Perceptions of Beginning General and Exceptional Education Teachers of their Preparation and Importance of Skills Associated with Collaboration and Co-teaching

Jodie Lynn Brinkmann

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Travis W. Twiford, Chair

Carol S. Cash

Glen I. Earthman,

Vicki B. Wilson

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Abstract

The need for more collaboration and co-teaching emerged from the standards-based and accountability movement as a result of the No Child Left Behind (NCLB) and Individuals with Disabilities Education Improvement Act (IDEIA) legislation. The purpose of this study is to identify the perceived skill set needed by general and exceptional education teachers in order to be successful in a co-teaching classroom, discover if collaborative coursework is being offered to pre-service teachers as part of their university experience, and identify specific strategies, programs, and field experiences in which pre-service general and exceptional education teachers can engage in to better prepare them for their first co-teaching/collaborative teaching assignment.

This qualitative study was based on the naturalistic inquiry design (Lincoln & Guba, 1985) and was comprised of one focus group from each of the three school divisions. The purposeful sample selection of teachers for each focus group included five to eight general and exceptional education probationary (zero to five years experience) teachers who have current or previous experience in a collaborative or co-taught classroom, and who graduated from a Virginia institution of higher education. A focus group protocol was used for data collection based on the ten revised (2011) Interstate Teacher Assessment and Support Consortium standards. When comparing the data of what general education teachers perceived were most important compared to what

training, coursework, and experiences were actually provided as part of their pre-service training, 53% of the training received matched the skills they felt were most important. Forty-seven percent of their pre-service training focused on "other" skills, knowledge, performance, and critical dispositions. When comparing the data of what exceptional education teachers perceived were most important compared to what training, coursework, and experiences were actually provided as part of their pre-service training, 60% of the training received matched with the skills they felt were most important. Forty percent of their pre-service training focused on "other" skills, knowledge, performance, and critical dispositions. These data suggest that there is a disconnect between what pre-service teachers perceive as important and what is actually being taught through coursework and experiences in teacher preparation programs.

Acknowledgements

In the words on Ralph Waldo Emerson, "Do not go where the path may lead, go instead where there is no path and leave a trail." This dissertation has been an amazing journey, tremendous challenge, and life long dream for me. I believe that God has called me to complete this program so that I can further fulfill his life's work through me. My hope is that this dissertation will positively impact teachers, students, parents, and administrators everywhere in their quest to provide the very best educational experiences for both general and exceptional education students in their pursuit of excellence.

I am most grateful to my dissertation committee for their vision, wisdom, guidance, and inspiration. Your support in this program has made this journey possible, enjoyable, and most successful. Dr. Travis Twiford has been instrumental in my success. You taught me how to persevere through the literature, analyze and synthesize good research, and become a better writer. Your genuine caring nature and encouragement made all the difference. Dr. Carol Cash, you challenged me to explore beyond my comfort levels and were always their to impart your wisdom in helping me choose the path less traveled. Dr. Glenn Earthman, your infinite wisdom, experience, and astuteness guided me in this journey to make a meaningful contribution to the field. Dr. Vicki Wilson, you have been the "wind beneath my wings," and have been a mentor, motivator, and friend all rolled into one extraordinary person. You will never know how much your confidence and encouragement has meant to me throughout my career.

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In the words of Robert Louis Stevenson, "Don't judge each day by the harvest you reap, but by the seeds that you plant." I hope this work plants a seed in the minds of other passionate educators who are striving to make a difference in the world through the teaching of our young people.

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CHAPTER 1

CONTEXT OF STUDY

Background of the Problem

Beginning in the 1600s, with the English colonists of the Jamestown, Virginia settlement, the need to construct knowledge and develop more skilled workers became an increasingly important endeavor. In 1810, the General Assembly of Virginia created the Literary Fund, which was the foundation for supporting free public schools in Virginia (A History of Public Education in Virginia, 2003). Since then the Virginia educational system has withstood over 200 hundred years of educational reform. The Virginia Department of Education has affirmed "the foremost purpose of public education in Virginia is to provide children with a quality education giving them opportunities to meet their fullest potential" (Regulations Establishing Standards for Accrediting Public Schools in Virginia, 2010, p. 7). Similar to other state laws, public education is not without controversy as to how to create optimal learning experiences for all students. At the epicenter of these reform efforts is greater student achievement and accountability for schools and their leaders. Education has become a "high stakes" business in which all students, no matter their ethnicity, socioeconomic status, need for exceptional education services, native language, or other limitations, will meet adequate yearly progress (AYP) indicators as specified by federal mandates. There is now more scrutiny than ever in public education regarding how to meet such rigorous demands.

Many scholars attribute the current focus on student achievement and accountability to the publication of *A Nation at Risk: Imperative for Educational Reform*

(1983). In the opening letter to the Honorable T. H. Bell, Secretary of Education, it was documented that:

> Our purpose has been to help define the problems afflicting American education and to provide solutions, not search for scapegoats. The Commission deeply believes that the problems we have discerned in American education can be both understood and corrected if the people of our country, together with those who have public responsibility in the matter, care enough and are courageous enough to do what is required. (A Nation at Risk: The Imperative for Educational Reform, 1983, p.2)

There have been multiple calls for action in response to the publication of *A Nation at Risk,* but the most noteworthy arose "on January 8, 2002, when President Bush signed the No Child Left Behind Act (NCLB) into law" (Great Expectations, 2008, p.18). Accountability for teaching all students to the highest standard was the goal of this legislation.

> One of the major purposes of NCLB was to close the nation's pernicious achievement gap. The law shined a needed spotlight on the level of achievement of several categories of historically underserved students including minority, low-income, limited English proficient (LEP), and children with disabilities. (Great Expectations, 2008, p.19)

"The No Child Left Behind Act has been especially beneficial to the nation's 6.5 million students with disabilities, providing them with more classroom time and attention than ever before and putting their educational needs at the forefront" (Great Expectations 2008, p.19).

Educational leaders are challenged to meet unprecedented levels of achievement for all students. By 2014, all students in the six NCLB subgroups (White, Black, Hispanic, limited English proficient, students with disabilities, and socio-economically disadvantaged) and all students are expected to meet rigorous pass proficiency rates (VA Department of Education, 2010). In addition, school divisions and schools must test at least 95% of their student population, including 95% of students in each of the Adequate Yearly Progress subgroups as mandated by No Child Left Behind legislation (Accountability and Virginia Public Schools, 2010). NCLB legislation specifies that Title I schools that receive federal money because they have 40% or more students qualifying for free or reduced lunch programs, must meet AYP benchmarks or else they may be at risk of losing funding. If a Title 1 school does not meet AYP benchmarks for two or more consecutive years in the same subject, the following sanctions and supports may be implemented: 1) notify parents of needs improvement status and offer a school choice option; 2) offer supplemental educational services to low-income students; and 3) requirement of the school division to develop a corrective action plan which could include such actions as replacing school staff, implementing a new research-based curriculum, and extending the school day or school year options, among others (Accountability and Virginia Public Schools, 2010).

Since data analysis is a critical component of meeting AYP benchmarks and proficiency levels, state level agencies are responsible for developing progress-monitoring systems that coincide with No Child Left Behind mandates. In Virginia, the Department of Education has developed Standards of Learning (SOLs) that are assessed through Standards of Learning Tests. These measures were developed in 1994 and

implemented in 1998 and are closely tied to Virginia's Standards of Accreditation (SOA) to demonstrate academic progress.

As Adequate Yearly Progress expectations and benchmarks continue to rise for all students, it is imperative that educational leaders discover innovative ways of closing the achievement gap, especially for those presenting the largest disparity in achievement. According to Virginia's Department of Education State Report Card from 2007-2010, data clearly indicate the largest disparity in student achievement is most prevalent within the *students with disabilities* AYP subgroup. The 2007-2010 Report Card states the largest number of students not passing English, mathematics, history and social science, and science standards of learning assessments in grades three through five are consistently located within the *students with disabilities* subgroup. The Virginia State Report Card data also reflect little growth in achievement pass rates of exceptional education students over the past three years. This compelling evidence suggests that further research is needed to identify evidence-based teaching strategies designed to increase achievement for students with disabilities.

A monumental piece of legislation coinciding with the No Child Left Behind Act is the Individuals with Disabilities Educational Improvement Act (IDEIA, 2004). IDEIA mandates that students with special needs access the general education curriculum and programs in the least restrictive environment with age appropriate peers, often in the general education setting. In some instances, this results in a co-teaching classroom, where a general and an exceptional education teacher work together to meet the needs of all students by providing appropriate accommodations and modifications in the general education classroom (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). The

impact of both the No Child Left Behind Act (NCLB, 2002) and Individuals with Disabilities Educational Improvement Act (IDEIA, 2004) has made collaboration between general and exceptional education teachers more important than ever (Conderman & Johnston-Rodriguez, 2009; Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010; Harvey, Yssel, Bauserman, & Merbler, 2010; Arthaud, T., Aram, R., Breck, S., Doelling, J., & Bushrow, K., 2007).

School leaders are vigorously searching for best practices, programs, and strategies to assist in closing the achievement gap with students of disabilities in order to meet state Standards of Learning and federal No Child Left Behind mandates.

> As a result of recent federal legislation and related policy changes, co-teaching has evolved rapidly as a strategy for ensuring that these students have access to the same curriculum as other students while still receiving the specialized instruction to which they are entitled. (Cook, Friend, Hurley-Chamberlain, & Shamberger, 2010, p. 9)
>
> Co-teaching may be defined as the partnering of a general education teacher and a special education teacher or another specialist for the purpose of jointly delivering instruction to a diverse group of students, including those with disabilities or other special needs, in a general education setting and in a way that flexibly and deliberately meets their learning needs. (Cook, Friend, Hurley-Chamberlain, & Shamberger, 2010, p. 11)

Researchers (Conderman & Johnston-Rodriguez, 2009; Magiera, K., Lawrence-Brown, D., Bloomquist, K., Foster, C., Figueroa, A., Glatz, K., et al., 2006; McKenzie, R., 2009) document that there is a strong need for collaboration and co-teaching in

today's schools; however, there is little evidence-based research on best practices for pre-service training, which focus on prerequisite skills and experiences needed for successful collaboration and co-teaching in the elementary school general education classroom. This documented need warranted further investigation of beginning general and exceptional education teachers' perceptions of their pre-service training regarding the importance of skills acquired for collaboration and co-teaching at the elementary level. "The future of co-teaching may be dependent on increasing the quantity and quality of research on it and placing co-teaching in the larger context of school reform and improvement" (Cook, Friend, Hurley-Chamberlain, & Shamberger, 2010 p. 10).

Statement of the Problem

In light of the aforementioned rigorous accountability measures for student achievement, the need for collaboration and a successful co-teaching model is of the utmost importance (Conderman & Johnston-Rodriguez, 2009; Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010; Harvey, Yssel, Bauserman, & Merbler, 2010; Arthaud, T., Aram, R., Breck, S., Doelling, J., & Bushrow, K., 2007). Virginia State Report Card data reflect a significant discrepancy in academic achievement between students with disabilities and those without disabilities over the past three years (Commonwealth of Virginia Report Card, 2007-2010). The question remains- what skill set, coursework, and experiences are needed in pre-service and post-service training to help beginning teachers become successful in a collaborative and co-teaching setting? Further research needs to be conducted to learn from elementary general education and exceptional education practitioners in the field regarding their perceptions about their pre-service training and post-service coursework, in order to better prepare future

beginning teachers for this challenging role. The findings will be useful to elementary school principals in better understanding the skill set that beginning general and exceptional education collaborative and/or co-teachers have as they begin their teaching career. This will assist administrators in identifying areas for future growth and professional development. This study will also assist faculty members at the university level in better understanding the perceptions of recent graduates about their preparation for the collaborative and/or co-taught classroom and perhaps give suggestions for additional coursework and experience to strengthen their pre-service programming.

Justification for the Study

Research on collaboration and co-teaching reveals several themes common to both rural and suburban public elementary school settings in the United States. The first prevalent theme identifies the need to pinpoint the specific collaboration and co-teaching skill set necessary for successfully teaching students with disabilities in the general education classroom. According to many researchers, (Conderman & Johnston-Rodriguez, 2009; Brownell & Walther-Thomas, 2002; Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010) communication, problem solving, and relationship building skills must be included in pre-service training. A second overarching theme reveals the need for more innovative teacher preparation programs fostering the development of collaborative skills through coursework and field experiences to pre-service general and exceptional education teachers (Conderman & Johnston-Rodriguez, 2009; Brownell & Walther-Thomas, 2002; Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010; Harvey, Yssel, Bauserman, & Merbler, 2010; Shippen, Crites, Houchins, Ramsey, & Simon, 2005; Brownell, Ross, Colon, & McCallum, 2003;

McKenzie, R. 2009). There appears to be a significant need for more research on how to better prepare general and exceptional education pre-service teachers for the complex roles they will face during their first few years of teaching (Washburn-Moses, 2009; Carter, Prater, Jackson, & Marchant, 2009; Harvey, Yssel, Bauserman, & Merbler, 2010; McKenzie, 2009).

As documented by Damore and Murray, two of the most important predictors of success are teachers' knowledge regarding the complex nature of co-teaching programming and their willingness to implement the co-teaching model. Coursework and field experiences, therefore, must provide training in the act of collaboration by first defining each team member's role. A third theme reveals that there appears to be a lack of focus on research-to-practice implementation of best practices (Conderman & Johnston-Rodriguez, 2009; Carter, Prater, Jackson, & Marchant, 2009; Magiera, K., Lawrence-Brown, D., Bloomquist, K., Foster, C., Figueroa, A., Glatz, K., et al., 2006). This may be due, in part, to the lack of collaboration between general and exceptional education departments at the university level (McKenzie, 2009). As McKenzie (2009) reported, in order to improve the final product, universities must take a reflective look at the processes, coursework, and field experiences already in place to ensure that students in teacher preparation programs have rich experiences collaborating with colleagues before assuming their first teaching position. Therefore, the three themes that emerged in the research include: 1) the need to identify the specific collaboration and co-teaching skill set utilized by beginning general and exceptional education teachers; 2) the importance of more innovative teacher preparation programs fostering inner-disciplinary

collaboration; and 3) the apparent lack of focus on research-to-practice implementation of best practices. These themes suggest a significant need for this research study.

Purpose of the Study

This qualitative research study gave a voice to beginning general and exceptional education teachers who are currently serving in a collaborative or co-teaching setting. The work of Carl Glickman (1997) documents the need to give teachers a voice in education. More thorough research studies need to reflect the link between university pre-service programs that prepare future teachers with the knowledge, attitudes, and field experiences to foster effective collaboration programs and beginning teachers' perceptions about their skills and preparation necessary for the collaborative classroom. The purpose of this study is to identify the perceived skill set needed by general and exceptional education teachers in order to be successful in a co-teaching classroom, discover if collaborative coursework is being offered to pre-service general and exceptional education teachers as part of their university experience, and identify specific strategies, programs, and field experiences in which pre-service general and exceptional education teachers can engage in to better prepare them for their first co-teaching and/or collaborative teaching assignment.

Research Questions

The research questions guiding this study are as follows:

1) What specific skill set and experiences are perceived necessary by beginning general and exceptional education teachers to be successful in collaboration and co-teaching classrooms?

2) What are general education teachers' perceptions of their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching?

3) What are exceptional education teachers' perceptions of their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching?

Methodology and Theoretical Framework

The review of literature suggested that a qualitative design appears to be the methodology of choice when investigating teacher perceptions. After a thorough review of literature, the researcher developed the focus group protocol based on a study completed by Dr. Greg Conderman and Dr. Sarah Johnston-Rodriguez from the University of Illinois. The study was based on the ten core Interstate New Teacher Assessment and Support Consortium (INTASC) principles (2001). In the fall of 2010, a newer version of the INTASC standards was introduced and adopted in April 2011. The newer version includes a change of name, eliminating the "new" in the title since these standards are for different developmental stages in a teacher's career (Council of Chief State School Officers, 2011). The 2011 revised version is titled, Interstate Teacher Assessment and Support Consortium (InTASC). Conderman and Rodriguez's survey instrument entitled, "Beginning Teacher Questionnaire" was field tested and determined to be valid and reliable when used in the study, Beginning Teachers' Viewpoints of Their Collaborative Roles, 2009. These original survey questions were referenced in developing the researcher's focus group protocol using open-ended questions to produce qualitative results and analysis. The focus group questions were field tested to establish

credibility. The focus group interview protocol further investigated beginning general and exceptional education teachers' perceptions of their pre-service training regarding the importance of skills acquired for collaboration and co-teaching at the elementary level.

This qualitative study utilizing focus groups examined the types of coursework and field experiences that are currently being offered to elementary general and exceptional education pre-service teachers by public institutions of higher education in the Commonwealth of Virginia. The researcher established credibility by collecting and analyzing data for this research study by conducting focus group interviews, transcribing the recorded interviews, cross referencing the field notes, and completing a thorough review of the literature to ensure consistency with leading researchers in the field. This process enriched the findings.

The naturalistic inquiry strategy (Lincoln and Guba, 1985) was employed in this exploratory and descriptive study, as it provided the best methodological fit to better understand teacher perceptions about the skill set, coursework, and experiences needed for collaboration and co-teaching. As Rossman and Rallis (2003) theorized, focus group methodology assumes that people need to interact with one another to challenge their own thinking and to clarify their own beliefs. The focus group technique allows for such interaction and promotes interactive discussion through open dialogue. "The interaction between the participants is the critical characteristic of this type of interviewing" (Rossman & Rallis, 2003 p. 193).

Definitions of Terms

For the purpose of this study, the researcher consistently used the term exceptional education when referring to students with disabilities receiving specialized

instruction, except when directly quoting another author's work. Throughout this paper, the term school division is used because this is how Virginia generally refers to its local education units. In order to create a common vocabulary and conceptual framework, the following terms and definitions are cited from current literature relating to collaboration and the co-teaching model of instruction:

- Co-teaching- "Co-teaching may be defined as the partnering of a general education teacher and a special education teacher or another specialist for the purpose of jointly delivering instruction to a diverse group of students, including those with disabilities or other special needs, in a general education setting and in a way that flexibly and deliberately meets their learning needs" (Friend & Cook, 2010, p. 11).

A number of co-teaching variations include:

- Alternative teaching- one teacher instructs the larger group and one teacher takes a smaller group of students for a limited period of time for specialized instruction such as remediation, enrichment, assessment, pre-teaching concepts, etc. (Friend & Cook, 2010; Scruggs, T., Mastropieri, M., & McDuffie, K., 2007).
- Collaboration- general and exceptional education teachers work together to plan instruction, modifications, and accommodations for special needs students (Damore & Murray, 2009).
- Consultation model- a special educator serves as a consultant for the general educator (Austin, 2001).
- One teach, one assist- one teacher (usually the general education teacher) assumes teaching responsibilities and leads large-group instruction, and the other teacher

provides academic, behavioral, social, and/or individual support as needed (Friend & Cook, 2010; Mastropieri, McDuffie, & Scruggs, 2007).

- Parallel teaching- typically the class is divided into two groups and the co-teachers teach the same or similar content in different classroom groupings fostering instructional differentiation and increased student participation (Friend & Cook, 2010; Scruggs, T., Mastropieri, M., & McDuffie, K., 2007).
- Station teaching- instruction is typically divided into three non-sequential learning stations and students rotate among the stations receiving instruction from co-teachers, as well as working independently (Friend & Cook, 2010; Scruggs, T., Mastropieri, M., & McDuffie, K., 2007).
- Team teaching- co-teachers share teaching responsibilities and are equally involved in leading instructional activities through lecturing, giving multiple examples and perspectives for debates and solving problems (Scruggs, T., Mastropieri, M., & McDuffie, K., 2007; Austin, 2001).

Other key terms:

- Adequate Yearly Progress (AYP)- represents the minimum level of improvement that schools and school divisions must achieve each year as determined by No Child Left Behind, (2002) (http://www.2.ed.gov/nclb/choice/index.htme).
- Individuals with Disabilities Education Improvement Act (IDEIA)- requires school boards to provide students with disabilities with a free appropriate public education (FAPE), consisting of documented exceptional education and related services (Russo, C. J. & Osborne, A. G., 2008).
- No Child Left Behind (2002)- refers to legislation that implements standards-

based education reform. The law reauthorized federal programs meant to hold primary and secondary schools measurably accountable to higher standards. (http://www.2.ed.gov/nclb/choice/index.htme).

- Special education- instruction specifically designed to meet the unique needs of students with disabilities (Russo, C. J. & Osborne, A. G., 2008).

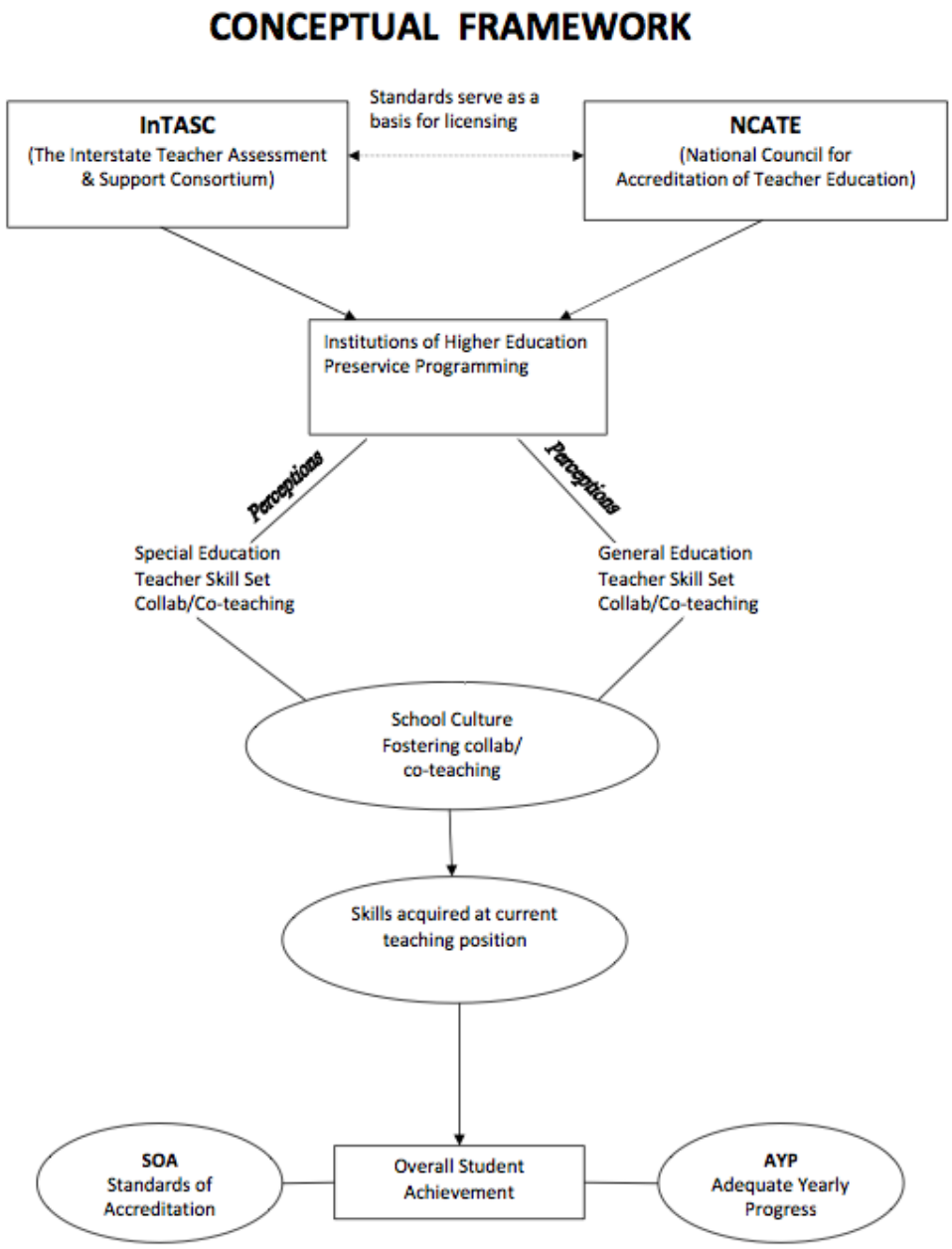


Figure 1. Conceptual Framework

Conceptual Framework

This conceptual framework explains the rationale for this research study. The Interstate Teacher Assessment & Support Consortium (InTASC) core standards are used as a basis for licensing in 38 states, including Virginia, and have been adopted by the National Council for Accreditation of Teacher Education (NCATE) for teacher pre-service programming. The purpose of this study is to identify the perceived skill set needed by general and exceptional education teachers in order to be successful in a co-teaching classroom, discover if collaborative coursework is being offered to pre-service general and exceptional education teachers as part of their university experience, and identify specific strategies, programs, and field experiences in which pre-service general and exceptional education teachers can engage in to better prepare them for their first co-teaching and/or collaborative teaching assignment. This perceived skill set, coupled with their current teaching experience, assists in identifying critical components encompassed in the repertoire of skills needed to be an effective collaborator and co-teacher. This skill set and these experiences will positively impact student achievement for all students, including those in exceptional education where there is a documented discrepancy in achievement when compared to other non-disabled students. Through an increase in student achievement, schools in Virginia will meet the Standards of Accreditation and Adequate Yearly Progress milestones set forth by the No Child Left Behind Legislation (2002). This research serves as a focused effort to further explore the barriers and reasons why the collaboration and co-teaching models have been in place for 15-20 years or more, yet there is still so much ambiguity regarding its implementation, skill set needed, teaching methodologies, and link to student achievement.

Delimitations/Limitations

There are several delimitations and limitations in this study. The first delimitation in seeking beginning general and exceptional education teachers' perceptions of their pre-service training regarding the importance of skills acquired for collaboration and co-teaching at the elementary level is how the data were derived solely from only three focus groups. The study is delimited to general and exceptional education teachers, who met specified participant criteria. The random selection of the focus group participants was based on a predetermined set of criteria including: zero to five years of elementary teaching experience with current or previous collaborative/co-teaching experiences, endorsement in elementary education and/or exceptional education from a Virginia institution of higher education, and participant self-selection. This participant sample depicts only a small representation of all collaborative and co-teaching teams and is not representative of the entire teaching population.

Another delimitation was the inclusion of participants solely from three randomly selected suburban school divisions in central Virginia. The participants' experiences, perceptions, and knowledge represent personal experiences and may not be consistent with other practitioners in the field. A third delimitation of the study was the stringent interview protocol that guided the focus group discussions. The data may be limited because they are based solely on the focus group protocol.

A limitation of the study was focus group confidentiality among participants while engaging in the session. Participants may be less willing to honestly share their pre-service and teaching experiences and to provide honest feedback about their perceptions of co-teaching, due to fear of reprisal from colleagues. Data were interpreted

with extreme caution and conclusions were drawn with this limitation taken into careful consideration.

A second limitation of the study is the researcher's personal bias towards this research topic as a principal of an elementary school. The collaboration and co-teaching model has been implemented in the researcher's school for ten years in second through fifth grades. This model has been proven to be highly effective in meeting the needs of both general and exceptional education students within the researcher's school. To account for this bias, data were verified with an outside reader who has credentials in research and statistics.

A third limitation of this study is the set of participants who actually volunteered to participate in the study. The researcher could not control that some participants came from the same school and that more general education teachers volunteered to participate than exceptional education teachers. It is important to note that several participants that confirmed participation in the focus group meeting declined at the last minute, which at times made the focus groups smaller than expected or unbalanced, having either more general or exceptional education teachers.

Organization for the Remainder of the Study

This research study contains five chapters. Chapter 1 introduces the reader to the topic of study, gives a historical perspective of accountability and significance of the problem, states the purpose of the study, identifies the research questions, definitions, limitations and theoretical and conceptual frameworks, and provides an overview of the research study.

Chapter 2 begins with a historical overview of collaboration and the co-teaching model. Chapter 2 presents a thorough review of the literature regarding specific skill set and experiences needed for general and exceptional education beginning teachers to be successful in collaboration and a co-teaching classroom. The literature review also sought to discover if collaborative coursework is being offered to pre-service general and exceptional education teachers as part of their university experience. This research study attempted to identify general and exceptional education teachers' perceptions of their pre-service training regarding the importance of skills acquired for collaboration and co-teaching at the elementary level. Chapter 2 includes background data, synthesized research on significant studies in the field by leading researchers, and presents a summary of current research findings. This study will further explore the barriers and some of reasons why the collaboration and co-teaching models have been in place for so long yet there is still much ambiguity regarding its implementation, skill set needed, teaching methodologies, and link to student achievement. Chapter 3 presents the methodology and procedures employed to conduct this study. Topics include research design, participant selection process, setting for the study, data collection and analysis procedures, validity and reliability controls, and an overall summary of the methodology. A rationale was provided as to why the particular research methodology was chosen and how it applies to this study. Chapter 4 presents the data collected during the study. Chapter 5 includes a presentation and discussion of the findings, conclusions, implications for practice, and recommendations for future studies.

CHAPTER 2

A REVIEW OF LITERATURE

This chapter investigates and shares the research findings to provide insight into the perceptions of beginning general and exceptional education teachers about their preparation and importance of skills associated with collaboration and co-teaching. To comprehensively investigate this topic, extensive research was conducted to identify leading researchers in the field and their studies focusing on the perceived specific skill set and experiences needed for beginning elementary general and exceptional education teachers to be successful with collaboration and a co-teaching classroom. Empirical research was completed to identify if collaborative coursework was being offered to pre-service general and exceptional education teachers as part of their university training. This literature review also focused on obtaining research generated findings from limited previous studies of beginning general and exceptional education teachers' perceptions of their pre-service training regarding the importance of skills acquired for collaboration and co-teaching at the elementary level. There is a need for additional research in this area due to the limited number of available studies.

The organizational framework for this chapter is divided into five sections. First, a brief synopsis of the history of educating students with disabilities in public education is shared. This includes a historical perspective of accountability for student achievement in public education leading to the evolution of educational collaboration and the co-teaching instructional model. This model is based on the perspectives of Dr. Marilyn Friend and Dr. Lynne Cook, pioneers in the co-teaching field. The rationale for co-teaching is explained and key components are identified. The six approaches to co-

teaching are also examined, including each model's strengths, as well as potential concerns with each model. The second section discusses Virginia's demographics and data on exceptional education students' achievement from 2007 -2010 to provide the rationale for a more intensive focus on best practices in preparing teachers for collaboration and co-teaching. Next, the researcher identified a specific skill set and experiences necessary for beginning general and exceptional education teachers to be successful in collaborative and co-teaching classrooms. The fourth section identifies general and exceptional education teachers' perceptions of their pre-service training and importance of skills associated with collaboration and co-teaching. Lastly, the fifth section presents a summary of the research findings and documents a need for this research study.

History of Educating Students with Disabilities

To fully comprehend this research topic, one must understand the history of education and the legislative mandates that have formed the current conceptual model of serving students with disabilities. Following the adoption of Public Law 94-142 (1975) and most currently, the Individuals with Disabilities Educational Improvement Act (IDEIA, 2004) a concerted effort was placed on the development of programs to meet the needs of students with disabilities (U.S. Department of Education, 2010). These new programming options must comply with federal statutes regarding educating students in their Least Restrictive Environment (LRE) with non-disabled peers. No Child Left Behind legislation also placed a new focus on exceptional education programming and the need for more effective collaboration and co-teaching models. Teacher training

institutions are responsible for ensuring that pre-service teachers are well-prepared to meet the challenges of more inclusive classrooms (Harvey, Yssel, & Bauserman, 2010).

The exceptional education framework is grounded in several case law studies and legislative mandates that shape exceptional education programming and services today. The landmark case of Brown vs. Board of Education (1954) laid the foundation for students with disabilities to receive a free and appropriate public education (Russo, C. J. & Osborne, A. G., 2008). Several legislative initiatives also had a significant impact on exceptional education students in public school settings. Legislative initiative Public Law 94-142 (1975) has been amended several times and is currently referred to as The Individuals with Disabilities Educational Improvement Act (IDEIA, 2004). IDEIA mandated that students with special needs be granted access to the general education curriculum and programs in the least restrictive environment with age appropriate peers. The second initiative was the No Child Left Behind legislation (NCLB 2002). NCLB also impacted the level of achievement expected for all students. "When No Child Left Behind requirements intersect with the traditional principles on which IDEIA is based, a strong component of a rationale for co-teaching can be established" (Friend, 2008, p. 37).

Exceptional education is a noteworthy topic in education due in part to the ambiguity and ever changing case law that often surrounds this challenging population of students. Educational achievement among students with disabilities remains a challenge for many educators. According to the Virginia State Report Card Data from 2007-2010, students in grades 3, 4, and 5 with disabilities scored considerably lower in most reporting categories when compared to other Adequate Yearly Progress subgroup participants (see Appendix D). Researchers across the country are exploring new and

innovative teaching strategies to help this unique learning-challenged group of students meet rigorous academic standards.

Dr. Lynne Cook and Dr. Marilyn Friend, the leading researchers and pioneers in the field of collaboration and co-teaching, recognized the need to educate all students in their least restrictive environments in order to meet rigorous standards for student achievement. In 1986, Dr. Madeline Will, Assistant Secretary of the United States Office of Special Education and Rehabilitation Services, called for a regular education initiative (REI) in which general and special educators would collaborate to educate students with disabilities along with their typical peers (Will, M. C., 1986). The collaboration and co-teaching revolution followed in the 1980's and 1990's with the gradual acceptance of inclusive principles that paired exceptional education and related services to students with disabilities in the general education classroom (Friend, 2008). These partnerships were revolutionary and crossed traditional boundaries of separation toward more inclusive settings, prompting the emergence of co-teaching (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010).

"As the number of students who are struggling in schools grow, the need for general and special education to come together to create a vision and capacity to educate all students becomes more and more pronounced" (Winn & Blanton, 2005).

> "As a result of recent federal legislation and related policy changes, co-teaching has evolved rapidly as a strategy for ensuring that these students have access to the same curriculum as other students while still receiving the specialized instruction to which they are entitled" (Cook, Friend, Hurley-Chamberlain, & Shamberger, 2010, p. 9).

"Interpersonal collaboration is a style for direct interaction between at least two co-equal parties voluntarily engaged in sharing decision making as they work toward a common goal" (Friend & Cook, 2010, P. 7).

> Co-teaching may be defined as the partnering of a general education teacher and a special education teacher or another specialist for the purpose of jointly delivering instruction to a diverse group of students, including those with disabilities or other special needs, in a general education setting and in a way that flexibly and deliberately meets their learning needs. (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 11)

In an interview with Dr. Cook, she stated "we aren't preparing people with the communication skills and the adult/adult interaction skills they need to work together effectively. That may be the greatest barrier of all to collaboration" (Spencer, 2005, p. 298).

Dr. Marilyn Friend (2008) believes the following components are essential to the development of a strong rationale for co-teaching: 1) more educational opportunities for all children; 2) less fragmentation in a student's educational programming; 3) less attention drawn to students with disabilities, therefore reducing the associated stigma; and 4) a stronger adult support system for educating all students.

According to Dr. Marilyn Friend (2008), there are five key components of successful co-teaching. They include the following:

1) A shared philosophy about teachers' educational priorities and beliefs;

2) Prerequisites for co-teaching:

   A) personal prerequisites such as ability to give up control in the classroom and

move towards a more shared classroom;

B) pedagogical prerequisites about teaching, schools, and students;

C) professional prerequisites that give teachers specialized expertise in the field;

3) Collaborative relationships are built on the concepts of parity, sharing goals for students, sharing responsibility for key decisions and accountability for outcomes and resources, trust and mutual respect.

4) Clear plans and procedures for accomplishing teachers' goals.

5) Supportive context including administrative support and professional development.

Referencing Dr. Marilyn Friend and Dr. Lynne Cook's (2010) model for co-teaching, there are six co-teaching approaches including: 1) one teaching, one observing; 2) station teaching; 3) parallel teaching; 4) alternative teaching; 5) teaming; and 6) one teaching and one assisting. These represent a core set of options for co-teachers; however, there are many variations of these models and frequently more than one model can be used throughout the duration of the lesson.

According to Friend and Cook (2010), the one teaching, one observing model refers to one teacher having the responsibility of delivering specific instruction to the whole group while the other teacher is observing and collecting data on individual, small group, or whole group based on previously agreed upon goals. This model can be beneficial to general education teachers in that they can gauge the rate of learning of the entire class and put special needs students' learning challenges in perspective with the rest of the class. The exceptional education teacher can also benefit from this model by allowing for better data collection and specific time to observe students to assess the need for additional supplementary aides, accommodations, and modifications to help ensure

academic success. A caution in using this model is if used too frequently, the observer, typically the exceptional education teacher, can be viewed as an aide or assistant to the teacher. To avoid this pitfall, teachers can switch roles giving each other the benefit of the other teacher's perspective.

The second co-teaching exemplar is station teaching. Station teaching actively involves both teachers' involvement in the daily planning, preparation, and instruction of the lesson. Typically students rotate from one station to another, and many times there is a third or fourth station for independent work. Students benefit from a lower teacher-pupil ratio and students with disabilities can be integrated into various groups instead of singled out for instruction. Two common concerns with station teaching are the amount of noise and movement during instruction. At times having two teachers instructing simultaneously in the classroom can be disruptive. To assist with this concern, special consideration should be given to room arrangement to minimize disruptions. Particular attention should also be paid to the type of material being presented so lesson order does not affect students' understanding. Other helpful considerations may be to establish hand signals and timing strategies for pacing of station lessons, as well as seating more distractible students next to the teacher in each group to help maintain focus and attention.

The third co-teaching model is parallel teaching. The purpose of parallel teaching is to lower the teacher-student ratio during direct instruction. Co-teachers must plan similar lessons together but each instructs a heterogeneous group of diverse students. Typically this type of instruction is favorable for skill review, reviewing for assessments, activities needing a high level of student engagement and conversation, or projects

requiring close teacher interaction and supervision. Parallel teaching is not appropriate if both educators are not qualified and comfortable teaching the content matter. Similar to station teaching, monitoring noise levels and pacing are important for successful lesson outcomes.

Alternative teaching is another typical form of co-teaching. Frequently students need assistance in small groups in order to receive instruction differently from the whole group. This may include pre-teaching for special needs students to become proficient at a skill more quickly or for remediation of a previously taught concept. These groupings may also be used for enriching the curriculum for more advanced students. One of the greatest benefits of this model is the opportunity to provide one-on-one and small group interaction with the teacher. Small group instruction can also benefit students with behavior and attention problems through providing more intense instruction in closer proximity. A caution to consider with this model is the stigma that may be attached to students working in a small group. It is important to vary the ability levels of students called into the small groups. From the teacher perspective, adequate record keeping and communication with the whole group and small group facilitators are important to be sure everyone is aware of each child's academic progress.

The fifth exemplar of co-teaching is teaming. Teaming refers to both instructors teaching a lesson together at the same time. They may take turns presenting concepts, providing illustrations, and leading the discussion. One specific strategy may be for one teacher to explain a new concept while the other teacher demonstrates it. This model can be helpful when presenting debates, role plays, and modeling various questioning techniques. According to Friend and Cook (2010), "Co-teachers frequently report that

teaming results in synergy that enhances student participation and invigorates the professionals, sometimes even prompting teachers to try innovative techniques and activities that they would not have tried if teaching alone" (p. 120). Co-teachers must be cautious when beginning the teaming model because it requires the highest level of trust and commitment, as well as a strong rapport in working together. Co-teachers must be comfortable working together and have the ability to read each other's body language and cues to have the lesson run smoothly. This is not a strategy for novice co-teachers new to the co-teaching role.

The last model for co-teaching is one teaching and one assisting. This form of co-teaching allows one instructor to teach the group while the other supports the instructional process. This form requires little joint planning and may be beneficial for beginning teachers new to the co-teaching relationship. There are several cautions with this model, hence it should only be used as an initial entry step to co-teaching or used sparingly with more experienced teachers. This model does not maximize the instructional capabilities of both teachers in the classroom. This can lead to one teacher doing the majority of the work while the other teacher is less engaged. The most serious concern with this model is that it can encourage students to become more dependent learners. When one instructor is always walking around and providing assistance, children may repeatedly ask for adult help and state, "I can't do it", before giving it their best attempt. Co-teachers need to be conscious of these factors and work together to ensure that students' independent learning skills are fully encouraged.

Understanding and utilizing a variety of these co-teaching models can assist students and teachers in better meeting their learning and instructional objectives (Friend

and Cook, 2010). Research documents that there is a strong need for collaboration and co-teaching in today's schools; however, there is little evidence-based research on best practices for pre-service training, which focus on prerequisite skills and experiences needed for successful collaboration and co-teaching in the elementary school general education classroom (Rea, McLaughlin, Walther-Thomas, 2002; Conderman & Johnston Rodriguez, 2009; Damore & Murray, 2009; Van Laarhoven, Munk, Lynch, Bosma, & Rouse, 2007; Hang & Rabren, 2009; Zigmond, 2001; Washburn-Moses, 2009; U.S. Department of Education, 2004). Rea, McLaughlin, & Walther-Thomas (2002) stated that pre-service opportunities for both general and exceptional education teachers at the university level are needed to develop effective instructional and interpersonal skills to work with other educators in developing instruction and services to meet the needs of students with disabilities. In addition, Rea, McLaughlin, & Walther-Thomas (2002) stated that teacher preparation programs need to provide well-developed classroom management skills to handle the complexities of a co-taught classroom that will assist in building teacher confidence, which directly affects student success. Brownell, Ross, Colon, and McCullum (2003) stated that collaboration is the key critical element in teacher education programs. These factors document the need for further investigation of beginning general and exceptional education teachers' perceptions of their pre-service training regarding the importance of skills acquired for collaboration and co-teaching at the elementary level. "Although the literature provides many examples of how collaborative efforts result in positive changes for teachers generally, we do not know much about how individual teachers respond to collaboration" (Brownell, Adams, Sindelar, Waldron, & Vanhover, 2006). "The future of co-teaching may be dependent on

increasing the quantity and quality of research on it and placing co-teaching in the larger context of school reform and improvement" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 10).

Virginia's Demographic Data on Exceptional Education Students' Achievement

To further investigate the importance of this research topic, one must recognize the urgent need for the co-teaching and collaboration reform movement. Like other states, Virginia was a theatre for the birth of collaboration and co-teaching. The accountability movement produced unprecedented levels of scrutiny on data reflecting the urgent need for new instructional models to increase achievement for students with disabilities. Since the expectation is for all students to meet the same rigorous student achievement rates, there is a need and legal mandate to conduct more research on how to best service the needs of students with disabilities in their least restrictive environment.

In reviewing the Virginia Department of Education's State Report Card from years 2007- 2010, the concern is confirmed regarding student achievement for students with disabilities.

> According to the Virginia Department of Education, schools, school divisions, and states are rated according to the progress made towards the goals of the No Child Left Behind Act of 2001 (NCLB). This federal law requires states to set Annual benchmarks for achievement in reading and mathematics leading to 100 percent proficiency of all students in all tested subject areas by 2014. Schools, school divisions, and states that meet or exceed annual benchmarks towards this goal are rated as having made adequately yearly progress (AYP). Schools, school divisions, and states must test at least 95 percent of students overall, and 95

percent of students in each of the following subgroups: White, Black, Hispanic, students with disabilities, limited English proficient students, and students identified as disadvantaged. Annual accountability ratings are based on achievement during the previous academic year or combined achievement from the three most recent years (Commonwealth of Virginia Report Card, p. 4).

The Virginia Department of Education State Report Card from 2007-2010 regarding the percentage of students passing, tested, not tested on the Standards of Learning Test in the subject areas of English and Mathematics are listed below.

Table 1.

Percentage of Students Passing/Tested/Not Tested										
Student Subgroup	Type	2007-2008			2008-2009			2009-2010		
		Passed	Tested	Not Tested	Passed	Tested	Not Tested	Passed	Tested	Not Tested
English Performance										
All Students	State	87	100	0	89	100	0	89	100	0
Black	State	78	99	1	81	100	0	81	100	0
Hispanic	State	81	100	0	85	100	0	85	100	0
White	State	91	100	0	93	100	0	93	100	0
Students with Disabilities	State	67	99	1	73	99	1	73	99	1
Economically Disadvantaged	State	77	99	1	81	100	0	81	100	0
Limited English Proficient	State	79	100	0	83	100	0	83	100	0
Mathematics Performance										
All Students	State	84	100	0	86	100	0	88	100	0
Black	State	73	99	1	77	99	1	79	99	1
Hispanic	State	75	99	1	79	99	1	82	99	1
White	State	88	100	0	90	100	0	91	100	0
Students with Disabilities	State	65	99	1	71	99	1	73	99	1
Economically Disadvantaged	State	73	99	1	77	99	1	80	99	1
Limited English Proficient	State	75	100	0	79	100	0	82	100	0

Key: < = A group below state definition for personally identifiable results
- = No data for group
* = Data not yet available

In reviewing the table above, the data indicates that *students with disabilities* in both English and Mathematics had the lowest percentage of students passing the Standards of Learning Test in comparison to all other AYP reporting categories.

According to the Virginia Department of Education's State Report Card from 2007-2010, the next chart reflects assessment based on other academic indicators. "The No Child Left Behind Act (2002) requires schools, school divisions, and states to make

progress in additional areas such as science, history, writing, and attendance" (Commonwealth of Virginia Report Card, p. 5). See table below

Table 2.

Other Academic Indicators							
		2007-2008		2008-2009		2009-2010	
Student Subgroup	Type	Passed	Tested	Passed	Tested	Passed	Tested
Writing Performance							
All Students	State	89	97	89	97	90	97
Black	State	82	96	83	96	84	96
Hispanic	State	83	89	83	90	85	90
White	State	92	98	92	98	93	98
Students with Disabilities	State	61	87	61	88	62	91
Economically Disadvantaged	State	79	93	80	94	83	94
Limited English Proficient	State	78	82	78	82	81	82
History Performance							
All Students	State	88	98	89	98	89	99
Black	State	79	98	81	98	81	99
Hispanic	State	79	94	82	95	82	95
White	State	92	99	93	99	93	99
Students with Disabilities	State	70	94	72	95	72	97
Economically Disadvantaged	State	77	97	80	97	80	97
Limited English Proficient	State	77	91	80	91	80	92
Science Performance							
All Students	State	88	98	89	99	90	99
Black	State	79	98	80	99	81	99
Hispanic	State	78	95	80	96	82	96
White	State	94	99	94	100	94	100
Students with Disabilities	State	69	95	69	98	71	98
Economically Disadvantaged	State	78	97	79	98	82	98
Limited English Proficient	State	74	93	76	94	78	93
Notes: Science Performance: the percentage of students passing science							
Key: < = A group below state definition for personally identifiable results - = No data for group * = Data not yet available							

In reviewing the table above, the data reflect that *students with disabilities* in writing, history, and science had the lowest percentage of students passing the other academic indicator assessments in comparison to all other AYP reporting categories.

According to Virginia Department of Education's State Report Card from 2007-2010, the next chart reflects the general graduation indicator. "High schools, school divisions, and the state must meet annual objectives for percentage of students who graduate with a Standard or Advanced Studies Diploma" (Commonwealth of Virginia Report Card, p. 5). See table on next page

Table 3.

Federal Graduation Indicator				
		Percent of students who earned a standard or advanced studies diploma in:		
Student Subgroup	Type	Four Years	Five Years	Six Years
All Students	State	77	77	NA
Black	State	67	67	NA
Hispanic	State	60	63	NA
White	State	83	82	NA
Students with Disabilities	State	43	40	NA
Economically Disadvantaged	State	61	62	NA
Limited English Proficient	State	56	64	NA
Key: < = A group below state definition for personally identifiable results - = No data for group * = Data not yet available				

In reviewing the table above, the data reflect that *students with disabilities* had earned the lowest percentage of students who earned a standard or advanced diploma in each of the past four or five years, compared to all other AYP categories.

According to the Virginia Department of Education's State Report Card from 2007-2010, "The Virginia Assessment Program includes Standards of Learning (SOL) tests and other statewide assessments in English, history/social science, mathematics, and science" (Commonwealth of Virginia Report Card, p. 9-11). The tables in Appendix D provide information for the years 2007-2010 based on the achievement of students at each proficiency level by subgroup. In reviewing these charts, the data for *students with disabilities* in grades three, four, and five in English/reading, mathematics, science, history/social science, and writing are significantly lower than most other AYP reporting categories with a few exceptions. In grade three, *students with disabilities* had the lowest pass rate in all subject areas in comparison to other AYP reporting categories. In grade four, *students with disabilities* had the lowest pass rate in all subject areas with the exception of history and social science. In grade five, *students with disabilities* had the lowest pass rate in English/reading and mathematics.

In summary, these data reflect the urgent call for innovative instructional strategies to assist students with disabilities to meet with success, commensurate to students in the other adequate yearly progress reporting categories. The significantly lower graduation rate indicator for students with disabilities is compelling data that calls for immediate action to help students with disabilities meet academic achievement benchmarks. One such strategy for assisting students with disabilities is through collaboration and co-taught classes. More research is needed to look at co-teaching skill sets, pre-service training coursework and experiences, and other experiences that help prepare teachers for the challenges of collaboration and co-teaching (Rea, McLaughlin, Walther-Thomas, 2002; Conderman & Johnston Rodriguez, 2009; Damore & Murray, 2009; Van Laarhoven, Munk, Lynch, Bosma, & Rouse, 2007; Washburn-Moses, 2009; U.S. Department of Education, 2004).

Skill Set and Experiences Necessary for Collaboration and Co-teaching

In light of the current accountability measures, federal mandates, and achievement data, there is a compelling need for specialized programming for students with disabilities. "In many ways, co-teaching demonstrates the potential as well as the complexities of collaboration that joins the fields of general education and special education" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 18). To create stronger collaboration and co-teaching models, one must begin to examine pre-service teacher coursework, training, and experiences that will help prepare them for the complexities of their future role in a collaborative or co-taught classroom. Specifically identifying exactly what skill set and experiences are needed by both general and exceptional education teachers to be successful in a collaborative and/or co-taught

setting; and then investigating if those findings are currently being offered as part of their pre-service training. "The mismatch between the reality of today's schools and traditional teacher preparation paradigms has led to a more collaborative approach to prepare all teachers" (Hardman, 2009, p. 583). "In a co-taught classroom the role of teacher quality has a more significant impact on student achievement than do other factors such as class make-up, background of students, class size, and class composition (Kloo & Zigmond, 2008, p. 12). "Mismatches between pre-service preparation and actual working conditions likely contribute to the challenges of the first teaching years" (Billingsley, B, Carlson, E., & Klein, S., 2004, p.344). "Co-teaching has been preferred as one way of ensuring that students with disabilities benefit from content instruction taught by content specialists in general education classrooms" (Kloo & Zigmond, 2008, p. 13).

Beginning in the 1980's, the notion of inclusive education began to emerge, recognizing that exceptional education and related services could be offered to students in a general education setting, creating an innovative vehicle of service delivery called co-teaching (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). "The intent of co-teaching is to make it possible for students with disabilities to access the general curriculum while at the same time benefiting from specialized instructional strategies necessary to nurture their learning" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p.11). Research documents the need to identify and foster specific skill sets and experiences necessary for beginning general and exceptional education teachers to be successful in collaborative and co-taught classrooms.

In 1992, the Council of Chief State School Officers developed the Interstate New Teacher Assessment and Support Consortium (INTASC), which released model standards for licensing new teachers. Teams of general and exceptional education teachers and teacher educators from across the country worked to clarify how both general and exceptional education teachers can effectively teach students with disabilities. INTASC joined forces with the Council for Exceptional Children and the National Association for the Directors of Special Education to develop subject matter standards in mathematics and English/language arts for elementary education and exceptional education. The premise of this work is the belief that all teachers are responsible for providing an appropriate education to students with disabilities (Council of Chief State School Officers, 2010). These standards represented a common core of teaching knowledge and skills, creating a coherent approach to licensing teachers compatible with National Board for Professional Teaching Standards (Council of Chief State School Officers, 2010). These standards were innovative at the time of their release because they were performance-based, focused on describing student outcomes rather than inputs, and learner centered (Council of Chief State School Officers, 2010). "The standards currently serve as the basis for licensing standards in 38 states, and have been adopted by the National Council for Accreditation of Teacher Education (NCATE) for teacher preparation accreditation" (Council of Chief State School Officers, 2010, p. 5).

In 2010, a revised version of the standards were drafted reflecting a change in name from Interstate *New* Teacher Assessment and Support Consortium specifically designed for beginning teachers to the current name the Interstate Teacher Assessment and Support Consortium (InTASC). The latest version of the Interstate Teacher

Assessment and Support Consortium document is intended to reference professional practice standards, setting one standard for performance that will look different at different developmental stages of the teacher's career (Council of Chief State School Officers, 2010). "The purpose of this document is to serve as a resource for states, districts, professional organizations, teacher education programs, and others as they develop policies and programs to prepare, license, support, evaluate, and reward today's teachers" (Council of Chief State School Officers, 2011, p. 5). The ten standards have been grouped into four general categories: 1) The Learner and Learning; 2) Content Knowledge; 3) Instructional Practice; and 4) Professional Responsibility. Each InTASC core standard is presented followed by expected core competencies regarding performance, essential knowledge, and critical dispositions. The ten InTASC standards are listed below (Council of Chief State School Officers, 2011):

The Learner and Learning

Standard #1: Learner Development. The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

Standard #2: Learning Differences. The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

Standard #3: Learning Environments. The teacher works with others to create environments that support individual and collaborative learning, and that

encourage positive social interaction, active engagement in learning, and self motivation.

Content

Standard #4: Content Knowledge: The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.

Standard #5: Applications of Content: The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative-problem solving related to authentic local and global issues.

Instructional Practice

Standard #6: Assessment: The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

Standard #7: Planning for Instruction: The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

Standard #8: Instructional Strategies: The teacher understands and uses a variety of instructional strategies to encourage learners to develop a deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

Professional Responsibility

Standard #9: Professional Learning and Ethical Practice: The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

Standard #10: Leadership and Collaboration: The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession. (Council of Chief State School Officers, 2011 p. 8-9.)

The InTASC standards are a valuable tool for preparing pre-service general and exceptional education teachers for collaboration and working in a co-taught general education classroom. It is imperative that a systematic approach with strong foundational supports assists teachers along the continuum to acquire the knowledge and skill set needed to meet performance standards. Meeting the challenges of students in today's classroom takes collaboration and support from all constituents to help students achieve academic success.

In an interview with Dr. Marilyn Friend, a leading researcher in the field of co-teaching, Dr. Brownell and Dr. Walther-Thomas (2002) suggest the following knowledge, skills, and experiences as being important in the pre-service development of beginning general and exceptional education teachers in preparation for collaboration and co-teaching at the elementary level. Dr. Friend emphasized that "Pre-service teachers

should learn and experience in their initial training the concept that 'effective teachers work together'" (p.225). Hence, collaboration and effective communication skills are a critical component of the skill set. Teacher-preparation programs and professional development programs should equip teachers with strong communication skills and problem-solving skills to work through situations where colleagues have philosophical differences (Carter, Prater, Jackson, & Marchant, 2009). As Mastropieri, et al. (2005) reported from their research entitled, *Case Studies in Co-teaching in the Content Areas,* that outstanding working relationships, teacher compatibility to work with a trusted colleague, and respect for another person's expertise are crucial. "The relationship between the co-teachers is a major critical component influencing the success or failure of the inclusion of students with disabilities" (Mastropieri, M., Scruggs,T., Graetz, W., Norland, J., Gardizi, & McDuffie, K., 2005, p. 268).

> When co-teachers are getting along and working well together, students with disabilities are more likely to be successful and have successful experiences in the inclusive classrooms. Conversely, when co-teachers experience conflict with their co-teaching relationships due to any number of issues, then the inclusive experience for students with disabilities is more challenging. (Mastropieri, M., Scruggs, T., Graetz, J., Norland, J., Gardizi, W., & McDuffie, K., 2005, p. 268)

Second, pre-service teachers should have the opportunity to observe effective collaboration through field experiences and student teaching placements (Brownell & Walther-Thomas, 2002). This could include planning meetings with general and exceptional education teachers, developing and implementing accommodations and modifications, preparing intervention plans, developing behavior management plans, and

conducting professional problem-solving (Brownell & Walther-Thomas, 2002; Conderman & Johnston-Rodrigez, 2009). Teachers need to have skills in clearly articulating and identifying problems and generating a variety of solutions for solving them (Carter, Prater, Jackson, & Marchant, 2009). Teachers need specific and in-depth training on modifying the curriculum and adapting classroom instruction using best practices (Carter, Prater, Jackson, & Marchant, 2009). As Mastropieri, et al. (2005) reported, a strong hands-on curriculum, with an activity-based approach, can provide an entry point for making specific teaching adaptations for students with disabilities in the general education classroom. These adaptations could include planning for individual differences and modifying lessons and work expectations. If both teachers are comfortable with the content, this would afford the opportunity to rotate lead teacher roles in the classroom.

Third, pre-service teachers need opportunities to observe and engage in interactions with parents in communicating academic and behavioral challenges and strategies for communicating effectively. "Experiences such as these can assist pre-service teachers in developing an appreciation for the value of collaboration and in building a knowledge base for successful professional interactions" (Brownell & Walther-Thomas, 2002, p.225). "Collaboration is about trust and respect. It's about working together to create better outcomes for all students" (Brownell & Walther-Thomas, 2002, p. 226). Collaboration is more successful when general and special exceptional teachers share common philosophies about student expectations, curriculum implementation, and classroom management practices (Carter, Prater, Jackson, & Marchant, 2009).

According to Damore and Murray (2009), overall, both special and general education teachers had favorable views about inclusive school practices and felt it was important in the education of students with disabilities. Dr. Friend stated that "effective collaboration is always about lifelong learning" (Brownell & Walther-Thomas, 2002, p. 226). Administrative support of the collaborative model is important, and planning time must be given to general and exceptional education teachers for collaboration. Teachers need exposure to a variety of collaborative frameworks and trainings on the skills and attitudes needed to work with students with disabilities in the regular education classroom (Carter, Prater, Jackson, & Marchant, 2009). As Mastropieri, et al (2005) reported, administrative support and leadership in fostering a school culture of collaboration are critical in sustaining a co-teaching model of instruction. Teachers need planning time and preferential scheduling to allow the time needed to meet instructional objectives. "Schools and classrooms of the 21st century represent diverse student populations representative of our larger society" (Mastropieri, M., Scruggs, T., Graetz, J., Norland, J., Gardizi, W., & McDuffie, K., 2005, p. 261).

> Changing roles for classroom teachers and specialists necessitate new emphasis on initial preparation and continuing professional development programs. Pre-service teachers, both general and special education, need to develop effective instructional and interpersonal skills to work with colleagues in the development and delivery of classroom-based services for students with disabilities. In addition, teacher education programs need to ensure that beginning educators develop well-honed classroom management skills that will ensure greater teacher confidence and student success (Rea, McLaughlin, Walther-Thomas, 2002, p.

220).

Through a concerted effort with universities, school administrators, and beginning general and exceptional education teachers there can be continued growth in learning more about effective ways to more fully prepare teachers for their new collaborative and co-teaching roles (U.S. Department of Education, 2004).

Perceptions about Training and Importance of Skills

During the last half century, there has been a rapid evolution of educational policy. This dramatic change is most notable in the way students with disabilities are educated in the public schools across the United States. In order to support students with disabilities in meeting rigorous achievement expectations, teachers and legislators must re-examine, refine, and implement strategies to better prepare teachers to work with special-needs children (Goe & Coggshall, 2007). "Moreover and importantly, it is not just special education teachers who require high-quality preparation in this important area but general education teachers as well" (Goe & Coggshall, 2007, p. 3). Teachers are not innately born with the knowledge and skills to be successful in a co-taught classroom. If teacher preparation programs are not adequately preparing both general and exceptional education teachers for this complex role, then public schools must compensate with on-the-job training which can be extremely complex and time consuming. "Teacher preparation programs must therefore respond to this challenge by offering high quality preparation programs for all teachers- both general and special education alike- in the diagnosis and instructional treatment of students with special education needs" (Goe & Coggshall, 2007, p. 3).

Common themes in literature reiterate the importance of core common knowledge and skill sets, as well as, collaboration between general and exceptional education departments producing meaningful practical field experiences in pre-service teachers' coursework (Goe & Coggshall, 2007; U. S. Department of Education, 2004). Another important element includes universities building strong partnerships with local school divisions to allow for practical implementation of skills acquired through training (Goe & Coggshall, 2007; U.S. Department of Education, 2004). Increased dialogue promoting the link between teacher preparation, practice, and student outcomes for all students and especially those with disabilities is needed by policy makers, researchers, university faculty, and instructional leaders to ensure progress and program development in this arena (Goe, L. & Coggshall, 2007; U. S. Department of Education, 2004).

There is limited research regarding teacher preparation for collaboration and co-teaching; however, one significant research study was conducted by Conderman and Johnston-Rodriguez in 2009 titled, *Beginning Teachers' Views of their Collaborative Roles*. The focus of the study was on perceived skill preparation of general and exceptional education teachers at both the elementary and secondary levels for collaboration and co-teaching, as well as perceived importance of such skills. The purpose of this study was to examine perceptions of beginning general and exceptional education teachers regarding teacher preparation; to examine the perceptions of the importance of skills associated with the aforementioned teachers and their collaborative roles under the Individuals with Disabilities Education Improvement Act (IDEIA 2004); and to identify current teacher training needs, as well as to address identified teachers' plans to remain in the teaching profession.

The survey research instrument was based on the Interstate New Teacher Assessment Standards Consortium (INTASC). The survey measured significant differences in perceived preparation and importance of skills and perceived preparation associated with the co-teaching experience. The data from the Conderman & Johnston-Rodriguez (2009), study supported the following: 1) Exceptional education teachers felt significantly more prepared than regular education teachers in the following skills: teacher preparation and adapting course content, pacing of the curriculum and student evaluation, monitoring student progress, providing accommodations and individualized instruction, maintaining appropriate expectations, and working on instructional teams and participating on teams; 2) Exceptional education teachers rated the following skills as being significantly more important in their current position than did general education teachers: evaluating student performance and adapting course content, pacing of instruction and providing accommodations, and problem solving; 3) Participants reported the most useful aspects from teacher-preparation program regarding students with disabilities. The themes identified included hands-on practical experiences and knowledge, applying information learned from coursework, demonstrating methods and strategies, knowing about the unique needs of each child, collaborating with others, and understanding the exceptional education process; 4) Data from the survey reflect the following skill development was still needed by participants, including new and innovative teaching strategies, professional development, instruction in the exceptional education process, interpretation of the law, completion of paperwork for IEPs, behavioral support strategies, and collaboration. All groups indicated a need for training

in differentiation, intervention strategies, and exceptional education law, especially focusing on Least Restrictive Environment (LRE).

Three of the major findings from this study included the following: 1) Beginning general education teachers felt well-prepared and valued working with children and families of diverse backgrounds. At-risk populations of students and their families presented unique challenges; 2) Field experiences were important in preparing teachers for working with students with disabilities. Other factors such as working with veteran teachers, substitute teaching experiences, and paraprofessional career experiences, helped teachers and para-professionals link theory to everyday practice; 3) The third theme reflected that various subgroups in this study had different in-service needs. Elementary general/exceptional education and secondary general/exceptional education teachers have specific needs based on their background, experiences, expectations in their job description, and involvement in mentoring programs (Conderman & Johnston-Rodriguez, 2009).

A central focus for this study was also to identify beginning teachers' perceptions of their preparation and their views of the importance of certain skills related to inclusion and collaboration. In summary, general education teachers felt less prepared in skills relating to curriculum and assessment, making accommodations and modifications, providing access to general education curriculum, and using individual assessments and progress monitoring skills. It was noted that some respondents also rated these skills as less important. It is important to note, exceptional education teachers did not share these previous concerns due to their more specialized training. Investigating teacher preparation coursework and opportunities for both general education and exceptional

education teachers to have more field experiences in a collaborative setting are recommended for further study (Conderman & Johnston-Rodriguez, 2009).

Another noteworthy contribution to the research field was the work in Griffin and Warden's 2006 study, *"The Effects of a University"* focusing on exploring the impact of beginning teachers' pre-service programming and experiences on their success as beginning collaborative teachers. The specific program components included field-based co-teaching training in a general education public school classroom and a specially designed semester long course focusing on collaboration, cooperative teaching, and differentiated instruction. Essential skills taught included exposure to Dr. Marilyn Friend's and Dr. Lynne Cook's models of collaboration and co-teaching, with specific skill development including communication skills, conflict management, consensus building, providing accommodations and modifications, and cooperative planning, among others. The authors used a 75 item written survey to gather data on the effects of the collaboration program and frequency of their use of the instructed collaborative skills. The results from this study indicated that pre-service teachers benefited from explicit instruction in collaboration when coupled with authentic practice in a general education setting (Griffin & Warden, 2006). Participants indicated that building a collaborative culture in their schools was vitally important to success of the co-teaching model. Other strengths of their collaboration coursework that translated into a strong skill set for their first collaborative teaching role included matching student interventions with students' learning needs, identifying student needs and developing intervention plans, planning for differentiated instruction, learning collaborative instructional planning skills, working with different personality types, and advocating for a co-teaching collaborative culture in

their first teaching assignment (Griffin & Warden, 2006). Likewise, experiences from their pre-service training that they found least helpful pertained to areas of using written records when planning for instruction, as well as, peer observation and feedback session experiences. Several experiences and barriers that were encountered in their first collaborative experience included their perceived lack of support from administrators in regards to specialized scheduling, little co-planning time, minimal team training regarding implementation of the model, and too wide of a grade level span to provide service made their jobs more difficult (Griffin & Warden, 2006).

The participants included recommendations for further training and coursework, such as more skills building (strategies for working with administrators in building a more inclusive culture), modifications of general education materials, time management, study of more case studies, and hands-on teaching experiences (Griffin & Warden, 2006). It was noted that there was particular emphasis on the need for both general and exceptional education pre-service teachers to have experience in this type of coursework.

Overall, this was a very positive learning experience for these participants in this study. "General education majors mentioned that, because of this program, they would continue to collaborate and strive to better meet the needs of all students" (Griffin & Warden, 2006, p. 193). These participants also viewed themselves as real change agents in their schools promoting a more inclusive and collaborative culture within their learning community. Participants also reported that because of the skills and experiences afforded to them in this program, they had a stronger skill set and practical experiences to draw upon when interviewing for teaching positions, which they felt gave them an edge when it came to the hiring process (Griffin & Warden, 2006).

To further document the need for general and exceptional education innovative collaborative pre-service teacher programming, Damore and Murray (2009) report in their study that exceptional education teachers had more positive perceptions of inclusion than their regular education peers. Significantly higher ratings were indicated by exceptional education teachers on four of the nine factors, which included communication, accountability, professional development, and shared responsibility. These findings suggest that exceptional education teachers believe these factors are more important in successful collaborative teaching practices than do general education teachers in this urban setting (Damore & Murray, 2009). This could be due to a lack of training and coursework in collaboration and co-teaching on behalf of general education majors.

In 2009, Washburn-Moses conducted a study to explore pre-service exceptional education teachers' perceptions of their future roles compared to teachers who are currently practicing in the field. This was an attempt to gather research and present findings on ways higher education institutions can better prepare pre-service teachers for the roles they will be assuming in their first years in the classroom. Washburn-Moses tried to establish a correlation between exceptional education pre-service teachers' perceptions of how exceptional education teachers spend their time in schools compared to how currently practicing teachers are actually spending their time. This research is geared towards gathering more information about what is actually happening in the field in order to better prepare pre-service teachers for "real" teaching experiences.

Washburn-Moses also examined the mismatches between the responses of pre-service teachers and practicing teachers, especially in the area of co-teaching. Pre-service

teachers, policy makers, and experts in the field seem to hold a vision of an exceptional education service delivery model inconsistent with what actually happens in the field. The perception of an exceptional education teacher spending a large amount of time in the general education classroom, when in reality little to no time is being spent there, is disconcerting. Washburn-Moses discussed the complexity of the special educator's role at length, but based on these findings, higher education institutions seem to be better preparing students for the multi-faceted roles they will be facing as they enter the classroom for the first time. Darling-Hammond (2006) summarizes the challenge for teacher pre-service programs as balancing the tasks of preparing teachers for real world teaching situations, while at the same time preparing them to be agents of change for schools of the future. This characterizes the struggle between the ideal and the reality of the exceptional education field.

Washburn-Moses' findings highlight important aspects of the realities for exceptional education teachers. Their roles are very complex and can lead to great sources of stress and ultimately a high turnover rate. Policy makers and administrators need to focus on supports for these novice and veteran exceptional education teachers to help them deal with these complex roles. A focus should be on more closely aligning partnerships between the schools and higher education institutions through field experiences. If educational leaders truly believe that new teachers are going to be the "change agents" within the schools, then it is important to eliminate barriers that may hinder opportunities for collaboration.

The work of Van Laarhoven, T., Munk, D., Lynch, K., Bosma, J., & Rouse, J., (2007), in *Project ACCEPT,* is another example of innovative teacher preparation

programming preparing students for collaboration and co-teaching. Research in the field suggests that teacher preparation programs must provide pre-service teachers with opportunities to develop collaborative skills through field experiences and coursework. Through this focus, beginning teachers will be better prepared to collaborate with general and exceptional education teachers and to support students in inclusive classrooms. Specific skill sets and competencies have been identified that are integral to the *Project ACCEPT* research study. This original study was entitled, *A Model for Preparing Special and General Education Pre-service Teachers for Inclusive Education*. Otherwise known as *Project ACCEPT (Achieving Creative and Collaborative Educational Pre-service Teams)*.

Project ACCEPT had four key components including the following: 1) an institute focusing on facilitating positive attitudes toward students with disabilities; 2) coursework designed to meet critical competencies such as universal lesson plan design, collaboration, functional behavioral assessments, and assistive technology; 3) clinical experience in an inclusive classroom concluding with a co-planned and co-taught lesson on the last visit; and 4) demonstration of specific competencies. Project ACCEPT had six specific competencies: 1) demonstrating a positive attitude toward individuals with special needs; 2) teaming skills and knowledge and practice of collaborative skills; 3) family intervention strategies for collaboration; 4) knowledge and application of the universal lesson plan design in inclusive classrooms; 5) knowledge and use of assistive technology; and 6) positive behavioral supports.

Van Laarhoven, Munk, Lynch, Bosma, and Rouse reported that the overall results from Project ACCEPT were positive in influencing attitudes and collaborative skill

competencies of pre-service teachers. The clinical experience, however, appeared to be a critical component of the students' field experiences. Participating Project ACCEPT students commented on how much they valued the clinical experience and suggested additional time in the classroom. The students also made informal recommendations to their advisors to encourage other students in future semesters to enroll in the Project ACCEPT program. Van Laarhoven, Munk, Lynch, Bosma, and Rouse acknowledged that collaboration between students in different majors and hands-on experiences in planning and executing lessons made this a valuable learning experience. The most beneficial outcome of Project ACCEPT are the skills and attitudes these pre-service teachers bring to their first collaborative teaching assignment.

Finally, the work of McKenzie (2009), in *A National Survey of Pre-service Preparation for Collaboration,* focuses on the link between university training programs and pre-service experiences and concerns about ineffective collaborative teaching models in the public school setting. This study pinpoints an area of concern about the lack of preparation at the university level for pre-service teachers regarding content and field experiences and inequity in required courses for general and exceptional education students. General education teachers often do not have the subset of skills and experiences needed to be successful in a collaborative setting. The number of special needs students being educated in the regular education classroom is dramatically increasing; yet there is limited research on the effectiveness of the collaborative teaching model. The literature defines various models of collaboration, but there is an absence of a universally consistent definition of *co-teaching* (McKenzie, 2009). This further

contributes to the role confusion of both special and general education teachers and their functions in the collaborative classroom.

When evaluating an effective collaborative setting for students with disabilities, one must look to see if the instruction is differentiated and unique in terms of delivery and content, as well as the role and ownership both teachers have in meeting the individual needs of all students. An overarching and realistic concern of collaborative partnerships is that role ambiguity can lead to less effort being put forth in the delivery of instruction. This, in turn, can lead to teacher burnout and greater teacher attrition (McKenzie, 2009). The purpose of McKenzie's study, therefore, was to learn more about how general and exceptional education pre-service teachers at the university level can be better prepared through content, field experiences, and curriculum development in order to be successful in their early collaborative teaching experiences.

Overall, the findings documented in McKenzie's study reflect two interrelated dilemmas that contribute to the challenges general and exceptional education teachers face everyday in a collaborative classroom. The first concern is the perception of faculty in developing collaboration skills in their pre-service teachers, and secondly, the difficulty students face in acquiring a subset of collaboration skills prior to their first teaching assignment in a collaborative classroom (McKenzie, 2009). The overarching conclusions to be drawn from this study are "that many of the problems related to collaboration in the school setting are parallel and partially attributed to the lack of cohesiveness between the general and special education departments at the university level" (McKenzie, 2009, p. 391). The first glimpse of collaboration that college students see at the university level is that from the professors and other instructors from various

departments involved in their programming. As McKenzie (2009) reported, in order to improve the final product, universities need to take a reflective look at the processes, coursework, and field placements in place to ensure that students have rich experiences collaborating with colleagues before reaching their first teaching position.

In summary, to quote Shippen, Crites, Houchins, Ramsey, and Simon (2005), "College coursework and field experiences must address deficits in knowledge and skills as well as focus on helping teacher candidates develop dispositions that would enhance the education of students with disabilities in the general education classroom" (p. 19). As Gerber and Popp (2000) reported,

> Universities, in their role as trainers of pre- and in-service teachers, should incorporate skills for effective collaborative teaching in their training programs. Team building, communication, problem-solving, and conflict-resolution skills Should be added to traditional instructional strategies. Learning strategies and accommodations and modifications of general education curriculum also should be addressed. Further, all pre-service teachers should learn about the parameters and constraints in collaborative teaching (p. 233).

Support and training for pre-service teachers is pivotal to the success of the co-teaching model (Bacharach, Heck, & Dahlberg, 2008). There is a common theme in the literature stating the urgent need for more research in this field, and through this proposed study, new light could potentially be shed on how to better prepare general and exceptional education teachers for their complex roles serving students with disabilities in the general education classroom.

Summary and Research Findings Supporting Proposed Study

The organizational framework for this chapter provides a foundation for understanding the complexities surrounding preparation of general and exceptional education teachers for their roles in the collaborative or co-taught classroom. As Zigmond (2001) surmised, there appears to be much literature and descriptive information about what co-teaching is and may look like in the classroom; however, there is a research gap in how teachers become more highly skilled in collaboration. "In many ways, co-teaching demonstrates the potential as well as the complexities of collaboration that joins the fields of general education and special education" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 18). Through a more in-depth look at the history of educating students with disabilities in Virginia, one can better understand the scope of the evolution of our current accountability system in public education. The need for more collaboration and co-teaching came about from the standards based and accountability movement charged by NCLB and IDEIA legislation. To meet the increased student achievement demands for students with disabilities, the collaboration and co-teaching movement came to the forefront. Dr. Marilyn Friend and Dr. Lynne Cook were the pioneers in establishing the rationale behind co-teaching and the six approaches to co-teaching instruction.

After closely scrutinizing the Virginia Report Card accountability data, it became abundantly clear that there is a need for stronger instruction for our students with disabilities since they are consistently one of the lowest performing achievement groups on the 2007-2010 Virginia State Report Card. In order to improve the achievement of students with disabilities, one must take a closer look at the instruction that students with

disabilities are receiving and where this instruction is taking place. Since IDEIA legislation requires students with disabilities to receive instruction in their Least Restrictive Environment, often times this translates into more special needs students being educated in the general education classroom. This instruction is provided by both general and exceptional education teachers in the general education setting. "In a co-taught classroom teacher quality has a more significant impact on student achievement than do other factors such as class make-up, background of students, class size, and class composition" (Kloo & Zigmond, 2008, p. 12). "Mismatches between pre-service preparation and actual working conditions likely contribute to the challenges of the first teaching years" (Billingsley, B, Carlson, E., & Klein, S., 2004, p. 344).

"Co-teaching has been preferred as one way of ensuring that students with disabilities benefit from content instruction taught by content specialists in general education classrooms" (Kloo & Zigmond, 2008, p. 13). Since there is such a significant need for increased levels of collaboration and co-teaching, it is imperative to look at pre-service programming to determine what skills and experiences are being taught as the core instructional base in preparing the teachers for the complexities of the collaborative and/or co-taught classroom. The InTASC standards provide significant detail regarding standards, performance indicators, essential knowledge, and critical dispositions for both general and exceptional education instructors in the classroom. Investigating teacher preparation coursework and providing opportunities for both general education and exceptional education teachers to have more field experiences in a collaborative setting are recommended for further study (Conderman & Johnston-Rodriguez, 2009).

These implications would help administrators recruit highly qualified teachers with better training and field experiences, as well as assist with retention of exceptional education teachers (Conderman & Johnston-Rodriguez, 2009).

Lastly, it is essential to identify general and exceptional education teachers' perceptions of their pre-service training and importance of skills acquired. "For co-teaching to be a productive use of a teacher's talents and training, co-teaching must be dynamic, deliberate, and differentiated" (Kloo & Zigmond, 2008, p. 16). "Co-teaching must unite the science of specifically designed instruction and effective pedagogy with the art of reorganizing resources and schedules to provide students with disabilities better opportunities to be successful in learning" (Kloo & Zigmond, 2008, p. 16). Several studies in this literature review document innovative pre-service programming that are currently taking place at public institutions of higher education across the country, preparing their pre-service teachers for their complex roles in their first years of teaching. "Although the topic of co-teaching is gradually finding its way into special education teacher preparation programs, it is equally important that co-teaching receive attention in the preparation of general education teachers" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 19-20). "Educators have not made the potential of co-teaching real" (Kloo & Zigmond, 2008, p. 14). "If you ask any professional who is a student of research on co-teaching, you will hear that efforts to date have been limited and that more data are needed regarding nearly every aspect of it" (Friend, 2008, p. 45). This research study has great potential to add knowledge on how to better maximize the potential of co-teaching by examining closely the pre-service preparation for both general and exceptional education teachers serving in these complex roles.

CHAPTER 3

METHODOLOGY

This chapter describes the methodological procedures the researcher employed to answer the research questions and complete this qualitative study. As elaborated in Chapter 1, the purpose of this study is to identify the perceived skill set needed by general and exceptional education teachers in order to be successful in a co-teaching classroom, discover if collaborative coursework is being offered to pre-service general and exceptional education teachers as part of their university experience, and identify specific strategies, programs, and field experiences in which pre-service general and exceptional education teachers can engage in to better prepare them for their first co-teaching and/or collaborative teaching assignment.

The research questions which will guide this study are: 1) What specific skill set and experiences are perceived necessary by beginning general and exceptional education teachers to be successful in collaboration and co-teaching classrooms; 2) What are general education teachers' perceptions about their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching; 3) What are exceptional education teachers' perceptions of their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching? This methodology chapter is divided into five sections. The first section includes the background for this study. The second section includes the research design. Next, the population and participant sample are discussed. In the fourth section, procedures for data collection and analysis are discussed. The fifth section will explain the researcher's efforts to achieve credibility and trustworthiness within the context of this study and

briefly describe "researcher as instrument" in this study. A final summary of the methodology concludes this chapter.

Background

After conducting a thorough review of the literature, there appears to be an abundance of research and descriptive information about what co-teaching is and what it may look like in the classroom; however, there is a gap in the research in how teachers become more highly skilled in collaboration. The need for more collaboration and co-teaching emerged from the standards-based and accountability movement as a result of NCLB and IDEIA legislation. To improve the achievement of students with disabilities, one must take a closer look at the instruction that students with disabilities are receiving and in what manner this instruction is taking place. It is imperative to look at pre-service programming for teachers of the disabled to determine what skills are being taught and what experiences are being offered as the core instructional base in preparing these teachers for the complexities of the collaborative and/or co-taught classroom. It is essential to identify general and exceptional education teachers' perceptions of their pre-service training and the importance of skills acquired. "Although the topic of co-teaching is gradually finding its way into special education teacher preparation programs, it is equally important that co-teaching receives attention in the preparation of general education teachers" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 19-20). "Educators have not made the potential of co-teaching real" (Kloo & Zigmond, 2008, p. 14). This void led the researcher to more closely examine the pre-service preparation for both general and exceptional education teachers serving in these complex collaborative and co-teaching roles.

Research Design

"Qualitative inquiry is the only real way of understanding how people perceive, understand, and interpret the world" (Patton, 2002, p. 112). This qualitative study was based on the naturalistic inquiry design (Lincoln & Guba, 1985) established on the premise that the researcher will best be able to understand the perceptions of beginning general and exceptional education teachers who have experience using collaboration or co-teaching through the first-hand knowledge and experiences of these practitioners in the field. Naturalistic inquiry allows the study of a phenomenon in the real world in real-time documenting as events naturally unfold (Patton, 1990). The researcher does not try to manipulate the phenomenon, but rather experience it as it unfolds naturally with no predetermined course of action (Patton, 2002). The naturalistic inquiry strategy was employed in this exploratory and descriptive study (Lincoln & Guba, 1985), as it provided the best methodological fit to better understand teacher perceptions about the skill set, coursework, and experiences needed for collaboration and co-teaching. The work of Carl Glickman (1997) documents the need to give teachers a voice so when that notion is applied to research, one can learn how to better meet the needs of practitioners through the voice of experience. The researcher will focus on beginning teachers' perceptions and experiences by conducting in-depth focus group conversations. Beginning teachers will tell their stories and share experiences about their pre-service preparation, and the researcher will interpret the data collected in context (Patton, 2002).

In the 1950's, focus group interviewing emerged as a research market strategy allowing consumers to share their opinions in a social context about knowledge and experiences they had collectively gathered through conversation regarding a specific

topic, which in turn could impact the sales market (Patton, 1987). In 1956, sociologist Robert K. Merton captured this same research strategy using research-oriented focus group interviews in his book, The Focused Interview (Patton, 2002). The purpose of focus groups is not to problem solve or make decisions, but rather to collect data about participants' knowledge and experiences regarding the research topic. "The objective of focus groups is to get high-quality data in a social context where people can consider their own views in context of the views of others" (Patton, 2002, p. 386). Using the open-ended conversations as opposed to a survey questionnaire which limits participants' responses because of the predetermined response categories is a distinct benefit of using a focus group protocol.

A focus group interview, typically involving five to eight participants who are selected due to similar backgrounds and experiences, focuses on the topic at hand. The interview typically takes one to two hours using an interview guide or protocol to guide the questioning for each focus group. In a research study, multiple focus group sessions occur with different participant groups. This assists in generating reliable and valid data for theme emersion analysis (Patton, 2002).

As Rossman and Rallis theorized, focus group methodology assumes that people need to interact with one another to challenge their own thinking and to clarify their own beliefs. The focus group technique allows for such interaction and promotes interactive discussion through open dialogue. "The interaction between the participants is the critical characteristic of this type of interviewing" (Rossman & Rallis, 2003, p. 193).

> Inductive analysis is built on a solid foundation of specific, concrete, and detailed observations, quotations, documents, and cases. As thematic structures

> and overarching constructs emerge through data analysis, the qualitative analyst keeps returning to the fieldwork observations, and interview transcripts, working from the bottom up, staying grounded in the foundation of case write-ups, and thereby examining emergent themes and constructs in light of what they illuminate about the case descriptions on which they are based. (Patton, 2002, p. 58)

Through the focus group interviews and data collection, the researcher collected "rich and thick" (Lincoln & Guba, 1985) descriptions of pre-service coursework and experiences that have helped teachers prepare for their current instructional role. While at the same time, perceptions were shared about the importance of skills acquired, as well as an emphasis on additional training and experiences to better prepare them for this challenging collaborative and co-teaching instructional role.

Population and Participant Sample for the Research Study

The sample population for this study included three suburban school divisions in Central Virginia. Three school divisions were selected for this study. These school divisions were selected because they are the three largest suburban school divisions surrounding the Richmond metropolitan area each encompassing a diverse student population with a wide range of socioeconomic and English as a second language learners. This study was comprised of one focus group per each of the three school divisions. Purposeful sampling, the primary method used in qualitative research to ensure that the most qualified participants meeting the specific criteria were selected for participation, was utilized. Selection criteria for participation was as follows: general or exceptional education probationary (0 to 5 years experience) teachers having current or

previous experience in a collaborative or co-taught classroom with a teaching degree awarded by a Virginia institution of higher education. The researcher made an inquiry in each school division to gauge interest in supporting this research study. After completing the Institutional Review Board (IRB) process at Virginia Tech (See Appendix I) and obtaining permission from each division to complete the research study, the human resource department from each school division sent out an e-mail to potential participants to generate interest in the study. If the researcher did not get enough participants for the focus group, she randomly called schools in the school division, contacted principals, and asked if they had any teachers that met the criteria. Five to eight participants, the number typically selected for a focus group (Creswell, 1998; Patton, 2002), were then randomly selected from a variety of schools in each school division and invited to participate in this study with a total target population of between 15 and 24 participants. "The validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information richness of the cases selected and the observational/analytical capabilities of the researcher than with sample size" (Patton, 2002, p. 245). In qualitative research, sample size should be reflected as a minimum based on "expected reasonable coverage of the phenomenon given the purpose of the study and stakeholder interest" (Patton, 2002, p. 246). The researcher did not get the desired number of participants on the first try; therefore, additional random selections of teachers were done until the desired target population was met. The researcher's goal was to reach a point of saturation (Lincoln & Guba, 1985) in the responses of participants, therefore emerging theme analysis was more credible.

Data Collection and Analysis Procedures

The researcher established credibility by collecting and analyzing data for this research study through conducting focus group interviews, transcribing the recorded interviews, cross referencing the field notes, and completing a thorough review of the literature to ensure consistency with leading researchers in the field. The study utilized open-ended focus group protocol questions to engage the participants in meaningful conversations about the topic. Through this protocol, participants described what was meaningful and salient without being directed to predetermined categories (Creswell, 1998; Patton, 2002).

As a result of the literature review, the researcher developed the focus group protocol based on the research from Dr. Greg Conderman and Dr. Sarah Johnston-Rodriguez from the University of Illinois (2009) utilizing the ten core Interstate New Teacher Assessment and Support Consortium (INTASC) principles (2011). In the fall of 2010, a newer version of the InTASC standards was introduced and this new version was approved March 2011. The newer version includes a change of name eliminating the "new" in the title since these standards are for different developmental stages in a teacher's career (Council of Chief State School Officers, 2011). The 2011 revised version is titled Interstate Teacher Assessment and Support Consortium (InTASC). This survey instrument entitled, "Beginning Teacher Questionnaire", was field tested and determined to be valid and reliable when used in the study: Beginning Teachers' Viewpoints of Their Collaborative Roles (2009). The researcher obtained written permission from Conderman to modify the original survey questions to reflect a focus

group protocol format using open-ended questions that produce qualitative results and analysis (See Appendix B).

The focus group protocol was field tested to establish credibility. The researcher completed a pilot study in one elementary school in Central Virginia that had three general or exceptional education teachers with zero to three years of experience using collaboration and co-teaching strategies and who graduated from a Virginia institution of higher education. These participants were not in schools that were utilized in the final study. The researcher systematically completed the pilot study by: having participants complete the demographics sheet, by choosing one of the six collaboration and co-teaching models that best fit their current teaching experience, and then by engaging the participants in meaningful conversation following the focus group protocol. After the pilot study session ended, the focus group discussion was transcribed and synthesized using inductive analysis and Erickson's (1986) interpretative method of data analysis. A research assistant accompanied the researcher in this pilot study and took field notes during the focus group discussion. The research assistant, whose background is in psychology and statistics, served as a peer debriefer for this research study.

Before systematically collecting data, the researcher obtained permission from all school divisions involved in this study, as well as Virginia Tech's Instructional Review Board. Confidentiality was explained to each participant before the study began. Teacher name, school, and school division information was kept anonymous, and participants were referred to by pseudonyms in the focus group discussion such as Participant E1 or G1. After explaining the purpose of the study, all participants were asked to sign an informed consent form that met Virginia Tech's Instructional Review

Board guidelines and approval. It was thoroughly explained to participants that information discussed during the focus group meeting would be audio-taped and heard by all participants, but professional discretion would be encouraged by the interviewer to ensure quality responses during the study. All research data with any participant identification were held by the researcher and then destroyed immediately after coding of the focus group participants.

All information was stored on the researcher's computer which was password protected. When information was transcribed, a security agreement was obtained from the transcriber to ensure confidentiality; and information was given to the researcher in the original form, and no other copies were maintained on the transcriber's computer. Both the researcher's and transcriber's computers were password protected. The research assistant who was utilized as a peer debriefer and for member checking also completed a confidentiality agreement and did not maintain any permanent records on her computer. All recorded interviews, field notes, data collection logs, and other confidential files were destroyed upon completion of the study. Statistical analysis was conducted using frequency distributions and descriptive statistics to represent relevant findings. After completing the focus group interviews, the researcher completed the member check process by sending the transcription data to participants to ensure accuracy of their statements and then the researcher collected all copies back from each member.

The researcher utilized Erickson's (1986) interpretative method of data analysis to categorize themes or assertions from the transcriptions. According to Erickson (1986), these themes emerge from an in-depth analysis of the transcribed recording from the focus group interviews. These themes were validated by continually confirming or

disconfirming evidence from the data corpus (Erickson, 1986). Several steps were employed to complete a systematic review of the data. The researcher identified themes with each focus group meeting. As themes emerged, key links and assertions were documented from participants' responses and conversation during the focus group. Final assertions had evidentiary data to confirm the findings. As stated by Erickson (1986), "analytic narrative vignettes and direct quotes make clear the particulars of the patterns of social organization and meaning-perspective that are contained in the assertions" (p. 149). An electronic file was utilized to store evidence of themes and assertions. Additionally, a cross-reference comparison was made between the InTASC skills listed in the 2011 standards and the standards represented in the participants' responses. Charts, tables, and graphs were created to help visually represent the data collected during this analysis. For example, a table was created with the frequency of responses listed. Patterns of perceptions of experiences and skills necessary for collaboration and co-teaching, coursework currently being offered in pre-service training, and perceptions of both general and exceptional education teachers were noted.

Researcher as Instrument

As Patton (2002) stated, "the quality of the information obtained during interviews is largely dependent on the interviewer" (p. 341). In qualitative studies, the researcher serves as the instrument for capturing the data from practitioners in the field. In this study, the researcher used audio recording devices, computer systems, a reflective journal, field notes, and a peer debriefer to efficiently and accurately document the focus group interview process.

To ensure credibility, the researcher analyzed data for this research study by conducting focus group interviews and transcribing the recorded interviews, cross referencing the field notes, and completing a thorough review of the literature to ensure consistency with leading researchers in the field. The research assistant/peer debriefer has credentials in research and statistics. She reviewed the focus group protocol, took field notes during the focus group interviews, reviewed transcriptions and the reflective journal, and provided feedback throughout the duration of the study.

These tools were all used at the discretion of the researcher; thus the credibility of this study lies within the researcher. In order to establish trustworthiness and credibility within the researcher, the following background and assumptions are provided to the reader. The researcher is currently completing the third-year of a three-year doctoral program in Educational Leadership and Policy Studies at Virginia Tech. She has been in the education profession for nineteen years and is currently serving as a principal of an elementary school where she has served for ten years. The researcher acknowledges personal bias towards this research topic as an elementary principal in a school that has a highly effective collaboration model in second through fifth grades.

The researcher has personal interest in this topic because she taught in a co-teaching setting for three years and is passionate about the benefits for all students being served in a co-taught classroom with highly qualified and trained co-teachers that possess the skills, attitudes, and competencies to effectively teach in this complex role. To account for this bias, data were verified with an outside reader who has credentials in research and statistics.

To ensure dependability of this study's methodology, data collection procedures, and analysis, the researcher employed dependability audits (Lincoln & Guba, 1985). Readers of this study will have to determine the transferability of these results to their specific situation after closely reviewing the complete methodology of this study.

Methodology Summary

This qualitative research study gives a voice to beginning general and exceptional education teachers who are currently serving in a collaborative or co-teaching setting. The purpose of this study is to identify the perceived skill set needed by general and exceptional education teachers in order to be successful in a co-teaching classroom, discover if collaborative coursework is being offered to pre-service general and exceptional education teachers as part of their university experience, and identify specific strategies, programs, and field experiences in which pre-service general and exceptional education teachers can engage in to better prepare them for their first co-teaching and/or collaborative teaching assignment. The site convenience sample population for this study was derived from three suburban school divisions in Central Virginia with diverse student populations. This study was comprised of one focus group per each of the three school divisions chosen for the sample. The purposeful sample selection of teachers for each focus group included five to eight general and exceptional education probationary (zero to five years experience) teachers who had current or previous experience in a collaborative or co-taught classroom, and who graduated from a Virginia institution of higher education.

This methodology employed a qualitative naturalistic inquiry approach. A focus group protocol was used for data collection. Erickson's (1986) interpretive method of

data analysis was used to extract themes from the data corpus. The researcher established credibility by collecting and analyzing the data for this research study through conducting focus group interviews, transcribing the recorded interviews, cross referencing the field notes, and completing a thorough review of the literature to ensure consistency with leading researchers in the field. The study utilized open-ended focus group protocol questions (Appendix A) to engage the participants in meaningful conversations about the topic. In this study, the researcher sought to identify the perceived skill set needed by general and exceptional education teachers in order to be successful in a co-teaching classroom, discover if collaborative coursework were offered to pre-service general and exceptional education teachers as part of their university experience, and identify specific strategies, programs, and in which field experiences pre-service general and exceptional education teachers can engage in to better prepare them for their first co-teaching and/or collaborative teaching assignment.

CHAPTER 4

RESULTS OF THE STUDY/FINDINGS

Background

This chapter presents the findings of this qualitative study identifying the perceived skill set needed by general and exceptional education teachers in order to be successful in a co-teaching classroom. This study sought to identify teachers' perceptions of collaborative coursework offered to pre-service general and exceptional education teachers as part of their university experience. This research study also identified perceptions about specific strategies, programs, and field experiences in which pre-service general and exceptional education teachers could engage in to better prepare them for their first co-teaching and/or collaborative teaching assignment. General assertions which emerged from the data, and their evidentiary warrants are presented.

This qualitative study was based on the naturalistic inquiry design (Lincoln & Guba, 1985) established on the premise that the researcher would best be able to understand the perceptions of beginning general and exceptional education teachers who have experience using collaboration or co-teaching through first-hand knowledge and experiences of these practitioners in the field. The site convenient sample population for this study was derived from three suburban school divisions in central Virginia with diverse student populations. This study was comprised of one focus group from each of the three school divisions chosen for the sample. The purposeful sample selection of teachers for each focus group included five to eight general and exceptional education probationary (zero to five years experience) teachers who have current or previous experience in a collaborative or co-taught classroom, and who graduated from a Virginia

institution of higher education. Originally, the researcher defined a beginning teacher as someone with zero to three years of experience. After the initial inquiry for participants in each of the three school divisions, it became apparent that because of budget cuts and hiring freezes there were not many participants meeting the zero to three years criteria. Hence, the researcher broadened the scope to include beginning teachers with zero to five years of experience. A focus group protocol was used for data collection based on the ten revised (2011) Interstate Teacher Assessment and Support Consortium standards. Erickson's (1986) interpretive method of data analysis was used to extract themes from the data corpus. The researcher established credibility by collecting and analyzing data for this research study through conducting focus group interviews, transcribing the recorded interviews, cross referencing the field notes, and completing a thorough review of the literature to ensure consistency with leading researchers in the field. This process enriched the findings.

First, demographic data are presented for each focus group population. Next, the researcher reports the data question-by-question for each of the three focus groups, including supporting vignettes, and direct quotes supporting the data presented. The quotes are coded according to focus group 1, 2, 3 (example, FG1, FG2, FG3), then by participant G for general education teacher or E for exceptional education teacher and including their coding participant number (example, G1 or E1), and then page number from the transcription.

The researcher has developed several tools to help the reader more comprehensively understand the data presented in this study. First, a comparison chart is presented using a Venn diagram stating assertions from both the general and exceptional

education teachers' perceptions of the most important skills needed for collaboration and co-teaching for each focus group. After each of the three school divisions' data are shared individually, then a synthesized summary is presented, both using a Venn diagram and narrative form. Second, the researcher presents pie charts (based on general and exceptional education participants' responses) comparing the most important skills for collaboration and co-teaching to the actual coursework and training they received as part of their pre-service experience. Third, based on the skills identified in the pie charts by both general and exceptional education participants regarding important skills needed for collaboration and co-teaching, a comparison table was created aligning those skills to the (2011) Interstate Teacher Assessment and Support Consortium Standards (InTASC). This summary of the data concludes the chapter.

As stated in Chapter 3, this interpretive method is based upon Erickson's work in the reference *Handbook of Research on Teaching* (Erickson, 1986, p. 119-161).

The research questions guiding this study are as follows:

1) What specific skill set and experiences are perceived necessary by beginning general and exceptional education teachers to be successful in collaboration and co-teaching classrooms?

2) What are general education teachers' perceptions of their pre-service training regarding the skill set and experiences acquired for collaboration and co-teaching?

3) What are exceptional education teachers' perceptions of their pre-service training regarding the skill set and experiences acquired for collaboration and co-teaching?

To provide the reader with an overview of this comprehensive study, the researcher provided a descriptive demographic data for all three focus groups in Table 4 below.

Focus Group Demographic Information

Table 4.
Demographic Information for Focus Group 1, 2, and 3

Demographic Information	**Focus Group 1**	**Focus Group 2**	**Focus Group 3**
Area of Endorsement			
Elementary General Education	6	2	5
Exceptional Education	1	2	2
Other	0	1	0
Graduated from VA Institution of Higher Education			
Yes	7	5	7
No	0	0	0
Years Taught Prior to This Year			
Zero	1	0	0
One	2	0	2
Two	4	2	1
Three	0	3	2
Four	0	0	2
Primary Role in Classroom			
Except. Ed using Collab/Consultation	0	1	1
Except. Ed in Co-taught Classroom	0	2	1
Except. Ed Collab/Co-taught (BOTH)	1	0	0
General Ed Using Collaboration	3	1	2
General Ed in Co-taught Classroom	1	0	2
General Ed Collab/Co-taught (BOTH)	1	1	0
Not currently in a collab/co-teaching role	1	0	1
Average Time Engaged in Role			
None currently, however previous experience	0	0	2
Less than 1 hour/day	1	0	1
1-2 hours/day	1	1	3
More than 2 hours	5	4	1

The site convenience sample population for this study was derived from three suburban school divisions in central Virginia with diverse student populations. There were a total of nineteen participants: thirteen elementary general educators, five elementary exceptional educators, and one with both general and exceptional endorsements. All nineteen participants graduated from a Virginia institution of higher education.

The range of teaching experience prior to the current school year varied from zero to four years of teaching experience. There was one participant with zero years of experience prior to this school year, four teachers with one year of experience, seven participants with two years of experience, five with three years of experience, and two teachers with four years of experience prior to this school year.

The participants' primary roles in the classroom varied accordingly; there were two exceptional education teachers that only used collaboration, three exceptional education teachers that co-taught in the general education classroom and one exceptional education teacher that both collaborated and co-taught in a general education classroom. There were six general education teachers who only used collaboration in their general education classroom, three general education teachers who co-taught, and two general education teachers who utilized both collaboration and co-teaching. There were also two participants that were not currently utilizing collaboration or co-teaching, but had past experience and met the participation criteria so they chose to participate in the focus group.

The average time engaged in each of these roles varied. Two participants stated they spent no time in a collaborative and/or co-teaching role this school year but have a

variety of past experience, two participants spent less than one hour per day, five teachers spent one to two hours per day, and ten participants spent more than two hours per day in a collaborative and/or co-teaching setting.

The dynamics of each focus group were quite diverse and unique which positively impacted and enriched the data collected in each focus group session. All participants in each of the three focus groups appeared to be relaxed and comfortable with the format of the questions and conversational style of the discussion. Conversation bounced from participant to participant in no specific order. At select times there was consensus among the group in response to a participant's answer. During certain times of group consensus, there was affirming laughter, smiling, and head nodding among participants. Both general and exceptional education teachers freely added their opinions to others' viewpoints and at times said, "no offense but…" which inferred that they were dis-agreeing with another participant's response but did so in a professional manner. The researcher's assistant and peer debriefer took field notes during each focus group session for reference during data analysis.

All participants completed the informed consent document, confidentiality agreement, and demographics sheet at the beginning of each session. To begin each session, the researcher thoroughly reviewed the purpose of the focus group, made sure all teachers met the criteria for participation, and thoroughly reviewed the common terminology to ensure continuity during the focus group meeting. Participants of each focus group reviewed the final transcripts, member checked the document for accuracy, and then mailed it back to the researcher with changes and their signatures indicating approval. During all three focus group sessions, at least one or two participants

(sometimes more) thanked the researcher for inviting them to participate in this meaningful research study, and two teachers even wrote thank you e-mails or notes on their transcripts expressing their appreciation for this work. The researcher then used the final member checked version of the transcript for evidentiary warrants throughout this chapter. There was ample time between focus group sessions (approximately one week between each) for the researcher to reflect on and analyze the dynamics of each focus group and to make minor adjustments (for example, positioning around the table or name tag coding) if needed, to ensure the success of the next focus group.

The researcher has further explained the demographics of each focus group and other introductory information within each section for a particular focus group. Table 5 depicts demographic information for the first focus group.

Focus Group 1 and Response by Question

Table 5.
Demographic Information for Focus Group 1

Demographic Information	**Participants**
Area of Endorsement	
Elementary General Education	6
Exceptional Education	1
Other	0
Graduated from VA Institution of Higher Education	
Yes	7
No	0
Years Taught Prior to This Year	
Zero	1
One	2
Two	4
Three	0
Four	0
Primary Role in Classroom	

Except. Ed using Collab/Consultation	0
Except. Ed in Co-taught Classroom	0
Except. Ed Collab/Co-taught (BOTH)	1
General Ed Using Collaboration	3
General Ed in Co-taught Classroom	1
General Ed Collab/Co-taught (BOTH)	1
Not currently in a collab/co-teaching role	1
Average Time Engaged in Role	
None currently, however previous experience	0
Less than 1 hour/day	1
1-2 hours/day	1
More than 2 hours	5

Focus Group #1 included seven participants (six general education and one exceptional education teacher). All seven participants graduated from a Virginia institution of higher education. The years of teaching experience ranged from zero to two years of teaching experience prior to the current school year. The only exceptional education participant primarily used collaboration and co-teaching. Of the other six general education participants, three used only collaboration, one co-taught, one used both collaboration and co-teaching, and one currently had no experience but used the models in the past. Participants reported that the average time currently engaged in collaboration and/or co-teaching roles varied from less than one hour per day, to more than two hours per day. The group appeared very relaxed and freely shared their thoughts about collaboration and co-teaching and their experiences. The participants initially began to speak by taking turns one-by-one around the table; however, by the end of the second question, there was a more natural flow and engaging conversation. Participants actively listened to one another's viewpoints and then commented on their statements and then added their responses accordingly. It is important to note that originally the researcher had two exceptional education participants scheduled to

participate in the focus group; however, one declined at the last minute and another participant could not be secured in a timely manner. Therefore, a limitation was that there was only one exceptional education teacher present, and her voice was very quiet, so the audio recording was challenging to transcribe causing some data to not able to be documented. This limitation contributes to the overall participant sample having more general education than exceptional education participants.

Interview Question 1. What are your perceptions about your current position as a collaborative or co-teacher?

Five out of six general and exceptional education teachers reported positive perceptions overall about collaboration and co-teaching. One general education teacher's perceptions were neutral. One general education participant stated, "it was definitely a positive experience…" (FG1, G6, p. 2) and another general education teacher stated, "I feel like we really got to know the kids, all the kids and their needs in our classroom" (FG1, G5, p. 2). The one exceptional education teacher in the group expressed a positive perception about the collaboration and co-teaching model, but shared that scheduling was a significant concern. The exceptional education teacher stated, "As a teacher, I feel it's important for a teacher to connect with their students. I know what I did; I tended to put myself in that child's place…" (FG1, E7, p. 10). The general education participants perceived the following weaknesses in the collaboration and/co-teaching model: scheduling difficulties, lack of defining roles and responsibilities, and lack of planning time. A general education teacher stated, "Unfortunately, with three different special education teachers in one classroom, one for each subject, planning was difficult trying to get everyone working together" (FG1, G2, p.2). Another general education teacher

stated, “I didn’t do as much collaboration and probably would like to do more and that I think it is due to scheduling… I’m not sure if we are always on the same page or I know what the expectations are…” (FG1, G6, p. 2). The general education participants perceived the following strengths in the model: collaboration with another educator, student traits (meeting individual learning needs), open communication, interpersonal skills, and planning together. A general education teacher shared, “Every one of us has a different way to go about teaching things and interacting with the students, and together we really figured out what worked for each child” (FG1, G2, p. 2). Overall, five out of six of the general education teachers felt strongly and provided testimony to the fact that the collaboration and co-teaching model helped them to better meet individual learning needs of their students. One general education participant stated, “I really enjoyed the collaborative model because I had the chance to learn about all the different types of needs that I had and how to best meet them, so it was a really effective model for me this year” (FG1, G1, p. 1). Another participant stated, “I went into the collaborative classroom and then realized how much closer I could get to my students and really understand their needs…” (FG1, G2, p. 1). In summary, the majority of both general and exceptional education teachers had positive perceptions about their current role as a collaborative or co-teacher, and one general education teacher expressed a more neutral position.

Interview Question 2. What was most useful in your pre-service programming preparing you to work with students with disabilities?

The general and exceptional education focus group participants reported that coursework in behavior management and classroom management strategies were helpful

in their pre-service training. The exceptional education teacher reported, "Behavior management, I think, would be the most important thing because one year you might have an awesome year, and the next year you will have a child that you can't even determine a single behavior strategy that works for them" (FG1, E7, p. 6). Four out of five of the general education teachers stated that they had zero to two classes covering topics regarding collaboration and co-teaching. The exceptional education teacher reported that she had more than two classes preparing for collaboration and co-teaching; however, that was because her first degree was in psychology and school counseling which mirrored some of these skills. The general education teachers stated that they were exposed to collaborative education, and their pre-service coursework required much group work through class projects that fostered a positive attitude towards teaching. One general education participant shared, "The one thing I think that my college did prepare me for was the attitude that you need to have in order to be a successful collaborative teacher" (FG1, G3, p. 3). The general education teachers also stated that coursework in behavior intervention strategies were prevalent. Pre-service general education teachers took coursework in the nuances of exceptional education, including exceptional education law. The general education teachers also stated that the hands-on student teaching experiences and field experiences were beneficial as evidenced by the following quote, "My student teaching experience which was more hands on, that's where I felt I got a little bit more direct experience seeing students who have particular disabilities…" (FG1, G4, p. 3). Another general education participant shared that another course that was helpful was a math and exceptional education course. In summary, both general and exceptional education teachers' perceptions were that they had limited coursework

covering topics related to collaboration and co-teaching. The general and exceptional education teachers highlighted behavior and classroom management strategies coursework as being helpful in their pre-service training.

Interview Question 3. In your pre-service coursework did you receive any training or coursework in collaboration or co-teaching? As part of your coursework and experiences, what skills were taught in preparation for meeting the needs of exceptional education students in a general education classroom?

The general and exceptional education focus group participants perceived that they did receive some training and coursework in collaboration and/or co-teaching. The general and exceptional education teachers stated they also received training and coursework in communication skills, interpersonal skills, and making connections between teacher colleagues, co-teachers, and parents that they perceived as important skills. One general education participant stated the importance of building relationships and learning to value others' opinions evidenced by her statement, "…even talking with someone else and learning to value their opinion knowing that you have to work with them…" (FG1, G6, p. 3) and another participant said, "I had a whole course on communication with parents" (FG 1, G2, p. 5) which emphasizes the importance of communication skills with colleagues and parents.

The exceptional education teacher stated,

> One of the classes I took we did role playing on a child that was recently diagnosed with a learning disability and the parent had a lot of questions about why my child was diagnosed… so I think it helps a lot if the school includes effective communication into their curriculum (FG1, E7, p. 5).

Five general education participants reported the importance of instruction in differentiation, to develop a strong teacher skill set in differentiating instruction for various ability levels. One general education participant shared, "In all of our lesson plans, we had a specific area where we had to address how we were going to differentiate our learners who were learning quicker or learning slower than the others" (FG1, G2, p. 4). Another general education teacher remarked, "There were times when you had to sit and analyze lessons, to see which works best for each type of student and that is definitely a great teaching skill" (GF1, G6, p. 3). The general education teachers also stated that communication skills were taught for teacher-to-teacher communication, collaborative planning skills, and classroom management coursework on developing a wide variety of classroom management skills. For example, one general education teacher shared, "Dealing with special education parents, from my experience this year, is a lot different than dealing with regular education parents because they have such different needs, come from different backgrounds" (FG1, G2, p. 5). The exceptional education teacher also emphasized the importance of communication skills and experience in dealing with these unique situations when educating students with disabilities.

Several general education teachers stated that they received instruction in data collection and tracking and monitoring student progress. One general education participant also mentioned coursework in how to handle difficult parents and stated this example,

> In my classroom management class, we actually had a book called <u>How to Handle Difficult Parents</u> and the book had different scenarios and then there

> would be different types of parents; there would be like a helicopter parent and we would split up into groups and discuss how to handle the helicopter parent, or the non-existent parent, so I did feel that I was prepared (FG1, G6, p. 5).

Other experiences shared by the general education teachers included: extensive opportunities for group work and projects and many opportunities for hands-on activities; one participant shared that she had the opportunity to observe in a co-taught lesson. In summary, all six of the general education teachers stated they had coursework and exposure to the collaboration ideology, which included fostering interpersonal skills with colleagues and communication skills with parents.

Interview Question 4. Of these skills, which two do you feel are the most important in your classroom today and please explain why and/or give examples?

To help report the findings for this question, the researcher reported skills and preferred experiences and then referred to the InTASC Standards (2011) to categorize the participant responses further into performances ("the aspect that can be observed and assessed in teaching practice" p. 6), essential knowledge ("the role of declarative and procedural knowledge as necessary for effective practice" p. 6), and critical dispositions ("indicates that habits of professional action and moral commitments that underlie the performances play a key role in how teachers do, in fact, act in practice" p. 6) as defined in the standards.

Of the skills reported by the focus group, general and exceptional education teachers perceived that in-depth training in exceptional education, including elements of the child study process, eligibility process, and IEP writing process were critically

important. The general and exceptional education participants also reported the importance of being knowledgeable about learning problems and a variety of learning disabilities and strategies to help students be academically successful.

Several general education participants stated that communication skills, data collection and diagnostic testing skills, organizational skills in providing appropriate accommodations and modification in the general education classroom, and writing effective lesson plans for a collaborative classroom were critically important. For example, one participant stated, "You have to be an effective communicator in order to plan well with your collaborative teacher…" (FG1, G3, p. 5) and another participant stated, "…but just having that openness and communication to express how you want it to be in that collaborative classroom" (FG1, G5, p. 7).

Another participant summarized her thoughts by saying,

> Having that training on collaboration and what it really should look like and what people's roles were because that's one thing that I know I really struggled with, I was like okay, what is our role, who is supposed to do what, what should this look like? We kind of just got ourselves through the first year because I had my idea from what I knew and they had their ideas and it was really just not a consistent idea of what collaboration should look like (FG1, G2, p. 7).

The general and exceptional education teachers also stated that the following learning experiences would be important in preparing a pre-service teacher for a collaborative classroom: looking at sample IEPs and analyzing the components, preparing for child study and eligibility meetings, and participating in hands-on

experiences, such as an actual child study would be beneficial. General education participants perceived that attending an IEP and eligibility meeting and having exposure to an actual collaborative classroom in student teaching and learning about scheduling would be beneficial experiences as part of their pre-service training. One participant shared, "The whole child study process was very overwhelming, very daunting, and I really struggled with that, and I'm still struggling with making sure I'm doing the best I can as the general education teacher…" (FG1, G4, p. 6). Another general education teacher stated,

> So attending meetings as a student teacher, you know being able to go to different kinds of IEP meetings to see what that process is like and meet and interact with different teachers in the collaborative setting and the co-teaching setting… (FG1, G4, pg. 6)

and yet another general education teacher declared, "I mean this was my first year, and I went to that file cabinet and I will never forget opening up that file and saying, 'oh my goodness'…" (FG1, G1, p. 6). These statements reflect the need for the development of the skill set and experiences needed for pre-service teachers in preparing them for the collaborative classroom.

The general and exceptional education teachers also shared the need for essential knowledge and critical dispositions that pre-service teachers must possess before entering into a collaborative classroom. Four general and exceptional education participants shared the need to develop an extensive, in-depth knowledge base about learning problems and a variety of learning strategies to assist these struggling learners. Both general and exceptional education participants also shared the need for extensive

knowledge about a variety of learning disabilities and how to implement a variety of learning strategies to meet their needs. The exceptional education teacher stated, "Some of these children just don't have it, but the main thing is you can step up to the plate and can teach this child" (FG1, E7, p. 10). The exceptional education teacher also expressed her belief that pre-service teachers need to be knowledgeable about the child study and IEP process and specifically how to identify learning problems. General and exceptional education participants also felt that the following critical dispositions were necessary: acquiring communication styles and models, learning how to build trusting relationships with colleagues, students, and parents, developing compassion for individual learners, and understanding that all children do not learn in the same manner. It was also shared that role clarification needs to take place so both the general and exceptional education teachers understand their responsibilities and duties in the teaming partnership. The following example of this was expressed during the interview,

> The other thing I guess is just the compassion and the realization that not every single kid; I mean I've had several ADD kids and ADHD kids and not every one of them could learn the same way so what worked with one kid isn't going to work for another one (FG1, G6, p. 7).

In summary, general and exceptional education teachers reported that in-depth training in exceptional education including elements of the eligibility, child study, and IEP writing process were of the utmost importance. The general and exceptional education participants also reported that being knowledgeable about a variety of learning problems and disabilities and being able to utilize research-based strategies to help students become academically successful were most important.

Interview Question 5. Do you recall having the opportunity to co-plan and/or co-teach a lesson with another pre-service general/exceptional education teacher?

All seven participants, general education and exceptional education teachers, indicated that they did not have an opportunity to co-plan or co-teach a lesson with another general or exceptional education teacher during their pre-service coursework. One general education teacher shared that during her student teaching, she had school guidance counselors in the classroom a lot supporting special needs students, but they never really co-planned or co-taught a lesson together.

Since there was minimal response to this question the researcher attempted to probe further by asking, "Did you actually sit down with a special or general education teacher and plan a lesson together, was there any interdisciplinary work offered?" but the overwhelming group response was "no". Several participants said they wish they would have had the opportunity to collaborate and co-teach a lesson with a general or exceptional education teacher.

Interview Question 6. What training would you have liked to have had in your pre-service coursework in order to better prepare you for collaboration and co-teaching?

The general education participants shared an extensive list of coursework and experiences they felt would have been beneficial in better preparing them for their collaborative and/or co-teaching experience. On the other hand, the exceptional education participant only observed the discussion nodding her head and saying, "Yeah," agreeing with other participants' responses not actually making any personal statements herself. Three out of the six general education participants stated they would have liked to have had more coursework in specific learning strategies to meet the needs of students

with disabilities. One general education teacher stated, "I didn't have any coursework dealing with special needs students, so that was one area that I would've liked to have more experience in before I started" (FG1, G3, p. 3). Other coursework perceived as necessary by the general education teachers included more exceptional education classes focusing on developing stronger communication skills with parents of special needs students, and developing skills and knowledge on how to prepare for the child study and eligibility process for exceptional education, including attending a meeting to observe. A quote from an exceptional education teacher is as follows, "Take a class where you can create an IEP. I think that's important because a general ed teacher can be overwhelmed with a child with an IEP that is twenty something pages long" (FG1, E7, p. 9). Other responses about pre-service needs from general education teachers included data collection strategies, co-teaching experiences in practicum and/or student teaching, and formal observations in a collaborative classroom. One general education teacher stated, "I think it would be beneficial at some point during your college career, whether it be practicum or student teaching, to have the opportunity to be placed in a room where there is a collaborative setting" (FG1, G5, p. 7); and another general education person said, "Even for a general teacher it would be a beneficial thing to see what a collaborative classroom looks like…" (FG1, G5, p. 8). Another general education participant shared, "I think it would be really cool if the university would start allowing special education majors and general ed majors to plan and teach together" (FG1, G3, p. 8).

In summary, the general and exceptional education teachers shared their perceptions for the need for more coursework, training, and experiences in the following areas: communication skills with colleagues and parents, specific learning strategies for

students with disabilities, methods of data collection, additional experience in preparing for child study and IEP meetings, more exceptional education coursework, and more observations and co-teaching experiences.

Interview Question 7. What advice do you have for those who prepare pre-service teachers for collaboration and co-teaching and for current pre-service teachers currently in their programs?

The question of giving advice to those who prepare pre-service teachers for collaboration and co-teaching and for current pre-service teachers in college generated a lively discussion with much laughter and discussion. The general and exceptional education teachers stated the importance of having rich practicum experiences giving pre-service teachers exposure to all types of students with special needs. As the exceptional education teacher stated,

> You just have to learn how to deal with the behavior so you know I'm thinking when it comes to all these disabilities and there are so many and we need to learn so many things about what we can and cannot do and we need to have a practicum or something that will put us in a classroom and let there be all levels of disabilities (FG1, E7, p. 9).

Focus group participants reiterated the importance of a variety of placements in diverse settings, such as working with socio-economically disadvantaged students, English as a second language learners, and students who exhibit behavior problems, etc. as part of their field work. The general education teachers in this focus group reported that they would emphasize to current pre-service teachers the importance of the coursework. For example, "Really just absorbing the information and understanding the opportunity from

learning this and asking questions is not just enough to get me through this course" (FG1, G2, p. 8). It was also suggested that perhaps a board of current practicing teachers could be invited in to the pre-service classroom on a regular basis to share "real world" experiences with aspiring educators. A quote shared was,

> Recent graduates come back on a panel and we would go into a meeting with them and they would share their first year teaching experiences and you know telling us, like look guys this is real, like we're here we're in it and that really kind of helped me to bring me back down to earth and say okay wait a minute this just isn't a class, a prerequisite anymore, like this is the stuff you're going to be doing (FG1, G2, p. 8).

The general and exceptional education teachers also spoke about the importance of building independence and confidence during their student teaching experiences. One general education teacher reported the importance of seeking out other learning opportunities within the school outside of the cooperating teacher's classroom. One example expressed by a general education teacher was,

> I know just in student teaching there were times when I kind of fell back into my comfort zone which was with my two cooperating teachers and maybe should've branched out more, taken some extra time at the end of the day and gone to see other teachers and visit others more without somebody coming to me to suggest it or to ask me to do that, just on my own, trying to get out and see other opportunities so that I could at least see as much of that school because you don't, you know, get to go to several different schools, but at least try and see different grade levels and have as many experiences as possible (FG1, G4, p. 9).

The exceptional education teacher stated that general education teachers should, "take a class where you create an IEP" (FG1, E7, p. 9). Also, as reported by the exceptional education teacher, "I think it is important because a general education teacher can be so overwhelmed with a child with an IEP that is twenty something pages long" (FG1, E7, p. 9).

In summary, general and exceptional education teachers' viewpoints on giving advice to those who prepare pre-service teachers for collaboration and co-teaching and for current pre-service teachers in college were centered around the following: importance of rich practicum experiences giving pre-service teachers exposure to all types of students with special needs, exposure to current teachers in the profession to ask them questions and engage in real-life scenarios, emphasis on the importance of building independence and confidence during their student teaching experiences, participation in learning opportunities within the school outside of the cooperating teacher's classroom, and a class in writing IEPs for general education teachers.

Interview Question 8. Is there anything else you would like to share regarding your pre-service training and preparation and importance of skills that has prepared you to work with the general and exceptional education students?

Two comments were shared by general and exceptional education focus group participants. One comment by a general education participant was that she felt it was incredibly important to have exposure to socio-economic diversity and to work with impoverished students. She recommended Ruby Payne training which focuses on working with at-risk students. One evidentiary comment states,

How do I teach in a poverty stricken area where there's going to be a lot of

challenges because this is my first year, and I loved it and I wouldn't trade anything but I feel like I could've been better equipped to deal with the group I was working with (FG1, G1, p. 9).

The exceptional education teacher shared her passion for the teaching profession and how important it is to stay connected to the children and their needs, as evidenced by this statement, "I think you have to have a passion for the field…As a teacher I feel it's important for a teacher to connect with their students…" (FG1, E7, p.10).

Table 6 depicts demographic information for the second focus group.

Focus Group 2 and Response by Question

Table 6.
Demographic Information for Focus Group 2

Demographic Information	**Participants**
Area of Endorsement	
Elementary General Education	2
Exceptional Education	2
Other: Both of above	1
Graduated from Virginia Institution of Higher Education	
Yes	5
No	0
Years Taught Prior to This Year	
Zero	0
One	0
Two	2
Three	3
Four	0
Primary Role in Classroom	
Except. Ed using Collab/Consultation	1
Except. Ed in Co-taught Classroom	2
Except. Ed Collab/Co-taught (BOTH)	0
General Ed using Collaboration	1
General Ed in Co-taught Classroom	0

General Ed Collab/Co-taught (BOTH)	1
Not currently in a collab/co-teaching role	0
Average Time Engaged in Role	
None currently, however previous experience	0
Less than 1 hour/day	0
1-2 hours/day	1
More than 2 hours	4

Focus Group #2 included five participants (two general education and three exceptional education teachers). All five participants graduated from a Virginia institution of higher education. The years of teaching experience ranged from two to three years of teaching experience prior to the current school year. The primary role of one of the exceptional education participants was in a collaborative setting; and the two other exceptional education teachers taught in a co-teaching setting. Of the other two general education participants, one used only collaboration; and one used both collaboration and co-teaching. General and exceptional education participants reported that the average time engaged in the collaboration and/or co-teaching roles currently varied from one to two hours per day to more than two hours per day.

The group dynamics of this focus group were very positive from the very beginning and participants openly shared their viewpoints, opinions, and experiences with the group. At times, the researcher had to summarize participants' main points related to the question at hand, because the group tended to stray off topic (example, timeliness of developing class rolls for collaborative classes and when teachers were assigned their caseloads, etc.). Some participants were more vocal than others and the researcher continually tried to encourage active participation and to provide opportunities for discussion on behalf of all members. There was a lot of laughter and humor around

the table as participants freely shared their thoughts and experiences about collaboration and co-teaching. As a follow-up, one participant wrote a thank you letter stating her interest in the research topic and its importance and relevance in the field today, and asked for a copy of the results when the study is complete. In response to the request, the researcher is happy to meet this request. It is important to note that the researcher strived to have at least seven participants in each focus group with a balance between general and exceptional education participants. At the last minute, two participants declined the meeting and there was not time to secure additional participants. This is a limitation of this research study, which contributes to the overall participant sample having more general education than exceptional education participants.

Interview Question 1. What are your perceptions about your current position as a collaborative or co-teacher?

The general and exceptional education participants' perceptions of their current position as a collaborative or co-teacher ranged from being positive to being neutral. The two general educators and one of the three exceptional education teachers' viewpoints were positive. Two of the exceptional education teachers had neutral perceptions about their current roles. General and exceptional education teachers' perceptions about strengths of the model were that they felt co-teachers are positive role models for students and that there are benefits of having two teachers in the classroom. General education teachers reported a strength of the model was the opportunity to bounce ideas off a co-teacher and problem solve together. Two general education teachers commented on how much they enjoy co-teaching overall. For example, one general education participant stated,

> I get along really well with the teacher that I collaborate with and we just bounce back and forth, and the students can see our relationship and they feed off of it and they have two people that they can go to for help and I think that helps a lot especially with difficult concepts (FG2, G1, p. 1).

One of the exceptional education teachers had a positive and two had neutral perceptions about their current position as a collaboration or co-teacher. According to the exceptional education teachers, a strength of the model included that students and parents viewed them as equal teachers in the general education classroom. One quote expressing this viewpoint was as follows,

> When the students would introduce their teachers to their parents, they would automatically say, 'these are both of my teachers', and we really felt good about how our situation was going when they didn't even realize that I was coming in to provide additional assistance for specific students. It just felt like a really natural thing, like we were teaching the entire class (FG2, E2, p. 1).

The general education participants reported one weakness of the model is that the collaborative and co-teaching role is extremely challenging for a first year teacher, and one should be experienced before assuming this role. For example, "I can see, though, where it would be a little bit intimidating, especially to a new teacher right out of college" (FG2, G5, p. 1). The exceptional education teachers reported a weakness of the model is trying to find co-teachers who are willing to work together (having a positive attitude) and who have strong interpersonal skills as evidenced by the comment, "you have to really hope you have a teacher who wants to collaborate with you" (FG2, E1, p.1).

In summary, there was quite a range of perceptions from general and exceptional education participants' spanning from extremely positive to more neutral. General and exceptional education teachers' perceptions about strengths of the model included: co-teachers are positive role models for students, the benefit of having two teachers in the classroom, and the opportunity to problem-solve together. The exceptional education teachers reported a strength of the model was the favorable viewpoint from parents and students of having two equal teachers in the general education classroom. The general education participants reported the weaknesses of the model as being the challenging nature of the collaborative and co-teaching role, the collaborative classroom should be for more experienced teachers, and the challenge of trying to find co-teachers who are willing to work together (having a positive attitude) and who have strong interpersonal skills.

Interview Question 2. What was most useful in your pre-service programming preparing you to work with students with disabilities?

The general and exceptional education participants in the focus group reported that they did receive limited coursework and training in preparing for their role as a collaborative or co-teacher. Of the two general education participants, one teacher recalled having a class where IEPs and terminology were discussed. One of the general education teachers did have a practicum experience in a collaborative setting, and one was a career switcher and had significant experiences as an expetional education instructional assistant before becoming a general education teacher. One general education participant stated, "I really wonder if teachers who major in exceptional education get more experience or pre-training with collaboration and co-teaching than

teachers who do not; I don't feel like I got very much experience or training in that area at all" (FG2, G5, p. 2).

The three exceptional education teachers reported that they recalled four classes involving topics regarding collaboration and co-teaching (specifically, school law, a learning strategies class, and a collaboration and consultation course). The exceptional education teachers reported that the following coursework was helpful: student teaching experiences, especially those in a co-taught classroom, the creation of an extensive collection of differentiation strategies in a learning strategies class, class work in collaboration and co-teaching, and the development of IEPs. Those participants who were career switchers felt their previous experiences as a general or exceptional education instructional assistant was helpful. One exceptional education teacher stated,

> I don't think anything you read in a book or write a paper about or are lectured about can prepare you until you actually get in there and are actually in the situation. While I taught, I was a general education teacher for three years and then switched over to special education and so my three years of teaching experience, you know teaching general education, was the best preparation for switching sides and looking at it from a different angle (FG2, E2, p. 2).

A general education participant mirrored that comment by stating,

> I feel like my best preparation was being a special education assistant and so like that really gave me another side of the fence so to speak and what both sides actually expect from one another and the relationship and the dynamics of that (FG2, G5, p. 2).

An exceptional education teacher participant shared,

> I took a class on collaboration and co-teaching and we made binders and it was the biggest binder you would ever buy, strategies which I still to this day pull it off from my bookcase because she just gave us so many ideas like if they do this you try this, spreadsheets, templates of things... (FG2, E3, p. 2).

In summary, general and exceptional education participants reported that they did receive limited training, coursework, and field experience in preparing for their role as a collaborative or co-teacher. Both general and exceptional education participants shared that they would have liked to have had more frequent and extensive variety of field experiences, and more coursework and explanation of teachers' roles and understanding of how to facilitate a productive IEP meeting. The exceptional education teachers reported having class work regarding collaboration and co-teaching (specifically school law, a learning strategies class, and one on collaboration and consultation). The exceptional education teachers reported that the following coursework was helpful: student teaching experiences, especially those in a co-taught classroom, the creation of an extensive collection of differentiation strategies in a learning strategies class, class work in collaboration and co-teaching, and the development of IEPs.

Interview Question 3. In your pre-service coursework did you receive any training or coursework in collaboration or co-teaching? As part of your coursework and experiences, what skills were taught in preparation for meeting the needs of exceptional education students in a general education classroom?

The general and exceptional education focus group participants perceived that they did receive some training and coursework in collaboration and/or co-teaching. The

general and exceptional education teachers stated they both received training and coursework in differentiation of instruction for a range of instructional levels.

The two general education participants stated that they did receive some pre-service coursework preparing them for collaboration and co-teaching. The two general education participants reported that they were exposed to exceptional education terminology and various differentiation strategies. The three exceptional education participants reported that they had more extensive training and coursework in collaboration and co-teaching. Two exceptional education teachers shared they had coursework in differentiation, specifically developing tiered lesson plans. Three exceptional education teachers reported they had coursework in data collection, the importance of it, and the development of data collection tools. It was reported that one exceptional education teacher had a reading course, specifically targeting differentiation strategies as evidenced by the following statement,

> A reading course that I took for my endorsement in elementary education you know it was a great course but one thing that the teacher focused on was how to differentiate across the board. You know way back then I hadn't really thought about how to take your teaching and apply it to all different types of learners and I thought that was really valuable (FG2, E2, p. 3).

Exceptional education participants also reported that communication skills were taught to be utilized between exceptional and general education teachers regarding data collection. Organizational skills, interpersonal skills, and utilizing resources in asking for assistance within a school were covered in the exceptional education pre-service coursework.

In summary, the general and exceptional education focus group participants perceived that they did receive some training and coursework in collaboration and/or co-teaching. It was reported by both general and exceptional education teachers that they received training and coursework in differentiation. General education participants reported that they were exposed to exceptional education terminology. Exceptional education teachers shared they had coursework in data collection, communication skills, organizational skills, interpersonal skills, and utilization of resources in asking for administrative support for collaboration and co-teaching.

Interview Question 4. Of these skills, which two do you feel are the most important in your classroom today and please explain why and/or give examples?

To help report the findings for this question, the researcher reported skills and preferred experiences and then referred to the InTASC Standards (2011) to categorize the participant responses further into performances ("the aspect that can be observed and assessed in teaching practice" p. 6), essential knowledge ("the role of declarative and procedural knowledge as necessary for effective practice" p. 6), and critical dispositions ("indicates that habits of professional action and moral commitments that underlie the performances play a key role in how teachers do, in fact, act in practice" p. 6) as defined in the standards.

The general and exceptional education participants in this focus group reported their perceptions about the importance of the classroom culture of embracing the diversity within the classroom and teaching students how to work together to fully develop their knowledge and skills. The general education participants reported that interpersonal skills were critically important in a collaborative or co-teaching setting.

One general education teacher stated, "How do you teach people not to take things so personally and be so offended and get their feathers ruffled? I don't know how you teach that" (FG2, G5, p. 8); and another general education participant said, "I mean I have my areas of training and he has his area of training and we have to work together to serve all of the children that we have" (FG2, G5, p. 9). The general education participants stated the importance of administrative support for their programs. A general education teacher reported the following about administrative support, "You feel like you're not alone. Feel like they really are involved; they know your kids by name, they know their face, they come in there all the time, you know, check in on them. I really appreciate that" (FG2, G1, p. 8).

The exceptional education teachers reported that communication skills and self-advocacy skills were critically important in a collaborative or co-taught classroom. One exceptional education teacher stated, "You have to be able to communicate thoughts and ideas and problems to the person that you are co-teaching with or it's not going to be an effective situation…" (FG2, E2, p. 7). Individual exceptional education teachers also stated that data collection, analysis, and application skills were important, as well as lesson planning skills for a collaborative setting, highly developed differentiation skills, strong problem solving skills, and well developed discipline and classroom management skills. One exceptional education participant reported the following about data, "I think taking data and knowing what to do with the data especially for me is the most important skill because I think you learn so much from the data…" (FG2, E1, p. 7). The exceptional education participants also reported the following dispositions as critically

important: flexibility, confidence in your instructional skill set, and perseverance in trying new learning strategies. One exceptional education participant stated,

> Being flexible isn't really considered a skill; I guess I think it is. You've got to be able to go with the flow, switch your strategy in a second, pick up where someone has left off and you know, the lesson plans that you wrote on Sunday afternoon might be thrown out the window by Tuesday morning and you just have to be able to roll with the punches (FG2, E2, pg. 7).

Another exceptional education participant stated that problem solving is a continuum "… but being able to communicate that and let them know I'm not the end all, supreme person that when I snap my fingers they are going to change, we have to keep trying" (FG2, E3, p. 8) is important.

In summary, both general and exceptional education participants reported their perceptions about the two most important skills for working in a collaborative/co-taught setting as the classroom culture of embracing the diversity within the classroom and teaching students how to work together to fully develop their knowledge and skills. The general education participants also reported the importance of interpersonal skills and administrative support. The exceptional education teachers stated that communication skills and self-advocacy skills were critically important. Individual exceptional education teachers also stated that data collection, analysis, and application skills were important, as well as lesson planning skills for a collaborative setting, highly developed differentiation skills, strong problem-solving skills, and well developed discipline and classroom management skills. The exceptional education participants also reported the importance

of the following dispositions: flexibility, confidence in one's instructional skill set, and perseverance to try new learning strategies.

Interview Question 5. Do you recall having the opportunity to co-plan and/or co-teach a lesson with another pre-service general/exceptional education teacher?

All five participants, general education and exceptional education teachers, indicated that they did not have an opportunity to co-plan or co-teach a lesson with another general or exceptional education teacher. This question seemed to get the participants off topic and they began to talk about how late it was in the summer when homeroom rolls and caseloads are decided and when they are notified. An exceptional education participant shared how important she feels looping is to serve students on her caseloads for multiple years. A general education teacher stated that knowing earlier in the summer would help her to communicate with the exceptional education teacher over the summer about the needs of her exceptional education students for the upcoming year. Even after several attempts to restate the question, the researcher moved on to the next interview question. Several participants indicated that they wish they would have had the opportunity to collaboratively plan and teach a lesson as part of the their pre-service training.

Interview Question 6. What training would you have liked to have had in your pre-service coursework in order to better prepare you for collaboration and co-teaching?

The general and exceptional education participants shared an extensive list of coursework and experiences they felt would have been beneficial in better preparing them for their collaborative and/or co-teaching experience. Both general and exceptional education teachers expressed a desire for more training overall in preparing for

collaboration and co-teaching. Two general education teachers stated that they needed more coursework and training in understanding their role in an IEP meeting, perhaps by engaging in role playing experiences, mock meetings using a fake file, and actually writing an IEP. One general education teacher stated, "I think special education has more acronyms than the military, and it feels like I'm totally in a different country or something" (FG2, G5, p. 12). General education participants also shared the following areas for more coursework and training: education on how to communicate with parents regarding the IEP process and terminology, development of the written IEPs, role of the general education teacher, and appropriate pacing of the curriculum with special needs students in an effort to keep students on grade level while remediating skills at the same time. Two statements shared accentuating this point were, "…I had no idea what I was supposed to say, do, have prepared for the meeting" (FG2, G5, p. 3) and

> I would've liked to know what the general education teacher, what their role was? I remember one of my first meetings I walked in and our assistant principal asked me a question and I got so red in the face, I was like, I don't know, and I was just embarrassed in front of the parents, they were like you're young, you don't know what you are doing (FG2, G1, p. 3).

One general education participant also shared, "I guess I go back to more training and data collection and assessment and interpreting data, and then applying the data and on strategies too. I felt like my pre-service education kind of left a hole there" (FG2, G1, p. 12). More collaborative experiences in general education student teaching, and overall more experience and training in collaboration and co-teaching, are needed as evidenced

by this statement, "Just experience. Just experience whether it be in a practicum situation or; there's really no substitute for just experience I think…" (FG2, G5, p. 2).

The three exceptional education participants shared an extensive list of coursework and experiences they felt they needed to become better prepared for their collaborative and/or co-teaching experience. At least two out of the three exceptional education participants stated that they needed more training and coursework in: opportunities for general and exceptional education teachers to co-plan together; more coursework in data collection strategies, organizational and classroom management skills, more in-depth study and understanding about a variety of learning disabilities and how to convey that knowledge to general education teachers; and exposure to more diverse field experiences dealing with lower socio-economic students with learning challenges and transient populations. An exceptional education participant stated, "I think it would be neat if your special ed majors could get with your general majors and maybe learn to plan together…" (FG2, E1, p. 4).

Exceptional education teachers also stated the following areas where more coursework and training was needed: learning how to collaborate with general education teachers in writing IEPs, gathering input, and explaining the general education teacher's role in an IEP meeting, learning the fundamentals of writing IEPs, understanding the nuances of running IEP meetings, and using computer based-IEP writing programs. One exceptional education teacher stated,

> Like the front of the IEP tells you the order but I was like, what am I supposed to do, where am I supposed to start?" I had no idea. Luckily my assistant principal was like this is what you're supposed to do and it was nice, but the first couple of

> meetings I was shocked, I didn't know what to do, I'm sure I was terrible but, I wish I had a class in that (FG2, E1, p. 3).

Other areas of focus by exceptional education participants were scheduling, less core content (general studies) classes and more classes in your major content such as, developing and managing reading groups in the general education classroom, learning more content knowledge for background in teaching the SOLs, and acquiring data collection and application strategies when collaborating with general education teachers. An example given by one exceptional education teacher in regards to content knowledge was,

> I would've liked to have gotten more on pulling out that essential knowledge from the SOLs because I'm strategy and problem-solving and I'm not content and that was very difficult to go in and plan with somebody…. I know they can't give special ed teachers the content that the general ed teachers get but, something would've been nice other than just strategies (FG2, E3, p. 11).

An exceptional education participant commenting about data collection stated,

> I know I would've found it more useful in a pre-service course if it would've shown you different ways to take data. Like here's the goal, here are five different examples on how you could effectively take that data and not forcing you to. I guess what I'm saying is, data collection that is realistic when it comes to, like when you're co-teaching… (FG2, E2, p. 6).

Another exceptional education participant said,

> Yes, I have experience in data collection. No, I don't feel like it prepared me for the real world of, you know preparing for IEPs and progress reports and all the

> information you need to fully show where a child starts at the beginning of the year, and the progress that is made and so I had an introduction to it but again the real experience of teaching I think is the only thing that can really prepare you for what it's really like and I don't know how, I don't know but it seems unfortunate, it's unfortunate to start out feeling unprepared and overwhelmed (FG2, E2, p. 5).

Additionally, exceptional education teachers discussed pre-referral and intervention strategies in working with general education teachers and one participant stated the importance by this quote,

> Almost like a troubleshooting guide like for a refrigerator. If the ice maker's not working, try this, this, and this and like you said, before you waste everybody's time and coordinating, and you know how hard it is to coordinate schedules for one meeting (FG2, E3, p. 12).

Other exceptional education needs included developing stronger interpersonal skills (desire to work together, acceptance of other teachers' viewpoints, collaboration, strong working relationships), advanced problem-solving skills, preparation on how to work with administrators to gain support for their program, especially advocating for more common planning time. The last discussion topic referred to by exceptional education participants was seeking out resources for staff development for veteran teachers who may be more reluctant to work with special needs students (managing behavior problems, discipline, learning problems, etc.). One exceptional education participant stated, "Staff development needs to come back in for those teachers that have a lot more experience that maybe didn't get that type of coursework" (FG2, E2, pg.4). Exceptional education teachers would also like to see more guest speakers from the field incorporated into the

pre-service coursework to prepare them for the real world challenges they will face in the classroom.

In summary, both general and exceptional education participants shared an extensive list of coursework and experiences they feel would have been beneficial in better preparing them for their collaborative and/or co-teaching experience. The need for more training overall was expressed by both general and exceptional education teachers. General education teachers stated that they needed more coursework and training in understanding their roles in IEP meetings, learning how to communicate with parents regarding the IEP process, and pacing of the curriculum. The exceptional education participants shared they needed more training, coursework, and experience in: co-planning lessons, data collection strategies, organizational and classroom management skills, more in-depth study and understanding about a variety of learning disabilities, and exposure to more diverse field experiences. Exceptional education teachers also stated the need for additional training in: learning all aspects of the IEP process, developing stronger interpersonal skills (desire to work together, acceptance of other teacher's viewpoints, collaboration, building strong working relationships), acquiring advanced problem-solving skills, learning how to work with administrators to gain support for their program especially advocating for more common planning time. Overall, the participants were very vocal about the coursework, training, and experiences they felt they needed to be more prepared for the collaborative classroom.

Interview Question 7. What advice do you have for those who prepare pre-service teachers for collaboration and co-teaching and for current pre-service teachers currently in their programs?

One general education teacher reiterated the importance of diverse field experiences with lower socio-economic student populations with learning challenges and working with transient populations as evidenced by this comment, "I think just a variety of field experiences. Inner-city, rural, poverty stricken, affluent, you know everything. Gifted, special education, general education. I just want to see it all. I want to be in there, in classrooms with the students…" (FG2, G1, p. 13).

One exceptional education teacher suggested the curriculum should be designed for hands-on and be connected to real world experiences, as evidenced by the comment,

> Maybe have a meeting with a specialist from that county and talk to them about what issues have come up with you and special education law and how does that affect the special education teacher. You know there are a lot of different ways they can make it more hands on I guess (FG2, E1 p. 13).

Interview Question 8. Is there anything else you'd like to share regarding your pre-service training and preparation and importance of skills that has prepared you to work with the general and exceptional education students?

Focus group #2 did not make any additional comments and indicated that they felt their viewpoints and opinions were expressed adequately throughout the session.

Table 7 depicts demographic information for the third focus group.

Focus Group 3 and Response by Question

Table 7.
Demographic Information for Focus Group 3

Demographic Information	**Participants**
Area of Endorsement	
Elementary General Education	5
Exceptional Education	2

Other: Both of above	0
Graduated from Virginia Institution of Higher Education	
Yes	7
No	0
Years Taught Prior to This Year	
Zero	0
One	2
Two	1
Three	2
Four	2
Primary Role in Classroom	
Except. Ed using Collab/Consultation	1
Except. Ed in Co-taught Classroom	1
Except. Ed Collab/Co-taught (BOTH)	0
General Ed using Collaboration	2
General Ed in Co-taught Classroom	2
General Ed Collab/Co-taught (BOTH)	0
Not currently in a collab/co-teaching role	1
Average Time Engaged in Role	
None currently, however previous experience	2
Less than 1 hour/day	1
1-2 hours/day	3
More than 2 hours	1

Focus Group #3 included seven participants (five general education and two exceptional education teachers). All seven participants graduated from a Virginia institution of higher education. The years of teaching experience ranged from two to four years of teaching experience prior to the current school year. The exceptional education participants primarily used collaboration or co-teaching. Of the other five general education participants, two used only collaboration, two co-taught, and one had used both models in the past. Participants reported that the average time currently engaged in these collaboration and/or co-teaching roles varied from none to more than two hours per day.

This focus group had very unique dynamics as the participants were extremely relaxed and comfortable during the session; the researcher basically only gave the background information and asked the first question and the teachers facilitated the conversation from there. In a very natural conversational manner, the participants talked about their pre-service experiences and coursework, elements they found beneficial and suggestions for future coursework. They shared many personal stories about their professional journeys using collaboration and co-teaching. The group answered the research protocol with very little prompting. The researcher basically summarized and asked for clarification to be sure all questions were fully answered. The group appeared to really enjoy this opportunity and even commented on the importance of this research. The researcher did receive a thank you note from one of the participants for allowing her to be part of such an important research study. The researcher had to bring closure to the meeting after the meeting ran over the allotted time; however participants still stayed to chat and to share their experiences informally. After having the experience with the first two focus group sessions, the researcher felt this session had the most enthusiastic, passionate, communicative teachers, and the conversation flowed very easily. Therefore, rich and thick data was collected throughout this session.

Interview Question 1. What are your perceptions about your current position as a collaborative or co-teacher?

General and exceptional education focus group participants reported a range of positive, neutral, and negative perceptions about their current position as a collaborative or co-teacher. One general and one exceptional education teacher expressed positive perceptions: two general and two exceptional education teachers expressed negative

perceptions, and one general education teacher's perceptions were neutral. One exceptional education participant stated, "I have been self-contained with my general education teacher, which was phenomenal" (FG3, E1, p. 2) and a general education teacher stated,

> I have been with the same co-teacher for three years and built a relationship because it is hard to figure out how to run your classroom, you know with special education students. And, it's hard to work together and figure it out and luckily we immediately meshed well and we did fourth grade together for two years and then last year we did second grade together (FG3, G4, p. 3).

Both general and exceptional education participants agreed that strengths of the collaboration and co-teaching models included staffing (one general education and one exceptional education teacher in the classroom for an extended period of time), and children viewing both teachers as their teachers. An exceptional education teacher passionately shared her testimony that one of the strengths of the model was when visitors came into her collaborative room they did not know who the general or exceptional education teachers were because they were both so engaged with all the children; and they did not know who the students with special needs were either (FG3, E1, p. 2). Other strengths reported by general education teachers were positive parent perceptions, lower numbers of students in co-taught classrooms, administrative support, the same co-teaching partner, and interpersonal skills when the two teachers immediately "meshed." A general education participant stated, "Our administration has been really good about catering to the co-taught room, which I know some other teachers don't appreciate, but no one else is volunteering to step up and do it" (FG3, G4, p. 4). An

exceptional education teacher reported a strength of the model was that an outsider could not distinguish the exceptional education students from general education students, therefore minimizing the stigma of being in exceptional education. A general education teacher stated, "I think there is definitely a stigma. I feel like the community you are in is a primary influence" (FG3, G4, p.4).

The general and exceptional education participants reported the following weaknesses of the collaboration and co-teaching model: time constraints (not enough time to physically co-teach, plan, or communicate) and scheduling constraints (exceptional education teachers being pulled in too many directions, difficult to work with multiple teachers and grade levels, and vulnerability of entire schedule just to meet one child's needs on the caseload). A general education participant stated,

> I feel like there is not enough time for what can be done with collaborative or co-teaching. There is not ample planning time and it seems like the poor special ed teachers are pulled in so many different directions they can't possibly work with all the kids and all the teachers in the most effective manner with the current schedule (FG3, G3, p.1).

An exceptional education participant stated,

> To that point, if you are a special education teacher and if you have various grades, then it is even more challenging. If you are the only one working with the general education teacher in that one grade you could really work well together. But we have kindergarten, first, second, a variety of grades (FG3, E2, p. 1).

The general education teachers also reported weaknesses in communication, a negative perception by some students and parents about this model, and administrators

who use collaborative classrooms as "dumping grounds" for other students with behavior problems or lower ability. One general education participant stated, "I'm a regular education teacher and I did co-teaching or should I call it collaborative teaching, because there was nothing co-teaching about it, for two years and it's gotten this perception now of "the dumping ground" (FG3, G5, pg. 4). The exceptional education teachers also reported weaknesses in equity of the caseloads amongst teachers, implementation of accommodations and modifications, behavior problems of exceptional education students, lack of clarity in job roles and responsibilities, and excessive amounts of paperwork for the job. An exceptional education teacher reported,

> The other thing that happens is, you get the schedule straight then you find you have another child identified and now that becomes your caseload again…So that child that you're working with or other children kind of get shoved behind. And then you're like; okay I have to clean up my schedule because maybe this is a second grader I didn't have before (FG3, E1, p. 1-2).

A general education teacher expressed the same viewpoint,

> We'd get on a roll, and could help all the students, and you're really getting in a groove and it's like, boom! Nope, we're taking this child out and another child is going to be in here this time now and they change my whole schedule every two months to accommodate just one student (F3, G2, p. 2).

In summary, general and exceptional education participants' perceptions of their current roles ranged from positive, to neutral, and some were negative. Both general and exceptional education teachers agreed that strengths of the model included staffing (one general education and one exceptional education teacher in the classroom for an extended

period of time) and children viewing both teachers in the classroom as beneficial. The general and exceptional education participants reported the following weaknesses: time constraints (not enough time to physically co-teach, plan, or communicate) and scheduling constraints.

Interview Question 2. What was most useful in your pre-service programming preparing you to work with students with disabilities?

The general and exceptional education teachers perceived the most useful pre-service programming to prepare them for working with students with disabilities was their coursework in differentiation strategies, classroom and behavior management strategies where role plays were utilized, and exposure to the IEP process, and prior experiences in "career switcher" programs such as being an exceptional education instructional assistant before becoming a general education teacher, or visa-versa. One exceptional education teacher reported, "You learn by trial and error and learn as you go (laughter)" (FG3, E2, p. 5) and another exceptional education teacher stated, "We did tons of role-playing and that was definitely one of the best classes that we took" (FG3, E2, p.8).

General education teachers reported that they took a variety of coursework that helped them prepare for their role in working with students with disabilities, such as exceptional education classes, math courses, learning strategies classes, reading and children's literature courses, and technology classes. One general education teacher stated, "I do think that the degree program now should involve some sort of special education because there is not a single classroom that is normal" (FG3, G4, p. 6). General education teachers reported that practicum experiences in a collaborative setting,

experiences when guest speakers with exceptional education backgrounds addressed the class about key issues such as 504 plans and IEPs, and other legal issues were very beneficial. One general education participant stated, "I just happened to luck into a practicum within a special education setting. It wasn't expected and it wasn't set up that way; it just happened to be a teacher that had a collaborative room so I was exposed to it that way" (FG3, G1, p. 5).

General education participants also reported that coursework in parent and classroom communication was useful. Exceptional education participants shared their perceptions about the most useful coursework as being coursework in writing IEPs and data collection.

General and exceptional education participants shared their perceptions that they would have liked to have had more coursework in communication skills, particularly preparing both disciplines for writing an IEP and executing an effective IEP meeting with parents and administrators. One exceptional education teacher reported,

> We did a scenario in the class with IEPs, but my first IEP I think it took me six days to write just the PLOP and I'm like gosh what if I forgot this and what if I forgot that… I don't know how to write this goal (FG3, E1, p. 7).

One general education teacher reported,

> There was a lot of role-playing, a lot of scenarios and acting out things even though it seemed kind of silly at the time. I mean, I don't think I was prepared to deal with the situations we encountered with special education kids… (FG3, G3, p. 8).

General education teachers also stated that they would have liked to have more coursework in exceptional education in general, legal aspects of exceptional education, IEP documentation, and practical field experience attending an IEP meeting. One general education teacher stated, "We got legal information from one class where we learned the Alphabet Soup that was special education just enough to get you good and confused" (FG3, G1, p.8). Other areas perceived by general education participants were collegial professionalism, parent communication and greater interpersonal skills training. One general education teacher stated, "But I don't think there was enough discussion about professionalism and what you can say to parents and what you can't say to parents" (FG3, G3, p. 9). An exceptional education participant remarked,

> The other thing that surprised me was how little you can say in an IEP meeting. So you are sitting in a meeting and everybody is making eye contact. Everybody knows what we all are thinking yet we can't say it. That frustrates me, because I am such an honest, open person and the whole time I sit there I'm like "why can't we just tell them?" "Why can't we say that?" And I don't think you get any training for that whatsoever (FG3, E2, p. 10).

In summary, both general and exceptional education participants reported that the most useful training in preparing them for working with students with disabilities was their coursework in differentiation, exposure to the IEP process, classroom and behavior management strategies, and prior experiences in "career switcher" programs.

Interview Question 3. In your pre-service coursework did you receive any training or coursework in collaboration or co-teaching? As part of your coursework and

experiences, what skills were taught in preparation for meeting the needs of exceptional education students in a general education classroom?

The general and exceptional education teachers' perceptions of the coursework and skills taught in preparation for meeting the needs of exceptional education students in a general education classroom centered around differentiation of instruction. As one general education teacher stated, "You don't have all the square pegs going into square holes. We've got a lot of round pegs we can't shove through the hole" (FG3, G4, p. 13) reiterating the point about how important differentiation is in the classroom.
General education teachers reported taking classes in exceptional education, classroom management, and learning strategies, and each had objectives in incorporating differentiation strategies for special needs students. The exceptional education participants stated that most of their coursework came from the class work required in their major. General education majors reported that they had limited exposure to what an IEP was and the IEP process. The exceptional education participants discussed their role playing scenarios in their behavior management class that helped prepare them with a behavior management skill set needed for working with students with disabilities. The exceptional education teachers also shared their perceptions about skills developed in data collection. One general education teacher spoke about the importance of reflective practice and how she was taught this skill and had extensive opportunities to hone this skill as a part of her pre-service coursework and experiences. The general education teacher stated,

> "Here is our plate, (no it's a little smaller because of budget cuts) they load it up with things and give us no time to process and talk. No time to process things….

> One of my favorite things about student teaching was the time we could get together to talk about the things we did with the kids, what went well, what each of us did, learning experiences, time to process" (FG3, G5, p. 18).

In summary, the general and exceptional education teachers' perceptions of the coursework and skills taught in preparation for meeting the needs of exceptional education students in a general education classroom centered on differentiation of instruction in meeting the needs of students with varying ability levels.

Interview Question 4. Of these skills, which two do you feel are the most important in your classroom today and please explain why and/or give examples?

To help report the findings for this question, the researcher reported skills and preferred experiences and then referred to the InTASC Standards (2011) to categorize the participant responses further into performances ("the aspect that can be observed and assessed in teaching practice" p. 6), essential knowledge ("the role of declarative and procedural knowledge as necessary for effective practice" p. 6), and critical dispositions ("indicates that habits of professional action and moral commitments that underlie the performances play a key role in how teachers do, in fact, act in practice" p. 6) as defined in the standards.

Of the skills reported by the focus group, general and exceptional education teachers perceived that flexibility and communication skills as being the most important in collaborative and co-taught classrooms today. As an exceptional education participant stated, "Just knowing how to communicate with the parents, the children, with your co-teachers is important" (FG3, E2, p. 12) and a general education teacher stated, "You just don't know how much you don't know" (FG3, G1, p. 13).

The general education participants' perceptions about the most important skills for a collaborative or co-teaching classroom included skills for differentiation of instruction and recognizing and adapting for various learning styles. General education teachers also perceived having advocacy skills and interpersonal skills (including learning how to be flexible), being reflective practitioners, and building strong working relationships with colleagues as important. An exceptional education participant stated, "I think patience and communication. Just knowing how to communicate with the parents, the children, with your co-teachers is important" (FG3, E2, p.12). One general education participant stated, "I'm actually going to say that there wasn't a lot of preparation as far as communication goes" (FG3, G3, p.9). General education participants also reported the importance of classroom management strategies and skills. One general education participant stated, "For the first time my eyes were opened. I can be excited about the classroom. I was excited. We talked about classroom management, the desk fairy, and we talked about all that stuff…" (FG3, G5, p.6).

General education teachers perceived that the following quintessential knowledge bases were important too; being knowledgeable about exceptional education law, knowing theories of education, teaching in different educational settings, and recognizing different learning styles. One general education participant stated,

> Just feeling confident and well prepared. I think a variety of course work, like that we have said, that includes in classroom time and role models that shows you what you need to know, and the differentiating, and of course the law aspect and all those and maybe a little theory. Your background. Just having confidence and feeling all prepared like you've had a variety of experiences… (FG3, G3,

p.12).

Critical dispositions perceived by general education teachers included flexibility, positive relationships with co-teachers, and confidence in personal teaching abilities. A general education teacher reported that, "you have got to be flexible with your administrators, your students, and your parents and I think the most important is the people you work with" (FG3, G2, p. 12). An exceptional education participant stated,

> I had a really good relationship with my AP, so at my first IEP I went in I said, "okay, I'm scared to death here." I didn't know what I was doing. What can I say? She was phenomenal. All the questions I asked, she answered for me (FG3, E1, p.10).

The exceptional education teachers perceived a critical disposition for a successful collaborative classroom is flexibility and patience in working with students and colleagues. The exceptional education teacher reported,

> I think especially the special education teacher that you're kind of being in different places; and, if you go to the general education room and that teacher says "no we didn't get that part," you can't get mad, you have to go with it (FG3, E2, p.12).

In summary, both general and exceptional education teachers perceived that flexibility and communication skills are most important in collaborative and co-taught classrooms today. Please note, this question provided surprisingly less data than expected but after in-depth analysis, the researcher discovered that many of the participants' responses dealt more with recommendations of course work and skill sets they wish they would have had, which is addressed in question six.

Interview Question 5. Do you recall having the opportunity to co-plan and/or co-teach a lesson with another pre-service general/exceptional education teacher?

All seven participants, general education and exceptional education teachers, indicated that they did not have an opportunity to independently co-plan or co-teach a lesson with another general or exceptional education teacher as part of their pre-service coursework. One general education teacher indicated that she collaborated with her supervising teacher, but this was not for collaborative/co-teaching purposes involving special needs students. Another general education teacher stated that during student teaching her supervising teacher was a special education collaborative teacher, so she had the opportunity to observe and participate in their weekly meetings but never planned without her supervisor present. Several general and exceptional education teachers reported that they would have welcomed the opportunity to collaborate and co-teach a lesson with a general or exceptional education teacher.

Interview Question 6. What training would you have liked to have had in your pre-service coursework in order to better prepare you for collaboration and co-teaching?

This question sparked a rich and lengthy conversation about the training both general and exceptional education teachers would have liked to have had in their pre-service coursework in order to better prepare them for collaboration and co-teaching. One general education teacher stated, "I actually had no training… and looking back now, and having some experience, I'm like what did I do with those kids. I feel like I did some of them an injustice" (F3, G2, p. 5). Both general and exceptional education teachers reported that they wish they would have had more training in working with parents, especially communicating about their child's disability and being in a co-taught

classroom. As one exceptional education teacher stated, "Just knowing how to communicate with the parents, the children, with your co-teachers is important" (FG3, E2, p. 12). An exceptional education teacher expressed the importance of teamwork and interpersonal skills evidenced by stating,

> If you've got a problem, you have got to find a way to fix it because the whole classroom is impacted. It's like marriage. And remember that the person is human and that you make mistakes and it is okay, let's talk about this. How would you like to approach this in your job? (FG3, E1, p. 16).

General education teachers mentioned the need for more exposure to a variety of types of classroom and school settings to work with more challenging populations, including at-risk students, high socio-economic deprivation, high exceptional education populations, and English as a second language learners. As one general education stated about her practicum experience, "For a practicum experience, the cooperating teacher said, 'I am going to give you the good, bad, and ugly of teaching' and she did" (FG1, G3, p. 15). There was mutual agreement with participants that these hands-on experiences should range throughout their pre-service coursework including practicum and student teaching. As one general education teacher stated, "There should be at least one practicum in a special education setting, and if not, it should be part of your student teaching" (FG3, G1, p. 6). Another general education teacher explained, "It shouldn't be something that strikes terror in your heart. It should be something that you have had some exposure to during training" (FG3, G1, p. 15).

General education teachers also shared that they valued hands-on instructional experiences greatly, instead of term papers and research coursework. One general

education teacher stated, “That would be my biggest thing, to have more hands on experiences– more student teachers in there teaching instead of papers. Get them in as soon as you can to make it the most realistic environment and a different environment” (FG3, G2, p. 17).

Both general and exceptional education teachers felt more practical learning experiences in classroom settings to observe and to develop their interpersonal skills were important. As a general education teacher stated, “You never really understand another person’s job until you walk in their shoes” (FG3, G3, p. 15). Both sets of participants also stated it was important to learn to be flexible and to observe flexibility in their practicum and student teaching experiences since this is such a valuable disposition when you are assigned to a collaborative or co-teaching setting.

One general and exceptional education focus group participant sparked a rich discussion and several other participants commented, as well, about the importance of building a positive school culture toward collaboration, which includes overall support from the staff, parents, and greater school community. It can be challenging to foster a positive school climate towards collaboration as evidenced by a general education teacher’s comment, “Parents ask me point blank if they are going to be in collaborative classes next year and if so, can they be out of it the year after that” (FG3, G5, p. 4). A second general education teacher expressed a similar viewpoint by stating, “The parents are just devastated when they find out their kids are being put in a collaborative class” (FG3, G5, p. 4). Another general education teacher stated a different viewpoint by sharing, “We do have some parents that ask for their kids to be put in there, and it is not because they have any special needs; but, they know at our school there are two teachers

doing everything together every day" (FG3, G4, p. 5). It was evident by the conversation that both general and exceptional education teachers felt the culture of the school, in fostering a positive attitude towards collaboration, was important.

A second in-depth discussion was sparked by one general and exceptional education focus group participant about the importance of self-advocacy skills and knowing how and when to speak up when additional support is needed for a program. A general education teacher stated the importance of administrative support and administrative monitoring of their program by stating,

> Administrators should make the collaborative decision to periodically evaluate if that marriage is working? To be able to reflect with each other on what worked, what didn't, what do you need from me? What do I need from you? To have an opportunity to continually grow as a team and not just here you go, you are going to collaborate. Have fun and we'll check with you in 180 days (FG3, G3, p. 17).

Both general and exceptional education participants felt self-advocacy skills were important. A general education teacher stated,

> We feel like we don't have any voice outside of this box. It is hard to hear our voice and to be heard through professional instructional development. It is often very hard to go to your administrator… and communicate what our needs are (FG3, G5, p. 11).

An exceptional education participant expressed a similar concern about advocacy by stating, "I don't know about any of you, but we actually have to eat lunch in the cafeteria, you don't even get a break from your students for lunch. What can I do? How can I fix

this?" (FG3, E1, p. 11). She also expressed that these concerns may seem minor but over time they can create quite a burden on a teacher, and administrators need to be aware of it. Several other general and exceptional education participants commented, as well, about self-advocacy skills and knowing how and when to speak up when additional support is needed for the program. Both general and exceptional education participants commented on the need for administrative support when developing class rolls, creating the master schedule, assigning resources, etc.

A third discussion was generated by both general and exceptional education teachers about the importance of mentor programs for both pre-service and beginning teachers. One exceptional education teacher reported, "I think I learned a lot from the teachers, especially when they said, "You're not supposed to know how to do this, but let me show you how to do it" (FG3, E1, p. 6). A general education teacher shared, "You need mentors to show you how to collaborate in student teaching…" (FG3, G3, p. 14). Both general and exceptional education teachers mentioned the "Teachers of Tomorrow Program" for high school students who are aspiring teachers, and their positive and negative experiences hosting these student groups. The one common theme was the importance of these types of programs for growing and further developing quality educators in the teaching profession. Teachers commented that for the most part they would be willing to host these aspiring and pre-service teachers despite time constraints because they value and recognize the importance of these types of hands-on learning experiences. One general education teacher did comment by saying,

> "I feel like people are more willing to take in pre-service teachers and to help teach and to help make our profession better, a more respected profession, if we

didn't feel like our world is crashing down on us on a regular basis" (FG3, G5, p. 18).

This question generated a lengthy, rich discussion about suggestions for future training for pre-service teachers, but also generated an emotional conversation about the profession as a whole; including respect for teachers, and the need for self-advocacy skills.

In summary, both general and exceptional education teachers reported that they wish they would have had more training in the following areas: working with parents (especially communicating about their child's disability and being in a co-taught classroom) and more learning experiences in classroom settings to observe and to develop their interpersonal skills. Another common theme between general and exceptional education teachers was the importance of building a positive school culture toward collaboration and overall support from the staff, parents, and greater school community. A second theme voiced by both general and exceptional education participants was the importance of self-advocacy skills and knowing how and when to speak up when additional support is needed for the program. A third theme generated by both general and exceptional education teachers was about the importance of mentor programs for both pre-service and beginning teachers, and the importance of these types of programs for growing and further developing quality educators in the teaching profession.

Interview Question 7. What advice do you have for those who prepare pre-service teachers for collaboration and co-teaching and for current pre-service teachers currently in their programs?

The general and exceptional education teachers did share advice for those who prepare pre-service teachers for collaboration and co-teaching roles. One general education teacher shared the importance of professors being realistic and in touch with the professionals currently in schools today. One general education teacher stated,

> I feel like some instructors are so far separated from the classroom and they have not taught themselves at that point, and I think you forget the object terror that first year teachers go through every day when they are getting ready to go to school (FG3, G1, p. 16).

Two general education teachers emphasized the importance of practical strategies being taught to pre-service teachers. One general education teacher reported,

> Yes, it sounds like a great idea to have eighteen different reading groups. That sounds fantastic; but I'm one person. You're one human being trying to do this all by yourself. So remember the practicality of certain instructional methods within the classroom (FG3, G3, p. 16).

A second general education teacher stated the following about the importance of practical experiences, "Get the real teachers showing how you are going to have five different reading groups. I mean reality is not what we've been shown in college" (FG3, G4, p. 17).

In summary, general themes regarding the advice current collaborative and co-teachers have for those who are working with pre-service teachers for these types of roles center around the importance of university faculty being in touch with the current realities of teaching in the classroom, making sure that coursework and experiences are

practical and clearly relate to their future teaching careers, and having current teachers serve as mentors in the field working with pre-service teachers.

Interview Question 8. Is there anything else you'd like to share regarding your pre-service training and preparation and importance of skills that has prepared you to work with the general and exceptional education students?

The general and exceptional education participants in Focus Group #3 did not have any additional responses to this question. Both exceptional and general education teachers expressed that the protocol questions adequately addressed their viewpoints and opinions, which contributed to the rich and lengthy discussions throughout the focus group meeting.

Summary of Data

To summarize the data, the researcher has developed several tools including Venn Diagrams, stating assertions from both the general and exceptional education teachers' perceptions of the most important skills needed for collaboration and co-teaching for each focus group. The researcher also developed a series of pie charts (based on general and exceptional education participants' responses) comparing the most important skills for collaboration and co-teaching to the actual coursework and training they received as part of their pre-service experience are presented. Lastly, based on the skills identified in the pie charts by both general and exceptional education participants regarding important skills needed for collaboration and co-teaching, a comparison table was created aligning those skills to the (2011) Interstate Teacher Assessment and Support Consortium Standards (InTASC). These InTASC standards currently serve as a basis for licensing standards in 38 states by the National Council for Teacher Accreditation (NCATE) for

teacher preparation accreditation including Virginia (Council of Chief School Officers, 2010). When creating the InTASC chart, the researcher used the definitions listed below to guide the categorization of the data,

> Performance is defined as the aspect that can be observed and assessed in teaching practice. Essential knowledge, signals the role of declarative and procedural knowledge as necessary for effective practice and "critical dispositions" indicates that habits of professional action and moral commitments that underlie the performances play a key role in how teachers do, in fact, act in practice. (p. 6)

Research Question 1- What specific skill set and experiences are perceived necessary by beginning general and exceptional education teachers to be successful in collaboration and co-teaching classrooms?

Through a detailed analysis of the focus group transcripts and a synthesis of the data, the following were the skills, experiences, performances, essential knowledge, and critical dispositions both general and exceptional education participants reported that were important to be successful in a collaborative or co-taught classroom. The following skills were noted: classroom management, collaborative lesson planning, communication, data collection, interpersonal, differentiation of instruction, and self-advocacy skills. Critical experiences include: looking at sample IEPs, preparing for child study and eligibility meetings, and attending an actual child study meeting. Both general and exceptional education participants believed that teaching students how to work together to fully develop their knowledge and skill set was a critical performance standard. The essential knowledge components include more in-depth training in

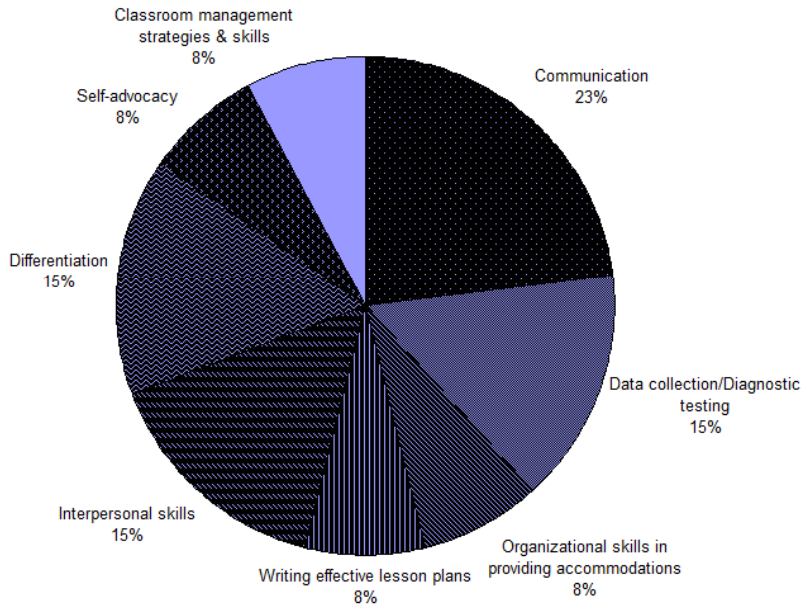
exceptional education, data collection, child study and eligibility processes, IEP writing process, knowledge in identifying learning problems and disabilities, defining specific strategies, and a thorough implementation process, when working with these complex students. The critical dispositions noted were working with various communication styles, having confidence in the teacher's instructional skill set, accepting and embracing diversity in the classroom, understanding the roles, responsibilities, and duties in the learning partnership, having flexibility, knowing how and when to acquire administrative support, being compassionate and understanding that all children don't learn the same, and learning to build trusting relationship with students and colleagues. See Venn diagrams 1-4 for more information in the Appendix G.

Research Question 2- What are general education teachers' perceptions of their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching?

The general education teachers perceived the following skills as most important: communication, data collection and diagnostic testing, organizational skills in providing accommodations, writing effective lesson plans, interpersonal skills, differentiation skills, self-advocacy, and classroom management strategies and skills. When comparing the data of what general education teachers perceived were most important compared to what training, coursework, and experiences were actually provided as part of their pre-service training, 53% of the training received matched the skills they felt were most important. Of the areas that matched between importance and actual pre-service training, the greatest was in differentiation of instruction (17%), communication skills (15%), and interpersonal skills (8%) and classroom management strategies and skills (8%). Forty-

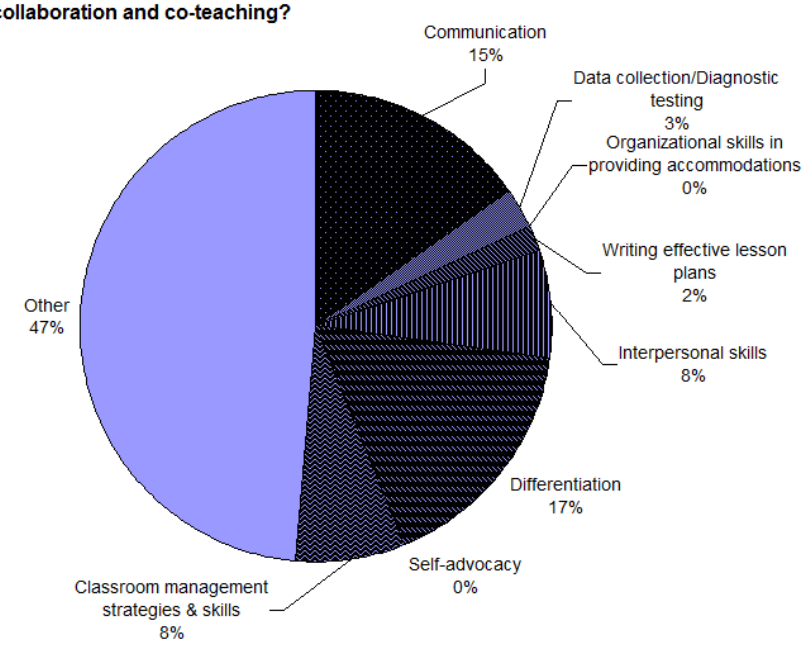
seven percent of their pre-service training focused on "other" skills, knowledge, performance, and critical dispositions. In making up the 47% "other category" there were 32 findings reported by participants regarding coursework and experiences, to include: items like behavior management courses and intervention coursework, core content classes (such as children's literature and other methods classes), special education law classes, and various other field experiences that were mentioned during the focus group but did not align with their perceived "essential skill set" identified through this study. A common sentiment by career switcher participants was that more experience in the field was needed; and they strongly voiced how beneficial their previous experiences in general or exceptional education were before accepting their current teaching position. See chart 1 below and chart 2 on the next page.

Chart 1: Findings to support Research Question 2:
What are general education teachers' perceptions about their pre-service training regarding the specific skill set and experiences aquired for collaboration and co-teaching?



General Education Teachers' Perceptions of Important Skills

Chart 2: Findings to support Research Question 2: What are general education teachers' perceptions about their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching?



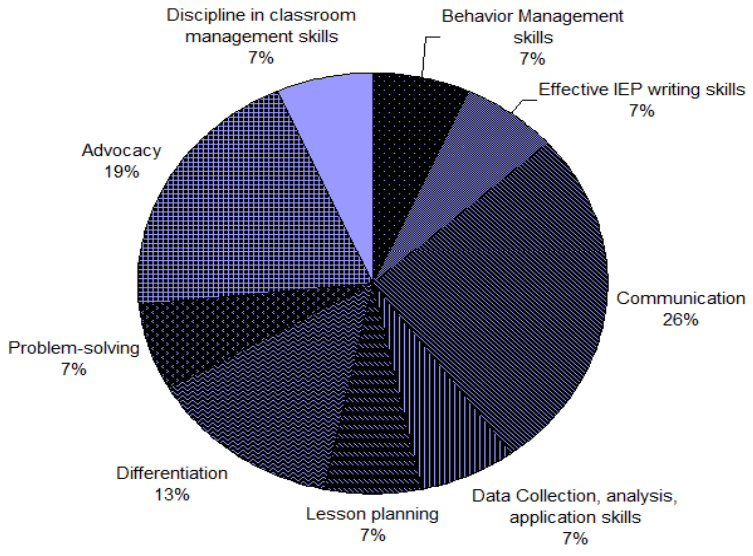
General Education Teachers' Perceptions of Frequency of Skills Aquired in Pre-service Coursework

Research Questions 3- What are exceptional education teachers' perceptions of their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching?

The exceptional education participants viewed the following skills as most important: behavior management, effective IEP writing skills, communication, data collection and analysis and application skills, lesson planning, differentiation, problem solving, advocacy, and discipline in classroom management skills. When comparing the data of what exceptional education teachers perceived were most important compared to what training, coursework, and experiences were actually provided as part of their pre-service training, 60% of the training received matched with the skills they felt were most important. Of the areas that matched between importance and actual pre-service training,

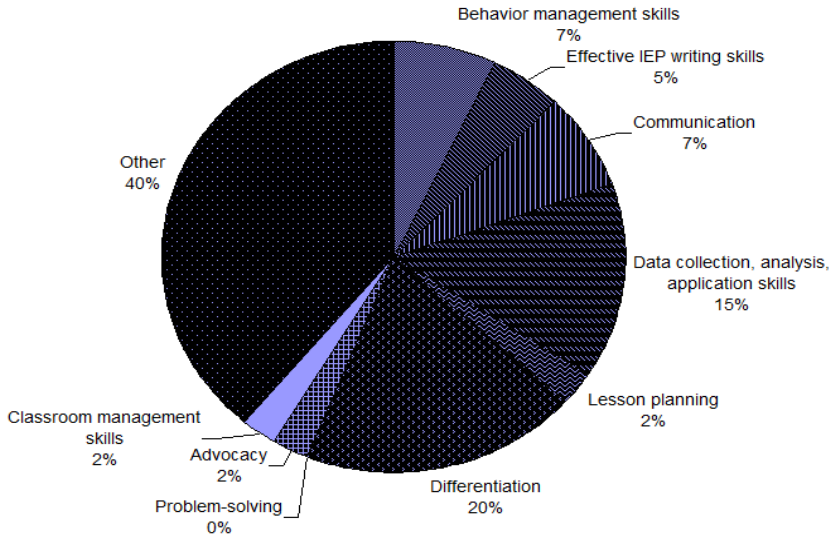
the greatest was in differentiation (20%), data collection analysis, and application skills (15%), communication (7%) and behavior management skills (7%). Forty percent of their pre-service training focused on "other" skills, knowledge, performance, and critical dispositions. In making up the 40% "other category" there were 16 findings reported by participants regarding coursework and experiences, to include items like school law classes, training in developing interpersonal skills, organizational skills for the exceptional education classroom, and various field experiences that were mentioned during the focus group but did not align with their perceived "essential skill set" identified through this study. A common sentiment by career switcher participants was that more experience in the field was needed; and they strongly voiced how beneficial their previous experiences in general or exceptional education were before accepting their current teaching position. See charts 3 below and 4 on the next page:

Chart 3: Findings to support Research Question 3:
What are exceptional education teachers' perceptions about their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching?



Exceptional Education Teachers' Perceptions of Important Skills

Chart 4: Findings to support Research Question 3:
What are exceptional education teachers' perceptions about their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching?



Exceptional Education Teachers' Perceptions of Frequency of Skills Aquired in Pre-service Coursework

The researcher further analyzed the data findings based on the skills identified in the pie charts by both general and exceptional education participants regarding important skills needed for collaboration and co-teaching, a comparison table was created aligning those skills to the (2011) Interstate Teacher Assessment and Support Consortium Standards (InTASC). Table 1 in Appendix H documents that the skills general education teachers perceived as important for collaboration and co-teaching do align to some degree with the InTASC standards. There is evidence that the strongest instructional alignment for general education teachers was in the area of data collection and diagnostic testing, writing effective lesson plans, and in teaching differentiation strategies. The largest gap for general education teachers was in classroom management strategies and skills for co-teaching. Overall, there was alignment with the 2011 InTASC standards but there are

instructional areas that appear weak, as reported by participants. Skills exceptional education teachers perceived as important for collaboration and co-teaching do align to some degree with the InTASC standards. There is evidence that the strongest instructional alignment is in data collection, analysis, and application skills, lesson planning, and teaching differentiation strategies. The largest gap was in behavior and classroom management strategies for co-teaching and effective IEP writing skills. Overall, there was alignment with the 2011 InTASC standards but there are also instructional areas that appear weak, as reported by participants. It is important to note that both general and exceptional education teachers' response data identified strong alignment to InTASC standards in lesson planning, data collection, and teaching differentiation strategies and both groups identified classroom management strategies for co-teaching as a weakness. The findings of this study along with implications for the practitioner and recommendations for further investigation will be addressed in Chapter 5.

CHAPTER 5

SUMMARY AND CONCLUSIONS

The need for more collaboration and co-teaching emerged from the standards-based and accountability movement as a result of the NCLB and IDEIA legislation. The work of Carl Glickman (1997) documents the need to give teachers a voice in education. This qualitative research study gave a voice to beginning elementary general and exceptional education teachers who are currently serving in collaborative or co-teaching settings. The purpose of this study was to identify the perceived skill set needed by general and exceptional education teachers to be successful in a co-teaching classroom, to discover if collaborative coursework is being offered to pre-service general and exceptional education teachers as part of their university experience, and to identify specific strategies, programs, and field experiences in which pre-service general and exceptional education teachers can engage in to better prepare them for their first co-teaching and/or collaborative teaching assignment.

This study was comprised of one focus group from each of the three school divisions chosen for the sample. The purposeful sample selection of teachers for each focus group included five to eight general and exceptional education probationary (zero to five years experience) teachers who have current or previous experience in a collaborative or co-taught classroom, and who graduated from a Virginia institution of higher education. A focus group protocol was used for data collection based on the ten revised (2011) Interstate Teacher Assessment and Support Consortium standards. Erickson's (1986) interpretive method of data analysis was used to extract themes from the data corpus. The research questions designed to guide this study are as follows:

1) What specific skill set and experiences are perceived necessary by beginning general and exceptional education teachers to be successful in collaboration and co-teaching classrooms?

2) What are general education teachers' perceptions of their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching?

3) What are exceptional education teachers' perceptions of their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching?

Summary of Findings

Through this qualitative research study, general and exceptional education participants identified specific skills and experiences perceived necessary to be successful in a collaborative or co-taught classroom. The following findings are categorized as skills, experiences, performances, essential knowledge, and critical dispositions for both general and exceptional education participants.

Finding 1. General and exceptional education teachers in this study agree that certain skills, experiences, performances, essential knowledge, and critical dispositions are necessary for collaboration and co-teaching.

As evidenced by the focus group data documented in the Venn Diagrams (Appendix G), general and exceptional education teachers reported agreement of a specific skill set and experiences necessary for collaboration and co-teaching. Both general and exceptional education teachers identified (7) skills, (3) experiences, (1) performance standard, (9) essential knowledge components, and (10) critical dispositions

as essential for the skill set needed for collaboration and co-teaching. The following skills were noted: classroom management, collaborative lesson planning, communication, data collection, interpersonal skills, differentiation of instruction, and self-advocacy skills. Critical experiences included the following: looking at sample IEPs, preparing for child study and eligibility meetings, and attending an actual child study meeting. Both general and exceptional education participants believed that teaching pre-service teachers how to work together to fully develop their knowledge and skill set was a critical performance standard. The essential knowledge components included more in-depth training in special education, data collection, child study and eligibility processes, IEP writing process, knowledge in identifying learning problems and disabilities, ability to define specific strategies, and a thorough implementation process when working with these complex students. The critical dispositions noted included working with various communication styles, having confidence in the teacher's instructional skill set, accepting and embracing diversity in the classroom, understanding the roles, responsibilities, and duties in the learning partnership, having flexibility, knowing how and when to acquire administrative support, being compassionate and understanding that all children do not learn the same, and learning to build trusting relationships with students and colleagues.

Research documents there is a strong need for collaboration and co-teaching in today's schools; however, there is little evidence-based research on best practices for pre-service training which focuses on prerequisite skills and experiences needed for successful collaboration and co-teaching in the elementary school general education classroom (Rea, McLaughlin, Walther-Thomas, 2002; Conderman & Johnston

Rodriguez, 2009; Damore & Murray, 2009; Van Laarhoven, Munk, Lynch, Bosma, & Rouse, 2007; Hang & Rabren, 2009; Zigmond, 2001; Washburn-Moses, 2009; U.S. Department of Education, 2004). "Although the literature provides many examples of how collaborative efforts result in positive changes for teachers generally, we do not know much about how individual teachers respond to collaboration" (Brownell, Adams, Sindelar, Waldron, & Vanhover, 2006). "The future of co-teaching may be dependent on increasing the quantity and quality of research on it and placing co-teaching in the larger context of school reform and improvement" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 10).

Finding 2. General and exceptional education participants perceive that classroom management skills, collaborative lesson planning, communication skills, data collection, interpersonal skills, differentiation of instruction, and self-advocacy skills are essential for successful collaboration and/or co-teaching.

General and exceptional education teachers reported they wish they would have had more training in the following areas: working with parents (especially communicating about their child's disability and being in a co-taught classroom) and more learning experiences in classroom settings to observe and to develop their interpersonal skills. Another common theme between general and exceptional education teachers was the importance of building a positive school culture toward collaboration and overall support from the staff, parents, and greater school community. A third theme voiced by both general and exceptional education participants was the importance of self-advocacy skills and knowing how and when to speak up when additional support is needed for the program. As one participant stated,

> We feel like we don't have any voice outside of this box. It is hard to hear our voice and to be heard through professional instructional development. It is often very hard to go to your administrator… and communicate what our needs are (FG3, G5, p. 11).

This is such a complex topic, which requires strong communication and advocacy skills on behalf of teachers and administrators to convey the vision they have for a collaborative culture. A fourth theme generated by both general and exceptional education teachers was about the importance of mentor programs for both pre-service and beginning teachers, and the importance of these types of programs for growing and further developing quality educators in the teaching profession.

Rea, McLaughlin, & Walther-Thomas (2002) stated that pre-service opportunities for both general and exceptional education teachers at the university level are needed to develop effective instructional and interpersonal skills to work with other educators in developing instruction, as well as services to meet the needs of students with disabilities. In addition, Rea, McLaughlin, & Walther-Thomas (2002) stated that teacher preparation programs needed to provide well-developed classroom management skills to handle the complexities of a co-taught classroom that would assist in building teacher confidence, which directly affects student success. Teacher preparation programs must therefore respond to this challenge by offering high quality preparation programs for all teachers- both general and special education alike- in the diagnosis and instructional treatment of students with special education needs" (Goe & Coggshall, 2007, p. 3). Griffin & Warden (2006) reported that building a collaborative culture in their schools was vitally important to the success of the co-teaching model.

Finding 3. General and exceptional education participants perceive that looking at sample IEPs, preparing for child study and eligibility meetings, and attending an actual child study meeting are a core set of critical experiences necessary to be successful in a collaborative and/or co-taught classroom.

General and exceptional education participants shared their perceptions that they would have liked to have had more coursework in communication skills, particularly preparing both disciplines for writing an IEP and executing an effective IEP meeting with parents and administrators. Both general and exceptional education teachers reported they wish they would have had more training in working with parents, especially communicating about their child's disability and their child being in a co-taught classroom. As one exceptional education teacher stated, "Just knowing how to communicate with the parents, the children, with your co-teachers is important" (FG3, E2, p. 12). General education participants also perceived that attending an IEP and eligibility meeting and having exposure to an actual collaborative classroom in student teaching and learning about scheduling would be beneficial experiences as part of their pre-service training. One participant shared how she preferred,

> Attending meetings as a student teacher, you know, being able to go to different kinds of IEP meetings to see what that process is like and meet and interact with different teachers in the collaborative setting and the co-teaching setting… (FG1, G4, pg. 6).

Participants shared how overwhelming it can be to fully comprehend a child's IEP. One general education teacher stated, "We got legal information from one class where we learned the Alphabet Soup that was special education just enough to get you good and

confused" (FG3, G1, p.8). These statements reflect the need for the development of the skill set and experiences needed for pre-service teachers in preparing them for the collaborative classroom.

Pre-service teachers should have the opportunity to observe effective collaboration through field experiences and student teaching placements (Brownell & Walther-Thomas, 2002). This could include planning meetings with general and exceptional education teachers, developing and implementing accommodations and modifications, preparing intervention plans, developing behavior management plans, and conducting professional problem-solving sessions (Brownell & Walther-Thomas, 2002; Conderman & Johnston-Rodrigez, 2009). Teachers need to have skills in clearly articulating and identifying learning problems and generating a variety of solutions for solving them (Carter, Prater, Jackson, & Marchant, 2009).

Finding 4. General and exceptional education participants believe that teaching pre-service teachers how to work together to fully develop their knowledge and skill set are a critical performance standard.

The general and exceptional education participants reported their perceptions about the importance of the classroom culture of embracing the diversity within the class and teaching students and adults how to work together to fully develop their knowledge and skills. The general education participants reported that interpersonal skills were critically important in a collaborative or co-teaching setting. One general education teacher stated, "I have my areas of training and he has his area of training and we have to work together to serve all of the children that we have" (FG2, G5, p. 9). An exceptional

education teacher expressed the importance of teamwork and interpersonal skills evidenced by,

> If you've got a problem, you have got to find a way to fix it because the whole classroom is impacted. It's like marriage. And remember that the person is human and that you make mistakes and it is okay, let's talk about this (FG3, E1, p. 16).

General education teachers also mentioned the need for more exposure to a variety of classroom and school settings to work with more challenging populations including at-risk students, high socio-economic deprivation, high special education populations, and English as a second language learners. There was mutual agreement with participants that hands-on experiences should range throughout their pre-service coursework, including practicum and student teaching experiences.

Teacher-preparation programs and professional development programs should equip teachers with strong communication skills and problem-solving skills to work through situations where colleagues have philosophical differences (Carter, Prater, Jackson, & Marchant, 2009). Dr. Friend emphasized that "Pre-service teachers should learn and experience in their initial training the concept that 'effective teachers work together'" (p.225). Hence, collaboration and effective communication skills are critical components of the skill set. Collaboration, communication, and problem-solving skills are imperative for the success of collaboration and co-teaching.

Finding 5. General and exceptional education participants agree that more in-depth training in special education, data collection, child study and eligibility processes, the IEP writing process, knowledge in identifying learning problems and disabilities, and

ability to define and implement specific learning strategies are quintessential pieces of knowledge necessary for successful collaboration and/or co-teaching.

The general and exceptional education teachers shared the need for essential knowledge that pre-service teachers must possess before entering into a collaborative classroom. Four general and exceptional education participants in one focus group shared the need to develop an extensive, in-depth knowledge base about learning problems and a variety of learning strategies to assist these struggling learners. Both general and exceptional education participants also shared the need for extensive knowledge about a variety of learning disabilities and how to implement a variety of learning strategies to meet their needs. An exceptional education teacher stated, "Some of these children just don't have it, but the main thing is you can step up to the plate and you can teach this child" (FG1, E7, p. 10). An exceptional education teacher also expressed her belief that pre-service teachers need to be knowledgeable about the child study and IEP process and specifically how to identify learning problems. The general and exceptional education participants also reported that being knowledgeable about a variety of learning problems and disabilities and being able to utilize research-based strategies to help students become academically successful were most important. One participant shared, "The whole child study process was very overwhelming, very daunting and I really struggled with that, and I'm still struggling with making sure I'm doing the best I can as the general education teacher…" (FG1, G4, p. 6).

In Conderman & Johnston-Rodriguez's (2009) study, general education teachers felt less prepared in skills relating to curriculum and assessment, making accommodations and modifications, providing access to general education curriculum,

and using individual assessments and program monitoring skills. Pre-service teachers need opportunities to observe and engage in interactions with parents in communicating academic and behavioral challenges and strategies in order to communicate effectively. "Experiences such as these can assist pre-service teachers in developing an appreciation for the value of collaboration and in building a knowledge base for successful professional interactions" (Brownell & Walther-Thomas, 2002, p.225).

Finding 6. General and exceptional education participants identify: working with various communication styles, having confidence in the teacher's instructional skill set, accepting and embracing diversity in the classroom, understanding the roles, responsibilities, and duties in the learning partnership, having flexibility, knowing how and when to acquire administrative support, being compassionate and understanding that all children do not learn the same, and learning to build trusting relationships with students and colleagues as critical dispositions necessary for successful collaboration and/or co-teaching.

Focus group participants shared the relationships between co-teachers is vitally important to the success of a co-taught class. General education teachers perceived having advocacy skills and interpersonal skills (including learning how to be flexible), being reflective practitioners, and building strong working relationships with colleagues as important. An exceptional education participant stated, "I think patience and communication. Just knowing how to communicate with the parents, the children, with your co-teachers is important" (FG3, E2, p.12). Both general and exceptional education teachers felt more practical learning experiences in classroom settings to observe and to develop their interpersonal skills were important. As a general education teacher stated,

"You never really understand another person's job until you walk in their shoes" (FG3, G3, p. 15). Both sets of participants also stated it was important to learn to be flexible and to observe flexibility in their practicum and student teaching experiences since this is such a valuable disposition when a teacher is assigned to a collaborative or co-teaching setting.

"In many ways, co-teaching demonstrates the potential, as well as the complexities, of collaboration that joins the fields of general education and special education" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 18). To create stronger collaboration and co-teaching models, one must begin to examine pre-service teacher coursework, training, and experiences that will help prepare them for the complexities of their future role in a collaborative or co-taught classroom. As Mastropieri, et al. (2005) reported from their research, entitled *Case Studies in Co-teaching in the Content Areas,* outstanding working relationships, teacher compatibility to work with a trusted colleague, and respect for another person's expertise are all crucial. "The relationship between the co-teachers is a major critical component influencing the success or failure of the inclusion of students with disabilities" (Mastropieri, M., Scruggs,T., Graetz, W., Norland, J., Gardizi, & McDuffie, K., 2005, p. 268). To quote Shippen, Crites, Houchins, Ramsey, and Simon (2005), "College coursework and field experiences must address deficits in knowledge and skills, as well as focus on helping teacher candidates develop dispositions that would enhance the education of students with disabilities in the general education classroom" (p. 19). This sentiment was confirmed through this research study.

Through this qualitative research study, general education teachers reported their perceptions of their pre-service training regarding the specific skills set and experiences acquired for collaboration and co-teaching.

Finding 7. The general education teachers perceive communication, data collection and diagnostic testing, organizational skills in providing accommodations, development of effective lesson plans, interpersonal skills, differentiation skills, self-advocacy, and classroom management strategies as skills that are essential for collaboration and co-teaching.

Frequency data from the focus group interviews signify that general education participants perceived the following skills as most important for collaboration and co-teaching: communication (23%), data collection/diagnostic testing (15%), interpersonal skills (15%), differentiation (15%), self advocacy (8%), writing effective lesson plans (8%), organization in providing accommodations (8%), and classroom management strategies and skills (8%). Several general education participants stated that communication skills, data collection and diagnostic testing skills, organizational skills in providing appropriate accommodations and modifications in the general education classroom, and writing effective lesson plans for a collaborative classroom as critically important. For example, one participant stated, "You have to be an effective communicator in order to plan well with your collaborative teacher…" (FG1, G3, p. 5) and another participant stated, "…but just having that openness and communication to express how you want it to be in that collaborative classroom" (FG1, G5, p. 7). Another participant summarized her thoughts by saying, "Having that training on collaboration and what it really should look like and what people's roles were because

that's one thing that I know I really struggled with, I was like okay, what is our role, who is supposed to do what, what should this look like? There was no consistent idea of what collaboration should look like" (FG1, G2, p. 7). General education participants perceived having exposure to an actual collaborative classroom in student teaching and learning about scheduling would be beneficial experiences as part of their pre-service training.

Common themes in literature reiterate the importance of core common knowledge and skill sets, as well as collaboration between general and exceptional education departments producing meaningful practical field experiences in pre-service teachers' coursework (Goe & Coggshall, 2007; U. S. Department of Education, 2004). "Collaboration is about trust and respect. It's about working together to create better outcomes for all students" (Brownell & Walther-Thomas, 2002, p. 226). Collaboration is more successful when general and special exceptional teachers share common philosophies about student expectations, curriculum implementation, and classroom management practices (Carter, Prater, Jackson, & Marchant, 2009). Administrative support of the collaborative model is important, and planning time must be given to general and exceptional education teachers for collaboration. Teachers need exposure to a variety of collaborative frameworks and trainings on the skills and attitudes needed to work with students with disabilities in the regular education classroom (Carter, Prater, Jackson, & Marchant, 2009). As Mastropieri, et al (2005) reported, administrative support and leadership in fostering a school culture of collaboration are critical in sustaining a co-teaching model of instruction.

Finding 8. General education teachers perceive that their pre-service training does not fully align with the skill set and experiences they need for successful collaboration and co-teaching.

When comparing the data of what general education teachers perceived as most important compared to what training, coursework, and experiences were actually provided as part of their pre-service training, 53% of the training received matched the skills they felt were most important. Of the areas that matched between importance and actual pre-service training, the greatest was in differentiation of instruction (17%), communication skills (15%), and interpersonal skills (8%) and classroom management strategies and skills (8%). In making up the 47%, "other category" there were 32 findings that did not align with the perceived "essential skill set" identified by participants. The "other" category encompassed 32 different areas of training through coursework and experiences, such as behavior management and intervention coursework, core content classes (such as children's literature and other methods classes), special education law classes, and various field experiences that were mentioned during the focus group but did not align with their perceived "essential skill set" identified through this study. A general education participant from this study stated, "Co-teaching shouldn't be something that strikes terror in your heart. It should be something that you have had some exposure to during training" (FG3, G1, p. 15).

Research documents there is a strong need for collaboration and co-teaching in today's schools; however, there is little evidence-based research on best practices for pre-service training which focus on prerequisite skills and experiences needed for successful collaboration and co-teaching in the general education classroom (Rea, McLaughlin,

Walther-Thomas, 2002; Conderman & Johnston Rodriguez, 2009; Damore & Murray, 2009; Van Laarhoven, Munk, Lynch, Bosma, & Rouse, 2007; Hang & Rabren, 2009; Zigmond, 2001; Washburn-Moses, 2009; U.S. Department of Education, 2004). More research is needed to look at co-teaching skill sets, pre-service training coursework and experiences, and other experiences that help prepare teachers for the challenges of collaboration and co-teaching (Rea, McLaughlin, Walther-Thomas, 2002; Conderman & Johnston Rodriguez, 2009; Damore & Murray, 2009; Van Laarhoven, Munk, Lynch, Bosma, & Rouse, 2007; Washburn-Moses, 2009; U.S. Department of Education, 2004).

Through this qualitative research study, exceptional education teachers reported their perceptions of their pre-service training regarding the specific skills set and experiences acquired for collaboration and co-teaching.

Finding 9. The exceptional education participants perceive behavior management, effective IEP writing skills, communication, data collection and analysis and application skills, lesson planning, differentiation, problem solving, advocacy, and discipline in classroom management skills are essential for collaboration and co-teaching.

Frequency data from the focus group interviews signify that exceptional education participants perceived the following skills as most important for collaboration and co-teaching: communication (26%), advocacy (19%), differentiation (13%), behavior management (7%), effective IEP writing skills (7%), data collection, analysis, application skills (7%), lesson planning (7%), problem-solving (7%), and discipline and classroom management skills (7%). Exceptional education teachers perceived that flexibility and communication skills are most important in collaborative and/or co-taught classrooms today. As an exceptional education participant stated, “Just knowing how to

communicate with the parents, the children, with your co-teachers is important" (FG3, E2, p. 12). Four exceptional education teachers in one focus group shared the need to develop an extensive, in-depth knowledge base about learning problems and a variety of learning strategies to assist these struggling learners. Exceptional education participants also shared the need for extensive knowledge about a variety of learning disabilities and how to implement a variety of learning strategies to meet students' needs.

In the Griffin and Warden (2006) study it was reported that pre-service teachers benefit from explicit instruction in collaboration when coupled with authentic practice in a general education setting. Participants in the Griffin and Warden (2006) study also indicated that building a collaborative culture in their schools was vitally important to the success of the co-teaching model. Other strengths of their collaboration coursework that translated into a strong skill set for their first collaborative teaching role included matching student interventions with students' learning needs, identifying student needs and developing intervention plans, planning for differentiated instruction, learning collaborative instructional planning skills, working with different personality types, and advocating for a co-teaching collaborative culture in their first teaching assignment (Griffin & Warden, 2006).

Finding 10. Exceptional education teachers perceive that their pre-service training does not fully align with the skill set and experiences they need for successful collaboration and co-teaching.

When comparing the data of what exceptional education teachers perceived were most important compared to what training, coursework, and experiences were actually provided as part of their pre-service training, 60% of the training received matched up

with the skills they felt were most important. Of the areas that matched between importance and actual pre-service training, the greatest was in differentiation (20%), in data collection, analysis, and application skills (15%), communication (7%) and behavior management skills (7%). Forty percent of their pre-service training focused on "other" skills, knowledge, performance, and critical dispositions. In making up the 40%, "other category" there were 16 findings that did not align with the perceived "essential skill set" identified by participants. The "other" category encompassed 16 different areas of training through coursework and experiences such as school law classes, training in developing interpersonal skills, organizational skills for the exceptional education classroom, and various field experiences that were mentioned during the focus group but did not align with their perceived "essential skill set" identified through this study. One exceptional education teacher stated,

> Like the front of the IEP tells you the order but I was like, what am I supposed to do, where am I supposed to start? I had no idea. Luckily my assistant principal was like this is what you're supposed to do and it was nice, but the first couple of meetings I was shocked, I didn't know what to do, I'm sure I was terrible but, I wish I had a class in that (FG2, E1, p. 3).

The data from this research study coincides with this account that exceptional education teachers' perceptions indicate that they do not feel adequately prepared for their first collaborative or co-teaching assignment.

"Mismatches between pre-service preparation and actual working conditions likely contribute to the challenges of the first teaching years" (Billingsley, B, Carlson, E., & Klein, S., 2004, p.344). As Zigmond (2001) surmised, there appears to be much

literature and descriptive information about what co-teaching is and may look like in the classroom; however, there is a research gap in how teachers become more highly skilled in collaboration. "In many ways, co-teaching demonstrates the potential, as well as the complexities of collaboration, that joins the fields of general education and special education" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 18).

The researcher further analyzed the data findings based on the skills identified by both general and exceptional education participants regarding important skills needed for collaboration and co-teaching, and aligning those skills to the (2011) Interstate Teacher Assessment and Support Consortium Standards (InTASC).

Finding 11. The gap between pre-service general and exceptional teachers' coursework and experiences vary greatly when aligning to the InTASC standards.

The InTASC Standards Alignments Tables (Appendix H) report the variation in frequency of skills taught during pre-service coursework for both general and exceptional education teachers. The general education teachers report the frequency of most important skills taught as follows: differentiation (23), data collection and diagnostic testing (17), writing effective lesson plans (17), communication (16), interpersonal skills (8), self-advocacy (5), organizational (4), and classroom management strategies and skills (1). The exceptional education teachers reported the frequency of most important skills taught as follows: differentiation (25), data collection , analysis, and application (17), lesson planning (17), communication (16), advocacy (5), problem-solving (4), classroom management skills (1), behavior management (0), and effective IEP writing (0). The general and exceptional education focus group participants perceived that they did receive some training and coursework in collaboration and/or co-teaching. The general

and exceptional education teachers stated they both received training and coursework in differentiation of instruction for a range of instructional levels. One general education teacher expressed her desire for more coursework in exceptional education by stating, "I think special education has more acronyms than the military, and it feels like I'm totally in a different country or something" (FG2, G5, p.12). This perspective gives some insight into the perceived complexities of special education programming. Several exceptional education participants shared an extensive list of coursework and experiences they felt they needed to become better prepared for their collaborative and/or co-teaching experience. Many exceptional education participants stated they needed more training and coursework in: opportunities for general and exceptional education teachers to co-plan together, more coursework in data collection strategies, organizational and classroom management skills, more in-depth study and understanding about a variety of learning disabilities and how to convey that knowledge to general education teachers, and exposure to more diverse field experiences dealing with lower socio-economic students with learning challenges and transient populations. To aide in building this collaborative partnership, an exceptional education participant stated, "I think it would be neat if your special ed majors could get with your general majors and plan and teach a lesson together…" (FG2, E1, p. 4).

"Co-teaching has been preferred as one way of ensuring that students with disabilities benefit from content instruction taught by content specialists in general education classrooms" (Kloo & Zigmond, 2008, p. 13). "In a co-taught classroom the role of teacher quality has a more significant impact on student achievement than do other factors such as class make-up, background of students, class size, and class composition"

(Kloo & Zigmond, 2008, p. 12). The mismatch between the reality of today's schools and traditional teacher preparation paradigms has led to a need for a more collaborative approach to prepare all teachers" (Hardman, 2009, p. 583). "Mismatches between pre-service preparation and actual working conditions likely contribute to the challenges of the first teaching years" (Billingsley, B, Carlson, E., & Klein, S., 2004, p.344) as evidenced by the findings in this study.

Finding 12. The strongest InTASC instructional alignment for general education teachers is in the area of teaching differentiation strategies.

According to the general education InTASC alignment chart (Appendix H), differentiation skills were strongly represented in participants' responses as evident 23 times through aligned performance, essential knowledge, and critical disposition categories. An example for differentiation is Standard #8: Instructional Strategies, where it states: The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways. Item 8(a) The teacher uses appropriate strategies and resources to adapt instruction to the needs of individuals and groups of learners, which correlates to participants' responses and is documented as evidence for this standard. Several general education participants reported the importance of instruction in differentiation, to develop a strong teacher skill set in differentiating instruction for various ability levels. One general education participant shared, "In all of our lesson plans we had a specific area where we had to address how we were going to differentiate our learners who were learning quicker or learning slower than the others" (FG1, G2, p. 4). Another general education teacher said, "There were

times when you had to sit and analyze lessons, to see which works best for each type student and that is definitely a great teaching skill" (GF1, G6, p. 3). Participants shared they valued time for reflective thought and professional dialogue with colleagues, and that it was valuable in planning differentiation strategies during student teaching, but it is often a missing element in the fast paced teaching environment of today.

Teachers need specific and in-depth training on modifying the curriculum and adapting classroom instruction using best practices (Carter, Prater, Jackson, & Marchant, 2009). As Mastropieri, et al. (2005) reported, a strong hands-on curriculum, with an activity-based approach, can provide an entry point for making specific teaching adaptations for students with disabilities in the general education classroom. These adaptations could include planning for individual differences and modifying lessons and work expectations. If both teachers are comfortable with the content, this would afford the opportunity to rotate lead teacher roles in the classroom.

Finding 13. The largest InTASC gap for general education teachers is in classroom management strategies and skills for co-teaching.

According to the general education InTASC alignment chart (Appendix H), the lowest frequency and least amount of coursework and experience was in classroom management strategies and skills evidenced by one data point. Participants indicated Standard #3: Learning Environments that states: The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self motivation. 3(d) The teacher manages the learning environment to actively and equitably engage learners by organizing, allocating, and coordinating the resources of time, space; and learners'

attention was correlated to participants' responses and documented as evidence for this standard. More collaborative experiences in general education student teaching and overall more experience and training in collaboration and co-teaching are needed as evidenced by this statement, "Just experience. Just experience whether it be in a practicum situation or; there's really no substitute for just experience I think…" (FG2, G5, p. 2).

"Schools and classrooms of the 21st century represent diverse student populations representative of our larger society" (Mastropieri, M., Scruggs, T., Graetz, J., Norland, J., Gardizi, W., & McDuffie, K., 2005, p. 261).

> Changing roles for classroom teachers and specialists necessitate new emphasis on initial preparation and continuing professional development programs. Pre-service teachers, both general and special education, need to develop effective instructional and interpersonal skills to work with colleagues in the development and delivery of classroom-based services for students with disabilities. In addition, teacher education programs need to ensure that beginning educators develop well-honed classroom management skills that will ensure greater teacher confidence and student success (Rea, McLaughlin, Walther-Thomas, 2002, p. 220).

Through a concerted effort with universities, school administrators, and beginning general and exceptional education teachers, there can be continued growth in learning more about effective ways to more fully prepare teachers for their new collaborative and co-teaching roles (U.S. Department of Education, 2004).

Finding 14. The strongest InTASC instructional alignment for exceptional education teachers is in teaching differentiation strategies.

According to the exceptional education InTASC alignment chart (Appendix H), skills in differentiation strategies were strongly represented in participants' responses evidenced 25 times through aligned performance, essential knowledge, and critical disposition categories. An example for differentiation is Standard #7: Planning for Instruction states, where it states: The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context. 7(b) The teacher plans how to achieve each student's learning goals, choosing appropriate strategies and accommodations, resources, and materials to differentiate instruction for individuals; and groups of learners were correlated to participants' responses and documented as evidence for this standard. The exceptional education teachers reported that the following coursework was helpful: student teaching experiences, especially those in a co-taught classroom, the creation of an extensive collection of differentiation strategies in a learning strategies class, class work in collaboration and co-teaching, and the development of IEPs. It was reported that one exceptional education teacher had a reading course, specifically targeting differentiation strategies as evidenced by the following statement,

> A reading course that I took for my endorsement in elementary education you know it was a great course but one thing that the teacher focused on was how to differentiate across the board. You know way back then I hadn't really thought

about how to take your teaching and apply it to all different types of learners and I thought that was really valuable (FG2, E2, p. 3).

According to the Conderman and Johnston- Rodriguez (2009) study on *Beginning Teacher's Views of their Collaborative Roles,* exceptional education teachers felt significantly more prepared than regular education teachers in the following skills: teacher preparation and adapting course content, pacing of the curriculum and student evaluation, monitoring student progress, providing accommodations and individualized instruction, maintaining appropriate expectations, and working on instructional teams and participating on teams. Exceptional education teachers also rated the following skills as being significantly more important in their current position than did general education teachers: evaluating student performance and adapting course content, pacing of instruction and providing accommodations, and problem solving. Both general and exceptional education teachers indicated a need for training in differentiation, intervention strategies, and exceptional education law, especially focusing on Least Restrictive Environment (LRE).

Finding 15. The largest InTASC gap for exceptional education teachers is in behavior and classroom management strategies for co-teaching and effective IEP writing skills.

According to the exceptional education InTASC alignment chart (Appendix H), skills in behavior and classroom management strategies for collaboration and co-teaching were not represented in participants' responses evidenced by zero responses in the performance, essential knowledge, and critical disposition categories. Individual exceptional education teachers stated that data collection, analysis, and application skills

were important, as well as lesson planning skills for a collaborative setting, highly developed differentiation skills, strong problem solving skills, and well developed discipline and classroom management skills. However, this was a gap in their pre-service training. The exceptional education teacher reported,

> Behavior management I think would be the most important thing because one year you might have an awesome year, and the next year you will have a child that you can't even determine a single behavior strategy that works for them (FG1, E7, p. 6).

According to the Conderman and Johnston- Rodriguez (2009) study on *Beginning Teacher's Views of their Collaborative Roles,* both general and exceptional education teachers indicated a need for training in differentiation, behavior and instructional intervention strategies, and exceptional education law, especially focusing on Least Restrictive Environment (LRE). It is essential to identify general and exceptional education teachers' perceptions of their pre-service training and importance of skills acquired. "For co-teaching to be a productive use of a teacher's talents and training, co-teaching must be dynamic, deliberate, and differentiated" (Kloo & Zigmond, 2008, p. 16). "Co-teaching must unite the science of specifically designed instruction and effective pedagogy with the art of reorganizing resources and schedules to provide students with disabilities better opportunities to be successful in learning" (Kloo & Zigmond, 2008, p. 16).

Finding 16. Participants report that hands-on field experiences are essential in pre-service training.

A common sentiment expressed by career switcher participants in particular, was that more experience in the field was needed; and they strongly voiced how beneficial their previous experiences in general or exceptional education were before accepting their current teaching position. As the researcher meticulously reviewed the transcripts from each focus group, one common theme kept surfacing from many participants' statements. Both general and exceptional education teachers voiced the critical need for more hands-on field experiences through their pre-service programming, especially working with special needs students. As stated by one general education participant, "I think it would be really cool if the university would start allowing special education majors and general education majors to plan and teach together" (FG1, G3, p. 8). Another participant reported that more collaborative experiences in general education student teaching and overall more experience and training in collaboration and co-teaching are needed as evidenced by this statement, "Just experience. Just experience whether it be in a practicum situation, or there's really no substitute for just experience I think…" (FG2, G5, p. 2).

Research in the field suggests that teacher preparation programs must provide pre-service teachers with opportunities to develop collaborative skills through field experiences and coursework (Van Laarhoven, T., Munk, D., Lynch, K., Bosma, J., & Rouse, J., 2007). Researchers in the field also reported that pre-service teachers should have the opportunity to observe effective collaboration through field experiences and student teaching placements (Brownell & Walther-Thomas, 2002). This could include planning meetings with general and exceptional education teachers, developing and implementing accommodations and modifications, preparing intervention plans,

developing behavior management plans, and conducting professional problem-solving sessions (Brownell & Walther-Thomas, 2002; Conderman & Johnston-Rodrigez, 2009). "Although the topic of co-teaching is gradually finding its way into special education teacher preparation programs, it is equally important that co-teaching receive attention in the preparation of general education teachers" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 19-20). "Educators have not made the potential of co-teaching real" (Kloo & Zigmond, 2008, p. 14).

In summary, research question one investigates what specific skill set and experiences are perceived necessary by beginning general and exceptional education teachers to be successful in collaboration and co-teaching classrooms? Findings one through six and finding sixteen directly answer this research question. Research question two examines, what are general education teachers' perceptions of their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching? Findings seven and eight directly answer this research question. Research question three investigates, what are exceptional education teachers' perceptions of their pre-service training regarding the specific skill set and experiences acquired for collaboration and co-teaching? Findings nine and ten directly answer this research question. The InTASC standard alignment revealed in findings eleven through fifteen directly correspond with research question two and three. Overall, these findings thoroughly answer the three research questions that commanded this study.

Implications for Practice

Findings from this study imply the need for changes to pre-service training models and professional development opportunities for teachers who are currently serving in a

collaborative or co-teaching setting. The researcher would recommend, based on this study, the following implication to further identify and evaluate the specific skill set and experiences perceived necessary by beginning general and exceptional education teachers to be successful in collaboration and co-teaching.

Implication 1. Schools of education should align their pre-service programming to the InTASC Standards. Pre-service teacher plans of study should be aligned to the InTASC Standards, which are frequently endorsed and utilized by the National Council of Accreditation for Teacher Education (NCATE).

Implication 2. Institutions of higher education should incorporate the skill set and experiences identified in this study, which are also consistent with current research, in designing their programming. The general education teachers perceived the following skills as most important: communication, data collection and diagnostic testing, organizational skills in providing accommodations, writing effective lesson plans, interpersonal skills, differentiation skills, self-advocacy, and classroom management strategies and skills. The exceptional education participants viewed the following skills as most important: behavior management, effective IEP writing skills, communication, data collection and analysis and application skills, lesson planning, differentiation, problem solving, advocacy, and discipline in classroom management skills.
These skill sets should be a focal point when implementing a revised course of study. This may include expanding co-teaching/ collaborative coursework to better meet the needs of general and exceptional education pre-service teachers.

Implication 3. School divisions in Virginia should closely examine their current collaboration and co-teaching models and programs offered to exceptional education

students. Utilizing the 2011 InTASC Standards and the findings from this study, it would be advantageous to assess current collaborative and co-teaching teams' skill sets to identify strengths and weaknesses and then develop professional development to address the gaps. A focus should be on expanding collaboration and co-teaching programming within schools.

Implication 4. Professional development for administrators in school divisions, both at the central office and building level, should be provided in the collaborative model so they can better understand the skill set and administrative support required for developing effective co-teaching teams in their buildings or school division. Priority should be given to schools that either currently have or are considering implementing collaboration models.

Implication 5. Extensive professional development in the skill set needed for collaboration and co-teaching should be initiated by local school divisions and offered to both general and exceptional education beginning and more experienced teachers who are assigned to collaborative and/or co-teaching classrooms. Administrators should complete a skills inventory with co-teaching teams to assess their current skill set and identify areas for further development. Extensive training in this "essential skill set" should be provided before initial pairing and co-teaching programs are implemented.

Implication 6. School divisions should begin early to educate and coach aspiring teachers in the essential skill set identified in this study needed for collaboration and co-teaching. High school students who are pursuing teaching careers could begin to obtain this skill set through early exposure to field experiences.

Implication 7. School divisions should develop a plan to more closely look at the skill sets of teachers with zero to five years of experience that are engaging in collaboration and co-teaching. Using the 2011 InTASC Standards as a reference, a close examination of current collaboration and co-teachers' skill sets should be identified and developed as needed.

Implication 8. Community colleges should use the 2011 InTASC Standards as a reference in developing their elementary teacher pre-service programming, as well as their instructional assistant coursework.

Implication 9. Institutions of higher education should investigate ways to obtain resources to offer innovative interdepartmental studies (general and exceptional education departments) and experiences to allow for both general and exceptional education teachers to plan and execute lessons together in the general education classroom.

Implication 10. Institutions of higher education should investigate ways to obtain resources such as grants to provide additional resources for students with special needs. A grant study could further investigate how collaborative programming models impact student achievement in comparison to non-disabled peers.

Implication 11. Undergraduates need exposure to collaboration in their course work modeled by Institutions of Higher Education faculty members. Professors would benefit from experiences in co-teaching in order to effectively demonstrate the skills, performances, essential knowledge, and critical dispositions needed for co-teaching. It is imperative that professors model co-teaching in pre-service and administrative courses.

Suggestions for Future Research

In order to continue to meet the increasing demands for effective collaborative and co-teaching classrooms, additional research must be conducted. A suggestion for future study would be to further examine the types of course content and experiences being offered to pre-service teachers at Virginia institutions of higher education. It could be insightful and beneficial to interview professors from both general education and exceptional education departments to learn more about what skills are being taught and how they are teaching the critical skills needed for collaboration and co-teaching. By more closely examining the 2011 InTASC Standards, a future study might investigate how the standards are aligning with today's coursework and pre-service experiences.

A second area for future research would be to interview school administrators to further identify their perceptions about the skill set beginning teachers have as they begin their first collaborative or co-teaching experience. Additional research could focus on what types of professional development site-based administrators are providing to supplement beginning teachers' prior training. "The future of co-teaching may be dependent on increasing the quantity and quality of research on it and placing co-teaching in the larger context of school reform and improvement" (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 10). It is this researcher's hope that this study will help inform current pre-service teachers, university faculty, and school division instructional leaders about what knowledge, skills, and experiences current beginning collaboration teachers possess and what areas need further refinement through professional development opportunities and other learning experiences

A third area for future research would be to compare if Virginia Institutions of Higher Education are utilizing the InTASC Standards as part of their programming for pre-service general and exceptional education teachers. If the InTASC standards are being integrated into pre-service programming, an in-depth analysis depicting how it is being done and to what extent the standards are reflected could add a significant contribution to the research field. Further investigation may be warranted to see how these skills support collaboration and co-teaching.

A fourth consideration for future research would be a replication of this study in middle and high schools to further investigate beginning general and exceptional education teachers' perceptions of the skill set needed for collaboration and co-teaching. This replication could provide insight into the perceived skill set needed, as well as preparedness of middle and high school teachers for collaboration and co-teaching just as this study did for elementary participants.

Reflections

The researcher is currently a building administrator and has studied collaboration and co-teaching both through literature and in practice for over a decade. This research is vitally important to aide in "leveling the playing field" for all exceptional education students. As a former collaborative and co-teacher, the researcher has a strong conviction to advocate for the rights of exceptional students. This research assists in unlocking the mystery of the skill set needed and pre-service coursework needed to build effective collaboration and co-teaching programs. The researcher is committed to building exemplary collaborative partnerships in her own public school and hopes to share these

findings with other instructional leaders across that Commonwealth of Virginia so they too, will be empowered to build strong collaborative/co-teaching models.

In sharing these findings with university, division, and building level instructional leaders, the researcher sincerely hopes to positively impact the teaching profession. These findings can help leaders reflect on the skills and experiences beginning teachers may have had during their pre-service training and better understand the skill set that needs to be fostered through ongoing professional development. Open communication and dialogue between teachers and administrators can help shape authentic professional development and the acquisition of resources to truly meet the needs of collaborative teams. In fostering a culture of collaboration in all schools and school divisions, leaders can set a positive example and model many of the skills needed for effective collaboration and co-teaching.

Overall, this qualitative research experience has been very motivating and inspiring, and it will have a direct impact on my future career aspirations as I share this dissertation research with other instructional leaders. The researcher is ever grateful for the research opportunity to talk directly with general and exceptional education teachers in the field about their perceptions regarding the skill set needed for their collaborative and co-teaching roles. One of the most rewarding aspects of the study was actually meeting with each focus group, listening to their perspectives, and hearing their genuine interest in the research topic. Several participants commented and even wrote thank you notes in appreciation of the research and how they believed it would strengthen the profession in the future. One participant requested a copy of the research findings when the study is complete and has chosen to contact me to share articles she has found related

to my topic. This demonstrates the commitment beginning teachers have to the profession and their desire to learn best practices and to enhance student learning.

As a researcher, one cannot help but reflect on the opportunity educators hold in the palm of their hand each day when they are teaching a class of inquisitive young people. The findings from this study pinpoint much more clearly the specific skill set and experience needed for successful collaboration and co-teaching from the voices of practitioners. While the findings are supported by current literature in the field, it is concerning that little progress is being made towards adapting teacher preparation programs to reflect the new 2011 InTASC Standards, hence, assisting beginning teachers in being better prepared for their first collaboration and/or co-teaching assignment. It is vitally important that schools have the best and brightest teachers, with the most highly developed skill set, prepared to work in the ever challenging collaborative classrooms. In order to be prepared for the future, one must look closely at the ever-changing landscape of today's schools and have the courage to forge ahead in developing the quality programs our students need and deserve. We may have let our students down in the past, but now we have the knowledge and skills, which translates into opportunities to change the future!

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Appendix A
Focus Group Protocol

Part I: Demographic information

<u>Directions:</u> Please complete page 1 and give it to the researcher before the focus group discussion begins.

1. Area of Endorsement:
   Elementary General Education _____
   Exceptional Education _____
   Other: _____

2. Did you graduate from a Virginia institution of higher education?
   _____

3. How many years have you taught prior to this year?
   Zero _____
   One _____
   Two _____

4. What is your <u>primary role</u> in supporting students in exceptional education in their least restrictive environment?

_____ Exceptional Education Teacher using collaboration with General Education Teacher
_____ Exceptional Education Teacher in a co-taught classroom with a General Education Teacher
_____ General Education Teacher using collaboration with Exceptional Education Teacher
_____ General Education Teacher in a co-taught classroom with an Exceptional Education Teacher
_____ I currently don't have exceptional education students in my classroom but have previous experience within the last 3 years.

5. This year on average what is the approximate time spent per day engaged in this role?
   _____ none
   _____ less than one hour per day
   _____ 1-2 hours per day
   _____ more than 2 hours

Part II.
The purpose of this research study is to explore the *Perceptions of Beginning General and Exceptional Education Elementary Teachers about their Preparation and Importance of Skills Associated with Collaboration and Co-teaching*. In order to create a common vocabulary and conceptual framework, the following terms and definitions are cited from current literature relating to collaboration and the co-teaching model of instruction:

- Collaboration- general and exceptional education teachers work together to plan instruction, modifications, and accommodations for special needs students (Damore & Murray, 2009).

- Co-teaching- "Co-teaching may be defined as the partnering of a general education teacher and a special education teacher or another specialist for the purpose of jointly delivering instruction to a diverse group of students, including those with disabilities or other special needs, in a general education setting and in a way that flexibly and deliberately meets their learning needs" (Friend and Cook, 2010 p. 11).

A number of co-teaching variations include:

- One teach, one assist- one teacher (usually the general education teacher) assumes teaching responsibilities and leads large-group instruction, and the other teacher provides academic, behavioral, social, and/or individual support as needed (Friend & Cook, 2010; Mastropieri, McDuffie, & Scruggs, 2007).

- Station teaching- instruction is typically divided into three non-sequential learning stations and students rotate among the stations receiving instruction from co-teachers as well as working independently (Friend & Cook, 2010; Mastropieri, McDuffie, & Scruggs, 2007).

- Parallel teaching- typically the class is divided into two groups and the co-teachers teach the same or similar content in different classroom groupings fostering instructional differentiation and increased student participation (Friend & Cook, 2010; Mastropieri, McDuffie, & Scruggs, 2007).

- Alternative teaching- one teacher instructs the larger group and one teacher takes a smaller group of students for a limited period of time for specialized instruction such as remediation, enrichment, assessment, pre-teaching concepts, etc. (Friend & Cook, 2010; Mastropieri, McDuffie, & Scruggs, 2007).

- Team teaching- co-teachers share teaching responsibilities and are equally involved in leading instructional activities through lecturing, giving multiple examples and perspectives for debates and solving problems (Mastropieri, McDuffie, & Scruggs, 2007; Austin, 2001).

- Consultation model- special educator serves as a consultant for general educator (Austin, 2001).

- Special education- instruction specifically designed to meet the unique needs of students with disabilities (Russo, C. J. & Osborne, A. G. (2008).

Part III. Perceptions of preparation and importance of skills associated with collaboration and co-teaching at the elementary level

Focus Group Questions:

Introductions will be completed by the researcher including background information such as school, position, what model(s) from the front sheet describes your classroom best, etc.

1. What are your perceptions about your current position as a collaborative or co-teacher?

2. What was **most useful in your pre-service programming** preparing you to work with students with disabilities?

3. In your pre-service coursework did you receive any **training or coursework** in collaboration or co-teaching?

If participants respond "yes" to question #3, then proceed to questions below:

As part of your pre-service coursework and experiences, what skills were taught in preparation for meeting the needs of exceptional education students in a general education classroom?

Examples of more probing questions (if needed):

A. Using a **variety of information** when planning for students with disabilities (example, IEPs, student achievement data, student feedback)?

B. Using a variety of **flexible grouping models** to effectively meet the needs of students with disabilities?

C. Designing a variety of **assessment tools** that effectively monitor student progress?

D. Providing **individual instruction** for students with disabilities? Implementing accommodations and modifications from student's IEP or 504 plan?

E. Using **effective communication skills** when interacting with my colleagues and team members?

F. **Communicating with parents** regarding the needs and progress of their child who has a disability?

G. **Co-planning** with other colleagues to better meet the needs of all students?

H. **Problem solving** and brainstorming different behavioral **strategies/interventions** for students?

- Tell me, was that a required class of all education majors?
- Were you trained to do that in your pre-service program? Do you recall what course?
- How did you learn to do that? Training at the university? Field experience?

4. Of these skills, which two do you feel are the **most important** in your classroom today and please explain **why** and/or give **examples**?

5. Do you recall having the opportunity **to co-plan and/or co-teach** a lesson with another pre-service general/exceptional education teacher?

- What was the purpose/goal?
- What skills did you gain from that experience?

6. What **training would you have liked to have had in your pre-service coursework** in order to better prepare you for collaboration and co-teaching?

- Were any of those skills acquired in your current teaching position?
- Either through structured programs from the division or from colleagues?

7. What **advice** do you have for those who prepare pre-service teachers for collaboration and co-teaching and for current pre-service teachers currently in their programs?

8. Is **there anything else** you'd like to share regarding your pre-service training and preparation and importance of skills that has prepared you to work with general and exceptional education students?

Permission to use research instrument adapted from Beginning Teacher Questionnaire developed by Conderman, G., & Johnston-Rodriguez, S. (2009) used in the study Beginning teachers' views of their collaborative roles. *Preventing School Failure, 53(4), 235- 244.* Council of Chief state School Officers. (2010). Interstate Teacher Assessment and Support Consortium (InTASC) *Model Core Teaching Standards: A Resource for State Dialogue (Draft for Public Comment).* Washington, DC: Council of Chief State School Officers.

Researcher: Jodie Lynn Brinkmann

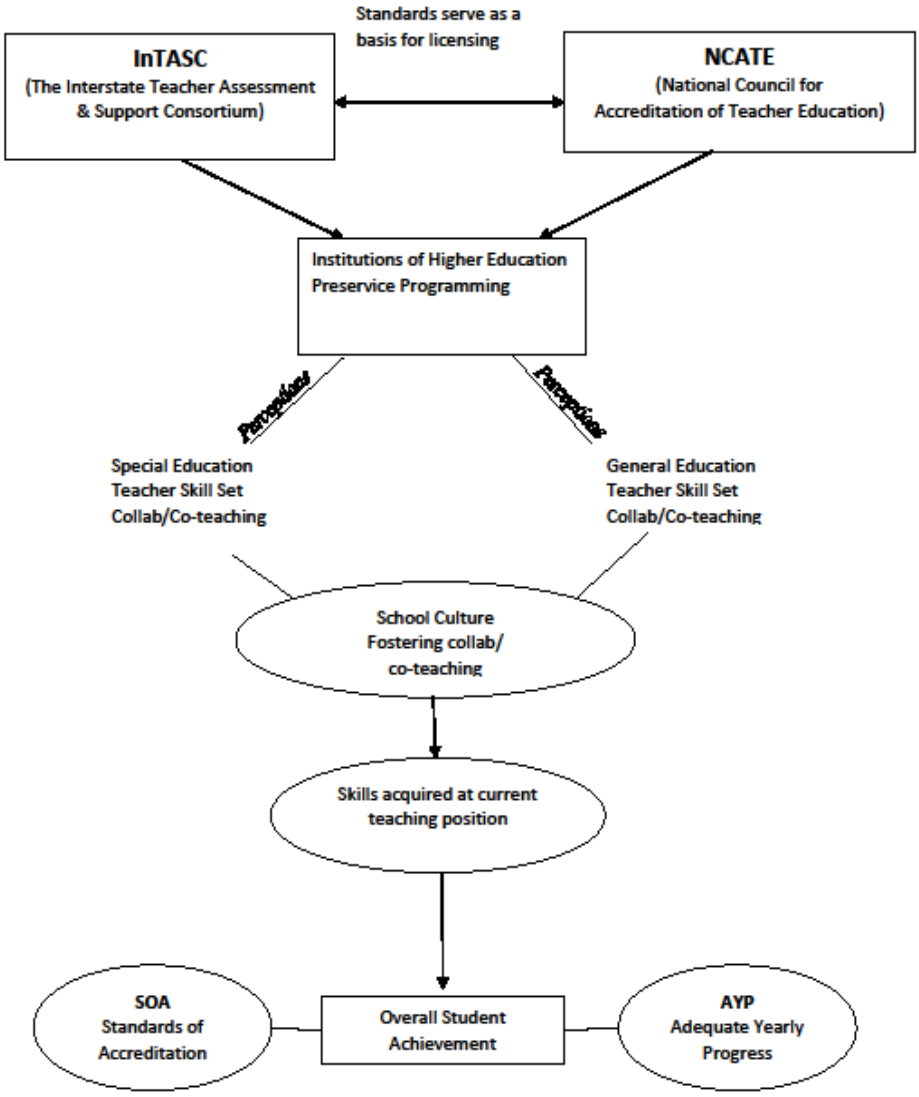
Appendix B
Permission from author to use survey instrument

From: Gregory Conderman
Subject: **Re: Permission**
Date: November 29, 2010 7:53:28 PM EST
To: Jodie L. Brinkmann (jlbrinkmann) <jlbrinkmann@henrico.k12.va.us>

Hi Jodie:
You have my permission to use the survey in whole or part as long as you properly acknowledge where it came from.
My co-author did not assist in that part of the study, so you do not need to contact her.
Dr. Greg Conderman

Appendix C

Conceptual Framework



Appendix D

Assessment Results at each Proficiency Level by Subgroup

Assessment Results at each Proficiency Level by Subgroup													
		2007-2008				2008-2009				2009-2010			
Student Subgroup	Type	Adv	Prof	Pass	Fail	Adv	Prof	Pass	Fail	Adv	Prof	Pass	Fail
English: Reading													**Grade 3**
All Students	State	39	45	84	16	37	49	86	14	41	43	83	17
Female	State	42	45	87	13	40	49	88	12	43	42	85	15
Male	State	35	46	81	19	34	50	84	16	38	43	82	18
Black	State	24	51	74	26	23	54	78	22	25	46	72	28
Hispanic	State	31	48	79	21	32	51	83	17	34	46	80	20
White	State	45	43	88	12	42	47	90	10	47	41	88	12
Asian	State	51	40	91	9	48	45	93	7	52	40	91	9
American Indian	State	35	49	84	16	31	57	88	13	39	47	86	14
Other	State	41	45	86	14	39	50	88	12	43	43	86	14
Students with Disabilities	State	28	40	67	33	30	42	72	28	29	38	68	32
Economically Disadvantaged	State	25	50	75	25	25	53	79	21	27	47	75	25
Limited English Proficient	State	32	47	79	21	35	49	84	16	35	46	80	20
Migrant	State	28	41	70	30	21	57	78	22	26	55	81	19
Mathematics													**Grade 3**
All Students	State	51	38	89	11	45	44	89	11	52	39	92	8
Female	State	51	39	89	11	45	44	89	11	53	40	92	8
Male	State	52	37	89	11	46	43	89	11	52	39	91	9
Black	State	33	48	81	19	27	53	80	20	37	49	85	15
Hispanic	State	35	47	82	18	31	52	82	18	38	50	88	12
White	State	61	33	93	7	54	39	93	7	60	35	95	5
Asian	State	68	27	95	5	61	34	95	5	69	28	97	3
American Indian	State	49	40	89	11	46	42	88	12	53	43	95	5
Other	State	54	36	90	10	47	44	90	10	54	39	93	7
Students with Disabilities	State	32	42	74	26	31	44	75	25	34	43	78	22
Economically Disadvantaged	State	34	47	81	19	30	51	82	18	38	49	87	13
Limited English Proficient	State	36	47	82	18	32	51	83	17	40	48	88	12
Migrant	State	33	47	79	21	20	70	91	9	49	41	90	10
Science													**Grade 3**
All Students	State	39	49	88	12	42	46	89	11	42	49	91	9
Female	State	38	50	89	11	41	48	89	11	41	50	91	9
Male	State	39	49	88	12	44	45	89	11	43	48	91	9
Black	State	20	58	78	22	24	55	79	21	23	59	83	17
Hispanic	State	22	59	80	20	27	55	82	18	24	61	85	15
White	State	48	45	93	7	52	42	93	7	52	43	95	5
Asian	State	47	47	93	7	54	40	94	6	50	45	96	4
American Indian	State	41	49	90	10	40	48	88	12	40	54	95	5
Other	State	40	50	90	10	46	45	91	9	43	49	92	8
Students with Disabilities	State	25	48	73	27	28	46	74	26	27	50	77	23
Economically Disadvantaged	State	23	56	79	21	26	55	80	20	26	58	84	16
Limited English Proficient	State	21	59	80	20	28	55	82	18	23	62	86	14
Migrant	State	24	60	84	16	6	75	81	19	31	49	80	20
History and Social Science													**Grade 3**
All Students	State	66	27	93	7	67	26	93	7	68	25	93	7
Female	State	66	27	93	7	67	26	93	7	68	25	93	7
Male	State	66	26	92	8	67	25	92	8	69	24	93	7
Black	State	49	38	87	13	51	36	87	13	52	35	87	13
Hispanic	State	52	36	88	12	53	36	89	11	54	35	89	11
White	State	74	21	95	5	75	20	95	5	76	19	96	4
Asian	State	78	19	97	3	79	18	97	3	79	18	97	3
American Indian	State	66	24	90	10	62	29	91	9	71	23	94	6
Other	State	68	26	94	6	70	24	94	6	71	23	94	6
Students with Disabilities	State	44	36	79	21	45	35	80	20	43	35	78	22
Economically Disadvantaged	State	49	38	86	14	51	36	87	13	52	35	87	13
Limited English Proficient	State	52	36	88	12	53	36	89	11	54	36	89	11
Migrant	State	48	41	89	11	35	48	83	17	59	29	88	12

Source: "The Virginia Department of Education State Report Card from 2007-2010"

Appendix D

Assessment Results at each Proficiency Level by Subgroup

Assessment Results at each Proficiency Level by Subgroup													
		2007-2008				2008-2009				2009-2010			
Student Subgroup	Type	Adv	Prof	Pass	Fail	Adv	Prof	Pass	Fail	Adv	Prof	Pass	Fail
English: Reading													**Grade 4**
All Students	State	47	41	**88**	12	49	39	**89**	11	48	40	**88**	12
Female	State	50	40	**90**	10	52	38	**90**	10	52	38	**90**	10
Male	State	45	42	**87**	13	47	40	**87**	13	45	41	**87**	13
Black	State	31	49	**81**	19	34	48	**81**	19	32	47	**80**	20
Hispanic	State	37	47	**84**	16	42	44	**86**	14	38	47	**85**	15
White	State	55	37	**92**	8	56	36	**92**	8	56	36	**92**	8
Asian	State	60	34	**94**	6	61	33	**94**	6	60	34	**94**	6
American Indian	State	42	48	**89**	11	38	50	**88**	12	50	40	**90**	10
Other	State	48	42	**90**	10	53	38	**91**	9	52	39	**91**	9
Students with Disabilities	State	33	40	**73**	27	38	38	**76**	24	35	41	**76**	24
Economically Disadvantaged	State	32	49	**81**	19	34	47	**81**	19	34	47	**81**	19
Limited English Proficient	State	37	47	**84**	16	42	44	**85**	15	38	47	**85**	15
Migrant	State	41	45	**86**	14	23	59	**82**	18	20	61	**82**	18
Mathematics													**Grade 4**
All Students	State	42	42	**84**	16	48	39	**86**	14	49	39	**88**	12
Female	State	40	44	**84**	16	46	40	**86**	14	48	40	**88**	12
Male	State	44	40	**84**	16	49	38	**87**	13	51	38	**88**	12
Black	State	26	48	**74**	26	31	46	**78**	22	33	48	**80**	20
Hispanic	State	29	47	**76**	24	34	45	**79**	21	37	45	**82**	18
White	State	49	40	**89**	11	55	36	**91**	9	57	36	**92**	8
Asian	State	62	31	**93**	7	66	28	**94**	6	69	26	**95**	5
American Indian	State	40	46	**85**	15	41	43	**84**	16	49	38	**87**	13
Other	State	45	40	**85**	15	51	37	**88**	12	54	36	**90**	10
Students with Disabilities	State	27	42	**69**	31	32	41	**73**	27	31	44	**75**	25
Economically Disadvantaged	State	26	48	**74**	26	32	46	**78**	22	34	47	**81**	19
Limited English Proficient	State	31	45	**77**	23	35	44	**79**	21	40	43	**83**	17
Migrant	State	26	56	**83**	17	21	59	**80**	20	20	63	**82**	18
History and Social Science (Alternate Assessment)													**Grade 4**
All Students	State	78	16	**94**	6	76	19	**95**	5	74	17	**92**	8
Female	State	78	15	**93**	7	76	20	**96**	4	74	18	**92**	8
Male	State	78	16	**94**	6	76	18	**94**	6	75	17	**92**	8
Black	State	80	13	**93**	7	75	21	**96**	4	74	19	**93**	7
Hispanic	State	76	20	**97**	3	77	20	**97**	3	77	18	**95**	5
White	State	79	15	**95**	5	77	18	**95**	5	76	16	**92**	8
Asian	State	71	19	**90**	10	73	11	**84**	16	64	16	**80**	20
American Indian	State	<	<	<	<	<	<	<	<	<	<	<	<
Other	State	58	26	**84**	16	50	40	**90**	10	68	29	**96**	4
Students with Disabilities	State	78	16	**94**	6	76	19	**95**	5	74	17	**92**	8
Economically Disadvantaged	State	80	15	**95**	5	78	17	**95**	5	77	16	**93**	7
Limited English Proficient	State	75	22	**97**	3	82	14	**96**	4	73	20	**94**	6
English: Reading													**Grade 5**
All Students	State	42	47	**89**	11	38	54	**92**	8	38	53	**90**	10
Female	State	45	46	**91**	9	40	53	**93**	7	40	52	**92**	8
Male	State	39	49	**88**	12	35	55	**90**	10	35	54	**89**	11
Black	State	27	55	**82**	18	23	62	**86**	14	23	61	**83**	17
Hispanic	State	31	53	**84**	16	29	60	**89**	11	30	57	**87**	13
White	State	49	44	**93**	7	44	50	**94**	6	44	50	**94**	6
Asian	State	52	42	**94**	6	52	44	**96**	4	51	45	**96**	4
American Indian	State	44	47	**91**	9	36	57	**93**	7	35	55	**91**	9
Other	State	46	45	**91**	9	39	54	**94**	6	41	52	**93**	7
Students with Disabilities	State	27	47	**73**	27	29	50	**79**	21	28	49	**77**	23
Economically Disadvantaged	State	26	55	**82**	18	24	61	**85**	15	24	60	**84**	16
Limited English Proficient	State	29	53	**83**	17	31	58	**89**	11	29	58	**87**	13
Migrant	State	25	55	**81**	19	18	61	**80**	20	24	55	**79**	21

Source: "The Virginia Department of Education State Report Card from 2007-2010"

Appendix D
(continued)

Assessment Results at each Proficiency Level by Subgroup

Assessment Results at each Proficiency Level by Subgroup													
		2007-2008				2008-2009				2009-2010			
Student Subgroup	Type	Adv	Prof	Pass	Fail	Adv	Prof	Pass	Fail	Adv	Prof	Pass	Fail
English: Writing													**Grade 5**
All Students	State	23	64	**87**	13	27	59	**86**	14	22	66	**88**	12
Female	State	28	62	**91**	9	33	58	**90**	10	28	64	**92**	8
Male	State	18	65	**83**	17	22	61	**83**	17	16	67	**84**	16
Black	State	13	66	**79**	21	15	64	**79**	21	12	70	**82**	18
Hispanic	State	16	65	**81**	19	17	64	**80**	20	14	71	**85**	15
White	State	27	63	**90**	10	32	57	**89**	11	25	65	**90**	10
Asian	State	36	58	**94**	6	43	50	**94**	6	39	56	**95**	5
American Indian	State	25	64	**89**	11	22	67	**89**	11	17	67	**84**	16
Other	State	27	64	**90**	10	30	58	**88**	12	24	66	**89**	11
Students with Disabilities	State	8	52	**59**	41	9	49	**58**	42	7	51	**58**	42
Economically Disadvantaged	State	12	66	**77**	23	13	64	**77**	23	10	70	**80**	20
Limited English Proficient	State	14	66	**80**	20	16	63	**79**	21	12	71	**83**	17
Migrant	State	13	83	**96**	4	16	64	**80**	20	15	52	**67**	33
Mathematics													**Grade 5**
All Students	State	53	35	**88**	12	57	33	**90**	10	58	33	**90**	10
Female	State	54	36	**89**	11	57	33	**90**	10	58	33	**91**	9
Male	State	52	35	**87**	13	57	33	**89**	11	57	32	**89**	11
Black	State	38	43	**81**	19	43	41	**84**	16	44	40	**84**	16
Hispanic	State	40	41	**81**	19	46	40	**86**	14	50	36	**86**	14
White	State	60	32	**92**	8	64	29	**93**	7	64	29	**93**	7
Asian	State	68	27	**94**	6	73	23	**96**	4	75	20	**96**	4
American Indian	State	52	35	**87**	13	56	34	**90**	10	51	39	**90**	10
Other	State	56	34	**90**	10	59	32	**91**	9	61	31	**92**	8
Students with Disabilities	State	34	39	**73**	27	39	38	**77**	23	39	37	**76**	24
Economically Disadvantaged	State	39	42	**81**	19	43	41	**84**	16	45	40	**85**	15
Limited English Proficient	State	39	41	**80**	20	46	39	**85**	15	49	36	**85**	15
Migrant	State	51	37	**88**	12	44	44	**88**	12	50	28	**78**	22
Science													**Grade 5**
All Students	State	24	64	**88**	12	26	62	**88**	12	32	56	**88**	12
Female	State	21	66	**87**	13	23	64	**87**	13	29	58	**87**	13
Male	State	27	62	**89**	11	29	60	**89**	11	35	54	**89**	11
Black	State	12	57	**80**	20	14	65	**79**	21	17	62	**79**	21
Hispanic	State	11	65	**77**	23	13	64	**78**	22	18	59	**78**	22
White	State	30	63	**93**	7	33	61	**93**	7	39	54	**93**	7
Asian	State	29	62	**91**	9	31	61	**92**	8	46	47	**93**	7
American Indian	State	25	67	**92**	8	22	71	**93**	7	28	62	**91**	9
Other	State	26	65	**91**	9	25	65	**90**	10	35	56	**91**	9
Students with Disabilities	State	17	55	**71**	29	18	52	**70**	30	20	49	**69**	31
Economically Disadvantaged	State	12	67	**79**	21	14	64	**79**	21	18	61	**79**	21
Limited English Proficient	State	10	63	**72**	28	11	63	**75**	25	16	57	**73**	27
Migrant	State	16	66	**82**	18	10	69	**79**	21	21	42	**63**	37
History and Social Science													**Grade 5**
All Students	State	73	17	**90**	10	75	19	**94**	6	73	17	**90**	10
Female	State	72	18	**90**	10	77	16	**93**	7	71	16	**87**	13
Male	State	73	17	**90**	10	74	21	**95**	5	74	18	**92**	8
Black	State	72	16	**88**	12	81	14	**95**	5	76	17	**93**	7
Hispanic	State	80	12	**92**	8	68	32	**100**	0	68	9	**77**	23
White	State	73	19	**91**	9	72	21	**93**	7	71	17	**88**	12
Asian	State	80	20	**100**	0	45	45	**91**	9	80	20	**100**	0
American Indian	State	<	<	<	<	<	<	<	<	<	<	<	<
Other	State	71	21	**93**	7	92	8	**100**	0	64	27	**91**	9
Students with Disabilities	State	73	17	**90**	10	75	19	**94**	6	73	17	**90**	10
Economically Disadvantaged	State	80	11	**91**	9	78	17	**95**	5	77	15	**92**	8
Limited English Proficient	State	90	0	**90**	10	75	25	**100**	0	70	10	**80**	20

Source: "The Virginia Department of Education State Report Card from 2007-2010"

Appendix E

Letter to Participants

Jodie Lynn Brinkmann
5701 Maple Brook Drive
Midlothian, VA 23112

June, 2011

Dear Sir or Madam:

I am currently a doctoral candidate at Virginia Tech working on my degree in Educational Leadership and Policy Studies. I am currently working on my dissertation that focuses on *Perceptions of Beginning General and Exceptional Education Elementary Teachers about their Preparation and Importance of Skills Associated with Collaboration and Co-teaching*.

As you know, being an educator in the field today is becoming increasingly more challenging with regards to accountability for student achievement. Current research documents the need for more collaboration and co-teaching models to meet the needs of students with disabilities and all learners. Even though there is a lot of literature in the field about collaboration and co-teaching, there are few studies focusing on pre-service programming, skill sets, coursework, and experiences perceived necessary to help beginning teachers be successful in collaborative and co-teaching settings. Further research is needed to learn from practitioners in the field regarding their perceptions about their pre-service training in order to better prepare future beginning teachers for this challenging role at the elementary level.

You were selected to participate in this pilot study because you are a general or exceptional education teacher in your first three years of teaching in your current school division. If you are interested in perhaps participating in this study, I will verify that you meet the other criteria including; graduated from a Virginia public institution of higher education with an endorsement in elementary general education and/or exceptional education, and you are currently or have had past experience in a collaborative or co-taught classroom. If your experiences do not fit these criteria, you may not want to participate in this study.

Conclusions from this study will be valuable to institutions of higher education in developing new and innovative teacher preparation programs. It will be helpful to building principals in learning exactly what skill sets beginning teachers feel are most important in their current positions and how that coincides with their coursework, training, and experiences up to this point. I also believe that beginning teachers will find

this information beneficial as they look at their personal skill sets and professional development needs.

Participation in this pilot study will involve meeting with a focus group of 5-8 beginning general and/or exceptional education teachers from your school division for approximately sixty to ninety minutes. The focus group meeting will be audio taped for research purposes however, participants' names, schools, school division, etc. will not be used in my report. Rather pseudonyms will be created to protect all participants' identities. I will arrange a convenient time and place for our focus group meeting once all participants have been identified. This study has been approved by VA Tech's Institutional Review Board and your local school division. However, please note this research is not being conducted by the school division but rather for a dissertation project as a requirement for a doctoral degree.

If you are interested in participating in this research study, please respond via e-mail to sammy1@vt.edu. Afterwards, I will be contacting you personally to thank you for your interest in possibly participating in this study, to arrange the meeting time and place, and to answer any questions you may have. **I am hopeful that the focus group can meet during the June 27th- 30 timeframe.**

Once again, thank you for your willingness to possibly share your perceptions and experiences with me as part of my research study.

Sincerely,

Jodie L. Brinkmann
Virginia Tech

Appendix F

Informed Consent

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Informed Consent for Participants
in Research Projects Involving Human Subjects

Focus Group Interview

Title of Project: Perceptions of Beginning General and Exceptional Education Teachers about Their Preparation and Importance of Skills Associated with Collaboration and Co-teaching

Investigator(s): Jodie L. Brinkmann and Dr. Travis Twiford

I. Purpose of this Research/Project
This qualitative research study gives a voice to beginning general and exceptional education teachers who are currently serving in a collaborative or co-teaching setting. The work from Carl Glickman (1997) documents the need to give teachers a voice in the field of education. More thorough research studies are needed to reflect the link between university pre-service programs that prepare future teachers with the knowledge, attitudes, and field experiences that foster effective collaboration programs, and beginning teachers' perceptions about their skills and preparation necessary for the collaborative classroom. The purpose of this study is to identify the perceived skill set needed by general and exceptional education teachers in order to be successful in a co-teaching classroom, discover if collaborative coursework is being offered to pre-service general and exceptional education teachers as part of their university experience, and identify specific strategies, programs, and field experiences in which pre-service general and exceptional education teachers can engage in to better prepare them for their first co-teaching and/or collaborative teaching assignment.
Results of this study may provide insight for university teacher preparation programs and elementary school principals on how to better prepare beginning teachers for collaboration and co-teaching.

II. Procedures
You will participate in a focus group discussion for about 60-90 minutes with 5-8 other beginning general or exceptional education probationary (0 to 3 years experience) teachers having current or previous experience in a collaborative or co-taught classroom with a teaching degree awarded by a Virginia public institution of higher education. You will be asked questions related to your perception of the skill set needed by general and exceptional education teachers in order to provide instruction in a co-taught classroom, asked to share your experiences regarding if collaborative course work was offered during your pre-service university experience, and ask you for your input identifying specific strategies, programs, and field experiences pre-service general and exceptional

education teachers could engage in to better prepare them for their first co-teaching and/or collaborative teaching assignment. The focus group interview will be recorded and field notes will be taken throughout the interview by the research assistant and the researcher. The interviews will take place at a convenient location in your school division to be determined later.

Following the focus group interview, the researcher will have the recording transcribed by a professional transcriptionist. You will be asked to member check your responses and send back your edited comments in the self-addressed envelope provided.

This study has been approved by VA Tech's Institutional Review Board and your local school division. However, please note this research is not being conducted by the school division but rather for a dissertation project as a requirement for a doctoral degree.

III. Risks

There are minimal risks associated with this study. Teacher name, school, and school division information will be kept anonymous, and participants will be referred to by pseudonym in the focus group discussion such as Participant A, Participant B, Participant C. After explaining the purpose of the study, all participants will be asked to sign an informed consent form that meets Virginia Tech's Institutional Review Board guidelines and approval. Your verbal responses to questions will be heard by all members of the focus group, and professional discretion will be encouraged by the interviewer to ensure quality responses during the study. Only participants in the focus group, a research assistant, the transcriptionist, and the researcher herself will have access to your comments. Pseudonyms will be used to identify each participant in all written documents. Direct quotes from participants will be used in the study. Participants may decline to answer all questions during the focus group process. In addition, participants may select to end the interview at any time.

IV. Benefits

Results of this study may provide insight for university teacher preparation programs on how to better prepare general and exceptional education teachers for collaboration and the co-teaching classroom. This study will benefit elementary school principals to assist them in better understanding beginning teachers' perceptions, skills, and field experiences acquired in their pre-service programming in preparing them for their first teaching experience in a collaborative or co-taught classroom.

No promise or guarantees of benefits have been made to encourage you to participate.

You may contact the researcher at a later time for a summary of the research results.

V. Extent of Anonymity and Confidentiality

The researcher will make every effort possible to maintain your anonymity in any written documentation resulting from this focus group interview. Teacher name, school, and school division information will be kept anonymous, and participants will be referred to by pseudonym in the focus group discussion such as Participant A, Participant B,

Participant C. After explaining the purpose of the study, all participants will be asked to sign an informed consent form that meets Virginia Tech's Instructional Review Board guidelines and approval. Your verbal responses to questions will be heard by all members of the focus group, and professional discretion will be encouraged by the interviewer to ensure quality responses during the study. Only participants in the focus group, a research assistant, the transcriptionist, and the researcher herself will have access to your comments. Pseudonyms will be used to identify each participant in all written documents.

Copies of transcripts may be viewed by members of the researcher's dissertation committee. It is also possible that the Institutional Review Board (IRB) may view this study's collected data for auditing purposes. The IRB is responsible for the oversight of the protection of human subjects involved in the research.

All research data with any participant identification will be held by the researcher and then destroyed immediately after coding of the focus group participants. All information will be stored on the researcher's computer which will be password protected. When information is transcribed, a security agreement will be obtained from the transcriber to ensure confidentiality; and information will be given to the researcher in the original form, and no other copies will be maintained on the transcriber's computer. Both the researcher's and transcriber's computers are password protected. The research assistant, who will be utilized as a peer debriefer and who will monitor member checking, will also complete a confidentiality agreement and will not maintain any permanent records on her computer. All recorded interviews, field notes, data collection logs, and other confidential files will be destroyed upon completion of the study (dissertation defense). There may be professional publications, articles, and presentations resulting from this study.

VI. Compensation
There will be no compensation given to you for participating in this study.

VII. Freedom to Withdraw
You are free to withdraw or stop participation in this study at any time. You may choose not to answer any or all questions during the focus group meeting.

VIII. Subject's Responsibilities
I voluntarily agree to participate in this study. I understand that I will have the following responsibilities:

- I agree to answer the focus group protocol questions honestly and to maintain professional confidentiality in relation to other participants' responses. Initial _____

- I agree to allow the researcher to record the interview. Initial _____

- I will member check and review the transcript for accuracy and return it to the researcher within 5 days of receipt in the self-addressed envelope provided. Initial _____

IX. Subject's Permission

I have read the Consent Form and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent:

_____ Date_____
Subject signature

Should you have any pertinent questions about this research or its conduct and research subjects' rights you may contact:

Jodie L. Brinkmann	804-938-7707/sammy1@vt.edu
Investigator	Telephone/e-mail
Dr. Travis Twiford	757-363-3930/ttwiford@vt.edu
Faculty Advisor	Telephone/e-mail

Departmental Reviewer/Department Head
David M. Moore 540-231-4991/moored@vt.edu
Chair, Virginia Tech Institutional Review Board Telephone/e-mail
for the Protection of Human Subjects Office
of Research Compliance
2000 Kraft Drive, Suite 2000 (0497)
Blacksburg, VA 24060

NOTE: Subjects must be given a complete copy (or duplicate original) of the signed Informed Consent.

Appendix G1

Venn Diagram Focus Group One

Venn Diagram 1 - Response Continuum for General and Exceptional Education Teachers' Perceptions of the Skill Set needed for Collaboration and Co-teaching for Focus Group Number One

Appendix G2

Venn Diagram Focus Group Two

Venn Diagram 2 - Response Continuum for General and Exceptional Education Teachers' Perceptions of the Skill Set needed for Collaboration and Co-teaching for Focus Group Number Two

Appendix G3

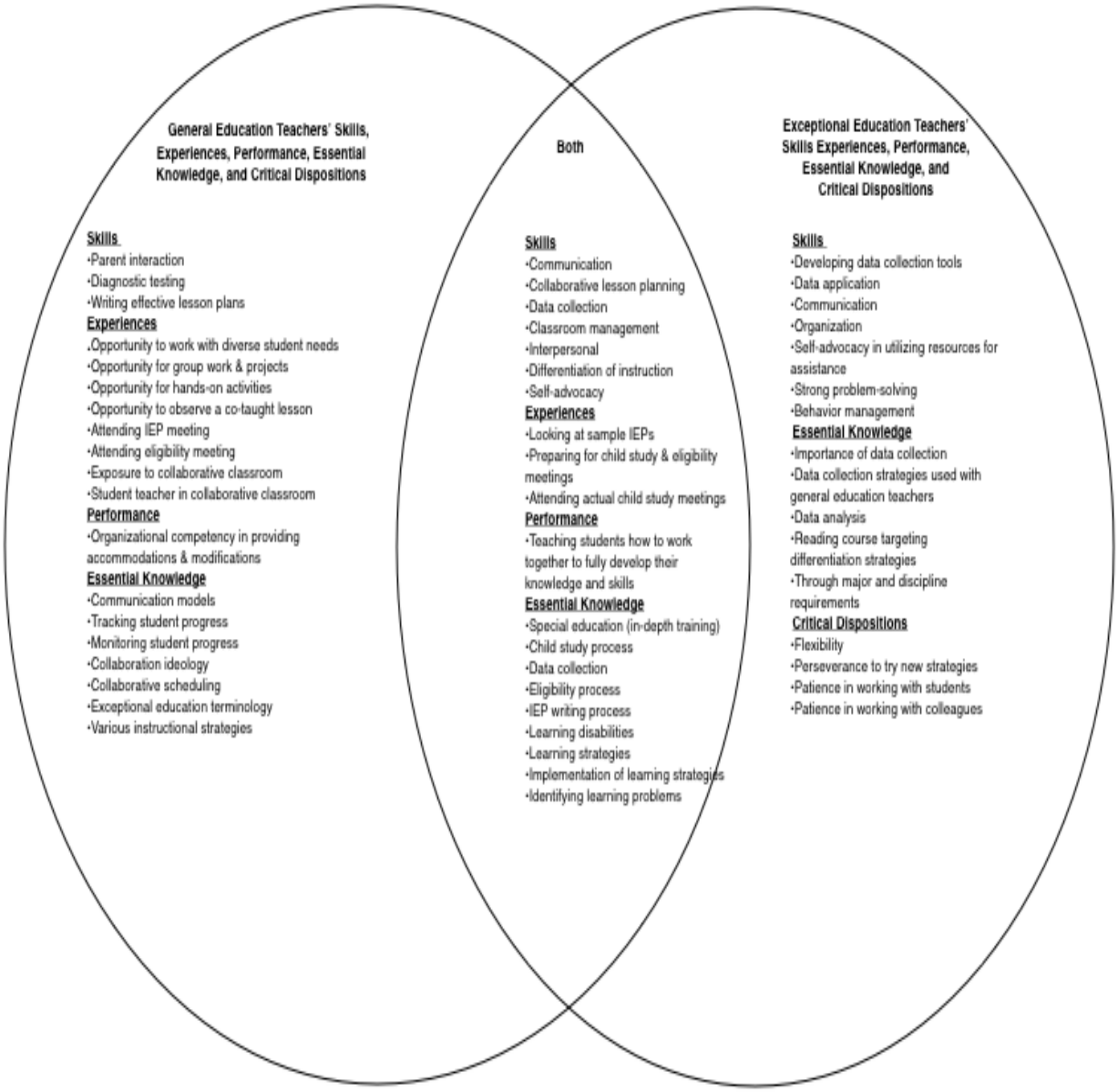
Venn Diagram Focus Group Three

Venn Diagram 3- Response Continuum for General and Exceptional Education Teachers' Perceptions of the Skill Set needed for Collaboration and Co-teaching for Focus Group Number Three

Appendix G4

Venn Diagram with Focus Group Responses from One – Three

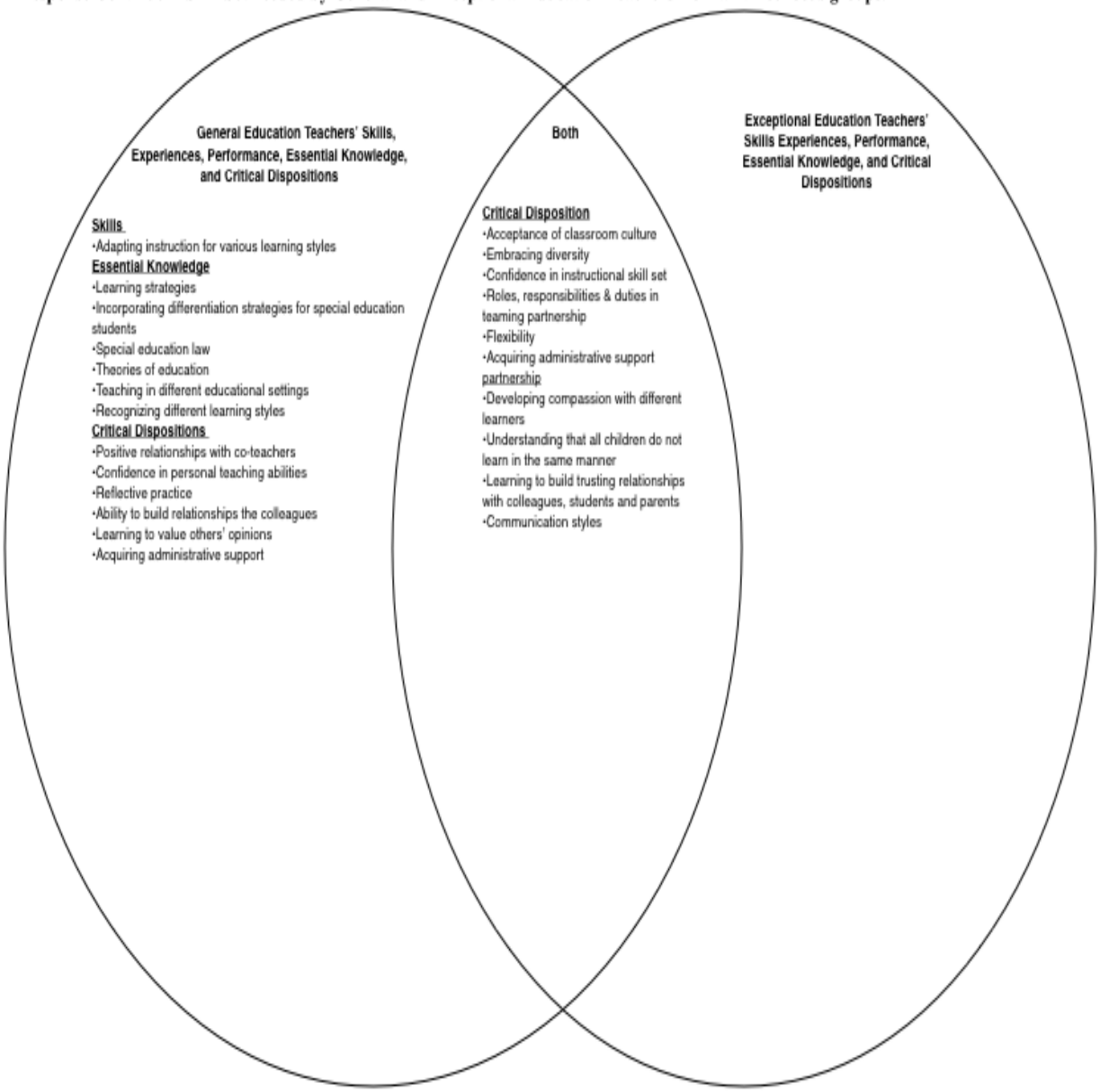
Venn Diagram 4 - Findings to support Research Question 1:
What specific skill set and experiences are perceived necessary for beginning general and exceptional education teachers to be successful in collaboration and co-teaching classrooms?
Response Continuum Skill Set needed by General and Exceptional Education Teachers from all three focus groups.



Appendix G4

Venn Diagram with Focus Group Responses from One – Three (Continued)

Venn Diagram 4 (continued)- Findings to support Research Question 1:
What specific skill set and experiences are perceived necessary for beginning general and exceptional education teachers to be successful in collaboration and co-teaching classrooms?
Response Continuum Skill Set needed by General and Exceptional Education Teachers from all three focus groups.



Appendix H

InTASC Standards Alignment

Table 8			
Alignment of General Education Teachers' Perceptions of Important Skills to InTASC Standards			
Skills	**Performance**	**Essential Knowledge**	**Critical Dispositions**
Communication	3(a),3 (c), 7(e), 9(c), 9(d), 10(a), 10(b), 10(c), 10(e), 10(f), 10(g)	7(m), 10(n)	3(q), 7(o), 10(r)
Data Collection/Diagnostic Testing	4(I) 6(c), 6(g), 6(h) , 7(d), 8(b), 9(c), 10(a), 10(b)	6(j), 6(K), 6(l), 6(p), 9(h)	6(r), 6 (u), 9(l)
Organizational Skills in providing accom	3(d), 6(h)	6(p)	6(u)
Writing effective lesson plans	7(a), 7(b), 7(c), 7(d),7(e), 7(f), 8(b), 9 (c), 10(b)	7(g), 7(h), 7(I), 7(j), 7(l)	7(n), 7(o), 9(l)
Interpersonal skills	3(a), 3(c), 9(e), 10(b), 10(e)	10(n)	3 (r), 10(r)
Differentiation	1(a), 1(b),2(a), 2(b),3(e), 4(a), 7(b), 7(f), 8(a), 8(b), 8(e), 9 (c)	1(d), 2(g), 2(h), 7(I), 7(j), 8(l), 9(h)	7(n), 8(p), 8(q), 8(s)
Self-advocacy	10(j), 10(e), 10(f)	10(o)	10(p)
Classroom management strategies & skil	3(d)		
Alignment of Exceptional Education Teachers' Percetions of Important Skills to InTASC Standards			
Skills	**Performance**	**Essential Knowledge**	**Critical Dispositions**
Behavior Management skills			
Effective IEP writing skills			
Communication	3(a), 3(c), 7(e), 9(c), 9(d), 10(a), 10(b), 10(c), 10(e), 10(f), 10(g)	7(m), 10(n)	3(q), 7(o), 10®
Data Collection, analysis, application ski	6(c), 6(g), 6(h), 6(a), 7(c), 7(d), 8(b), 9(c), 10(a)	6(j), 6(k), 6(l), 6(p), 9(h)	6(r), 6 (u), 9(l)
Lesson planning	7(a), 7(b), 7(c), 7(d), 7(e), 7(f), 8(b), 9(c), 10(b)	7(g), 7(h), 7(I), 7(j), 7(l)	7(n), 7(o), 9(l)
Differentiation	1(a), 1(b), 2(a),2 (b),3(e), 4(a), 7(b), 7(e), 7(f), 8(a), 8(b), 8(e), 9(c), 10(b)	1(d), 2(g), 2(h), 7(I), 7(j), 8(l), 9(h)	7(n), 8(p), 8(q), 8(s)
Problem-solving	9(c), 9(d)	8(l), 9(g)	
Advocacy	10(j), 10(e), 10(f)	10(o)	10(p)
Classroom management skills	3(d)		
InTASC Standards			
Standard #1: Learner Development			
Standard #2: Learning Differences			
Standard #3: Learning Environments			
Standard #4: Content Knowledge			
Standard #5: Application of Content			
Standard #6: Assessment			
Standard #7: Planning for Instruction			
Standard #8: Instructional Strategies			
Standard #9: Professional Learning & Ethical Practice			
Standard #10: Leadership & Collaboration			

Appendix I

IRB Approval Letter

VirginiaTech

Office of Research Compliance
Institutional Review Board
2000 Kraft Drive, Suite 2000 (0497)
Blacksburg, Virginia 24060
540/231-4606 Fax 540/231-0959
e-mail irb@vt.edu
Website: www.irb.vt.edu

MEMORANDUM

DATE: May 27, 2011

TO: Travis W. Twiford, Jodie Brinkmann

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires October 26, 2013)

PROTOCOL TITLE: Perceptions of Beginning General and Exceptional Education Teachers about their Preparation and Importance of Skills Associated with Collaboration and Coteaching

IRB NUMBER: 11-487

Effective May 27, 2011, the Virginia Tech IRB Chair, Dr. David M. Moore, approved the new protocol for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at http://www.irb.vt.edu/pages/responsibilities.htm (please review before the commencement of your research).

PROTOCOL INFORMATION:
Approved as: **Expedited, under 45 CFR 46.110 category(ies) 6, 7**
Protocol Approval Date: **5/27/2011**
Protocol Expiration Date: **5/26/2012**
Continuing Review Due Date*: **5/12/2012**
*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:
Per federally regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals / work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.