact on pre service teachers' disposition? The sample included 93 pre service general education students attending the same undergraduate college of education. Subjects were enrolled in an introductory special education course. Sample comprised of all females between the ages of 20 and 50. In order to test the outcome of the treatment intervention, the study utilized a quasi-experimental design with an experimental group and comparison group, and pretest and posttest means. Randomization of the experimental group and comparison group was not possible. It was hypothesized that, while controlling for age, gender and pretest scores, those students who participated in the group intervention by completing the instructional online module would have a change in disposition and increase in knowledge scores as compared to those in the comparison group. It was further hypothesized, while controlling for age, gender and pre test scores, student written responses to two questions based on a case study (scored using rubric) would correlate positively with their disposition and knowledge scores as measured by self report following completion of the intervention. Findings indicate that students' level of knowledge increased significantly over time. The measure of disposition did not change significantly over time.

This dissertation is dedicated to my husband, Jerry and our children, Camille, Patrick and Grant. It is through their love, support and patience that I am able to fulfill my dream of completing a doctoral degree. I dedicate this work to my parents, Don and Shirley, who taught me the value of education and the importance of giving back to others and my brother Tom, for showing me the meaning of perseverance. Lastly, I dedicate this dissertation to my sisters, Katie, Susan and Lisa. They continuously lift me up through my most challenging endeavors.

ACKNOWLEDGMENTS

First, I would like to thank all those families of children with disabilities that showed me the need for a greater understanding of why parents and teachers must partner. To Dr. Suzanne Martin, for the past three years you have been my advisor and mentor, a model of leadership. Thank you for the insight, knowledge and guidance you have shared with me and the opportunities that came about because of you. To Dr. William Wienke, thank you for sharing your wisdom and direction. You have dedicated your life to teaching others. I will continue to look to you as the model of a true educator. To Dr. Chad Nye, thank you for supporting me and encouraging me to complete my degree. Thank you for your honesty. Thanks for being genuine. To Dr. Jonathan McIntire, I could not have asked for a better example of “partnership”. Thank you for your continued commitment to families, to teachers and students, and most especially to my son, Patrick. To Geraldine, we’ve managed to make it through so many challenges these past three years. Thank you for your friendship, your beautiful spirit and your amazing ability to help me put life back into focus. And finally, I must thank the two people who really brought me to this point, Dr. Susan Donovan and Dr. Pete McAlindon. Sue, thank you for being such a steadfast friend and confidante. You continue to be a source of strength and peace. To Pete, for being an authentic example of a true steward of one’s gifts. Thank you for teaching me what it means to say “yes” to God’s call.

TABLE OF CONTENTS

LIST OF FIGURES	xi
LIST OF TABLES	xii
LIST OF ACRONYMS	xiii
CHAPTER ONE: INTRODUCTION.....	1
Purpose of the Study	12
Rationale	13
Research Questions	13
Statement of Hypotheses.....	14
Definition of Terms.....	15
Assumptions of the Study	16
Limitations of the Study.....	17
Summary	18
CHAPTER TWO: LITERATURE REVIEW	20
Historical Background of Family Involvement and the Law.....	22
Barriers to Partnership	32
Teacher Standards and Family Involvement.....	38
Teacher Preparation	41
Family/Teacher Partnerships	43

Chapter Summary	47
CHAPTER THREE: METHODOLOGY	48
Research Hypotheses	49
Research Variables.....	51
Dependant Variables.....	51
Independent Variables	52
Design	52
Description of the Setting	53
Description of the Participants.....	53
Demographic Characteristics of the Sample.....	54
Research Instrumentation.....	55
Pilot Test of Teacher Disposition Survey (TDS).....	55
Knowledge- Base Assessment Questionnaire (KAQ)	59
Rubric Scoring Development.....	60
Development of Knowledge Rubric and Disposition Rubric	63
Rubric Scoring Procedure	64
Data Collection	64
Data Analysis Procedures	66
CHAPTER FOUR: ANALYSIS OF THE DATA.....	69
Overview of Data Analysis.....	69

General Characteristics of the Sample	70
Analysis of Research Question 1&2	71
Analysis of scores within and between groups on Knowledge Questionnaire	72
Within Group Analysis	72
Between Group Analysis	74
Analysis of scores within and between groups Teacher Disposition Survey	75
Within Group Analysis	76
Between Group Analysis	77
Analysis of Research Question 3&4	78
Analysis of Knowledge Rubric Performance	81
Analysis of Disposition Rubric Performance	83
Analysis of Research Question 5	86
Responses to Knowledge Questionnaire and Disposition Survey	87
Analysis of Item Responses on Knowledge Base Questionnaire	88
Analysis of Variance for Knowledge Pre Post	92
Analysis of Gain Scores on the Disposition Survey	93
Analysis of Test Responses Pre & Post per Question.....	95
Summary of Data Analysis	97
CHAPTER FIVE: DISCUSSION AND RECOMMENDATIONS	101
Family Involvement Research	102

Student Outcomes	107
Summary of Research Study.....	109
Implications for Further Investigation	111
Future Research	117
APPENDIX A: INTERNAL REVIEW BOARD	120
APPENDIX B TEACHER DISPOSITION SURVEY	124
APPENDIX C KNOWLEDGE-BASE ASSESMENT QUESTIONNAIRE	126
APPENDIX D KNOWLEDGE RUBRIC	128
APPENDIX E DISPOSITION RUBRIC.....	130
APPENDIX F CASE STUDY QUESTIONS.....	132
APPENDIX G CASE STUDY	134
LIST OF REFERENCES.....	136

LIST OF FIGURES

Figure 1: Rubric Scores for the Knowledge Experimental and Control Groups	82
Figure 2: Disposition Scores on Rubric for Control and Experimental.....	84
Figure 3: Knowledge Questionnaire, Responses Correct, Control Group, Pre test.....	89
Figure 4: Knowledge Questionnaire, Responses Correct, Control Group, Post test	90
Figure 5: Knowledge Questionnaire Responses Correct, Experimental Group, Pretest...	91
Figure 6: Knowledge Questionnaire Responses Correct, Experimental Group, Post test	92
Figure 7: Gain Scores on the Disposition Survey	94
Figure 8: Improvement of Scores on the Disposition Survey.....	96

LIST OF TABLES

Table 1 Item Factor loading (varimax rotated) for the Teacher Disposition Survey	59
Table 2 Characteristics of Sample	70
Table 3 Knowledge Questionnaire Pre/Post Means and Standard Deviations	72
Table 4 t-test For Knowledge for Control Group (pre and posttest).....	73
Table 5 t-test For Knowledge for Experimental Group (pre and posttest)	74
Table 6 t-test For Knowledge Control and Experimental Posttest	75
Table 7 Disposition Survey Pre/Post Means and Standard Deviations	76
Table 8 t-test For Disposition Experimental Group (pre and post)	77
Table 9 t-test For Disposition Control Group Posttest, Experimental Group Posttest	78
Table 10 Analysis of Variance for Experimental and Control Group Knowledge Performance	83
Table 11 Disposition Performance Analysis of Variance.....	85
Table 12 Correlation Matrix for Experimental Group.....	87
Table 13 Summary of Analysis of Variance for Knowledge.....	93
Table 14 Summary of Analysis of Variance for Disposition.....	97

LIST OF ACRONYMS

ADA	Americans with Disabilities Act
CEC	Council for Exceptional Children
CPRC	Community Parent Resource Centers
GPA	Grade Point Average
IDEA	Individuals with Disabilities Education Act
IEP	Individual Education Plan
IFSP	Individual Family Support Plan
INTASC	Interstate New Teacher Assessment and Support Consortium
LD	Learning Disabilities
LRE	Least Restrictive Environment
NCLB	No Child Left Behind Act of 2001
NCATE	National Council for Accreditation of Teacher Education
NBPTS	National Board for Professional Teaching Standards
NPTA	National Parent Teacher Association
PTIC	Parent Training and Information Centers
SIG	State Improvement Grants
USDOE	United States Department of Education

CHAPTER ONE: INTRODUCTION

The reauthorization of the Individuals with Disabilities Education Act (IDEA) in 1977 significantly increased the role of parents in the education of students with disabilities (Sileo, Sileo, & Prater, 1998). The IDEA strengthens parent involvement in the education of their child and stresses the many levels needed for parental involvement in the educational process. For example, families must be notified and involved in decisions about initial evaluation, change in educational placement, and individualized education programs. Family's participation in the educational arena is viewed as crucial in order to develop appropriate educational programs for children, as well as achieve full implementation of the law.

Traditionally, family involvement in schools has been characterized by parents volunteering in the classroom, helping with homework, and participating in school fund raising activities - what Christenson (2001) calls the "big three" forms of involvement. Involvement levels differ and are influenced by numerous factors (Hoover-Dempsey & Sandler, 1997, 2002). These factors include how well and how much schools inform and involve families. The attitudes and beliefs of teachers about parents affect whether and how much families are engaged in partnerships with professionals.

One model of family/professional partnership is Joyce Epstein's Framework for Developing Comprehensive Partnership Programs (Epstein, 2001). This model examines

partnerships within the context of families, schools, and the community in which they exist, that is, the larger system that surrounds a child. Although this work has centered on partnerships in regular education, the principles and concepts also apply to special education. Epstein talks about 'spheres of influence' (p. 404) and the way these spheres (families, schools and communities) directly affect the learning and development of students. Epstein categorizes six types of family involvement: Parenting, Communicating, and Volunteering, Learning at home, Decision-making, and Collaborating within the community. The term “family involvement” has many meanings. What it means in each of the types of involvement may differ depending on one's perspective.

A second model of family involvement in schools is described by Berger (2000). The model outlines seven levels of parent involvement. These levels contain the more traditional approach to family involvement (fund raising, volunteering in the classroom, assisting with homework) as well as the expanded concept of families as partners with professionals. These expanded roles include the family as: (1) active partners and educational leaders at home and school (2) decision-makers on school boards and advisory councils (3) community and legislative advocates who help schools achieve effective educational offerings and (4) and active participants in educational processes such as Individual Family Support Plan (IFSP)/Individual Education Plan (IEP) development and assessment decisions.

“Despite legislative intent, parent involvement may not always reach desired levels, and at times educators and parents may perceive the interests of the child differently, leading to conflict” (21st Annual Report to Congress, 1999, p. I-2). In 2001, the No Child Left Behind Act (NCLB), an educational reform initiative intended to hold schools accountable for the learning of all students, was signed into law. The Act sets out a basic framework at the state, district and school level for ensuring that all students (including disadvantaged students, students with limited English proficiency, and students with disabilities) become proficient in the skills and knowledge identified in states’ standards for what all students should learn. Subsequently the President’s Commission on Excellence in Special Education, *A New Era: Revitalizing Special Education for Children and Families* (2002) underscored the need to found a new era that embraces increased academic achievement and improved educational outcomes for every student with a disability. NCLB, coupled with those provisions of the IDEA that address parent involvement, creates a timely opportunity to foster collaboration between parents and professionals that will lead to positive outcomes for children and youth with disabilities

Improving outcomes for students by actively involving families as partners with teachers requires changes within the educational system itself. How can the current educational system universally embrace the notion of families as partners within the system at all levels? Systemic change is a complex and difficult task. Providing pre-

service teachers with the skills and desire to partner with families of students with disabilities is one way to bring about that change. Presently, teacher preparation programs have minimal content with regard to preparing teachers to work with families of children with disabilities. A study conducted by Kochhar-Bryant (2003) analyzed state licensure standards and teacher accountability laws in several states. She found that: “Many states admitted they had no standards for teacher performance, and there was often little alignment between teacher standards and pre-service teacher preparation program requirements” (p. 3.) She adds that, “For students with disabilities, supportive environments in schools depend on positive relationships and communication between teachers and families and the quality of these relationships depend on the preparation of the teachers. Yet too few teachers are prepared to work effectively with families when they graduate and report they struggle for years to improve these relationships” (p. 4) Learning effective techniques to engage families in meaningful school activities will not only result in positive outcomes for students, but also result in positive relationships for their families and teachers working together in partnership.

There is a critical gap between family expertise regarding the needs of their children with disabilities and how teacher preparation programs use this expertise to prepare teachers. It is imperative that, in order to close this gap, educators, and those who prepare educators, assess family perspectives to determine the family’s perceptions on

levels of involvement, communication, and skills needed by teachers when working with children with special needs.

Boe, Cook Paulsen, Barkanic, & Leow, 1999 report that data from the 1993-1994 National Center for Education Statistics Schools and Staffing Survey (SASS) revealed that approximately 40% of beginning teachers were recent graduates of teacher education programs. Therefore, teacher education programs are a major source of beginning special education teachers. During the 1990s, the number of teachers produced by teacher education programs increased 21%, from 16,697 graduates in 1993 to 20,274 graduates in 1998 (National Center for Education Statistics, 2001). Evidence continues to indicate that these numbers, although increasing, are too few to fill the positions that continue to stay vacant waiting for a fully certified teacher, (Boe, Cook, et al., 1996; Boe, Cook, et al., 1999; United States Department of Education, 1998). Even with the growth in numbers of new teachers, the shortage of fully certified teachers in special education remained steady at 9% to 10% throughout the 1990s, (USDOE, 1998).

There is surplus of elementary education teachers in America, (American Association for Employment in Education, 2000). Boe, Cook, et al., (1999) looked at data from a national study of the surplus and shortage of special education and general education teachers prepared by teacher preparation programs. They found that for every general education elementary school teaching position that was available for entering teachers in 1993-1994, 1.68 teachers graduated from preparation programs. In

comparison, for every entering-teacher position available in special education, only .86 teachers were prepared. These data suggest a surplus of elementary teachers in some parts of the United States and a shortage of special education teachers in all parts of the United States. McLeskey, Tyler and Flippin (2004) reported that the limited number of graduates of teacher preparation programs in special education programs in the United States remains a significant, contributing factor to the shortage of fully certified teachers in special education. One conclusion to be drawn from these data is that more and more general educators will be responsible for the day to day instruction of students with disabilities. As the students with disabilities are provided their instruction in the general education setting, the need for qualified teachers to work with these students and their families will increase. The demand for knowledgeable, skilled teachers to instruct disabled and non-disabled students in the classroom continues to grow. Upon graduation from teacher preparation programs, teachers must be ready to face the complex and diverse nature of the students he/she will encounter in those first few years of teaching. It is no longer just the responsibility of the special education personnel to meet the academic needs of children with disabilities. More and more general education teachers will be challenged within the inclusive classroom. The responsibility of successful student outcomes rests with school personnel, administrators, parents, teachers, and those that prepare teachers. The knowledge, skills and disposition necessary to meet the needs of students with disabilities must include an understanding of family involvement.

Teachers must be prepared to promote effective family involvement in the education of all children including those students with disabilities. Many factors can be attributed to successful outcomes for a student with a disability both in the school and the broader community. Families of children with disabilities can be one of these significant factors, yet teachers and those who prepare teachers are often ill prepared and lack essential skills and basic knowledge about the process of partnering with families of children with disabilities. Further, these same teachers may be unaware of their own disposition in regards to children with disabilities and their families.

Another important consideration is the role attitudes and belief play in promoting family participation. If family participation is to be encouraged and promoted, then teachers must ensure that families are not excluded or alienated as a result of professional attitudes, biases or lack of understanding about differences. Teachers must learn about the attitudes and perspectives of the students and families with whom they work in order to assure positive communication and interactions. Teachers need to reflect on their own beliefs about cultures that are different from others.

The landscape of elementary education continues to change in response to federal mandates including the IDEA, and the NCLB. More students with disabilities are being included in the general education classroom. This continuous shift to inclusion of students with disabilities into general education classrooms demands more knowledge and skills on the part of both the general education teacher and the special education

teacher. It is important for all teachers to be aware and understand cultural differences between the students they are teaching. Different cultures value different attributes in individuals and in the culture. These attributes or value orientations usually exist along a continuum, from individualism to collectivism (Friend and Cook, 2003). Individualistic cultures place emphasis on individual goals, achievements and fulfillment. Collectivistic cultures value interdependence and the good of the group. Differences occur in many arenas of everyday life - communication, social interactions, family life style, and child rearing techniques. While the United States is viewed as an individualistic culture, most of the world's cultures and most immigrant groups in America are more collectivistic. Other collectivistic groups in America are African American, Native American, and Alaskan Native cultures. Creative ways of supporting involvement must be developed between families and professionals for all cultures (Berger, 2000; Jordan, 2001). Some of these supports include families working with their children at home on material that is mutually agreed upon between families and teachers; communication via internet or notebooks to assist family/teacher collaboration; after-hours meetings between families and teachers or phone calls to families during work hours at convenient times.

These beliefs and values may differ from those held by families of other cultures and nationalities and this has important implications for engaging families, as well as assessment and service delivery. Kalyanpur and Harry (1999) state "It is imperative that professionals recognize that much of special education policy and practice emerges from

the prevailing values and ideals of the dominant mainstream - values that may not always be held by minority cultures" (p.118). It is equally as important that professionals be able to effectively communicate the principles and values embedded in the IDEA and how the legislation promotes the participation of families

Professionals need to examine their own perspectives and attitudes about families and their participation with teachers in order to work effectively with them. Families should be valued for the unique knowledge they have about their children. They are the authentic experts about their child's strengths, talents, needs, learning styles and potential. Teachers have a unique role in building positive working relationships with the families of the children with whom they work. Valuing the role of the families, engaging in positive interactions, and helping families realize the importance of their role is crucial to building the partnerships with families that will have positive impacts on their children. As the professional in these relationships, the teacher should take the lead in the process of partnership building.

Kochhar-Bryant (2002), in her study of national and state standards for preparing teachers for partnerships with families noted the importance of "dispositions" (attitudes and beliefs) that facilitate or hinder collaborative relationships. "Attitudes, beliefs and ethics greatly influence and shape teachers' relationship with families and what is communicated to parents. These competencies are often crucial to establishing and improving family relationships and they drive collaborative processes. The teacher's role

in parent collaboration is central (p.27). Christenson (2001) also states "... the responsibility for creating partnerships (between schools and families) lies with educators"(p.12). But "the responsibility for sustaining relationships is shared between parents and educators and beliefs have been identified as critical for creating a partnership" (p. 12).

Researchers and policy analysts studying family involvement have concluded that it may be time to challenge and change some basic assumptions about families. Smith-Davis (2002) reports family structures have changed markedly over the past 30 years. Many women are delaying marriage and families, while greater numbers of adolescents become parents. About 60% of married women are in the workforce. As of 1999, 19% of children under 18 were in poverty, and 27% of children were in families headed by a single parent, usually the mother, and many fathers are living at a distance from their families. The importance of the extended family is often overlooked. Parents may ask other family members to represent them in educational planning or caring for their children with disabilities. Many grandparents are raising their grandchildren. Brothers and sisters are very significant in the lives of children with disabilities.

Parents have knowledge and understandings about their children that can add a new dimension to educators' perspectives. When families enter the educational and service systems, however, their experience can be likened to arriving in a foreign country without knowing the language and customs. They have to develop new relationships in

new settings each time their children move forward to a new level. Families, often with a great sense of urgency, try to strike a balance between hope for the best that their children can achieve and acceptance of the realities and limitations that they present. They are never completely certain whether or not their children are reaching full potential. At the same time, teacher educators face requirements of the system such as curriculum content, promotion policies and standardized assessments that families experience less directly. Although parents and teachers may often be on opposite sides of the table, trusting relationships can be developed. The challenge is to develop mutual frames of reference and common goals between families, teachers and schools, through building effective parent-educator teams in which family members experience authentic participation and can influence their children's education (Smith Davis, 2002, pp. 3-4).

The student with a disability comes to the classroom with a unique set of experiences. The family of the student with a disability also brings a unique and valuable set of skills and experiences. Teachers must be prepared to partner with these families in order to affect positive outcomes for the learning and overall success of the student. In order to partner effectively, teachers must possess the knowledge and skills unique to students with disabilities and be aware of their own dispositions regarding students with disabilities and their families.

The infusion of partnering can happen on many levels. Content and course work adjusted to include partnering, and use of curriculum-based modules can be infused into

existing course work. On-line modules can be incorporated into web based classes. Increasing the awareness of general and special education faculty must occur in order to enhance the likelihood of sustained adjustments. Partnerships between the schools and the colleges of education must be nurtured and include parents of children with disabilities. The administrators and principals are a key factor in teachers being supported in their relationships with families. Ongoing education must be made available to these groups. The faculty from education schools can bridge the need for training and support of these personnel. These same school personnel can and should be invited into the colleges of education to partner, share and teach. Collaborative relationships can be modeled for the soon to be teacher when all parties, including the families, are invited, respected, and supported at the table.

Purpose of the Study

Family involvement in teacher preparation is an emerging personnel preparation model in higher education. Research has shown that when families are engaged in the education process, student outcomes are more positive. The role of the teacher is critical in involving families of children with disabilities into the process of learning as well as the policies and procedures of the school system. The skills and knowledge necessary to partner with families must occur at the pre-service level. Emerging teachers need to have content related to family involvement during their training. The purpose of this study is to determine what dispositions pre-service teachers have toward families of children with

disabilities, to determine if these dispositions can be impacted with new knowledge regarding families, to determine what knowledge pre-service teachers have toward families of children with disabilities, and determine if this knowledge can be enhanced.

Rationale

The rationale of the proposed study was to investigate the knowledge and disposition of pre service elementary education students during their final year of course work in teacher preparation. The researcher was interested in measuring the level of knowledge and disposition of pre-service elementary education students with regard to family involvement in school systems with families of children with disabilities. The researcher attempted to affect the knowledge base and general disposition of the sample population by exposing the participants to a content-based online curriculum module centered on teacher preparation and family involvement.

Research Questions

The present study was designed to measure the effect of a curriculum-based on line module on students' knowledge and disposition. Specifically, this study sought to address the following questions:

Is there a significant change in participant's knowledge, as measured by a ten item questionnaire following participation in an intervention designed to increase student awareness of the importance of partnering with the families of students with disabilities?

Is there significant change in participant's disposition, as measured by a pre/post test

survey following participation in an intervention designed to increase student awareness of the importance of partnering with the families of students with disabilities?

Is there significant change in participant's knowledge, as measured by a rubric scoring device in relationship to responses on written activities within the module following participation in an intervention designed to increase student awareness of the importance of partnering with the families of students with disabilities?

Is there significant change in participant's disposition, as measured by a rubric scoring device in relationship to responses on written activities within the module following participation in an intervention designed to increase student awareness of the importance of partnering with the families of students with disabilities?

What is the relationship between participant's knowledge, disposition, age and grade point average (GPA)?

Statement of Hypotheses

There are no statistically significant mean differences in knowledge scale scores generated between students who complete the module and those students who do not complete the module as measured by a 10 item pre/post questionnaire.

There are no statistically significant mean differences in disposition scale scores generated between students who complete the module and those students who do not complete the module as measured by a pre/post survey.

There are no statistically significant mean differences in knowledge scale scores generated between students who complete the module and those students who do not complete the module as measured by narrative responses on written activities within the module.

There are no statistically significant mean differences in disposition scale scores generated between students who complete the module and those students who do not complete the module as measured by narrative responses on written activities within the module.

Definition of Terms

Disposition: The values, commitments, and professional ethics that influence behaviors toward students, families, colleagues, and communities and affect students learning, motivation, and development as well as the educator's own professional growth.

Dispositions are guided by beliefs and attitudes related to values such as caring, fairness, honesty, responsibility, and social justice (NCATE, 2002).

Knowledge: Knowledge is defined as acquaintance with facts, truths, or principles; general erudition, familiarity or conversance as by study or experience, the fact or state of knowing, clear and mental apprehension, awareness, as of a fact or circumstances, something that is or may be known; information, the body of truths or facts accumulated in the course of time, the sum of what is known (NCATE, 2002).

Family: Family is defined in the broadest terms. It includes traditional families with a father, mother and children; blended families; single parent families; extended families (grandparents, aunts and uncles, cousins, etc.); families with the grandparent in a parental role; same-sex parent families; and families of adopted and foster children. This definition includes, blood relatives as well as caregivers who may or may not be legal guardians' (NCATE, 2002).

Pre-service teacher: Pre-service teacher is defined as undergraduate students enrolled in a College of Education. The student is majoring in elementary education. The student is working toward a certification and degree in education. The student may or may not have previous experience teaching (NCATE).

Assumptions of the Study

1. The students enrolled in the introductory exceptional education course are

representative of typical students in colleges of education.

2. The students enrolled in the introductory exceptional education courses are adequately skilled in the use of computers and on-line modules.
3. The instrument used to measure student's disposition regarding the notion of family involvement is valid.
4. The difference between the two scores obtained for each subject on the disposition measure should be normally distributed.
5. The difference between the two scores obtained for each subject on the knowledge measure should be normally distributed.

Limitations of the Study

1. The study was confined to one College of Education student population at a metropolitan urban university.
2. The study was confined to six classes of introductory to exceptional education.
3. The participants were limited to elementary education majors.
4. The study was limited to the first quarter of the 2004-2005 school years.

The instrument used to measure student dispositions regarding family involvement in the education of children with disabilities was developed and tested using a limited sample of undergraduate students from higher education institutions.

The instrument used to measure knowledge regarding family involvement in the

education of children with disabilities was not tested prior to use in this study.

The sample size for this study was limited to students enrolled in an undergraduate introductory exceptional education course, "Teaching Exceptional Children". The possibility of instructor bias exists and therefore may affect responses by students to the four questionnaires and/or written responses following completion the on line module.

Summary

Chapter one contains the introduction, purpose of the study, the rationale for conducting the research, and the limitations and assumptions surrounding the study. Family involvement significantly contributes to improved student outcomes relating to learning and overall school success. Teachers must be prepared to promote effective family involvement in the education of all children including those students with disabilities. Many factors can be attributed to successful outcomes for a student with a disability both in the school and the broader community. Families of children with disabilities can be one of these significant factors, yet teachers and those who prepare teachers are often not well prepared and lack essential skills and basic knowledge about the process of partnering with families of children with disabilities.

This study attempts to build on what we already know about family involvement and teacher preparation. The research study situates within an urban metropolitan university College of Education setting. This study investigates the effectiveness of a content related curriculum module on the knowledge and disposition of undergraduate

pre-service elementary education teachers. It will evaluate the level of knowledge and disposition within two groups to determine significant change in scores following a treatment intervention. An assessment of written responses to content related questions will be done using a three point rubric to evaluate the levels of knowledge and disposition. Chapter 2 will present information on previous research pertinent to this study.

CHAPTER TWO: LITERATURE REVIEW

No Child Left Behind (NCLB) Act of 2001 has helped to focus education reform discussions in the United States on helping all students succeed. Still, many schools, administrators, principals, teachers and parents struggle with a variety of problems that make achieving this goal difficult at best. These problems include, but are not limited to, engaging students in learning; involving parents in their children's education; providing qualified teachers in content area, accountability; and standardized-based unbiased testing. Increasingly, there is a need to address issues outside the traditional purview of the school system such as helping students and their families with health, social, housing, and other needs, as well as meeting the specialized needs of immigrant students and their families (Blank & Shah, 2004). A recent poll highlighted in Phi Delta Kappa (Rose & Gallup, 2003) found that Americans in general are concerned about these issues. Ninety-four percent or more of the public saw factors such as home life and upbringing, the level of parental involvement, student interest or the lack thereof, and community environment as contributing to the achievement gap that NCLB seeks to remedy.

Decades of research have demonstrated that family involvement significantly contributes to improved student outcomes relating to learning and overall school success. Teachers must be prepared to promote effective family involvement in the education of all children including those students with disabilities. Many factors can be attributed to

successful outcomes for a student with a disability both in the school and the broader community. The family of a child with a disability can be one of these significant factors, yet teachers and those who prepare teachers are often ill prepared and lack essential skills and basic knowledge about the process of partnering with families of children with disabilities. A key variable in parental involvement is a strong parent teacher partnership.

Teacher education and professional development in family involvement is one of the most potentially effective methods of reducing barriers to home-school partnerships (Shartrand, Weiss, Kreider, & Lopez, 1997). Creating meaningful home-school or parent teacher collaboration means moving beyond the goal of expanding family involvement training in the neighborhood school. Multiple studies provide powerful evidence of the relationship between parent involvement and student performance (Ammon, Chrispeels, Safran, Sandy, Dear and Reyes, 2000; Ammon and Peretti, 1999; Burts and Dever, 2001; Epstein, 2004, 2001; Evans-Shilling, 1999; Katz and Bauch, 1999). The extent to which a student's family is able to become involved in their children's education is an accurate predictor of a student's achievement, and what the family does with the student is more important to student success than family income or education.

Several researchers have described the effectiveness of various parent partnership activities aimed at enhancing school success of children (Christenson, Hurley, Sheridan, & Fenstermacher, 1997; Epstein, 2001, 1991). Learning to create meaningful partnerships with families begins when teachers are preparing for their profession. In

order for families to be effectively engaged, professionals must recognize and appreciate the role of family-professional partnerships.

Historical Background of Family Involvement and the Law

Numerous studies have shown the positive effects from school, family and community partnerships and the beneficial outcomes for children in the areas of achievement, positive attitudes and behaviors (Anderson, 2000; Drake, 2000; Epstein, 2001a, 2001b; Fan & Chen, 2001; Hara & Burke, 1998; Israel, Beaulieu & Hartless, 2001; Kelley-Laine, 1998; Keith, 1996; Romer & Umbriet, 1998; U.S. Department of Education, 1997). This large body of research has led to legislative intervention that supports family involvement in education.

Before the 1960's, education and services for individuals with disabilities in the U.S. were not addressed in a consistent, comprehensive manner. Services and educational opportunities varied from state to state. Individuals were often placed in institutions and many children with disabilities were denied an education. *Brown vs. Board of Education* in 1954, the landmark civil rights legislation which is associated with the birth of the civil rights movement provided the foundation for advocacy for the rights of individuals with disabilities. From the mid 1960's to the 70's there was a surge in state litigation and federal legislation which addressed the rights of individuals with disabilities. Parents were instrumental in these advocacy efforts and worked closely with lawmakers.

The combination of effective efforts by families, advocacy groups, and the

political climate of the time provided the impetus for the disabilities' rights movement (Garwood, 1984; Scotch, 1988). The court system was also used effectively to achieve social change. Two pivotal cases, PARC vs. Commonwealth of Pennsylvania case in 1971, followed by Mills vs. Board of Education in 1972, set the stage for a flurry of litigation which resulted in new public policies to assure the educational rights of children with special needs.

For over thirty years federal laws have focused attention on the important role of the family in education. Change in education policy also fostered the growth of an emerging disability rights movement. In 1968 parent participation was encouraged in programs for children with disabilities for the first time through the passage of P.L. 90-538, the Handicapped Children's Early Education Assistance Act. This law provided for parents to be included in individual education program development. Two laws enacted in 1973 and 1975 were the foundation for providing access for individuals with disabilities: Section 504 of the Vocational Rehabilitation Act of 1973 (P.L. 93-122) and the Education for All Handicapped Children Act (P.L. 94-142). They established the right of individuals with disabilities as a class to be protected from discrimination and afforded specific educational rights. Section 504 of the Vocational Rehabilitation Act provided civil rights protections with the intent of ending discrimination against all individuals with disabilities regardless of age.

Family involvement has been addressed in both the Individuals with Disabilities

Education Act (IDEA) (Part B-Assistance for the Education of All Children with Disabilities and Part C-Infants and Toddlers with Disabilities), and most recently in the No Child Left Behind Act of 2001(NCLB). The concept of collaborative partnership between parents and schools in the design and implementation of special education programs is shared between these two landmark laws. P.L. 94-142 established a national policy which afforded the free and appropriate public education to children with disabilities, and to the extent possible, education in their home community. With each reauthorization of this legislation until its present form as the Individuals with Disabilities Education Act (IDEA) Amendments of 1997, the role of families as partners has been strengthened in all aspects of services to children with disabilities. The reauthorization of the IDEA has significantly increased the role of parents in the education of students with disabilities (Sileo, Sileo, & Prater, 1998). The IDEA has increased the role of parents in the education of students with disabilities by emphasizing the role of the family in planning and coordination of services (Reyes, 1999; Sileo, Sileo & Prater, 1998; IDEA, 1997).

The IDEA Amendments of 1997 require documentation of active parent involvement in the educational process and stress the many levels needed for parent involvement, including parents viewed as partners with professionals. For example, parents must be notified and involved in decisions about initial evaluation, change in educational placement, and individualized education programs. Parent participation in

the educational arena is viewed as crucial in order to develop appropriate educational programs for children as well as to achieve full implementation of the law. Involvement levels differ and are influenced by numerous factors (Hoover-Dempsey & Sandler, 1995). “Despite legislative intent, parent involvement may not always reach desired levels, and at times educators and parents may perceive the interests of the child differently, leading to conflict” (21st Annual Report to Congress, 1999, p. I-2). Parent participation in the educational arena is viewed by policy makers as crucial in order to develop appropriate educational programs for children as well as to achieve full implementation of the law.

The NCLB is an educational reform initiative intended to hold schools accountable for the learning of all students. The Act set out a basic framework at the state, district and school level for ensuring that all students, including disadvantaged students, students with limited English proficiency, and students with disabilities, become proficient in the skills and knowledge identified in states’ standards for what all students should learn. One of the priorities of the NCLB Act is to “focus on what works.” The research found in *Partnerships 2000: A Decade of Growth and Change* documents the effectiveness of school partnerships. The President’s Commission on Excellence in Special Education, *A New Era: Revitalizing Special Education for Children and Families* (2002) underscored the need to begin a new era that embraces increased academic achievement and improved educational outcomes for students.

This new federal law, NCLB, furthers the commitment to family-professional

partnerships and contains many requirements for school-family communication and engagement. These include: (1) implementation of meaningful communication and consultation with parents, (2) development with parents, of a formal parent involvement policy for the school, (3) education of all school staff and parents in the value and contributions of parents in the education process, (4) education of all school staff and parents in the importance of parents as equal partners, (5) participation of parents in the development of curriculum and instruction for school personnel, and (6) establishment of district-wide parent advisory councils to provide advice on all matters related to parental involvement. These requirements in the NCLB Act have focused attention on the important role of the family. The foundation has been laid to move beyond school-parent communication and engagement of parents in their child's education, to a deeper, meaningful collaboration in the decisions, policies and practices of the schools. NCLB, combined with those provisions of the IDEA empower parents of students with disabilities to move in the direction that fosters collaboration with professionals that will lead to positive outcomes for children and youth with disabilities.

Other federal laws such as Goals 2000, Title I, the Elementary and Secondary Education Act, and Communities' and Children's Mental Health Systems Improvement Act emphasize the importance of ensuring partnerships between families and professionals (Epstein, 2001; Osher & Osher, 2002). Also, both the IDEA and the NCLB share common language that strengthens the role and decision making of parents in

educational planning and program decisions for their children on local and state policy level. Given the attention focused on family involvement in federal legislation, it is important to recognize the effect these new laws have and will have on teachers and teachers being prepared for the workplace. The time has come when teachers need to demonstrate the knowledge and skills necessary to work effectively with families in the education of their children.

There has been much evidence from the research about the importance of parent involvement in education. So, why has there been so little effort in the educational community to foster collaboration among parents and professionals? It is important to examine our basic beliefs about the role and importance of parents as partners in their child's educational program. Educating teachers for 'family involvement' is only a part of what needs to occur. Teacher education needs to move beyond traditional models of preparing pre-service teachers, both in general and special education, to a broader more encompassing design that includes parent/family participation. Involving parents directly in the process of teacher preparation, as well as in the process of planning student educational curriculum, content and programs assumes a much more essential and active role for parents in the teacher education restructuring process. It is based on the assumption that parents should be an essential part of the cultural change process in teacher education. It requires a shift in the equation. Parents and teachers must be partnered as equals. Parents and professionals must work together on curriculum content,

how student performance is assessed, how student dispositions are shaped, and in how student internships are conducted. Engaging parents and professionals in collaborative relationships is a social and political issue. In order to achieve structural reform in the way we prepare teachers, change in perspective must occur with teachers, educational professional and teacher educators' with regard to the role of parents.

In Parent Involvement and Participation (1997), the U.S. Department of Education states that research over the past 30 years has consistently shown that greater family involvement in children's learning is a critical link to achieving high quality education and a safe, disciplined learning environment. Unlike many topics in education, the need for parent involvement is one issue where most experts agree. Families themselves have identified the need for better communication and collaboration with school professionals in Twenty Five Years of Educating Children with Disabilities: The Good News and the Work Ahead (2002). The report states "a majority of parents of children with disabilities in preschool and elementary school are actively involved in planning their child's individualized services and making other educational decisions" (p.4). This involvement does not always continue to the middle and high school years. However, many parents are still left out of the active participation in their child's ongoing education. Often they feel unimportant and disenfranchised in interactions with their child's teacher or other school personnel. These barriers to active participation often are caused by ineffective communication and understanding between the parents and the

professional. These barriers can be compounded by a lack of awareness of or responsiveness to cultural, ethnic and linguistic differences as well. Bruder, (2000) found that although professionals favor collaborative interactions with parents, research indicates that gaps still exists between actual practice and professionals' desire to do their best.

Research has found that what a teacher and school do to encourage family involvement and participation in their children's education is more important to home/school partnerships than family characteristics such as socio-economic level, parental education or student grade level, family size, or marital status (Bennett, Deluca, & Bruns, 1997). Mapp (1997) studied family involvement at an economically and racially diverse urban public school where 90 percent of the families were involved in one or more of the family activities at the school. She interviewed low income families at the school and discovered that when schools develop meaningful connections with families, the degree of involvement rises. Families reported the two most important ways these connections occurred were when schools made families truly welcome (what Mapp calls 'joining' with families) and "encouraged, affirmed, and validated their efforts to be involved in their children's education" (p. 3). Mapp calls this 'honoring' family. The end result was a true community of families and professionals who worked together to improve outcomes for their children. Teachers should show respect for families, encourage families to ask questions, and emphasize the importance of families' input and

the unique skills families bring to the table. They should inform families of important issues in the schools and give families the information to assist them in understanding and determining what is important. They also should to enlist families as partners to solve problems; connect them with other parents; and advocate with and for them to the school administration in regard to sound educational practices in building partnerships with families.

Families may define involvement differently than teacher. Teachers may not recognize these differing perceptions of involvement. Creative ways of supporting involvement must be developed between families and professionals (Berger, 2000; Jordan, 2001). Some of these include families working with their children at home on material that is mutually agreed upon between families and teachers; communication via internet or notebooks to assist family/teacher collaboration; after-hours meetings between families and teachers or phone calls to families during work hours at convenient times. Another consideration is that different cultures perceive involvement in different ways and to different degrees. For example, Hispanic families may view that they are very involved with their child at home by assuring school work is done even though they may not come to an event at the school (Henderson & Mapp, 2001).

Attitude about families of children with disabilities, including those from cultures other than your own, is an important consideration in how successful you will be able to engage families as partners. Each family possesses characteristics such as

education levels, socio-economic status, beliefs, religion, language, ethnicity, etc. which make it unique. Christenson (2001, p. 14) proposes that this uniqueness defines families and “it is essential that sincere efforts be made to understand all families for *who* they are rather than *what* they are or are not”. When teachers examine their beliefs and attitudes and become open to different perspectives, they can foster true partnerships with families. Christenson calls this ‘perspective taking’. This thinking includes reflection and self-assessment on our personal attitudes toward families, learning with and from families as well as about them, showing a personal interest in families and their children, realizing different perspectives are the norm and embracing them. Christenson suggests some strategies for working as partners with families: (1) Treat families with the same respect with which you would like to be treated, (2) Understand that there are differences in the way in which some families can be involved. (single parent families, lack of child care, work hours, travel, etc. impact on types and degree of participation), (3) Understand that you are both interested in the child's wellbeing. Meet families where they are, (4) Identify and acknowledge the cultural values embedded in your interactions, (5) Be sensitive to *how* invitations to become involved are offered (make them personal, in native language, use various forms of invitation - written, verbal, through the child, etc.), (6) Help families understand that their role is critical and find a meaningful role for families as partners that match their needs and beliefs (pp.14-15).

Barriers to Partnership

During the past twenty-five years, families of students with disabilities have had access to training in the areas of disabilities, rights and due process, and communication skills and individual and system advocacy. Even with this training, families continue to report barriers to active participation and input into their child's education. Focusing on family training addresses only one aspect of the problem. It is time to focus on how training in collaborative strategies can be utilized with families and professionals to build positive interactions based on mutual trust. Bryk and Schneider (2002) in, Trust in Schools: A Core Resource for Improvement examined the role of relationships in schools and the impact of these relationships on student achievement. They found that "a broad base of trust across a school community lubricates much of a school's day-to-day functioning and is a critical resource" (p.34).

Countless studies have shown the positive effects among school, family and community partnerships and the beneficial outcomes for students in the area of achievement, positive attitudes and behaviors (Epstein & Salinas, 2004; Epstein, 2001; Fan & Chan, 2001). A review of research from the past two decades confirms the importance of parent involvement (Epstein, 2001; Hiatt-Michael, 2001). Teachers' efforts to involve families promote better student attendance, higher graduation rates, fewer retentions, increased levels of parent and student satisfaction with schools, more accurate diagnosis of students for placement in classes and higher achievement scores on

reading and math tests. The need for positive communication and interactions between parents of children with disabilities and the teachers who work with these children is not new.

Family participation and involvement in the system of services for infants and toddlers with disabilities has been a cornerstone of Part C of IDEA since 1985. This participation has led to a system that encourages active collaboration between families and the providers of service to their children. The family centered approach (families as collaborative partners with service providers) seeks to address the needs of the child within the context of the family, and requires active communication and collaboration to be successful. Remaining barriers include the perspectives and attitudes of the provider and the way services are provided by personnel and programs.

Often the relationship between families and providers is not equal. There are assumptions made by providers about families including a lack of respect for cultural differences, methods of family functioning, and understanding and support for the desires of the family. Families report that while providers talk about family centered, what is actually happening is that providers seek family agreement with what the provider thinks best, not necessarily with what the family wants. (Vacca, J. & Feinberg, E., 2000) With these kinds of barriers for parents of very young children with disabilities it can be assumed that the potential for collaborative and equal relationships to develop are limited when entering the schoolhouse. “Educators need to know the context in which students

live, work and play.” (Epstein, 2001, p. 5) They need to work in partnership with the other important people in students’ lives. The ‘whole child’ must be considered and all the aspects that affect this child – home, school and community.

Systemic barriers may impede the involvement of parents as their children move into upper elementary, middle school, and high school settings. School schedules often prevent the simultaneous participation of special education and general education teachers and other personnel in meeting with parents. Inconvenience and fragmented communication can occur when parents must meet on many occasions with small subsets of the school team with whom they need to work. A three year study (Harry, Allen & McLaughlin, 1995) in a large urban, primarily minority district showed families of African descent made consistent efforts to support their children’s early education and were effective in preschool programs. As their children moved into elementary grades, however, these parents became disillusioned with the separateness of special education placements, objected to labeling, found their avenues for influence diminishing, and felt that schools were more interested in having them sign documents than in meaningful dialogue and participation.

The 1999 Synthesis of State Needs and Barriers to Systemic Reform in the 1998 State Improvement Grants (Kochhar-Bryant, 1999) found twelve of the 36 State Improvement Grants (SIGs) studied elaborated on barriers related to parent involvement, although most states reported difficulties engaging parents in IEP meetings and transition

planning. Many SIGs briefly addressed parent involvement, or simply included parent representation on committees or advisory boards. Many SIGs provided generic needs statements such as “parents need to be involved in all aspects of the implementation,” or “parents require greater support and training than is presently provided.” Few clearly described a process of meaningful involvement of parents in the needs assessment and planning processes. Parents feel alienated in the process of eligibility determination and IEP development. Parents experience many practical barriers to effective school participation. These barriers include the time that meetings are scheduled, the distance from home, prohibitive travel expenses, meal and day care expenses, lack of day care, and lack of accommodations related to disability or language.

Many researchers have examined the cultural perspectives of the values and beliefs held by different groups that make up the population of the United States (Blasi, 2002; Bruder, 2000; Dunst, 2002; Harry, 2002; Harry, Allen and McLaughlin, 1995; Harry, Kalyanpur and Day, 1999; Milan, 2001; Sileo and Prater, 1998; Tharp and Yamauchi, 1994; Turnbull and Turnbull, 2001; Villegas and Lucas, 2002).

We are all raised within a cultural framework that allows us to understand the norms and expectations of our particular culture. This is known as our cultural identity or ‘cultural stance’ (Harry, Kalyanpur & Day, 1999, p. 2). The researchers report that what is important and vital to one society, may not be important to another. It is important to understand ones own perspective with regard to beliefs about cultures, ethnicities, and

families with children who have disabilities. It is also important to celebrate the differences by acknowledging and respecting cultural differences rather than ignoring them (Kalyanpur & Harry, 1999; Lynch & Hanson, 1999).

A primary question that comes out of this research may be; how do teachers and special educators reach out to families from different cultures? A study by Sanders and Herting (2000) found that programs that recognize, respect, and address cultural and class differences were effective in engaging diverse families. Given the increasing cultural diversity of our nation this skill is critical for successful partnerships. "A growing number of parents do not speak or read English well enough to communicate with teachers and administrators. Because of cultural differences, many parents are not familiar with the expectations of their children's schools and don't understand how to go about getting involved, even if they want to. Some parents lack the educational background or skills they feel they need to interact with teachers and staff. For others, their own negative experiences as students make them uncomfortable going into the school" (Aronson, 1966, p. 58). These facts, coupled with how different cultures view and react to disabilities, makes the collaborative process more challenging for special educators.

Lynch & Hanson (1997) present research that addresses views of disabilities. One area studied was how people of different cultures react to disabilities. Particular factors such as socio-economic status, education, time in the U.S., age and gender, proximity to other members of their cultural or ethnic community and other cultures can

influence views toward disabilities. In addition the type of disability may be viewed differently within a culture. For example, children with learning disabilities may be viewed as having 'less of a disability' than a child with mental retardation and in some cultures carry less of a stigma.

The culture and ethnicity of a family impact the degree and kind of participation families will engage in with professionals and schools. We need to respect the families of our students and their cultures and respond to their needs and values in light of their culture. Kalyanpur and Harry (1999, p.118) state, "Awareness of cultural differences provides the scaffolding for building collaborative relationships." They call the ways of thinking and behaving that enable members of one cultural, ethnic, or linguistic group to work effectively with members of another "cultural reciprocity". Lynch & Hanson (1997) use the term "cross cultural competence" (p. 492). Cultural reciprocity and cross cultural competence have several components (Kalyanpur and Harry, 1999, pp. 120-23; and Green, 1982 in Lynch & Hanson, 1997, p. 493): (1) awareness of one's own cultural limitations; (2) openness, appreciation and respect for cultural differences, including subtle differences between cultures; (3) avoidance of stereotyping; (4) ability to apply cultural awareness universally to all situations; (5) view of intercultural interactions as learning opportunities; (6) ability to use cultural resources in interventions; (7) empowerment of both families and professionals as each learns from the other; and (8) acknowledgement of the integrity and value of all cultures.

In order to work effectively with families of diverse backgrounds, it is also important to know how their specific cultures view disabilities. Some cultures place great value on cooperation, cohesiveness, and interdependence - characteristics that differ from the school culture's emphasis on individual achievement and a competitive spirit. For these and other reasons, racially/culturally diverse families are sometimes only marginally involved in the education of their children with disabilities. For example, Latino parents of a child with mental retardation may view their child's disability differently from Native American parents. The Latino parents may attribute the mental retardation to something the mother did during her pregnancy. The Native American parents, on the other hand, may view the disability of their child as the result of a supernatural cause and employ the use of a tribal healer to intervene (Kalyanpur & Harry, 1999).

Teacher Standards and Family Involvement

Education reform has gained momentum due to legislative action on the federal and state levels and the role of families in this movement has gained national attention. Both national advocacy and professional organizations have written standards for family involvement in early intervention and regular and special education. For example, the National Parent Teachers Association (NPTA) developed its National Standards for Parent and Family Involvement Programs, many of which have been incorporated in the 2001 No Child Left Behind Act (NCLB). These standards are based on the work of Joyce

Epstein (2001) and outline goals and quality indicators in six areas: parenting, communicating, volunteering, student learning, school decision-making and advocacy, and collaborating within the community, with very specific examples of how these quality indicators can be met.

PTA members across the nation have urged Congress to adopt and promote the goal of increasing parental involvement and participation in promoting the social, emotional and academic growth of children (Goals 2000: Educate America Act). Standards for professional practice are incorporated in state accreditation and licensing processes and national accreditation standards, such as The Council for Exceptional Children's Common Core of Knowledge and Skills Essential for All Beginning Special Education Teachers (CEC, 1996). These standards are meant to guide professional practice and assure the quality of the individuals working under them. They also reflect the perspective of the system as a whole on a particular area such as family and parent participation.

What do national standards say about family/school partnerships and how should these standards affect teacher and teacher educators? Kochhar-Bryant (2002) examined 8 sets of standards from national organizations related to the preparation of special education teachers and found that only two “contained the greatest number of standards related to parent partnerships” (p.2). The other standards were not specific and didn't provide action oriented guidance on how to implement them. Few of the standards

studied addressed the effect of attitudes and beliefs of teachers on family involvement or on families in school decision-making. She states the importance of examining “the disconnection among our philosophical ideals, our statutory expectations for teacher-parent collaboration, and our professional standards for teacher preparation” (p. 3). If teachers are to work effectively and collaboratively with the families of their students in their classrooms, they will need to learn the skills to do this.

Since research has shown that family participation in education improves outcomes for students a teacher’s ability to engage the family is a fundamental skill. Although teacher certification requirements in about half of the states mention the importance of working with families, very few states require extensive coursework or in-service training in working with families (Kochhar-Bryant, 2003; U.S. Department of Education, 1997). It is important to focus on how special education teachers are prepared in understanding the importance of actively engaging families in the education of their children. What better way to develop this awareness than to include families in the actual preparation of teachers.

Until recently, most state teacher certification departments did not require that teacher education programs include standards of courses on family involvement issues. The Harvard Family Study Report (Shartrand, Weiss, Kreider, & Lopez, 1997) concluded that only 22 states had parent involvement in their credentialing standards. They collected data to determine why training teachers to work successfully with families are so critical,

and how to train teachers to work in partnership with parents and families. They confirmed three needs of teachers: (1) more direct experiences with families and communities; (2) support in making school conditions conducive to family involvement; and (3) opportunities to share successful experiences and outcomes with their colleagues.

Subsequently, the Harvard Family Research Project (Lopez, 2002) investigated how professionals can support families in order to work more collectively and less exclusively as partners. The research found the need to expand the notion of family support to include getting and using information and then moving to collective action. Implied in the collective action is a partnering of family and school.

At the present time the National Board for Professional Teaching Standards (NBPTS) includes parent involvement as one out of the eleven generalist standards for all three developmental levels; early and middle childhood and early adolescence. The National Council for the Accreditation of Teacher Education (NCATE) includes similar standards for working with parents.

Teacher Preparation

Epstein (2001) found in her research that early childhood and special education receive a disproportionately less amount of parent involvement attention within university preparation and in schools. The research suggested there are a limited percentage of programs that include other forms of family-teacher partnerships such as utilizing interactive homework with parents, conducting parent workshops, developing

newsletters and planning a year-long program of partnership. The research, however, found that although classroom teachers assert that working with families is important to the child's positive school outcomes, they receive little formal training and therefore possess minimal knowledge and skills to work with parents.

Education courses that include family involvement issues and practices do make a difference in subsequent classroom practice. A study by Katz and Bauch (1999) on graduates from teacher education programs at Peabody College, Vanderbilt University indicated that new teachers felt prepared and engaged in a diverse number of parent involvement practices because they had received parent involvement training in their courses. Hiatt-Michael, (2001) looked at promising practices for teachers related to infusing parent involvement. The study found that acquiring skills to promote positive home-school communication are the most critical. The study recommends that university faculty as well as teacher supervisors, master teachers and administrators use case studies and role playing to familiarize teachers with the details of a positive parent conference. Further, new teachers should visit master teachers in classrooms to observe parent conferences, prepare a case study on a family, make a home visit, provide home-school literacy programs, prepare a classroom newsletter and attend and participate in a school advisory council.

The Office of Special Education Programs has funded 76 Parent Training and Information Centers (PTIC) and 10 Community Parent Resource Centers (CPRC) around

the United States. Martin and Goldberg (2000) surveyed all of the PTIC and asked if there was a need for teachers and future teachers to understand the issues that families of children with disabilities experience. All 32 respondents replied yes. Respondents listed the top three skills they believed teachers needed to work effectively with parents with the number one item being the ability to communicate openly and effectively. The number two and three item were that teachers show respect to parents for their knowledge and expertise, and that team building within the community was needed. Respondents felt teachers need to be knowledgeable about special education law, be compassionate, demonstrate an understanding of diverse issues, be flexible and creative, and be good listeners. However, in the same survey of PTICs, parents responded that virtually no state education agency or teacher preparation programs systematically and consistently includes families in their curriculum design, implementation and evaluation. Learning effective ways to engage families in meaningful ways will not only result in positive outcomes for students, but also result in positive rewards for their families and teachers working together in partnership.

Family/Teacher Partnerships

Although the inclusion of families in the design and delivery of individualized educational plans is mandated in state and federal statute, teacher preparation programs and credentialing agencies often fail to mention the critical role that families should play in the preparation of teachers. A gap still exists between practice and implementation.

Dunst, (2000) found one reason for the gap between recommended practices for collaborative partnerships between teachers and parents and the implementation of those practices may be the failure to operationally define the construct of partnership. These partnerships would allow for the investigation and documentation of benefits associated with partnership relationships. Winton, (2000) found that a lack of consensus about partnerships in the field impedes development of personnel preparation programs that promote effective practices for fostering partnerships between families and professionals. These most recent findings suggest that professionals may find it difficult to implement collaborative partnerships with parents because they do not know, in operational ways, what is expected of them.

Blue-Banning, Summers, Frankland, Nelson, & Beegle, (2004) examined collaborative partnerships between parents and professionals and found one reason that these relationships have difficulty in establishment and sustainability may be the lack of empirical understanding of the components of interpersonal partnerships. The qualitative study identified indicators of professional behavior facilitative of collaborative partnerships. These indicators identified included; communication, commitment, equality, skills, trust and respect. The researchers concluded that more study is needed in the area of partnerships including teachers and families.

Three national entities are promising examples of efforts to train new teachers in the area of parent-teacher collaboration. These national centers are clearinghouses for

practice, research and policy. The Institute for Responsive Education at Boston University has researched and promoted parent involvement for over forty years. The National Network of Partnership Schools based at John Hopkins University coordinates a network of schools, districts and state agencies that adhere to the Epstein model of six types of parental involvement (Epstein, 2001, 2004). At the federal level, the Partnership for Family Involvement in Education within the U.S Department of Education coordinates a range of activities to promote collaborative practices (Murray, 2002).

The literature regarding family involvement, teacher preparation and parent-professional collaborative partnering strongly supports the notion of equal, active, respectful relationships needing to exist. The research is clear that developing knowledge and skills around the notion of partnering needs to happen early in training of teachers and must be grounded in sound scientific research. It is no longer enough just to say family involvement is important. Policy makers have become acutely aware of the need for more accountability, stronger laws and higher standards. The intensity of the debate over teacher quality, standardized testing, discipline, student outcomes and financial accountability will continue and with this more pressure will be applied to state and local administrators, principals and teachers by families of children with disabilities.

There is increasing recognition that fostering collaborative partnerships with families' leads to early dispute resolution and the prevention of more costly actions such as mediation, due process hearings, and litigation (Feinberg, Beyer, & Moses, 2002).

The work of preparing qualified skilled teachers to partner with families needs to occur at the pre-service level, in-service level and the professional development level. Colleges of education, school systems and professional development schools need to ask the question; what can we do to ensure that teachers have the knowledge and skills to partner with families? Embedding the notion of partnerships with families into teacher preparation courses can not just be an after thought or a single course on families with disabilities. The notion of partnering with families must be presented in both the general education and special education course work early and often. Most students leaving colleges of education and moving to classroom settings will encounter students with disabilities and therefore these skills must be given to all pre-service teachers.

Family partnership skills should be taught as part of the pre-service preparation of general and special education teachers. During their preparation as teachers, candidates should also have the opportunity to work with families of children who have disabilities. Teachers who are prepared in advance to work with families will have a higher level of confidence and competence in working with families. Since research has shown that family participation in education improves outcome for students, teachers' ability to engage families is a fundamental skill. Although teacher certification requirements in about half the states mention the importance of working with families, very few states require extensive coursework or in-service training in working with families (Kochhar-Bryant, 2003; Radcliffe, Malone, & Nathan, 1994; U.S. Department of Education, 1997).

Although certification requirement may not stress skills working in partnership with families of children with disabilities, all teachers can be sure they will very much need these skills on the job.

Chapter Summary

Research has demonstrated that family involvement significantly contributes to improved student outcomes. Thirty years of legislative reform in the United States has promoted parent involvement in the education of children. Specifically, laws such as IDEA and NCLB have addressed the needs of students with disabilities and have opened the door wider for change in the area of teacher preparation. Teachers must be prepared to promote effective family involvement in the education of all children including those students with disabilities. Being able to work with the family of a child with a disability can be a significant factor in the ability of a new teacher to succeed in the classroom, yet teachers and those who prepare teachers are often ill prepared and lack essential skills and basic knowledge about the process of partnering with families of children with disabilities. A key variable in parental involvement is a strong parent teacher partnership. Models of family involvement have been well researched and documented including the work of Epstein and Berger. Presently, research is needed to develop a clearer understanding of partnership between educators, special educators and families of children with disabilities.

CHAPTER THREE: METHODOLOGY

This experiment was designed to measure the effect of the independent variable, an instructional online curriculum module, on the two dependant variables: disposition and knowledge. The group treatment, consisting of an online instructional module, was conducted by the researcher at a metropolitan urban university setting within a college of education. The title of the module is; “Examining Assumptions about Families” (EAAF). The focus of this intervention was to expose undergraduate education students to content related to (a) the role attitudes and beliefs play in developing relationships between teachers and families, (b) understanding family perspectives, and (c) identifying teachers own disposition toward families of children with disabilities. The study followed a place-based experimental design by randomly assigning classrooms to the treatment and control conditions. It was hypothesized that, while controlling for age, gender and pretest scores, those students who participated in the group intervention by completing the EAAF instructional online module would demonstrate improved disposition and knowledge scores over the participants in the non-treated group. Specifically, the program was designed to determine the nature and degree of student’s disposition and knowledge as measured by self report following completion of a short term self-directed online instructional module which served as the intervention. The student’s disposition and level of knowledge was then measured two weeks later following the initial self reporting

using the same instruments. The participants in both the treatment and non treatment group were given a case study based on the content presented in the online instructional module and asked to respond in writing to two specific questions. It was hypothesized, while controlling for age, gender and pre test scores, that student responses to the two questions based on the case study (scored using a rubric) within the module would correlate positively with their disposition and knowledge scores as measured by self report following completion of the intervention.

The primary assumption for this study was that the disposition pre-service teachers have toward families of children with disabilities can be impacted with new knowledge regarding families. The underlying assumption about knowledge base is that undergraduate pre-service education students do not have sufficient knowledge regarding family involvement in the education of children with disabilities and increasing or enhancing the knowledge base will positively affect student outcomes in the schools.

Research Hypotheses

The following null hypotheses are provided to address the intervention effects of this study:

1. There are no statistically significant mean differences in disposition scale scores generated between students who complete the EAAF module and those students who do not complete the EAAF module as measured by a pre/post survey.
2. There are no statistically significant mean differences in knowledge scale scores

generated between students who complete the EAAF module and those students who do not complete the module as measured by a 10 item pre/post questionnaire.

3. There are no statistically significant mean differences in disposition scale scores generated between students who complete the EAAF module and those students who do not complete the EAAF module as measured by narrative responses on written activities in the EAAF module.
4. There are no statistically significant mean differences in knowledge scale scores generated between students who complete the EAAF module and those students who do not complete the EAAF module as measured by narrative responses on written activities in the EAAF module.

These hypotheses generated the following research questions that serve as a guide for this study. Following participation in an intervention designed to increase student's awareness of the importance of partnering with the families of students with disabilities:

1. Is there significant change in participant's knowledge, as measured by a ten item questionnaire;
2. Is there a significant change in participant's disposition, as measured by a ten item survey instrument;
3. Is there significant change in participant's knowledge, as measured by a rubric scoring device in relationship to responses on written activities within the EAAF module;

4. Is there significant change in participant's disposition, as measured by a rubric scoring device in relationship to responses on written activities within the EAAF module;
5. What is the relationship between participant's knowledge, disposition, age and grade point average (GPA)?

Based on these hypotheses and research questions, specific dependant and independent variables along with three instrumentation measurements have been identified and applied to a research design that will address the research questions presented above. In addition, a brief presentation of participants and setting descriptions follows.

Research Variables

Dependant Variables

The study includes two dependent variables: disposition and level of knowledge. Conceptually, disposition is described as the values, commitments, and professional ethics that influence behaviors toward students, families, colleagues, and communities and affect students learning, motivation, and development as well as the educator's own professional growth. Dispositions are guided by beliefs and attitudes related to values such as caring, fairness, honesty, responsibility, and social justice (NCATE, 2003). The second dependant variable is knowledge base regarding family involvement in the

education of children with disabilities. Knowledge is defined as acquaintance with facts, truths, or principles; general erudition, familiarity or conversance as by study or experience, the fact or state of knowing, clear and mental apprehension, awareness, as of a fact or circumstances, something that is or may be known; information, the body of truths or facts accumulated in the course of time, the sum of what is known.

Independent Variables

The independent variables accounted for in this study include the treatment program, participant classrooms, participant's age and GPA. The primary independent variable is the experimental treatment, the "Examining Assumptions about Families Module" (EAAF). The EAAF is an instructional tool designed to expose participants, undergraduate students preparing to be teachers, to (a) the role attitudes and beliefs play in developing relationships with others; (b) understanding family perspectives; and examining one's own attitudes and beliefs about families of children with disabilities and families in the context of cultural diversity.

Design

Considering the hypotheses posed, the research questions generated, and the variables under investigation, it was determined that a place-based true experimental design using a pre-post treatment comparison is an appropriate approach for the present study. Instructors teaching the course *Teaching Exceptional Children* were asked to allow

their students to participate in the study. Of the available eight classes, two instructors did not respond. The remaining six instructors agreed to participate in the study as either a treatment or control group condition. Six classes were assigned to either a treatment or control condition using a double blind randomization procedure.

Description of the Setting

The settings were instructional classrooms located in a College of Education building set on an urban metropolitan university campus. The classes were conducted in the afternoon and early evening. Each class had one instructor. The survey instrument, the knowledge base questionnaire and consent forms were administered within the classroom. The experimental group was allowed to complete the online instructional module EAAF outside the classroom and therefore the variable of setting was not held constant. No restrictions were placed on the participants regarding location, only time, of completion of the module which was two weeks.

Description of the Participants

The population of interest was college aged elementary education students enrolled in an introductory exceptional education course. The participants were seniors beginning their first semester of internship in local school settings. Six classes of undergraduate elementary education students participated in the study. Participants were selected based on (1) enrollment in an introductory course, *Teaching Exceptional Children*, (2) undergraduate status within the College of Education, (3) ability to

complete a 10 item knowledge questionnaire, (4) ability to complete a pre/post survey (5) ability to complete and online instructional module via Internet.

Demographic Characteristics of the Sample

The initial sample consisted of 102 students, ranging in ages 20 to 52. All participants were enrolled in the same course divided into six sections. The final sample consisted of 94 participants, with five students not completing a portion of the study and 3 students did not agree to their data being used for the study. All 94 participants were able to complete the questionnaire, survey, written responses and online instructional module. The initial sample was recruited from a list of eight classes registered for the course, *Teaching Exceptional Children*. This researcher contacted the program director within the college of education and requested the list of those faculties who would be instructors for the eight sections. Six instructors agreed to have their sections participate. The instructors were given a copy of the IRB, packet of materials including the Consent for Participation form, the Knowledge Base Questionnaire, Teacher Disposition Survey, the case study, case study questions and access codes to the online module, "Examining Assumptions about Families". This researcher gathered a list of those sections of classes that would be used for the study from the program director approximately one week prior to the commencement of the semester, identified the scheduled times of the classes, and scheduled with each of the instructors, via email, a time to begin gathering data from their classes. The pre test portion of the study was conducted during the first week.

Assignment to the experimental and comparison group was done randomly by flipping a coin. Following the establishment of the treatment groups, the students were given the option of participation in the pre and post testing or choose not to participate in the study. The experimental groups were given a modified consent form slightly different from the comparison groups which included participation in the online instructional module. The experimental group participants were given instructions on how to access the module, including an individual access code and password. The comparison group was given the option to complete the online module following completion of the post testing.

Research Instrumentation

Pilot Test of Teacher Disposition Survey (TDS)

The survey instrument was initially developed by Martin, et al (in press) for use in a federally funded Department of Education, Office of Special Education grant. The grant was identified as a Project of National Significance entitled “Building Teacher Preparation Capacity through Partnerships with Families: Improving Teacher Quality.”. The grant was designed to address the critical need in (a) family involvement in special education personnel preparation focusing on families, (b) teacher educators in special education, (c) teacher and early intervention personnel preparation programs, and (d) administrators and policy makers. The project, begun in 2001, was, directed by Suzanne

Martin, at the University of Central Florida. The project included partnerships with George Washington University, Washington, D.C. National Family Center, University of Colorado Denver and the Parent Training and Information Centers in the country, Pacer. This researcher served as a graduate research assistant on the project.

The grant project was composed of three dimensions: (1) research on current teacher preparation practices concerning family involvement in the development and delivery of teacher preparation programs and surveys of current special education teacher preparation programs and families to determine ways in which families of students with disabilities are involved in teacher preparation and in the education of their children; (2) analysis of current institutional program standards and policy, and development of recommendations for a national policy agenda to involve families in teacher preparation; and (3) design, implementation and evaluation of a curriculum for teacher preparation and professional development, focusing on partnerships with families.

Component three of the project included development of four (4) online curriculum modules. The third online instructional module, “Examining Assumptions about Families” (EAAF), serves as the training program for the present study. Early field testing of the EAAF module was conducted in colleges of education in institutes of higher education around the United States. Each site selected one to three modules to test (the fourth module was not tested) Data collection from these sites included student responses to the Teacher Disposition Survey (TDS) individually designed for each of the

three modules. The college students responded electronically to the survey prior to completing the module and then a second TDS after completing the module. The responses were collected electronically within the website and maintained by the research team.

The items were reviewed by the three university partners throughout development phase of the modules. An outside evaluator was utilized to review the module content and survey instruments. The responses on the scale ranged from (1) *not important*, (2) *somewhat important*, (3) *neutral*, (4) *important* (5) *very important*. The TDS was designed such that the higher the score, the stronger the belief that partnering by teachers with families is important.

The Teacher Disposition Survey consisted of a 10 item five point Likert scale format:

1. Families who have children with special needs possess unique family characteristics not found in other families.
2. We need to understand why some families are not actively involved with their child's education.
3. Families from different cultural, ethnic and linguistic backgrounds have different beliefs about disabilities.
4. Understanding the culture of a student with disabilities is as important as understanding the disabilities.
5. The perspective of the teacher about what is important educationally for the child should be considered before the parent's perspective about what is important.
6. It is important for families to be involved with the planning and coordination of

services for children with disabilities.

7. Differences in communication impact how well interactions between teachers and families occur.
8. Families from different cultures need to learn to 'fit in' in America.
9. The focus should be on a child's disability and how it affects the way you teach rather than how it affects their child's family.
10. Outcomes for students with disabilities improve when their families are involved in their education.

While no validity data existed for this scale, a pilot study analysis of data from the beta sights were subjected to a varimax rotated factor analysis (N=140). Items loading .30 or higher were considered to represent significant contributors to the theoretical structure of the scale. The results of this preliminary analysis revealed the existence of a two-factor solution of (1) family perspective (2) teacher perspective.

Table 1

Item Factor loading (varimax rotated) for the Teacher Disposition Survey

	<i>Factor 1</i>	<i>Factor 2</i>
Q1	0.650	
Q2	0.801	
Q3	0.683	
Q4	0.786	
Q5		0.559
Q6	0.902	
Q7	0.839	
Q8		0.554
Q9		0.801
Q10	0.816	

When the individual items of the two factors are combined to create the 10-item Teacher Disposition Survey, reliability was .8757, as measured by Chronbach’s Alpha was obtained, representing a strong level of item reliability. The Teacher Disposition Survey was used for the purpose of this study with no modifications. (Appendix C)

Knowledge- Base Assessment Questionnaire (KAQ)

The KAQ was developed in conjunction with the lead writer and developer, Susan Donovan, of the module, “Examining Assumptions about Families”, and the TDS. (Appendix B) The researcher and the module developer, a faculty member within the

college of education, independent of each other, developed ten questions relating to the content of the module in the form of true/false response. The combined questions, a total of 20, were reviewed by a third year graduate doctoral student in exceptional education and reduced to ten. Items that overlapped or were similar were selected. The KAQ is a self report instrument administered as a paper/pencil true/false assessment. The participants are asked to circle their responses. The instructions were clearly marked on the top of the questionnaire.

Rubric Scoring Development

Rubrics are statements about characteristics of behaviors, that when totaled, represent the quality of the behavior. Rubrics are aids to increasing the standardization of meaning for terms comprised of a fixed scale and a list of characteristics that describe the level of performance for each of the points on the scale (Marzano, Pickering, & McTighe, 1993). Rubrics are intended to assist in the scoring by reducing the amount of subjectivity in judging the quality of a respondent's performance. The goal of a rubric scoring set is to reduce the variability of scores assigned to the same respondent by different trained assessors.

For the purpose of this study, and in order to develop a rubric scoring device, the researcher relied on the work of Carol Kochhar -Bryant, *The Quality of National Standards for Preparing Teachers for Partnership with Families: Briefing Paper 1*(2003). The purpose of her study was to examine new teacher standards that had been

added, standards that had been updated or revised, since 1991, to national standards including the Interstate Teacher Assessment and Support Consortium (INTASC). Secondly, the study made judgments about the quality of the standards in terms of specificity and effectiveness to affect teacher behavior. Thirdly, the study examined standards related to the preparation of special education teachers in special education teacher preparation programs. It was this third purpose that led this researcher to select and utilize the findings of the study to develop the two scoring rubrics, knowledge and disposition.

The objective of the Kochhar-Bryant study was to analyze national standards that affect teacher preparation programs in special education. The intent was to determine whether the standards included requirements related to (1) knowledge and skill competencies needed by professionals at the preservice and inservice levels about family partnerships; (2) dispositions related to parent-professional collaboration; and (3) direct participation of parents in decision making and reform in schools, preservice institutions, and field-based professional development. Competency standards were classified as; Knowledge (K) - Content, pedagogical, or professional knowledge, including reflection. Skills (S) - The specific strategies, assessments, activities and events, methods, materials and technology teachers employ in working with parents. Disposition (D) - The attitudes, values, commitments and professional ethics that influence behavior towards students and families that affect relationships with parents.

The analysis included nine sets of national special education teacher preparation standards related to family partnerships. Three categories were developed to guide the judgments about the quality of each set of standards, based on the definition; *quality standards emphasize results as well as process. They concretely describe what and individual or organization must know and be able to do. They require reflection and are explicit about expected change in knowledge, skills, and disposition. It is clear which standards are required, encouraged or optional* (Briefing Paper, p.21). Standards that were considered to be the most powerful in their potential to affect change and improvement in teachers' ability to work with families were labeled 'Level A'. Standards that were considered to be less powerful were labeled Level B and Level C. A total of 350 standards were reviewed from 8 organizational clusters. One third of the standards did refer to families in some way, however, only about 31% of those were judged to be 'Level A' standards. All of these were Council for Exceptional Children (CEC) standards and Interstate Teacher Assessment and Support Consortium (INTASC) standards. These standards, which aimed at preparing teachers to work with students with disabilities, had the greatest number of standards that addressed parent partnerships. The Principles from INTASC, the CEC Content Standards for All Beginning Special Education Teachers, and CEC Standards for Professional Practice Professional in Relation to Persons with Exceptionalities and Their Families, and CEC Performance-Based Standards for Special Education Administrators were extracted and compiled to a summary table (Briefing

Paper, p. 23). From the summary of findings relating to CEC and INTASC standards, Kochhar-Bryant described the text of the standards that incorporate parent partnerships. Each standard was identified as a knowledge (K), skill (S) or disposition (D), and by quality level, A, B, or C. In order to design a measurement instrument for the present study, this researcher matched the CEC standards and INTASC principles respective to knowledge and disposition. The language from the 'Level A' principles and standards were then used to develop the levels of the scoring rubric for the measures of knowledge (Appendix F) and the scoring rubric for the measure of disposition. (Appendix G)

Development of Knowledge Rubric and Disposition Rubric

For the present study a three level ordinal scale (1-3), low to high, was applied to the narrative responses of the treatment group and non-treatment group EAAF to two specific questions following exposure to a case study based on content presented in the online module. The development of two rubrics was for the purpose of objectifying the written response by participants in both the treatment and non-treatment group to two questions posed related to the content of the online EAAF instructional module. The participants in both groups recorded their responses to the questions as part of the post treatment assessment protocol using paper/pencil. The researcher utilized the two scoring rubrics developed for this study in order to measure level of knowledge and to measure disposition level.

Rubric Scoring Procedure

Prior to initiating this study, two graduate doctoral students in exceptional education were asked to assist in rater-reliability training in the use of the rubric scoring. Data used for the scoring was obtained from responses generated by the beta testing of the module. The graduate students were given ten sets of responses to the two questions related to the case study based on the module. Seven of the sets were from different subjects and three sets were from the same subject. The raters were instructed to measure the responses using the knowledge rubric and the disposition rubric. A 90% agreement of the categorization of responses was considered the minimum standard for inter-scorer reliability. The rubrics were then reviewed by this researcher and a faculty member of the college of education for reliability. The scoring results were reviewed with the scores. The 90% standard was met. The researcher reviewed criteria with scores and then repeated the same steps using a different set of responses taken from the beta site data. For intra-scorer reliability, the two scorers were asked to score the same response sets three times. The same standard was used for intra-scorer mastery of the rating scale. The scoring of the responses, using the same two rubrics for this study, was complete by the same two graduate students after data was collected.

Data Collection

Prior to commencement of the fall semester of 2004 school year, faculty members were contacted and invited to participate in the study. The faculty was selected based on

their roles as lead instructors in an introductory to exceptional education course, *Teaching Exceptional Children*. The first six faculties to respond affirmatively to the request to be a part of the study were acknowledged. A package containing a cover letter, module instruction page, copy of the Teacher Disposition Survey, Knowledge-Base Assessment Questionnaire, and access codes to the module, and copies of student consent forms were given to each of the faculty. The cover letter explained the purpose of the study and that the class being taught by the instructor would be randomly assigned to an experimental group or control group. Three of the classes were randomly assigned experimental and three classes were assigned control.

During the first week of scheduled classes, each instructor was contacted by the researcher to schedule a specific time for presentation of the pretreatment assessments. Each of the six classes was given a consent form and a single page form asking for age, sex and grade point average. Each participant in the experimental and non-treatment classes was requested to complete the Teacher Disposition Survey and Knowledge-Base Assessment Questionnaire. In addition, each participant was provided with a complete explanation of the project along with options for participants to engage in the study. Each participant was assigned a non-identifying code to maintain confidentiality during the scoring phase of the study. The experimental group (three classes) were assigned access codes to the training modules and given written instructions as to accessing and completing the module. Two weeks later, all participants in the experimental and non-

treatment classes were again requested to complete the Teacher Disposition Survey and Knowledge-Base Assessment Questionnaire. In addition, both groups were asked to respond in writing to two questions regarding a case study presented to them that was based on content presented in the EAAF module. For each participant of the six classes, the researcher collected a pre/post Knowledge Base Assessment Questionnaire, pre/post Teacher Disposition Survey, written response to two questions relating to the case study based on the content of the online instructional module, and signed consent forms. The Institutional Review Board of the University of Central Florida had given permission to this researcher to conduct the study. (Appendix A)

Data Analysis Procedures

Analyses of the data for this study were conducted using both descriptive and inferential methods. At an overall descriptive level, both pre and post treatment means and standard deviations were calculated for each class and group participant characteristics including age, gender, and performance on the disposition survey and knowledge questionnaire. These data provided a descriptive summary picture of the treatment and comparison groups and served as the basis for the inferential analysis assessing the effects of the intervention methodology.

At the inferential level of analysis, the parametric Analysis of Variance (ANOVA) was conducted to assess within group or between classroom pretreatment differences that might result in a significant and systematic bias impacting the effects of

the intervention. This analysis was conducted for pretreatment differences for participants on (1) disposition scores (2) knowledge scores (3) disposition rubric scores, (4) knowledge rubric scores, (5) age and (6) GPA.

If no significant differences were found, all remaining analyses would disregard these factors as a potentially contributing to the treatment effects of the intervention program. If however, substantive differences emerged, the remaining analyses would, where appropriate, utilize an analysis of variance (ANOVA) to moderate the potential bias on the impact of the intervention. The goal of the analyses was to compare the combined treatment classes' performance with the combined control classes' performance on the measures of disposition and knowledge. As a confirmatory analysis, the rubric scores for both Disposition and Knowledge were conducted. A one way analysis of variance (ANOVA) was conducted for the Knowledge Rubric (KR) performance in which the control group performance was treated as a pretest estimate of the experimental group. A one way analysis of variance (ANOVA) was conducted for the Disposition Rubric (DR) performance in which the control group performance was treated as a pretest estimate of the experimental group. A correlation analysis of the experimental group only posttest outcomes was conducted to address the nature of the post treatment relationship between a participant's knowledge as measured on the Knowledge Base Assessment Questionnaire and Knowledge Rubric, the participant's disposition as measured on the Teacher Disposition Survey and the Disposition Rubric

and the participant's age and grade point average (GPA). Chapter four will present the analysis of data.

CHAPTER FOUR: ANALYSIS OF THE DATA

Overview of Data Analysis

The purpose of this study was to determine the effect of an online instructional module, “Examining Assumptions about Families” (EAF) on the level of knowledge and disposition of undergraduate education students enrolled in the exceptional education course, *Teaching Exceptional Children*. Specifically, an experimental study was designed to investigate the degree of change, in students’ level of knowledge and disposition regarding family involvement of children with disabilities. The assessment of the changes in knowledge and disposition was made following students’ participation in an intervention designed to increase student’s awareness of the importance of partnering with the families of children with disabilities.

Five research questions were asked specifically:

Question 1: Is there statistically significant change (difference) in participants’

knowledge, as measured by a pre/post ten item questionnaire?

Question 2: Is there a statistically significant change (difference) in participants’

disposition, as measured by a ten item survey instrument?

Question 3: Is there a statistically significant change (difference) in participants’

knowledge, as measured by a rubric (assessment instrument), in response to

a case study based on content presented in the online module?

- Question 4: Is there a statistically significant change (difference) in participants' disposition, as measured by a rubric (assessment instrument), in response to a case study based on content presented in the online module?
- Question 5: Is there a correlation between participants' knowledge, disposition, age, and grade point average (GPA)?

General Characteristics of the Sample

Participants for this study were composed of 99 female students enrolled in three undergraduate classes assigned to the experimental condition (n=43) and three classes assigned to the control (n=46) condition. The age and current grade point average (GPA) was collected for each participant. Table 2 presents the mean and standard deviation of the age and GPA for each class.

Table 2

Characteristics of Sample

	<i>Experimental</i>			<i>Control</i>		
	<i>Class 1</i>	<i>Class 2</i>	<i>Class 3</i>	<i>Class 4</i>	<i>Class 5</i>	<i>Class 6</i>
N	17.00	5.00	21.00	26.00	5.00	15.00
Mean Age	23.53	27.40	24.25	23.92	27.60	24.93
Std Dev Age	4.60	8.41	7.04	7.22	9.56	8.08
Mean GPA	3.47	3.12	3.42	3.52	3.66	3.47
Std Dev GPA	0.27	0.44	0.42	0.36	0.26	0.39

In order to assess the impact of age or GPA on posttest performance, the combined mean age and GPA for each group were submitted to a one-way analysis of variance. Results of this analysis revealed no significant difference ($p > .05$) for any comparison. These data suggest that no systematic bias existed prior to the pretreatment assessment with regards to the basic participant characteristics of age and GPA resulting in the random group assignment. This remainder of the analyses could proceed using data combined across the three classes in both the experimental and control groups.

Analysis of Research Question 1&2

The statistic of choice for addressing research questions 1 and 2 was the t-test for independent groups comparing measures for both knowledge and disposition scores. While the measurement of both disposition and knowledge utilizes only 10 responses, for each area, the basic assumption of the normality of variance can be assumed. Due to the robustness of the t-test mathematics and the larger than required sample size for each group, Drew and Hardman, (1985) and Kerlinger, (1973), have both indicated that even a moderate violation of the normality of group variances is mediated.

The first question focused on the participant's change in knowledge as measured by a 10 item true/false questionnaire. Table 3 presents the pretest mean (sd) and posttest mean (sd) for the experimental and control groups responses to the Knowledge Base Assessment Questionnaire (KAQ).

Table 3

Knowledge Questionnaire Pre/Post Means and Standard Deviations

	<i>Experimental</i>				<i>Comparison</i>			
	<i>Class 1</i>	<i>Class 2</i>	<i>Class 3</i>	<i>Total</i>	<i>Class 4</i>	<i>Class 5</i>	<i>Class 6</i>	<i>Total</i>
Average Pretest Score	7.29	5.80	6.76	6.86	6.12	7.20	6.60	6.39
Std Dev Pretest	1.45	0.84	1.09		0.82	1.10	1.12	
Average Posttest Score	6.65	6.80	7.81	7.23	6.35	7.40	6.93	6.65
Std Dev Posttest	1.62	1.28	1.14		0.94	1.14	1.28	

Analysis of scores within and between groups on Knowledge Questionnaire

Within Group Analysis

The first level of analysis was conducted to assess whether any changes within the experimental and control group conditions occurred from the pretest to posttest. An analysis of the performances of the experimental and control groups revealed no significant differences for the control group (t (one-tail) = 1.533, df = 44, p = .066). A summary of these data are presented in Table 4.

Table 4

t-test For Knowledge for Control Group (pre and posttest)

t-Test: Paired Two Sample for Means

Knowledge Control Group

	<i>Control Pretest</i>	<i>Control Posttest</i>
Mean	6.4	6.6444
Variance	1.018	1.2797
Observations	45	45
Pearson Correlation	0.5057	
Hypothesized Mean Difference	0	
df	44	
t Stat	-1.5334	
P(T<=t) one-tail	0.0661	
t Critical one-tail	1.6802	

The analysis of the experimental group pretest to posttest performance as presented in Table 5, revealed a non-significant finding of the posttest performance ($t = 1.311$, $df = 41$, $p = 0.098$). That is, the experimental group's performance improved non significantly on the posttest when compare to their pretest performance while the control groups performance did not significantly improve.

Table 5

t-test For Knowledge for Experimental Group (pre and posttest)

t-Test: Paired Two Sample for Means

Knowledge Experimental Group

	<i>Experimental Pretest</i>	<i>Experimental Posttest</i>
Mean	6.8571	7.2142
Variance	1.6864	2.5139
Observations	42	42
Pearson Correlation	0.2639	
Hypothesized Mean Difference	0	
df	41	
t Stat	-1.3117	
P(T<=t) one-tail	0.0984	
t Critical one-tail	1.6828	

Between Group Analysis

While the experimental group did not demonstrate a significant improvement from pre to posttest, the question still to be answered was whether or not that change can be attributed to the students' completion of the teaching module. As seen in Table 6, the t-test analysis of the performances of the experimental and control groups posttest scores revealed a significant difference ($t = -2.2419$, $df = 42$, $p < 0.015$) in favor of the experimental group.

Table 6

t-test For Knowledge Control and Experimental Posttest

t-Test: Paired Two Sample for Means

Knowledge Posttest

	<i>Control Posttest</i>	<i>Experimental Posttest</i>
Mean	6.5581	7.2326
Variance	1.1573	2.4684
Observations	43	43
Pearson Correlation	-0.0786	
Hypothesized Mean Difference	0	
df	42	
t Stat	-2.2419	
P(T<=t) one-tail	0.0152	
t Critical one-tail	1.682	

Analysis of scores within and between groups Teacher Disposition Survey

The second question addressed whether or not there was a significant change in participants' disposition, as measured by a ten item, 5 point Likert Teacher Disposition Survey (TDS). Table 7 presents the pretest mean (sd) and posttest mean (sd) for the experimental and control groups responses to the Teacher Disposition Survey (DS).

Table 7

Disposition Survey Pre/Post Means and Standard Deviations

	<i>Experimental</i>				<i>Comparison</i>			
	<i>Class 1</i>	<i>Class 2</i>	<i>Class 3</i>	<i>Total</i>	<i>Class 4</i>	<i>Class 5</i>	<i>Class 6</i>	<i>Total</i>
Average Pretest Score	3.80	3.68	4.06	3.85	3.84	3.94	3.99	3.92
Std Dev Pretest	0.40	0.41	0.42		0.36	0.23	0.32	
Average Posttest Score	3.91	4.02	3.97	3.96	4.02	3.98	3.90	3.97
Std Dev Posttest	0.25	0.56	0.58		0.42	0.20	0.48	

Within Group Analysis

A comparison of the pre to posttest performance of the experimental group on the Teacher Disposition Survey (DS) revealed a significant ($t = 2.486$, $df = 439$, $p = 0.0066$) improvement. However, the same analysis of the control group yielded a non-significant difference ($p > .05$). A summary of the analyses of the posttest performance of the experimental and control group is presented in Table 8.

Table 8

t-test For Disposition Experimental Group (pre and post)

t-Test: Paired Two Sample for Means
Disposition Experimental Pretest,
Posttest

	<i>Experimental Pretest</i>	<i>Experimental Posttest</i>
Mean	3.8609	3.9951
Variance	1.4009	1.2825
Observations	440	440
Pearson Correlation	0.5227	
Hypothesized Mean Difference	0	
df	439	
t Stat	-2.4861	
P(T<=t) one-tail	0.0066	
t Critical one-tail	1.6483	

Between Group Analysis

The comparison of the posttest performances of the experimental and control group revealed a non-significant difference ($p > .05$) between the two groups. These analyses taken together suggest that while the experimental group exhibited a significant improvement in their score following participation in the module training program. However, the gain could not be attributed solely to the program since the control group exhibited a similar level of improvement. Table 9 presents a summary of the t-test

analysis of the performance for the experimental group on both the pre and posttest measures of the Teacher Disposition Survey.

Table 9

t-test For Disposition Control Group Posttest, Experimental Group Posttest

t-Test: Paired Two Sample for Means

Disposition Control Posttest, Experimental Posttest

	<i>Control Posttest</i>	<i>Experimental Posttest</i>
Mean	3.9070	3.9490
Variance	1.3053	1.3863
Observations	440	440
Pearson Correlation	0.5178	
Hypothesized Mean Difference	0	
df	439	
t Stat	-0.7719	
P(T<=t) one-tail	0.2203	
t Critical one-tail	1.6483	
P(T<=t) two-tail	0.4406	
t Critical two-tail	1.9654	

Analysis of Research Question 3&4

Questions 3 and 4 focused attention on the assessment of the respondent's use of descriptive terms indicating the level of understanding of the importance of partnering with the families of students with disabilities. In order to accomplish this, a three level

rubric scale was applied to each participant's written responses following completion of a case study based on the content presented in the on line instructional module. The written responses to the case study were scored: Unacceptable (1), Acceptable (2), and Target (3). A complete discussion of these categories was presented in Chapter 3.

The dimension of interest with regard to the development of a rubric analysis was whether or not the experimental group could, as a result of the online instructional training module, demonstrate a higher level of understanding through written communication. Since there was no pre treatment measurement of either groups using the rubric, the estimate of the treatment effect had to be conceived on the basis of the reasonable assumptions that, since (1) the groups were randomly assigned prior to the intervention, and (2) all pretreatment measures including age, GPA, and pretreatment knowledge and disposition scores were not significantly different, there was no reason to expect that the pretreatment rubric values would have been significantly different. Further, the rubric assessments could reasonably be viewed as a post test only experiment since neither group was assessed prior to the intervention on levels of rubric usage. All of this leads the researcher to cast the statistical measurement of rubric performance as a single group pre to post treatment design using the control groups post treatment performance as an estimate of the experimental groups' pretreatment level of performance. That is, since there was not pretreatment measure using the rubric, the only way to assess whether or not the treatment had any effect on the participants use of

written descriptions was to assume that since the control group did not receive the module training program, the experimental group would likely have functioned at about the same pretreatment level and the control group performance could be treated as a best estimate of the experimental group prior to treatment.

It could also be argued that this recasting of data in fact strengthens the potential interpretative value of the data. Since there was no pretest condition for either group, the potential effects of test-retest have been removed. That is the experimental group did not have the opportunity to improve their performance by virtue of their exposure to the task prior to the treatment. This is a substantial contribution to the internal validity as suggested by Campbell and Stanley (1966) who pointed out the potential bias associated with test reactivity for multiple exposures to the measurement task. In summary, the statistical analysis of the rubric measures is justified by using the rubric measurement for the control group as an estimate of the pretreatment rubric measurement for the experimental and comparing that to the post treatment rubric measurement.

The experimental group and control group responses for both the Knowledge Rubric (KR) and Disposition Rubric (DR) were coded, and scored using trained raters as presented in Chapter 3 of this manuscript. During the posttest phase of the research, participants in both groups responded to two questions, a single knowledge question regarding a case study presented at the post test phase of the research and a dispositions question, regarding the same case study presented at the post test phase of the research.

The two questions, developed by this researcher, were based on the content presented in the case study.

Analysis of Knowledge Rubric Performance

Results of the scoring indicate that 44 subjects in the control group and 31 subjects in the experimental group obtained a score of 1 (Unacceptable), 4 subjects in the control group obtained a score of 2 (Acceptable) and 14 subjects obtained a score of 2 (Acceptable). No subjects obtained a score of 3 (Target) in the control group or the experimental group. Figure 1 provides a graphic representation of the rubric performance for both groups at all levels of rubric performance.

Control and Experimental Knowledge Rubric

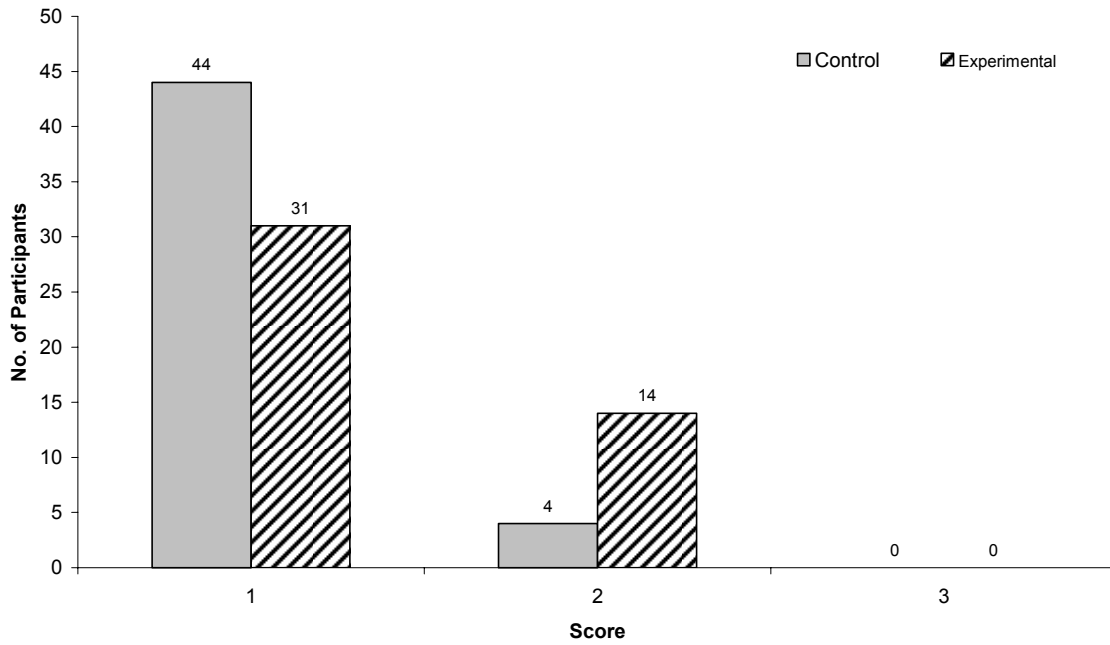


Figure 1: Rubric Scores for the Knowledge Experimental and Control Groups

A one way analysis of variance (ANOVA) was conducted for the Knowledge Rubric (KR) performance in which the control group performance was treated as a pretest estimate of the experimental group KR. This analysis yielded a significant omnibus F (3.94, $p = 0.003$) suggesting that the experimental group demonstrated a significant improvement of their scores of the KR from the pretest to posttest measurement. Table 10 presents a summary of the ANOVA.

Table 10

Analysis of Variance for Experimental and Control Group Knowledge Performance

Anova:
Single Factor

SUMMARY

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Knowledge Control	47	51.17391	1.088807	0.079227
Knowledge Experimental	47	62.27273	1.324952	0.205262

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	1.310465	1	1.310465	9.212749	0.003125	3.944539
Within Groups	13.08651	92	0.142245			
Total	14.39698	93				

Analysis of Disposition Rubric Performance

The fourth question addressed whether or not there was significant change in participants' disposition, as measured by the rubric scoring device DR, to the written responses to the disposition question following the case study.

The written responses were scored with the same three level rubric system used in the KR analysis.

The experimental group performance revealed that 38 subjects in the experimental

group and 44 subjects in the control group obtained a score of 1 (Unacceptable), 3 subjects in the control group obtained a score of 2 (Acceptable) and 5 subjects in the experimental group obtained a score of 2 (Acceptable). One subject obtained a score of 3 (Target) in the control group and 2 subjects obtained a score of 3 (Target) in the experimental group. Figure 2 presents a graphic representation.

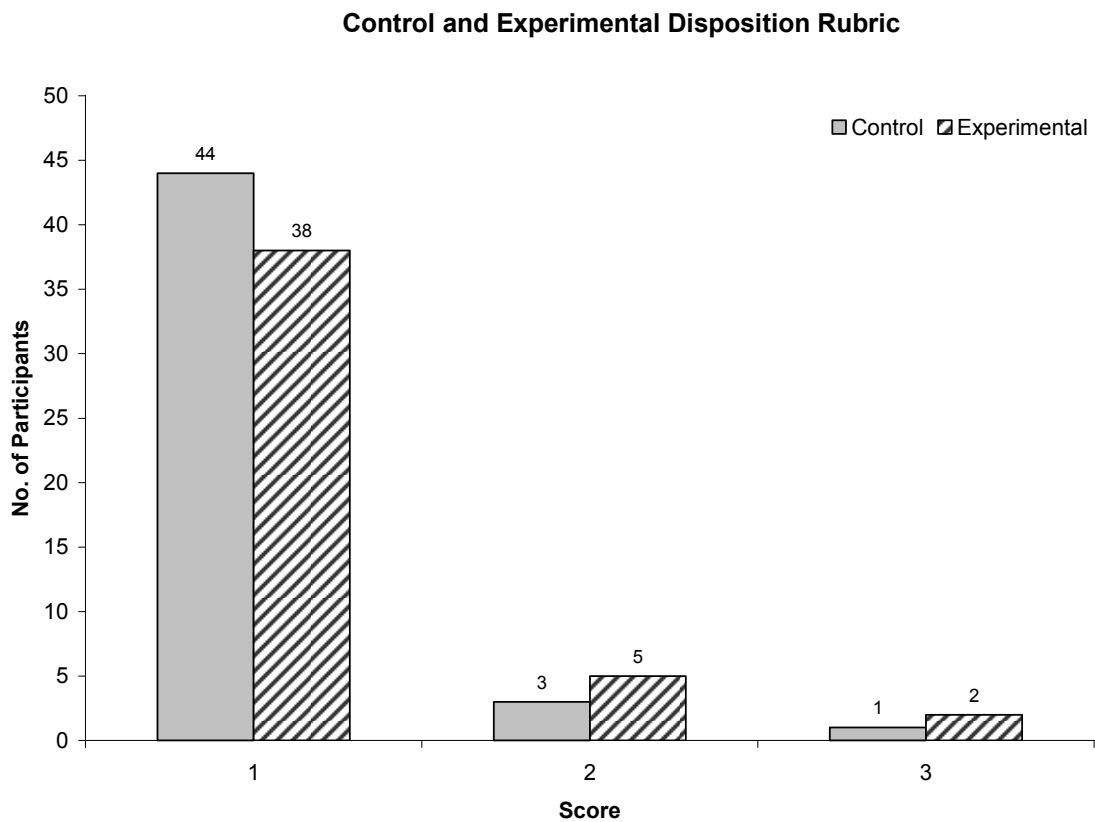


Figure 2: Disposition Scores on Rubric for Control and Experimental

A one way analysis of variance (ANOVA) was conducted for the Disposition Rubric (DR) performance in which the control group performance was treated as a pretest estimate of the experimental group. This analysis yielded a non-significant omnibus F (1.23 at $p = 0.233$) suggesting that the experimental group did not demonstrate a statistically significant improvement in their level of disposition from the pretest to posttest measurement. Table 11 presents a summary of the ANOVA analysis.

Table 11

Disposition Performance Analysis of Variance

Anova:
Single Factor

SUMMARY

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Disposition Control	48	53.106	1.106383	0.137619
Disposition Experimental	48	57.818	1.204545	0.237427

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.231261	1	0.231261	1.233239	0.269611	3.942303
Within Groups	17.62718	94	0.187523			
Total	17.85844	95				

Analysis of Research Question 5

The final research question addresses the nature of the post treatment relationship between a participant's knowledge as measured on the Knowledge Base Assessment Questionnaire and Knowledge Rubric, the participant's disposition as measured on the Teacher Disposition Survey and the Disposition Rubric and the participant's age and grade point average (GPA). Since the issue of concern centers around the impact of the treatment condition, a correlation analysis of the experimental group only posttest outcomes was conducted.

Results using a Pearson Product Moment Coefficient analysis revealed a moderate relationship between Disposition Rubric and the Knowledge Rubric ($r = 0.40$). The Pearson was used because the scoring protocol used an interval scale and continuously scaled measures for judging the adequacy of the response. Correlation findings were not greater than $r = -.17$ (except for Knowledge Rubric and Disposition Rubric) suggesting no substantial strength of relationship between the independent variables and measured outcomes. A complete correlation matrix is presented in Table 12. Because the rubric measure utilized an ordinal scale to measure participants' responses, the appropriate statistic, Kendal Tau, was applied (SPSS). As seen in Table 12, a value of .46 was obtained suggesting a moderate relationship.

Table 12

Correlation Matrix for Experimental Group

	<i>Disposition Rubric Score</i>	<i>Knowledge Rubric Score</i>	<i>Disposition Post Score</i>	<i>Knowledge Post Score</i>	<i>Age</i>	<i>GPA</i>
Disposition Rubric Score	1.00	0.416*	0.07	0.06	0.05	(0.04)
Knowledge Rubric Score		1.00	0.09	0.06	(0.17)	(0.00)
Disposition Post Score			1.00	0.07	0.14	0.15
Knowledge Post Score				1.00	(0.11)	(0.00)
Age					1.00	(0.03)
GPA						1.00

*Kendall's tau-b non-parametric statistical test for ordinal data significant at $p < 0.001$

Responses to Knowledge Questionnaire and Disposition Survey

The experimental study was designed to investigate the degree of change, in students' level of knowledge and disposition regarding family involvement of children with disabilities. The assessment of the changes in knowledge and disposition was made following students' participation in an intervention designed to increase students' awareness of the importance of partnering with the families of students with disabilities. The instruments used to measure change, both with regard to subjects' knowledge and

disposition, were the Knowledge Base Assessment Questionnaire, a true/false 10 item scale developed by the researcher and the Teacher Disposition Survey created during the pilot stage of the module development. The researcher wanted to assess the effectiveness of these two instruments to measure knowledge and disposition changes that could result from exposure to the online instructional module, the treatment. An item analysis was conducted for the Knowledge Base Assessment Questionnaire for both pre/post control and experimental groups. The analysis evaluated the number of correct responses using a gain score statistic for the performance on the Knowledge Base Assessment Questionnaire as a measure of the difference between the experimental group pre and posttest performance. An analysis of pre/post test responses per question on the Teacher Disposition Survey was conducted in order to assess which items (questions) best identified change in disposition. Finally, a one-way ANOVA was conducted to compare pre/post test difference between the control and experimental groups.

Analysis of Item Responses on Knowledge Base Questionnaire

An analysis of correct items on the KAQ was completed for both the pre test and post test measure. The findings for the control group on the pre test suggest that the highest number correct responses in percentage occurred for question 7. The control group answered question 7 most often correctly, with a score of 41%, followed by question 6 at 30%, question 5 at 17%, question 8 at 7% and questions 4 and 9 at 2%. Figure 3 presents the number of correct response per question. The number of correct

response is calculated by percentage within each question set.

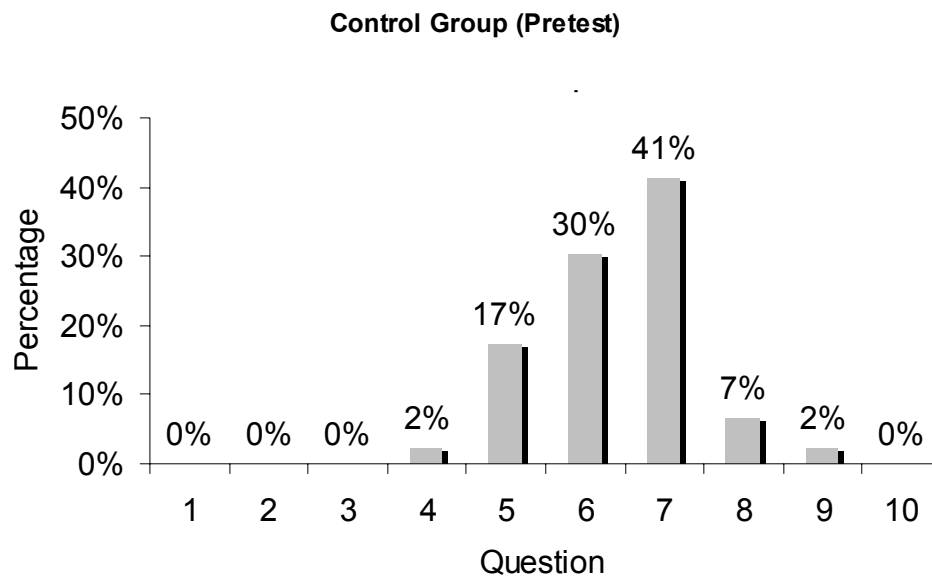


Figure 3: Knowledge Questionnaire, Responses Correct, Control Group, Pre test

The findings for the control group on the post test suggest that the highest number correct responses in percentage occurred for items 7 and 8. The control group answered question 7 most often correctly, with a score of 35%, followed by question 6 at 33%, question 8 at 13%, question 5 at 11%, questions 9 at 7% and question 4 at 2%. Figure 4 presents the results in terms of percentage within each question set.

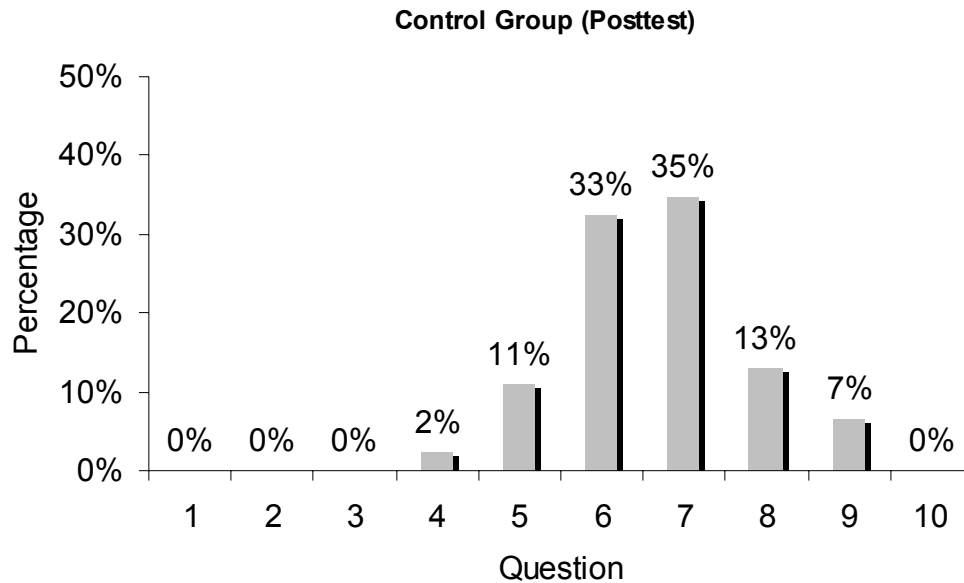


Figure 4: Knowledge Questionnaire, Responses Correct, Control Group, Post test

The findings for the experimental group (N=43) on the Knowledge Base Assessment Questionnaire pre test suggest that the highest number correct responses in percentage occurred with questions 6 and 7 followed by 8, 5, 9 and 10. As presented in Figure 5, the experimental group answered question 6 and 7 most often correctly, with a score of 26%, followed by question 8 at 23%, question 5 at 16%, and question 9 at 7%.

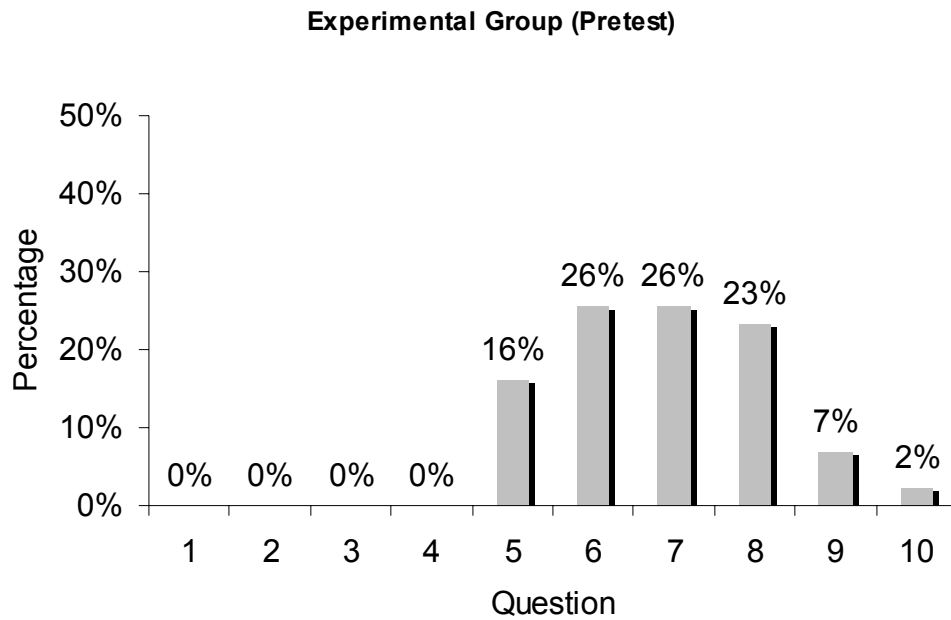


Figure 5: Knowledge Questionnaire Responses Correct, Experimental Group, Pretest

Figure 6 presents the findings for the experimental group (N=43) on the post test revealing that the highest number correct responses in percentage were observed for questions 6 and 8 followed by question 7, 9, 10 and 5. The experimental group answered question 6 and 8 most often correctly, with a score of 23%, followed by question 7 at 21%, question 9 at 12%, question 10 at 9% and question 4 at 5%

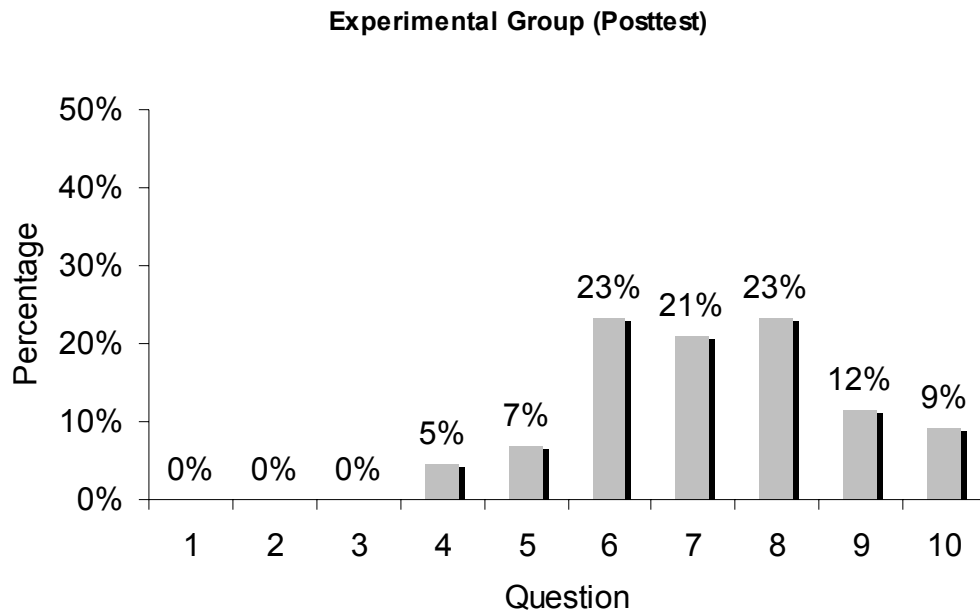


Figure 6: Knowledge Questionnaire Responses Correct, Experimental Group, Post test

Analysis of Variance for Knowledge Pre Post

The third statistical analysis was performed using a one- way analysis of variance. When comparing pre to post tests among the control and experimental groups, gain is an increase in response to the Likert scale questions and loss is a decrease. As presented in Table 13, the analysis revealed that there was statistically significant difference between the two groups for gain score measures ($F= 3.94, p = 0.003$).

Table 13

Summary of Analysis of Variance for Knowledge

Anova: Single Factor

SUMMARY

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Gain Score Experiment	43	12	0.27907	1.20598
Gain Score Control	43	16	0.372093	3.048726

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.186047	1	0.186047	0.087454	0.768168	3.954568
Within Groups	178.6977	84	2.127353			
Total	178.8837	85				

Analysis of Gain Scores on the Disposition Survey

Because a statistically significant difference was found within the experimental group following completion of the online instructional module (treatment) it was important to determine which item(s) on the survey participants responded to that resulted in the statistically significant difference. An item analysis was conducted for the Likert scale items in which 5 was the highest or most desired and 1 was the lowest, least desired. The results, presented in Figure 7, suggested that from a total of 440 responses,

(N=44 x 10 responses) the number of responses that stayed the same was 190, the number of responses that improved (increased) was 139, and the number of responses that showed no improvement was 100.

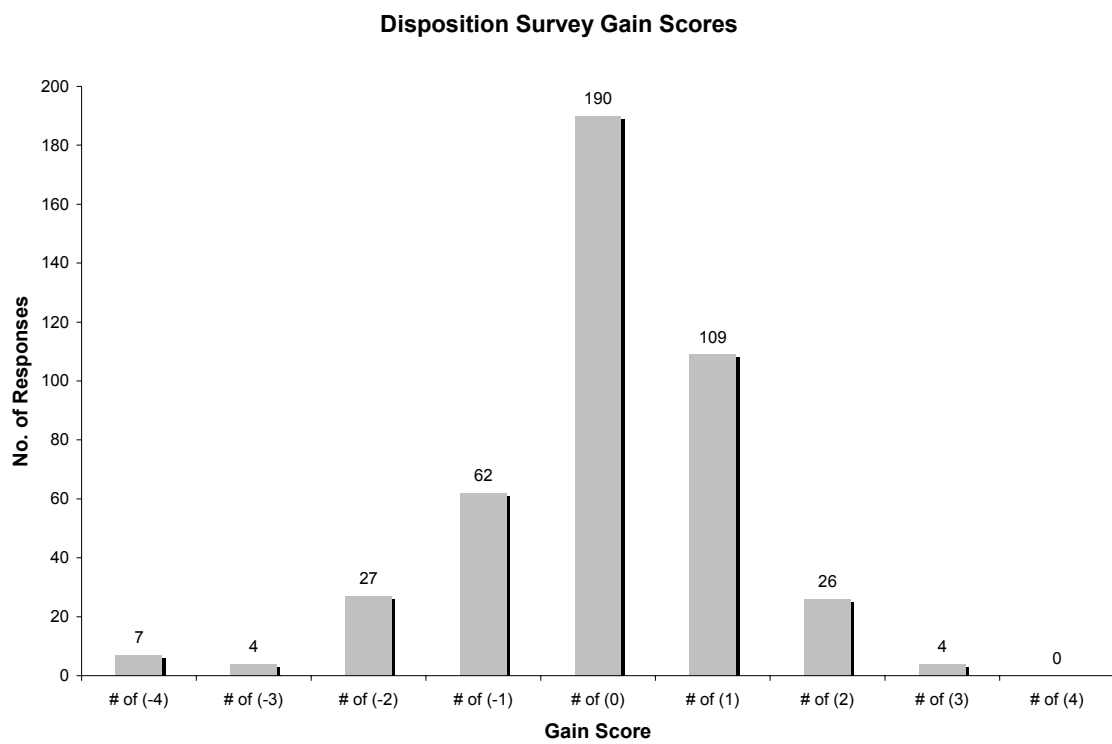


Figure 7: Gain Scores on the Disposition Survey

Analysis of Test Responses Pre & Post per Question

The results from the Teacher Disposition Survey (TDS) indicated an increase or change in scores when looking at overall responses for at least 139 items. This finding leads the researcher to ask which question(s) on the survey best measured change in disposition or which questions had the greatest improvement in score. Questions 5 and 1 had the most improvement (change) with score of 20.3 and 19.9 respectively. Question 7 indicates a negative change with a score of -6.7. A summary of these data are presented in Figure 8.

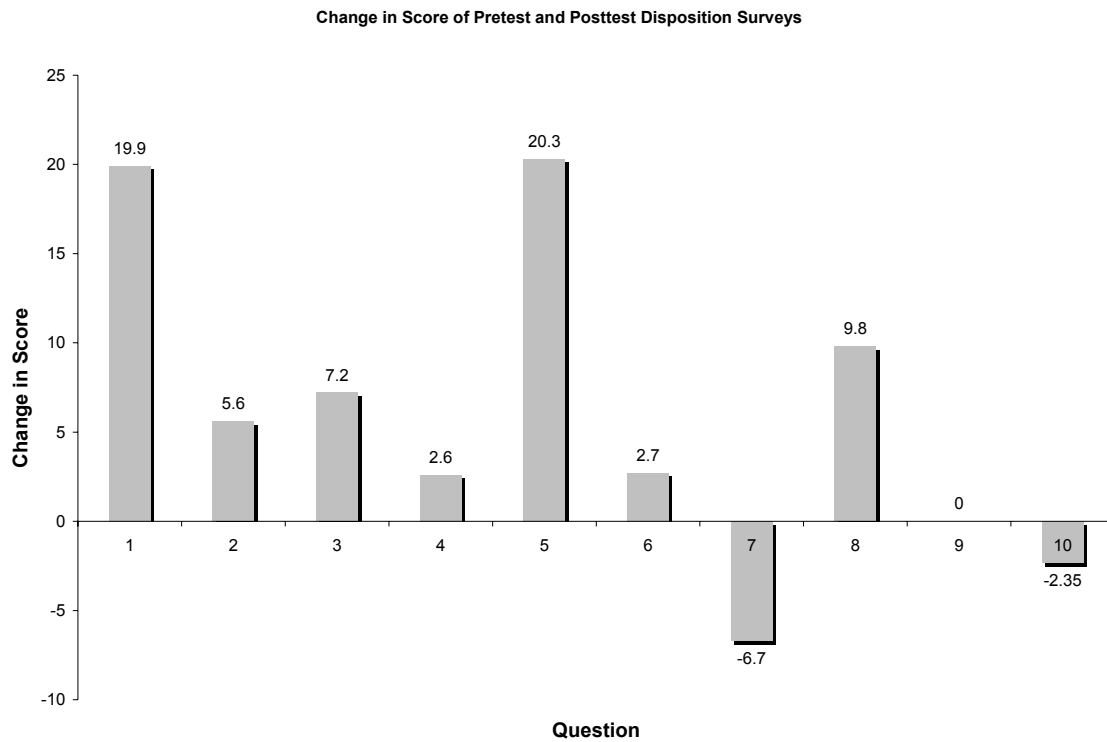


Figure 8: Improvement of Scores on the Disposition Survey

The fourth statistical analysis was performed using a one- way analysis of variance. When comparing pre to post tests among the control and experimental groups, gain is an increase in response to the Likert scale questions and loss is a decrease. As presented in Table 14, the analysis revealed that there was no statistically significant difference between the two groups for gain score measures ($F= 0.281, p = 0.597$).

Table 14

Summary of Analysis of Variance for Disposition

Anova:
Single Factor

SUMMARY

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
1	42	8	0.1904	1.036
1	42	15	0.3571	3.1132

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.5833	1	0.5833	0.2811	0.5973	3.9573
Within Groups	170.119	82	2.0746			
Total	170.7023	83				

Summary of Data Analysis

The purpose of this study was to determine the effect of the online instructional module, “Examining Assumptions about Families” (EAF) on the level of knowledge and disposition of undergraduate education students enrolled in the exceptional education course, *Teaching Exceptional Children*. The experimental study was designed to investigate the degree of change, in students’ level of knowledge and disposition regarding family involvement of children with disabilities. The assessment of the

changes in knowledge and disposition was made following students' participation in an intervention designed to increase student's awareness of the importance of partnering with the families of children with disabilities.

Five research questions are asked specifically: (1&2) is there significant change in participant's knowledge, and/or disposition following completion of an online instructional module, (3&4) is there significant change in participant's knowledge and/or disposition, as measured by a rubric (assessment instrument), in response to a case study based on content presented in the online module and lastly, (5) what is the relationship between participant's knowledge, disposition, age, and grade point average (GPA)?

A detailed assessment was conducted for the two instruments used to determine change in knowledge and disposition. The instruments used to measure change, both with regards to subject's knowledge and disposition, were the Knowledge Base Assessment Questionnaire (a true/false, 10 item scale developed by the researcher) and the Teacher Disposition Survey created during the pilot stage of the module development. Data were presented to assess the effectiveness or strength of these two instruments using correlation analyses. An item analysis was used to inspect performances for the number of correct responses on the Knowledge Base Assessment Questionnaire for both pre/post control and experimental groups.

An analysis of gain scores on the Teacher Disposition Survey was conducted in order to determine if the changes from pre to posttest could be observed when accounting

for the precise estimate of pretest treatment levels of performance. An analysis of pre/post test responses per question on the Teacher Disposition Survey was conducted to assess which items (questions) best reflected a change in disposition performance. Lastly, a one-way Analysis of Variance was conducted to compare pre/post test difference between the control and experimental groups.

In response to questions one and two, was there significant change in participants' knowledge, following completion of an online instructional module (treatment), the analysis of the experimental and control group pretest to post test performance revealed non significance. Analysis of performance of the experimental and control group post test scores revealed significance.

In response to the second questions, was there significant change in participants' disposition, following completion of an online instructional module (treatment), the analysis of pre to post test performance of the control group yielded a non significant difference. The analysis of the pre to post performance of the experimental group revealed a non significant difference.

In response to the third question, was there significant change in participants' knowledge, as measured by a rubric (assessment instrument), in response to a case study based on content presented in the online module, the analysis yielded a significant omnibus F (3.94, $p = 0.003$) suggesting that the experimental group demonstrated a

significant improvement in their scores on the KR from the pretest to posttest measurement.

In response to the fourth question, was there significant change in participants' disposition, as measured by a rubric (assessment instrument), in response to a case study based on content presented in the online module, the analysis yielded a non-significant difference ($F = 1.23$, $p = 0.233$) suggesting that the experimental group did not demonstrate a statistically significant improvement from the pretest to posttest measurement.

The relationship between participants' knowledge, disposition, age, and grade point average (GPA) was investigated using a correlation analysis in order to determine what degree of relating each of the variables had to each other. Results of this analysis revealed a moderate relationship between Disposition Rubric and the Knowledge Rubric ($r = 0.40$) using the Kendal Tau analysis. No other variables correlated beyond a weak level of relating.

CHAPTER FIVE: DISCUSSION AND RECOMMENDATIONS

The purpose of this chapter is to discuss the impact of the online instructional module “Examining Assumptions about Families” on the level of knowledge and disposition in college aged preservice elementary education students. The researcher will relate findings from the study to possible future research and discuss how this study has added to the body of knowledge already present in the literature. The chapter will suggest recommendations for further research in the area of personnel preparation. The present study attempted to build on what we already know about family involvement and teacher preparation. The research was situated within an urban metropolitan university college of education. This study sought to determine the effectiveness of a content related module on the knowledge and disposition of pre-service teachers. The module contained content centered on the areas of family involvement, partnerships, and assumptions about families. The study included two dependant variables: level of knowledge and disposition. The independent variable was the experimental treatment, an online instructional module. The module was conceptualized as an instructional tool to expose participants, students preparing to be teachers, to the role that attitudes and beliefs play in developing relationships with others; understanding family perspectives; and examining one’s own attitudes and beliefs about families of children with disabilities. The control variables included age, gender and GPA. The research question was: does increasing

knowledge regarding family involvement of children with disabilities have an impact on pre service teachers' disposition? The sample included 93 preservice elementary general education students attending the same undergraduate college of education. Subjects were enrolled in an introductory special education course. Sample comprised of all females between the ages of 20 and 50. In order to test the outcome of the treatment intervention, the study utilized a quasi-experimental design with an experimental group and comparison group, and pretest and posttest means. Randomization of the experimental group and comparison group was not possible. It was hypothesized that, while controlling for age, gender and pretest scores, those students who participated in the group intervention by completing the instructional online module would have a change in disposition and increase in knowledge scores as compared to those in the comparison group. It was further hypothesized, while controlling for age, gender and pre test scores, student written responses to two questions based on a case study (scored using rubric) would correlate positively with their disposition and knowledge scores as measured by self report following completion of the intervention. Findings indicate that students' level of knowledge increased significantly over time. The measure of disposition did not change significantly over time.

Family Involvement Research

Decades of research have demonstrated that family involvement significantly contributes to improved student outcomes relating to learning and overall school success.

Teachers must be prepared to promote effective family involvement in the education of all children including those students with disabilities. Many factors can be attributed to successful outcomes for a student with a disability both in the school and the broader community. Family involvement in education, particularly those families of children with disabilities can be one of these significant factors. Teachers and those who prepare teachers are often not prepared to work with families of students with disabilities and lack essential skills and knowledge about the process of partnering with these families. This study suggests that knowledge about the process of partnering with families of children with disabilities can be obtained through the use of an online instructional module.

Positive educational outcomes for students with disabilities depend on cooperative/collaborative relationships between parents and teachers. Teacher effectiveness with students with disabilities can be enhanced by strong partnerships with families (Shartrand, Weiss, Kreider & Lopez, 1997, Harvard Family Research Project). The Harvard Family Research Project, begun in 1991, documents the nature and scope of preservice teacher education in family involvement. The researchers concluded that teacher preparation in family involvement lags behind school efforts to promote family involvement. Findings of the present study support the conclusion of the Harvard Family Research Project. The level of knowledge students possessed prior to the treatment, related to family involvement and partnering with families of children with disabilities was low.

Efforts to promote family involvement have been greatly enhanced through policy changes over the past ten to fifteen years as evidenced in the passage of multiple federal laws including, Individuals with Disabilities Education Act, 1997 and 2004, Americans with Disabilities Act, 1990; No Child Left Behind Act, 2000. Additionally, educational standard sets developed by such entities as the Council for Exceptional Children (CEC), Interstate New Teacher Assessment and Support Consortium (INTASC, 2000) and the National Council for Accreditation of Teacher Education (NCATE) have been instituted. Education systems are now mandated through law to actively involve families of children with disabilities into the educational experience of the student. Institutes of higher education are guided by the aforementioned standards, to address such personnel preparation issues that include parent participation, family involvement, and increased academic achievement for all students. The reauthorization of the Individuals with Disabilities Education Act (IDEA) in 1997 significantly increased the role of parents in the education of students with disabilities (Sileo, Sileo, & Prater, 1998). The IDEA strengthens parent involvement in the education of their child and stresses the need for parental involvement in the educational process. Family's participation in the educational system is important in order to develop appropriate educational programs for children, as well as achieve full implementation of IDEA.

The No Child Left Behind Act (NCLB) is an educational reform initiative intended to hold schools accountable for the learning of all students. The Act sets out a

basic framework at the state, district and school level for ensuring that all students become proficient in the skills and knowledge identified in states' standards for what all students should learn. The President's Commission on Excellence in Special Education, *A New Era: Revitalizing Special Education for Children and Families* (2002) underscored the need for school systems to work towards increased academic achievement and improved educational outcomes for every student with a disability. The NCLB, combined with those provisions of the IDEA that address parent involvement, creates an opportunity to foster collaboration between parents and professionals that can lead to positive outcomes for children and youth with disabilities. However, as stated earlier, there is a disconnect between school efforts to promote family involvement and teacher preparation as evidenced by the Harvard Family Research Project findings (2002). The present study is further evidence that preservice education students have a minimal level of knowledge with regard to family involvement.

Why are policies regarding parent involvement important and why do achievement outcomes for students with disabilities matter? Many scholars have written persuasively of the relationship between parent involvement and student performance (Ammon, Chrispeels, Safran, Sandy, Dear and Reyes, 2000; Ammon and Peretti, 1999; Burts and Dever, 2001; Epstein, 2004, 2001; Evans-Shilling, 1999; Katz and Bauch, 1999). The extent to which a student's family is able to become involved in their children's education is an accurate predictor of a student's achievement. What the family

does with the student is more important to student success than family income or education. Attitude about families of children with disabilities, including those from cultures other than one's own, is an important consideration in how successful a person will be in engaging families as partners. Each family possesses many characteristics which make it unique. Some of these include education levels, socio-economic status, beliefs, religion, language and ethnicity. Christenson (2001) proposes that this uniqueness defines families and "it is essential that sincere efforts be made to understand all families for who they are rather than what they are or are not" (p.4). When teachers examine their beliefs and attitudes and become open to different perspectives, they can foster true partnerships with families. Christenson calls this 'perspective taking'. This thinking includes reflection and self-assessment on our personal attitudes toward families, learning with and from families, as well as about them, showing a personal interest in families and their children, and realizing different perspectives are the norm and embracing them

Several researchers have described the effectiveness of various parent partnership activities aimed at enhancing the school success of children (Christenson, Hurley, Sheridan, & Fenstermacher, 1997; Epstein, 2001, 1991). Learning to create partnerships with families begins when teachers are preparing for their profession. With all of the discussion in the education research literature about the importance of parent involvement in education, why has there been so little effort in the educational community to foster collaboration among parents and professionals? Educating teachers

for ‘family involvement’ is the first step towards what needs to occur. Engaging parents and professionals in collaborative relationships is a social and political issue that builds upon this education.

Student Outcomes

Young people with disabilities drop out of high school at twice the rate of their peers. Twenty-five percent of students with mental retardation are employed after exiting schools and as many as 90% of children with disabilities are living at the poverty level three years after graduation. Eighty percent of people with significant disabilities are not working. Currently, only one out of ten persons with a developmental disability will achieve integrated, competitive employment, and most will earn less than \$2.40 an hour in a sheltered workshop (National Organization on Disability’s Harris Survey of Americans with Disabilities, 2004). These findings speak to the need for greater academic achievement outcomes for students with disabilities. A primary goal for students proceeding through the educational system is to graduate from high school and be productive in society. Possible attainment of this goal needs to be available for all students who so desire. The attainment of a high school diploma and/or its equivalent can provide young people the potential to succeed, including earning a living, owning/renting a home and being an integrated, involved member in one’s community. This goal of graduation can not and should not be lessened merely because a student has a disability. It is for this reason achievement outcomes for students with disabilities must be

addressed both in policy and practice. When schools and families collaborate, better educational outcomes are facilitated (Raffaele, 1999).

In order to achieve systemic reform in the way we prepare teachers, change in perspective or attitude toward students with disabilities and their families must occur with teachers, educational professionals and teacher educators. In today's schools, where teachers are faced with more inclusive, diverse classrooms, they must be prepared to partner with families in order to affect positive outcomes and overall success of all students. In order to partner effectively, teachers must possess the knowledge and skills concerning students with disabilities as well as be aware of their own dispositions regarding students with disabilities and their families. The optimal time to provide this knowledge, practice these skills and affect this disposition is during the pre-professional level of personnel preparation. Cheney & Osher (1997) state that there is a need to improve preparation for preservice teachers to develop skills to work effectively with families. Teacher education curricula must provide for opportunities for preservice and in-service teachers to develop collaborative skills. Preparation of personnel to enter the education arena must include content centered on teacher/family partnering. The capacity of teacher preparation programs to prepare prospective educational candidates for partnership with parents/families must be expanded. The present study suggests that effecting students' level of knowledge is possible using an online instructional module; however, students' disposition was not effected significantly using the same treatment.

Disposition may have been significantly effected if the subjects had a longer exposure to the module. Several responses to the case study by subjects did indicate an awareness of beliefs, values and attitudes towards families of children with disabilities; however, the overall summative data was not significant. It may have been possible, with further probing, that verbal responses to the case study questions such as a focus group may have exposed more subjects change in disposition. Asking subjects to respond in writing, rather than verbally, may have limited their expression.

Summary of Research Study

This study attempted to expand the knowledge base we know about family involvement in the education of students with disabilities and teacher preparation. The research study was conducted in an urban metropolitan university college of education. This study sought to determine if the introduction of a content related module centered on family involvement, parent/teacher partnerships, and assumptions about families impacted the knowledge and dispositions of preservice teachers. The purpose of the online module was to introduce the learner to varying aspects of family involvement in the education of students with disabilities. The module was developed prior to the commencement of the study. It was designed to teach preervice teachers in general and special education, how to partner with families of children with disabilities. The following research questions served as a guide for this study: following participation in an intervention designed to increase student's awareness of the importance of partnering

with the families of students with disabilities (1) is there a significant change in participant's knowledge, as measured by a ten item questionnaire; (2) is there significant change in participant's disposition, as measured by a ten item survey instrument; (3) is there significant change in participant's knowledge, as measured by a rubric scoring device in relationship to responses on written activities based on content from the online module; (4) is there significant change in participant's disposition, as measured by a rubric scoring device in relationship to responses on written activities based on content from the online module; and, (5) what is the relationship between participant's knowledge, disposition, age and GPA?

A major question regarding this study was can a person's disposition be impacted with the addition of new knowledge. The assumption was that students who were exposed to the online instructional module would have a change or 'increase' in their disposition towards parents/families of children with disabilities. A statistically significant difference was not found within the experimental group following completion of the online module; however there was movement or increase in scores. The researcher wanted to determine which items on the TDS effected the change. Question 1 (Families who have children with special needs possess unique family characteristics not found in other families) and question 5 (The perspective of the teacher about what is important educationally for the child should be considered before the parent's perspective about what is important) had the most improvement (change) of scores. An analysis comparing

pre to post tests among the control and experimental groups revealed that there was no statistically significant difference between the two groups gain scores suggesting that the treatment intervention was not effective in changing subjects' disposition over time. The addition of new knowledge did not impact the disposition of the students.

Implications for Further Investigation

The online module, "Examining Assumptions about Families" was initially developed for use in teacher preparation programs. The intent during the development of the module was to infuse the module into existing curricula, add to the existing curricula as a stand alone model, and /or a combination of both. For purposes of this study, the online instructional module was presented in isolation. The students did not have a context from which to work. The online instructional module was utilized within the first two weeks of the semester so that teacher bias and content contamination would be minimized. A second concern was that the group treatment included a two week period to complete the online module. This may have been a short period of time in which to impact such a complicated construct as disposition. Crowther and Cannon (2002) looked at professional development models to see if there was any impact on learning and to determine the ideal length of time for workshops as measured by teacher efficacy and outcome expectancy on teaching science. When looking at outcome expectancy, the study suggests that for professional development to be effective, more than an intensive workshop is needed. The National Center for ESL Literacy Education (2002) looked at

family literacy programs and found that the length of time to demonstrate learner progress needed to be sufficient in duration. A longer treatment could more explicitly address issues of disposition as related to teacher perspective and parent/family partnering. A third concern regarding the module, was the amount of time spent completing the module as reported by the subjects. The online instructional module was designed to take approximately three hours with the activities attached, or two hours if the activities are not attached. The average time reported by the subjects that completed the module, with no activities attached, was approximately 75 minutes. Because the setting for the completion of the module was not held constant, the question of how reliable the college students were in completing the online module remains. Finally, the completion of the online module occurred over a two week span of time. During this period, the community in which the subjects lived experienced a natural disaster. This disaster affected power, water, transportation and most daily routines for an extended period of time. This event may have been an important factor with regard to the internal validity of the experiment. Campbell and Stanley (1966) argue that a threat to internal validity must be considered when a realized threat does occur. They refer to this as an “intrasession” history on internal validity as a factor to be considered with a test/retest design. They state that if a change-producing event occurred, in addition to the experiment, it may cause the difference. Hunter and Schmidt (2004) build on the list of potential threats to internal validity of the within-subjects design, including history, as

described by Campbell and Stanley, by pointing out that the experimenter may interpret the change in the dependant variables as being caused by the intervention yet there was some concurrent event outside the scope of the study that actually caused the results. They conclude by stating that there could be a study in which history made the interpretation of the study results false. The findings of the present study should be considered with caution due to an external event such as a natural disaster.

The full availability of educational opportunities for children with disabilities has been debated for many years. Parent involvement in the education of children with disabilities continues to gain momentum both in the general and special education arena. Policy makers have become acutely aware of the need for more accountability, stronger laws and higher standards to measure student learning outcomes. Teacher preparation programs need to ask the question more specifically about the level of involvement families of children with disabilities have in their preparation process. This question of involvement should be addressed on the undergraduate, graduate and post graduate level. Family input into the curriculum, in order to shape student dispositions, continues to be a challenge. The results of this study suggest that impacting preservice students' level of disposition was not successful. This shift in teacher disposition will not happen without key stakeholders being involved in teacher preparation programs. Additionally, professional development programs must raise the awareness about family involvement issues and begin shifting their program designs to creatively and effectively prepare

students to partner with families of children with disabilities.

In 2004, Blue-Banning, Summers, Frankland, Nelson, & Beegle examined collaborative partnerships between parents and professionals and found a primary reason those relationships between professionals, including teacher and parents have difficulty in establishing and sustaining relationships may be due to the lack of empirical understanding of components of interpersonal partnerships. The qualitative study identified indicators of professional behavior facilitative of collaborative partnerships. These indicators identified included; communication, commitment, equality, skills, trust and respect. The researchers concluded that more study is needed in the area of partnerships including teachers and families. The present study attempted to expand on these findings and examine the effect of knowledge about families of children with disabilities on the disposition of preservice teachers. The literature regarding family involvement, teacher preparation and parent-professional collaborative partnering strongly supports the notion of equal, active, respectful relationships needing to exist. The research is clear that developing knowledge and skills around the notion of partnering needs to happen early in training of teachers and must be grounded in sound scientific principles (Hiatt-Michael, 2001; Dunst, 2000; Epstein, 2001; Katz and Bauch, 1999).

This present study was successful at affecting the knowledge base of preservice elementary education teachers but not disposition. The change in knowledge level of the

subjects included in this study may have occurred due to the modality in which the new knowledge was presented, via online module. The change in knowledge level may have been significant because the information presented was new for a sample of elementary general education students not having previously been exposed to content related to students with disabilities and their families. The change in level of knowledge was measured two weeks following exposure to the treatment, the online module. It is not clear whether the subjects' level of awareness could have been even greater, if the time between pre and post measurement would have been longer. If the change in knowledge level was measurable within two weeks, it would be important to look at the sustainability of the knowledge over a longer period of time. It would be desirable for preservice teachers, just as the subjects in this study, that gain new knowledge in their training experience, carry this knowledge with them to the classroom. If gains can be made with regards to knowledge in two weeks, as shown by this study, it may be possible to expect greater gains by students if they are exposed to knowledge about families of children with disabilities over a longer period of time with greater frequency.

It is no longer enough just to say family involvement is important. The intensity of the debate over teacher quality, standardized testing, discipline, student outcomes and financial accountability will continue and with this more pressure will be applied to state and local administrators, principals and teachers by families of children with disabilities. The present study attempted to affect students' knowledge and disposition with regards

to family involvement of children with disabilities, teacher assumptions about families of children with disabilities, and the desire for partnership. The overriding question of this study was; does the addition of new knowledge impact student's level of knowledge and their dispositions. The acquisition of new knowledge, the importance of partnering with families, would then change student's knowledge base and disposition towards families of children with disabilities. The assumption is that, ultimately, this change in disposition would lead teachers to partner more effectively with families and therefore affect student achievement outcomes. While this study showed that student's level of knowledge could be affected with the introduction of new knowledge using an online instructional module, the ability to affect students' disposition-attitude, beliefs, and feelings was not possible to ascertain.

As a researcher, it was important to look at both disposition and knowledge simultaneously. It was theorized that by increasing a subjects' knowledge regarding family involvement of children with disabilities, the subjects' disposition would be impacted. While the data indicates that subjects' knowledge levels were increased significantly, the disposition levels did not change significantly. It is important to look at the limitation that may have been present. Defining and then measuring disposition was a difficult task. The Teacher Disposition Survey was used to measure subjects' level of disposition. This was limiting due to the newness of the instrument. However, the researcher wanted to examine not just potential gains in knowledge, but if this knowledge

would impact disposition. This researcher believes that the disposition that teachers bring to the teaching profession regarding students with disabilities affects their abilities to effectively partner with families of children with disabilities. It is not enough to be knowledgeable about family involvement and families of children with disabilities. Educators must be aware of their own attitudes and beliefs and how these play in developing relationships with others. Examining one's own attitudes and beliefs about families of children with disabilities is a key first step in creating partnerships between teacher and family.

Future Research

Parent involvement is a necessary and important knowledge base in the process of educating children with disabilities. The present study was born out of the question; when and where is the best place for families to interface with the education system and where is the best place for educators to better understand families of children with disabilities. Specifically, how can this interface be successfully developed and implemented. This researcher believes that the most effective teacher resource for educators to gain that knowledge is from persons who know that child best, their families. Is there a threshold as to how much involvement is useful? Future research needs to address in greater depth, what is best practice for family/teacher partnerships. The present study is a step in the discovery of an effective interface between families and educator.

The present study could be expanded beyond preservice teachers to include

teachers during their induction phase of teaching. Continuing this line of research would contribute to further understanding the effects of knowledge on teachers' disposition regarding families of students with disabilities. Is knowledge gained in the classroom, with students with disabilities and their families are more effective interface for developing partnership? The initial assumption of this study, by the researcher, was that by increasing the knowledge level of pre-service students, their disposition towards families of children with disabilities would be impacted. It would be important to look at how and when the relationships between families and teachers occur. These relationships are the beginnings of partnership.

Future research could include follow-up assessment of the participants involved in this same study after a year of induction into the school system. It is hoped that more time and actual experience with families may increase the ability of teachers to partner with parents/families. This study addresses the population of elementary, general education undergraduate students. Replication of this study is recommended to include special education students. A replication would provide additional insight and information regarding preparation of general education students as compared with special education students.

The present study could be modified to further study the various levels of knowledge with regards to family involvement and the impact on student achievement. Future research may include looking at the knowledge levels and dispositions of

preservice students and compare those with teachers working in the field. In order to address the question of student outcome, teacher level of knowledge and disposition regarding family involvement and families of children with disabilities, it would be important to examine achievement of students over time. One approach would be to establish a level of knowledge and disposition at the beginning of a school year of classroom teachers and then look at a measure of achievement of the students in several classrooms. At the end of the school year, student achievement would be measured along with teacher level of knowledge and disposition.

Future studies may want to look at measurable behaviors of classroom teachers that attempt to involve families of children with disabilities. How the teacher works to develop a partnership with families can be identified as specific behaviors, monitored throughout the school year, and then measures of student achievement would be analyzed.

Finally, future research may include examining the knowledge and disposition of teachers, both preservice and those practicing in the field, which are also parents of a child with special needs. This line of investigation may lead to a greater understanding of the impact disposition has on the relationship between teacher and the family of the child with a disability.

APPENDIX A
INTERNAL REVIEW BOARD



THE UNIVERSITY OF CENTRAL FLORIDA
INSTITUTIONAL REVIEW BOARD (IRB)

IRB Committee Approval Form

PRINCIPAL INVESTIGATOR(S): Mary Senne

IRB #: 04-1987

PROJECT TITLE: Preparing Teachers to Partner with Families

Committee Members:

Full Board

- Contingent Approval
Dated: _____
- Final Approval
Dated: _____
- Expiration
Date: _____

- Dr. Theodore Angelopoulos: _____
- Ms. Sandra Browdy: _____
- Dr. Jacqui Byers: _____
- Dr. Ratna Chakrabarti: _____
- Dr. Karen Dennis: _____
- Dr. Barbara Fritzsche: _____
- Dr. Robert Kennedy: _____
- Dr. Gene Lee: _____
- Ms. Gail McKinney: _____
- Dr. Debra Reinhart: _____
- Dr. Valerie Sims: _____

Chair

- Expedited Approval
Dated: 23 July 2006
- Exempt
Dated: _____
- Expiration
Date: 22 July 2006

Chair, IRB

Signed: 
Dr. Sophia Dziegielewska

Researcher to clarify all participants are
18 years of age, or older.

Informed Consent Form 1

September, 2004

Dear Student:

My name is Mary Senne and I am a graduate student working under the supervision of faculty member, Suzanne Martin, Ph.D. You are being asked to participate in a study designed to gather information on how attitudes are affected by knowledge. During the study, you will be asked to complete four questionnaires. You will also be asked to complete an online instructional module about family involvement in education of children with disabilities. This research project was designed solely for research purposes and no one except the research team will have access to any of your responses. Your identity and responses will be kept confidential using a numerical coding system. Only the research team will have access to the responses. At the end of this study, the responses will be destroyed.

Your participation in this project is voluntary. You do not have to participate. You do not have to answer any question(s) that you do not wish to answer. Please be advised that you may choose not to participate in this research, and you may withdraw from the experiment at any time without consequence. Non-participation will not affect your grade. There are no other direct benefits or compensation for participation. Completion of the survey will take approximately 10 minutes to complete in class. The online instructional module will take approximately 1 to 2 hours to complete outside of your regularly scheduled class time. There are no anticipated risks associated with participation.

If you have any questions or comments about this research, please contact Mary Senne (407) 718-1091 or my faculty supervisor, Dr. Suzanne, College of Education, Orlando, FL; (407) 823-4260. Questions or concerns about research participants' rights may be directed to the UCFIRB office, University of Central Florida Office of Research, Orlando Tech Center, 12443 Research Parkway, Suite 207, Orlando, FL 32826. The phone number is (407) 823-2901.

Sincerely,

Mary Senne

_____ I have read the procedure described above.

_____ I voluntarily agree to participate in the procedure and I have received a copy of this description.

_____ I would like to receive a copy of the procedure described above.

_____ I would not like to receive a copy of the procedure described above.

Participant

Date

Informed Consent Form 2

September, 2004

Dear Student:

My name is Mary Senne and I am a graduate student working under the supervision of faculty member, Suzanne Martin, Ph.D. You are being asked to participate in a study designed to gather information on how attitudes are affected by knowledge. During the study, you will be asked to complete four questionnaires. This research project was designed solely for research purposes and no one except the research team will have access to any of your responses. Your identity and responses will be kept confidential using a numerical coding system. Only the research team will have access to the responses. At the end of this study, the responses will be destroyed.

Your participation in this project is voluntary. You do not have to participate. You do not have to answer any question(s) that you do not wish to answer. Please be advised that you may choose not to participate in this research, and you may withdraw from the experiment at any time without consequence. Non-participation will not affect your grade. There are no other direct benefits or compensation for participation. Completion of the survey will take approximately 10 minutes to complete in class. There are no anticipated risks associated with participation.

If you have any questions or comments about this research, please contact Mary Senne (407) 718-1091 or my faculty supervisor, Dr. Suzanne Martin, College of Education, Orlando, FL; (407) 823-4260. Questions or concerns about research participants' rights may be directed to the UCFIRB office, University of Central Florida Office of Research, Orlando Tech Center, 12443 Research Parkway, Suite 207, Orlando, FL 32826. The phone number is (407) 823-2901.

Sincerely,

Mary Senne

_____ I have read the procedure described above.

_____ I voluntarily agree to participate in the procedure and I have received a copy of this description.

_____ I would like to receive a copy of the procedure described above.

_____ I would not like to receive a copy of the procedure described above.

_____ / _____

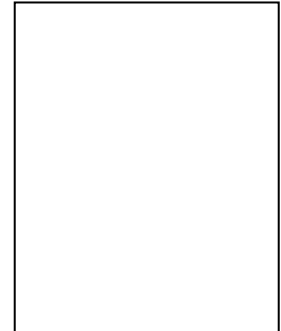
Participant

Date

APPENDIX B
TEACHER DISPOSITION SURVEY

Learning Assessment Colleges of Education

Please read each statement and indicate the degree to which you agree or disagree, with 5 being Strongly Agree and 1 being Strongly Disagree. Please circle your response



- | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 1. Family involvement in education results in increased outcomes for their children. | 1 | 2 | 3 | 4 | 5 |
| 2. The most important type of family involvement is volunteering in the classroom and helping children with homework. | 1 | 2 | 3 | 4 | 5 |
| 3. Confidentiality issues prohibit families from active involvement in school. | 1 | 2 | 3 | 4 | 5 |
| 4. Learning to partner and work effectively with families is as important skill as learning how to teach children. | 1 | 2 | 3 | 4 | 5 |
| 5. Special education in the United States reflects the beliefs and values of many cultures. | 1 | 2 | 3 | 4 | 5 |
| 6. Teachers as the professional need to be the primary decision makers regarding the academic needs of children with disabilities. | 1 | 2 | 3 | 4 | 5 |
| 7. Parent participation in the education of students is required by Federal laws. | 1 | 2 | 3 | 4 | 5 |
| 8. National and state professional standards and licensing should support teacher preparation for partnership with families. | 1 | 2 | 3 | 4 | 5 |
| 9. Some families are not interested in becoming involved with their child's' education. | 1 | 2 | 3 | 4 | 5 |
| 10. Teacher certification requirements in all states should include coursework and in-service training in working with families. | 1 | 2 | 3 | 4 | 5 |

APPENDIX C

KNOWLEDGE-BASE ASSESMENT QUESTIONNAIRE

Learning Assessment

Please read each statement and indicate whether the question is mostly TRUE or mostly FALSE.

Please circle your response

- | | | |
|------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| 1. The responsibility for creating partnerships between schools and families lies with the educators. | TRUE | FALSE |
| 2. Families are the experts with regard to their child's education needs. | TRUE | FALSE |
| 3. Most cultures view children with disabilities as similar. | TRUE | FALSE |
| 4. Different cultures value different attributes in individuals and in the culture. | TRUE | FALSE |
| 5. Effective material and strategies are effective with any student regardless of their disability, cultural or ethnic background. | TRUE | FALSE |
| 6. Family partnerships in education results in better learning and better outcomes for children with disabilities. | TRUE | FALSE |
| 7. Some cultures view the causes of disabilities as a result of spiritual or folk beliefs. | TRUE | FALSE |
| 8. It is important that educators view a student with a disability in a similar manner as the parent of the student with the disability. | TRUE | FALSE |
| 9. A teacher's frame of reference comes from his/her experience in the classroom. | TRUE | FALSE |
| 10. Family involvement in schools is measured according to the amount of time the family members spend at the school. | TRUE | FALSE |

APPENDIX D
KNOWLEDGE RUBRIC

Knowledge Rubric

Question	TARGET 3	ACCEPTABLE 2	UNACCEPTABLE 1
<p>How does your 'frame of reference' influence how you perceive situations in other cultures?</p>	<p>Target performance is evidenced by language reflecting an in depth understanding of the term "frame of reference" with regard to perceptions about other cultures and families in particular. This includes supporting evidence of an understanding of one's own perspectives with regard to beliefs about cultures, ethnicities, and families with children who have disabilities and also the "frame of reference" that families have as they work with professionals. Some discussion of family systems and the impact of having a child with disabilities on families will strengthen this discussion. Acknowledgement of the varying views families from different cultures may have about disability as well as differences in how relationships with professionals are perceived and their role in the special education process. Presents a clear discussion of the effect of "frame of reference" when working with others in the teaming process and the necessary skills to be an effective team member, including communication skills.</p>	<p>Acceptable performance is evidenced by language reflecting an understanding of the term "frame of reference" with regard to perceptions about other cultures and families in particular. This includes some discussion of the implications and effect of culture, ethnicity, and disabilities on families.</p>	<p>Unacceptable performance is evidenced by no or very little language reflecting an understanding of the term "frame of reference" with regard to perceptions about other cultures and families in particular.</p>

APPENDIX E
DISPOSITION RUBRIC

Disposition Rubric

Question	TARGET 3	ACCEPTABLE 2	UNACCEPTABLE 1
<p>Is Mrs. Martinez a bad mother because she did not help her son to use the communication board?</p>	<p>Target performance is evidenced by language referring to the importance of recognizing and respecting cultural differences and the importance of understanding how the values and beliefs of families may compare or conflict with our own.</p> <p>References to Mrs. Martinez should acknowledge an understanding of the impact on families of having a child with disabilities and the need to establish mutual understanding of educational goals, performance and meaningful interventions. This includes supporting evidence understanding the need to balance accepting families “where they are” while advocating for the child.</p> <p>This could include a reflection on personal biases and their effect on interactions with the family and child.</p>	<p>Acceptable performance is evidenced by language referring to the importance of recognizing and respecting cultural differences and the importance of understanding how the values and beliefs of families may compare or conflict with our own. This includes supporting evidence understanding the need to balance accepting families “where they are” while advocating for the child.</p>	<p>Unacceptable performance is evidenced by no or very little language reflecting an understanding of the importance of recognizing and respecting cultural differences and the importance of understanding how the values and beliefs of families may compare or conflict with our own.</p>

APPENDIX F
CASE STUDY QUESTIONS

Case Study Questions

Is Mrs. Martinez a bad mother because she did not help her son to use the communication board?

How does your 'frame of reference' influence how you perceive situations in other cultures?

APPENDIX G

CASE STUDY

Case Study

Jorge Martinez is a 10 year-old boy who has severe mental retardation and cerebral palsy (CP), which keeps him confined to a wheelchair. He also has severe oral motor difficulties resulting in speech and feeding problems. As a result of his feeding problems, it is necessary for him to have a gastronomy procedure to be able to ingest food. Jorge lives with his mother, Juana, and older brother, Simon. Spanish is the primary language spoken at home.

Jorge is in a self-contained special education classroom with five other students who have severe or multiple disabilities. Tests indicate that Jorge's intelligence scores is about 25, but his teacher, Mrs. Miller, has told his mother that "Jorge is much smarter than that." Mrs. Miller says she can tell by "the fire in his eyes that he is no 25 IQ kid." Mrs. Miller is considered one of the most dynamic and optimistic teachers at Belle Elementary School.

While the relationship between the school and home can be described as 'good', Mrs. Miller feels it is often difficult to communicate with Mrs. Martinez because of her limited English. Things have not gone well as recently as two weeks ago, Mrs. Miller contacted Mrs. Martinez to tell her of Jorge's progress with the micro switch and to tell her that she thought it was time for him to begin using a communication board. She explained that with the board Jorge would be able to let people know what he wanted and interact better with them. In order to reinforce the work they were doing at school, Mrs. Miller wanted Mrs. Martinez to start using the board at home. Mrs. Martinez expressed some concern about using electronic devices such as computers saying she didn't know anything about them. She also wondered why they would need this "new thing" with Jorge. "I know what he wants. He's doesn't have to tell me. I give him whatever he wants".

After much discussion, Mrs. Martinez reluctantly agreed to try the communication board. When she got home from work the next night, she saw the board sitting on the kitchen table. Jorge was at the table with his brother, Simon. He seemed agitated and upset. Simon told his mother, "This is junk. It doesn't work. I was using it and the screen went blank." Mrs. Martinez looked at the book of directions that came with the board, but didn't understand much of the text and couldn't figure out what was wrong with it. She put it on the self, made supper for the boys and put Jorge to bed. Every day Mrs. Miller sent home different exercises Mrs. Martinez to try with Jorge on the board. Mrs. Martinez put them on the shelf next to the communication board.

At school, Jorge didn't seem familiar with the exercises Mrs. Miller thought he was doing at home. Finally, she called Mrs. Martinez. She was quite upset when she discovered that the board was not being used at home. Mrs. Martinez was upset that Mrs. Miller was asking her to do something she wasn't familiar with and which she didn't really think necessary anyway

LIST OF REFERENCES

- American Association for Employment in Education (2000). *Education supply and demand*. Columbus, OH: Author.
- American Youth Policy Forum and Center on Education Policy: *Vol. Twenty-five years of educating children with disabilities: The good news and the work ahead*. (2002, February).
- Ammon, MS, Chrispeels, J., Safran, D., Sandy, M.V., Dear, J., & Reyes, M. (2000). *Preparing Educators for Partnerships with Families. Report of the advisory task force on educator preparation for parent involvement*. Sacramento, California Commission on Teaching Credentialing. ERIC Document Reproduction Services Ed. 437369.
- Ammon, P., & Peretti, D. (1999). Preparing constructivist teachers for parent involvement: The developmental teacher education program. In Ammon, M.S. (Ed.) *Joining hands: Preparing teachers to make meaningful home-school connections*. (pp.16-36) CA: California Department of Education.
- Anderson, S.A. (2000). How parental involvement makes a difference in reading achievement. *Reading Improvement*, 37(2), 61- 86.

- Bailey, D. B., Buysse, V., Edmondson, R., & Smith, T. M. (1992). Creating family-centered services in early intervention: Perceptions of professionals in four states. *Exceptional Children, 58*, 298-310.
- Blank, M.J. & Shah, B.P. (2004). Educators and Community Sharing Responsibility for Student Learning. *ASCD Info brief*, January 2004, Issue 36. Retrieved April 21, 2004 from www.ascd.org/publications/infobrief/issue36.html
- Blue-Banning, M., Summers, J.A., Frankland, H., Nelson, L.L., Beegle, G. (2004). Dimensions of Family and Professional Partnerships: Constructive Guidelines for Collaboration. *Exceptional Children, 70*, 167-184.
- Boe, E., Cook, L., Paulsen, C., Barkanic, G. & Leow, C. (1999). Productivity of teacher preparation programs: Surplus or shortage in quantity and quality of degree graduates (Report No. 1999-DAR2). Philadelphia: University of Pennsylvania, Graduate School of Education, Center for research and Evaluation in Social Policy.
- Bruder, M.B. (2000). Family-centered early intervention: Clarifying our values for the new millennium. *Topics in Early Childhood Special Education, 20*, 105-115.
- Burts, D.C., & Dever, M.T. (2001). Engaging teacher education students in an authentic parent education project. *Journal of Early Childhood Teacher Education, 22*, 59-62.

- Bryk, A. S. & Schneider, M. (2002). *Trust in Schools: A core resource for improvement*.
New York: Russell Sage.
- Campbell, D.T. & Stanley, J.C. (1963). *Experimental and Quasi-Experimental Designs
for Research*. Houghton Mifflin Company, Boston.
- The Commission on Excellence in Special Education: *Vol. A New Era: Revitalizing
Special Education for Children and their Families* (2002).
- Drake, D.D. (2000). Parents and families as partners in the education process:
Collaboration for the success of students in public schools. *ERS Spectrum, 18*(2),
34-39.
- Drew, C. J. & Hardman, M.L. (1985). *Designing and Conducting Behavioral Research*.
New York. Pergamon Press
- Dunst, C.J. (2000). Revisiting “Rethinking early intervention.” *Topics in Early
Childhood Special Education, 20*, 95-104.
- Epstein, J. L. (1996). Advances in family, community, and social partnerships. *New
School, New Communities, 12*(3), 5-13.
- Epstein, J. L. (2001). *School, Family, and Community Partnerships: Preparing
Educators and Improving Schools*. Boulder, CO: Westview Press.
- Epstein, J.L., & Salinas, K.C. (2004). Partnering with Families and Communities.
Educational Leadership, May, 2004.

- Fan, S. T., & Chen, M. (2001). Parental Involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review, 13*, 1-22.
- Hara, S.R. & Burke, D.J. (1998). Parent involvement: The Key to improved student achievement. *School Community Journal, (8)2*, 9-19.
- Hiatt-Michael, D. (2001). *Promising Practices for Family Involvement in School*. Greenwich, CT: Information Age Publishing.
- Hiatt-Michael, D. (2001, October). *ERIC Clearinghouse on Teaching and Teacher Education: Vol. Preparing Teachers to Work with Families*. 1307 New York Ave., NW, Suite 300, Washington, D.C. 20005-4701: Educational Resources Information Center. ("ERIC edo-sp-2001-2)
- Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Education research, 3-42*.
- Hunter. & Schmidt, F.(1990). *Methods of Meta Analysis: Correcting Error & Bias in Research Findings, Second Edition*. Sage Publication, Inc., Newbury Park, CA.
- Israel, G.D., Beaulieu, L.J. & Hartless, G. (2001). The influence of family and community social capital on educational achievement. *Rural Sociology, 66*, 43-68.
- Katz, L., & Bauch, J. P. (1999). The Peabody family involvement initiative: Preparing pre-service teachers for family/school collaboration. *School Community Journal, 9*, 49-69.

- Kelley-Laine, K. (1998). Parents as partners in schooling: The current state of affairs. *Childhood Education, 74*, 342-346.
- Keith, T.Z. (1996). Effects of parental involvement on achievement for students who attend school in rural America. *Journal of Research in Rural Education, 12*, 55-67.
- Kochhar, C. (August 1999). *Synthesis of state needs and barriers to systemic reform in the 1998 special education state improvement grants*. Federal Resource Center, Academy for Educational Development.
- Kochhar-Bryant, C. (2002). The quality of national and state teacher preparation and institutional accreditation standards in addressing partnerships with families (Briefing Paper 1) The George Washington University.
- Kochhar-Bryant, C. (2003). The quality of state standards for preparing teachers for partnerships with families. (Briefing Paper 2). The George Washington University.
- Lopez, M.E. (2002). Learning from Families. *The Evaluation Exchange, Harvard Family Research Project*, Spring, 2002, 8, 1.
- Martin, S., & Goldberg, P. (2000). Unpublished raw data, University of Central Florida/Parent Training and Information Center PACER.

- Marzano, R.J., Pickering, D. & McTighe, J. (1994). *Assessing student outcomes: Performance assessment using the dimensions of learning model*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McLeskey, J., Tyler, N.C., & Flippin, S.S. (2004). The supply of and demand for special education teachers: A review of research regarding the chronic shortage of special education teachers. *The Journal of Special Education*, 38, 1, pp. 5-21.
- Murray, M. (2002) Unpublished paper, presented Teacher Education Division Conference, Savannah, GA., Parent-Professional Partnerships in Pre-service Preparation
- National Board Professional Teaching Standards. Retrieved October 17, 2002, from <http://www.nbpts.org/standards>
- National Organization on Disability's Harris Survey of Americans with Disabilities, June 24, 2004. Retrieved November, 10, 2004 from www.nod.org.
- Partnerships 2000: A Decade of Growth and Change. Retrieved May 2, 2004 from www.partnershipineducation.org
- Public Law 105-17. 105th Congress. 1997: *Vol. Individuals with Disabilities Education Act Amendments of 1997*.
- Public Law 107-110. 107th Congress: Vol. *January 8, 2001. No Child Left Behind Act of 2001*.

- Shartrand, A. M., Weiss, H., Kreider, H., & Lopez, M. (1997). New Skills for New Schools: Preparing Teachers in Family Involvement. *Harvard Family Research Project*.
- Sileo, T., Sileo, M., & Prater, M. A. (1998). The role of parents in the education of children with disabilities. *Teaching Exceptional Children*, 32(1), 8-13.
- U.S. Department of Education: Vol. *Achieving the goals, Goal 8: Parent Involvement and Participation*. (1997). Washington D.C. 20402-9328: U.S. Government Printing Office, Superintendent of Documents. (ISBN 0-16-049245-9)
- U.S. Department of Education, Office of Special Education Programs (1999). Parent involvement in educating children with disabilities: Theory and Practice. *In The Twenty-first Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act*. Washington DC: 1-1
- Vacca, J., & Feinberg, E. (2000). Why can't families be more like us? Henry Higgins confronts Eliza Doolittle in the world of early intervention. *Infants and Young Children*, 13(1), 40-48.
- Winton, P. (2000). Early childhood intervention personnel preparation: Backward mapping for future planning. *Topics in Early Childhood Special Education*, 20(2), 87-94.