4-29-1996

Relationship Between General Education Teachers' Sense of Efficacy and Use of Accommodations for Students with Learning Disabilities in General Education Classrooms

Lori Andrews Jones

Longwood University

Follow this and additional works at: http://digitalcommons.longwood.edu/etd

Part of the Educational Methods Commons, and the Special Education and Teaching Commons

Recommended Citation


This Thesis is brought to you for free and open access by Digital Commons @ Longwood University. It has been accepted for inclusion in Theses, Dissertations & Honors Papers by an authorized administrator of Digital Commons @ Longwood University. For more information, please contact hinestm@longwood.edu.
Relationship Between General Education Teachers’ Sense of Efficacy and Use of Accommodations for Students with Learning Disabilities in General Education Classrooms

Lori Andrews Jones
Longwood College

This thesis was approved by:

Dr. Ruth Meese (Chair): [Signature]
Dr. Stephen Keith: [Signature]
Dr. Linda Tennison: [Signature]

Date of Approval: April 29, 1996

Running head: ACCOMMODATIONS
Abstract

One hundred and five middle school general education teachers of English, math, social studies, and science in Virginia were surveyed to determine if their reported levels of teaching efficacy and personal teaching efficacy were related to their use of accommodations for mainstreamed students with learning disabilities. A 32-item self-efficacy scale was used to assess subjects' levels of teaching efficacy and personal teaching efficacy. A 41-item survey was constructed to assess the extent to which subjects used accommodations for students with learning disabilities. Results showed a significant positive correlation between subjects' sense of personal teaching efficacy and their use of accommodations for students with learning disabilities. No significant relationship existed between subjects' levels of teaching efficacy and their use of accommodations.
Acknowledgements

I owe a debt of gratitude to my committee members, Dr. Ruth Meese, Dr. Linda Tennison, and Dr. Stephen Keith. Your contributions of time and expertise have been immeasurable, and your enthusiastic involvement has been essential to the completion of this project. A special thanks to Dr. Meese, for five years of encouragement and inspiration as a mentor.

Thank you to all of my parents. Mom and Dad, nearly twenty-three years ago you gave me the gift of life, and everyday since you have enriched that life by encouraging me to follow my dreams. Parran, many struggles along the way have been eased by your continued love and support. Mary Lou, your grammatical expertise made long nights at the computer less tiring, and your insight helped me forge through many brain blocks. To Paul and Linda Jones, thank you for much needed mountain getaways, home-cooked meals, and a taste of normalcy.

Much thanks to my sister, Holly. No one ever understood my crazed moods as much as you. Thanks for always giving me some reason to smile and for reminding me not to take life so seriously.

Finally, my sincerest thanks to Wen, my husband and my best friend. Your endless patience and understanding never ceased to amaze me. You encouraged me through the toughest of times. I thank you for wiping the tears, celebrating the accomplishments, and tolerating the craziness. I never could have made it through the challenges of this year without your support.

You have all helped to make the dream of this accomplishment a reality. Words could never adequately express my gratitude.
Contents

List of Appendices by Title
List of Tables by Title
Literature Review
  Introduction
  Accommodations Used By Educators
  General Educators Perceptions of Accommodations
  Teacher Training and Preparedness
  Efficacy
  Statement of Hypothesis
Method
  Participants
  Procedure
  Instrument
  Design
Results
Discussion
References
Appendices
Tables
Biography of Author
## ACCOMMODATIONS 5

List of Appendices by Title

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Sample Letter to School Division</td>
<td>46</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Sample Letter to Principal</td>
<td>48</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Sample Letter to Teacher</td>
<td>50</td>
</tr>
<tr>
<td>Appendix D</td>
<td>Self-Efficacy Survey</td>
<td>52</td>
</tr>
<tr>
<td>Appendix E</td>
<td>Accommodations Questionnaire</td>
<td>54</td>
</tr>
<tr>
<td>Appendix F</td>
<td>Self-Efficacy Subgroup Statements</td>
<td>57</td>
</tr>
</tbody>
</table>
List of Tables by Title

Table 1: Correlations Between Subgroup Scores on Self-Efficacy Survey 60

Table 2: Correlations Between Subgroups Scores on Self-Efficacy Survey and Scores on Accommodations Survey 61
Relationship Between General Education Teachers' Sense of Efficacy and Use of Accommodations for Students with Learning Disabilities in General Education Classrooms

In recent years there has been an enormous movement toward mainstreaming students with disabilities into regular education classrooms. Many researchers agree that, specifically, students with learning disabilities should be educated in regular education classrooms for most, if not all, of the school day. McLeskey and Pacchiano (1994) examined the trends in placement settings for students with learning disabilities following the implementation of Public Law 94-142. Results indicated a forty-three percent increase in the cumulative placement rate of students with learning disabilities in regular classroom and resource settings over the past eleven years. Data on the identification of students with learning disabilities revealed a dramatic increase as well, as fifty-two percent more students were labeled with learning disabilities and placed in regular education and resource settings in 1989 than in 1979. Further investigation suggested that the increase in the number of students with learning disabilities educated in regular education and resource settings resulted from the increase in the identification rate of such students. Nevertheless, a new initiative exists for educating students with mild disabilities in general education classrooms.

As reported by The United States Department of Education's Twelfth Annual Report to Congress on the Implementation of The Education of the Handicapped Act (1990), more than ninety percent of students with learning
disabilities are taught in regular education classrooms for some part of their
school day. The National Joint Committee on Learning Disabilities (1993)
asserted that in order to ensure the success of these students in such
classrooms, regular education teachers must provide appropriate instruction
tailored to meet the specific needs of students with learning disabilities who are
placed in their classrooms. Adequate support services, materials, and
technology should be available to both the teacher and the student. In addition,
sufficient time and support for the planning and consultation needed by
teachers to provide appropriate instruction to students with learning disabilities
is an important factor affecting the outcomes of such students.

Many concerns exist regarding the extent to which general education
teachers can and will accommodate the special needs of students with learning
disabilities. Certainly, this is a factor fundamental to the academic success of
students with learning disabilities in general education classrooms. Fewer than
half of the educators surveyed by Houck and Rogers (1994) agreed that general
educators are willing to make appropriate accommodations for students with
learning disabilities. Furthermore, findings from a study conducted by Semmel,
Abernathy, Butera, and Lesar (1991) suggested that many teachers do not
believe that their teacher training adequately prepared them to teach students
with mild disabilities effectively.

The majority of students with mild disabilities spend at least forty percent
of their school day in general education classrooms (U.S. Department of
Education, 1990). As a result, general educators have an important role in
facilitating an appropriate education for these students. The efforts of general
education teachers must foster achievement among all students, regardless of
the varied disabilities which may exist among those students. Numerous
studies have examined accommodations which may be used to assist educators in their efforts to meet the needs of students with disabilities. The success of effective inclusive education is greatly dependent upon the general educator’s employment of such accommodations in his or her teaching approach. A teacher’s expectations regarding his or her ability to effect achievement and his or her perceptions regarding the teacher’s role in the classroom are each critical factors influencing the probability of employing accommodations necessary to meet the needs of students with learning disabilities.

Accommodations Used By Educators

Numerous studies have examined a variety of accommodations used by educators to meet the needs of students with disabilities. Fuchs, Fuchs, and Bishop (1992), for example, examined teacher planning and adaptations for students with learning disabilities in the area of math at the elementary school level. The subjects were divided into three groups: general educators who used conventional monitoring methods to plan for students with learning disabilities; special educators who used conventional special education planning and adaptation strategies for students with learning disabilities; and special educators who used Curriculum-Based Measurement to plan instruction for students with learning disabilities. The focus of Curriculum-Based Measurement is the use of ongoing, systematic, and objective assessment information and decision rules to adjust student programs. Research has suggested that such methods may increase teacher adaptation and student achievement (Jones & Krouse, 1988; Wesson, 1991). Specifically, results from the study of Fuchs, Fuchs, and Bishop (1992) indicated that teachers who employed Curriculum-Based Measurement made more adaptations of their
ACCOMMODATIONS 10

instructional strategies, instructional goals, and instructional materials than teachers who used conventional methods of planning and monitoring. Such findings suggest that Curriculum-Based Measurement may assist general education teachers in adapting their programs to facilitate the achievement of students with learning disabilities in their classes.

Since a discrepancy exists between the performance levels of students with learning disabilities and the curriculum demands in content classes, it is often difficult for general education teachers to instruct students with learning disabilities in their classroom (Schumaker & Deshler, 1984, cited in Hudson, Lignugaris-Kraft, & Miller, 1993). To reduce this discrepancy, content teachers should provide instruction that “actively involves all students and enhances their understanding of key points of a lesson” (Deshler & Schumaker, 1988, cited in Hudson, Lignugaris-Kraft, & Miller, 1993, p. 106).

As stated in Hudson, Lignugaris-Kraft, and Miller’s (1993) review of related literature, an effective and efficient teaching approach that benefits all students in content classes includes three components: the use of an instructional cycle, effective teaching practices, and content enhancements. An effective instructional cycle provides a sequence for planning, implementing, and evaluating instruction. It also provides a structure for integrating effective teaching practices and content enhancement techniques in the delivery of instruction. Effective teaching practices may include checking homework, reviewing previous learning, activating prior knowledge, providing a rationale for the current lesson, stating lesson objectives, and communicating performance expectations. Providing numerous opportunities for student response and using corrective and positive feedback procedures are also effective teaching practices. “Content enhancements are techniques used by
the teacher to help students identify, organize, comprehend, and retain critical content information” (Lenz, Bulgren, & Hudson, 1990, cited in Hudson, Lignugaris-Kraft, & Miller, 1993, p. 107).

Many content enhancements that may be used by general education teachers in a variety of content areas and class settings exist. Hudson, Lignugaris-Kraft, and Miller (1993) conducted an in-depth study of research outcomes related to seven commonly used enhancements, including advance organizers, visual displays, study guides, mnemonic devices, audio recordings, computer-assisted instruction, and peer mediated instruction. The researchers described each content enhancement and examined the ability of each content enhancement to improve the performance of adolescents with learning disabilities in content classes. Hudson, Lignugaris-Kraft, and Miller (1993) found that various content enhancements may be used at different phases of the instructional cycle to improve the performance of students with learning disabilities, as well as the performance of students without learning disabilities in general education classrooms.

Advance organizers prepare students for an upcoming lesson, providing a general description of the entire lesson. An advance organizer may include information such as: tasks that are to be performed by the student and the teacher; topics, subtopics, and concepts to be presented; background information; rationale for content lesson; new vocabulary; organizational framework for the lesson; and desired student outcomes (Lenz, Alley, & Schumaker, 1987). Results from a study conducted by Darch and Gersten (1986, cited in Hudson, Lignugaris-Kraft, & Miller, 1993) suggested that advance organizers designed for specific instructional purposes (e.g., outlines used to preteach essential content facts, concepts, and vocabulary) were more
beneficial to students than less structured, discussion-oriented activities which may precede a lesson.

Visual displays highlight important information for students during the presentation and guided practice phase of instruction. They may also be used to assist students during independent practice sessions. Four formats of visual displays are commonly used. A hierarchical or central display focuses on a main topic from which all other information flows. A comparative display illustrates a relationship between at least two concepts that are compared or contrasted. A representative display includes diagrams, pictures, or models that illustrate relationships among objects, and a directional display illustrates sequential relationships. Hudson, Lignugaris-Kraft, and Miller (1993) reviewed eight studies investigating the effectiveness of various visual displays. Included in their review were three experiments measuring performance levels of students whose instruction was enhanced by hierarchical visual displays. Each experiment, conducted by Horton, Lovitt, and Bergerud (1990), involved three middle school science classes, three middle school social studies classes, and three high school social studies classes. Results from each of the three experiments indicated significantly higher mean performance among students with disabilities, as well as students without disabilities, when a visual display was used in conjunction with instruction. Similarly, in a study conducted by Crank (1991, cited in Hudson, Lignugaris-Kraft, & Miller, 1993) involving twenty-four students with learning disabilities and twenty-seven students without learning disabilities in two high school social studies classes, all students scored significantly higher on quizzes following instruction when hierarchical and comparative displays were used during lectures. Overall, results from each of the eight studies suggest that visual displays effectively enhance content.
learning during several phases of instruction in a variety of classes (Hudson, Lignugaris-Kraft, & Miller, 1993).

As defined by Hudson, Lignugaris-Kraft, and Miller (1993), “a study guide is a set of statements or questions that emphasize important content information” (p. 114). Formats of study guides include short answer questions, framed outlines, and matching. The researchers reviewed five studies in which study guides were used to enhance lectures and reading passages for students with and without learning disabilities in middle school and high school science and social studies classes. Results from these studies indicated that study guides, when used to enhance lecture presentations and independent reading assignments, significantly improved the performance of all students, especially those with learning disabilities (Hudson, Lignugaris-Kraft, & Miller, 1993).

Further studies reviewed by Hudson, Lignugaris-Kraft, and Miller (1993) found that the use of mnemonic devices improved test performance for students with learning disabilities and students without learning disabilities. Mnemonic devices are verbal or pictorial techniques integrated into the instructional cycle. These devices make unfamiliar information easier to remember, thus they foster the acquisition and recall of content material. Mnemonic devices include first-letter, key word, pegword, mimetic, and symbolic mnemonics. When compared to traditional instruction, the performance of students with learning disabilities significantly favored instruction using mnemonic devices (Hudson, Lignugaris-Kraft, & Miller, 1993).

Students with learning disabilities may also benefit from the use of audio recordings. Independent reading assignments are often the main source of new content information for secondary students (Schumaker, Deshler, & Denton, 1984, cited in Hudson, Lignugaris-Kraft, & Miller, 1993). Such
assignments can be enhanced by the use of audio recording in order to assist low-achieving students. Text material may be recorded word for word or it may be paraphrased to emphasize important information. Two studies conducted by Torgesen, Dahlem, and Greenstein (1987) found that comprehension levels of students with learning disabilities increased significantly when audio tapes were used in conjunction with textbooks. The researchers found that students with learning disabilities performed nearly twelve percent higher on comprehension quizzes when they listened to verbatim audiotapes after reading the textbook than they did when the textbook was the only medium used. Although such findings are encouraging, there has been little research on the use of supplemental audiotapes by secondary-level students with learning disabilities (Hudson, Lignugaris-Kraft, & Miller, 1993).

Computer-assisted instruction is an enhancement which may be used in content classes during the presentation of new information or the review of previously learned information. Two formats of computer-assisted instruction are tutorials and simulations (Hudson, Lignugaris-Kraft, & Miller, 1993). Tutorials are used to present new information or monitor students' use of new information (Lewis & Doorlag, 1991, cited in Hudson, Lignugaris-Kraft, & Miller, 1993). Simulations provide opportunities for review and application of facts and concepts previously learned. As stated by Malouf, Jamison, Kercher, & Carlucci (1991, cited in Hudson, Lignugaris-Kraft, & Miller, 1993), research suggests few computer programs, such as tutorials, are "adequately designed to independently teach new content information to students with learning disabilities" (p. 121). Hudson, Lignugaris-Kraft, and Miller (1993) concluded that "computers may be more efficient learning tools when used in other phases of the learning cycle or with more direct teacher involvement and student
monitoring" (p. 121). Woodward, Carnine, and Gersten (1988, cited in Hudson, Lignugaris-Kraft, & Miller, 1993) concluded that computer simulation, when used in conjunction with teacher-directed instruction, is "an effective means for reviewing content information and for applying content information to problem-solving activities" (p. 122). These researchers found that computer simulation, when used to reinforce specific test items, resulted in significantly higher test performance on those items than on test items not reinforced by computer simulation. Although research varies, it is apparent that some use of computer-assisted instruction during different phases of the learning cycle may improve the comprehension and performance of students with learning disabilities in content classes (Hudson, Lignugaris-Kraft, & Miller, 1993).

Peer-mediated strategies are the final enhancement researched by Hudson, Lignugaris-Kraft, and Miller (1993). As defined by Lloyd, Crowely, Kohler, and Strain (1988, cited in Hudson, Lignugaris-Kraft, & Miller, 1993) "peer-mediated strategies are systematic methods in which peers are used as instructional agents for their classmates" (p. 122). Peer-tutoring and cooperative learning are peer-mediated strategies used during content-area instruction. Peer-tutoring formats researched include cross-age peer tutoring, during which older students tutor younger students, and classwide peer tutoring, during which students in the same class tutor each other (Hudson, Lignugaris-Kraft, & Miller, 1993). Cooperative-learning formats include many different instructional arrangements which typically form small groups of students who work together towards mastery of content information (Slavin, 1983, cited in Hudson, Lignugaris-Kraft, & Miller, 1993). Peer-mediated strategies, such as peer-tutoring and cooperative-learning, are commonly used during the independent practice phase of instruction to increase proficiency with
content information or to provide opportunities for application of content information (Hudson, Lignugaris-Kraft, & Miller, 1993). A study conducted by Maheady, Sacca, and Harper (1988) concluded that student performance during class-wide peer-tutoring conditions exceeded performance during individual conditions. Research also found that cross-age peer tutoring may affect school attendance and discipline for some students with mild learning disabilities (Lazerson, Foster, Brown, & Hummel, 1988; Maher, 1984, cited in Hudson, Lignugaris-Kraft, & Miller, 1993). Furthermore, studies of cooperative learning suggested an increased amount of academic and social interactions between students with learning disabilities and students without learning disabilities during and after cooperative learning situations (Salend & Washin, 1988). Hudson, Lignugaris-Kraft, and Miller's (1993) review of research suggested that peer-mediated strategies not only facilitate comprehension and mastery of content information, but also "impact how students with learning disabilities interact with their peers and with school authorities" (p. 122).

To foster academic achievement of students with disabilities, modifications of general classroom settings are often necessary. Students with disabilities may benefit from specialized seating arrangements. "The arrangement of seats and the assignment of students to those seats contribute to student attention and participation" (O'Connor, 1988, cited in Meese, 1994, p. 77). Seating a student with learning disabilities near the chalk board or near the teacher's desk may be more appropriate than allowing him or her to sit by a window or a door. Depending on the individual needs of the student, specialized seating arrangements may stimulate responding and discourage distractibility (Patton, Payne, Payne, & Polloway, 1989). In addition, room dividers or study carrels can be employed to minimize the distraction of various
classroom activities. Two main purposes for use of study carrels and room dividers are to limit outside stimuli and to provide a specific place for concentrated study (Patton, Payne, Payne, & Polloway, 1989). Students with disabilities may benefit from such accommodations, especially when independent work is necessary.

Use of modifications in testing are often necessary to meet the needs of students with learning disabilities. Mercer and Mercer (1993, cited in Dettmer, Dyck, & Thurston, 1996) discussed many possible modifications. One such modification was the use of alternate forms of tests, including multiple choice, matching, short-answer, and essay. In addition, modification of test presentation was also suggested. For example, students' needs may require that a test be given orally or that key words in the directions or questions be highlighted. Students with learning disabilities may also need additional time to complete tests. Alternative test construction and administration may include giving practice tests or frequent mini-tests (Dettmer, Dyck, & Thurston, 1996).

General Educators' Perceptions of Accommodations

Although a number of professionals believe that students with learning disabilities would be better served in general education classrooms, many question the adequacy of general education teachers' skills for making needed instructional adaptations for these students (Houck & Rogers, 1994). Adaptation of instruction is a pivotal factor influencing the outcomes of students with learning disabilities who are educated in general education classrooms. Fuchs, Fuchs, and Bishop (1992) stated that "adaptation is the process of modifying the instructional environment to address the diversity found within general education" (p. 120). Data from an investigation designed to determine the extent to which general education teachers make accommodations and
adaptations for students with disabilities suggested that students with disabilities were treated much like their general education peers (McIntosh, Vaughn, Schumm, Haager, & Lee, 1993). Minimal differences are apparent in seating arrangements, assignments, and materials between the two groups. In a preceding study, secondary level general education teachers reported very few differences between their planning for students with learning disabilities and their planning for students without learning disabilities (Schumm & Vaughn, 1992). In addition, this study revealed that those educators felt significantly less prepared to plan for students with disabilities in their classes than for other students. Schumm and Vaughn (1991) also conducted a study to determine general education teachers' perceptions regarding the feasibility of adaptations made in the classroom. Although instructional procedures such as the use of encouragement and the involvement of the student in whole class activities were considered feasible by many respondents, the feasibility of adaptations such as the modification of materials, use of alternative materials, and provision of individualized instruction were rated much lower. Such findings suggest that instruction in the general education classroom is often no different for students with learning disabilities than it is for students without learning disabilities (McIntosh et al., 1993). As a result, great concern exists regarding whether the delivery of instruction in general education classrooms meets the needs of students with disabilities.

Recently, Vaughn and Schumm (1994) conducted a year-long case study which examined the planning of three middle school general education teachers for their students with disabilities. The purpose of this study was to understand how general education teachers plan for and instruct students with special needs. Results indicated that general education teachers are not likely
to make adaptations to meet the special needs of students with learning
disabilities. Furthermore, the subjects agreed that students who are
mainstreamed into general education classrooms should be required to meet
the same expectations set by the teacher for all other students in the classroom.
This view was held with the assumption that such a criteria would better prepare
students with disabilities for the “real world.” Research has suggested that
general educators plan instruction to meet the needs of the class as a whole,
not to meet the specific needs of individual students in the class (Schumm &

Ellett (1993) conducted a study investigating regular education teachers’
opinions concerning the reasonability of various instructional strategies and
adaptations used to meet the needs of students with disabilities in general
education classrooms. Included in this study was a survey of teachers’
perceptions of the student skills and behaviors most relevant to classroom
success. Student study skills were considered the most important determinant
of one’s success in the classroom; however, teaching such skills and providing
a positive, cooperative learning environment were adaptations which teachers
identified as least feasible. A willingness to provide students with support and
extra instructional cues did exist among the teachers. In addition, teachers
were willing to enhance classroom behavior management procedures, simplify
instruction, and use supplemental resources. They considered adaptations
requiring the modification of the learning environment and the facilitation of
grade improvement to be less feasible. The researcher concluded that
secondary general education teachers are willing to make adaptations for
students with specific learning needs in their classroom; however, the
adaptations must be reasonable, quickly and easily accomplished, and applicable, as well as beneficial, to all students in the class.

**Teacher Training and Preparedness**

Special education teachers may assist regular education teachers in devising alternative teaching strategies which are both reasonable for the general education teacher and beneficial to the student with learning disabilities. As indicated in Vaughn and Shumm's (1994) review of related literature, many studies have examined the communication and collaboration between special education teachers and general education teachers. Such collaboration is critical to the success of students with disabilities served in general education classrooms. Lack of inservice training facilitating the collaboration and communication between general education and special education teachers has been cited as a major restriction in providing adequate service delivery to students with disabilities in general education classrooms (Voltz, Elliott, & Cobb, 1994).

Teacher preparedness contributes significantly to a regular education teacher's ability to serve students with disabilities in his or her classroom. Results of a study conducted by Kearney and Durand (1992) suggested that post secondary schools of education did not adequately prepare general education teachers for working with students with disabilities. The standards set forth by the National Council for Accreditation of Teacher Education (NCATE) state that student teaching experiences should include participation with "culturally diverse and exceptional populations" (NCATE, 1990, p.49). In addition, teacher preparation programs must provide "knowledge about and appropriate skills in...instructional strategies for exceptionalities" (p. 48).
Stainback and Stainback (1987) stated that prospective general education and special education teachers should have experiences collaborating with one another in classes and practicum experiences prior to their completion of post secondary teacher education training programs. Such integration fosters future collaboration as professionals, thus enabling educators to meet the needs of students with disabilities. After analyzing results from their study on teacher preparation for mainstreamed classroom settings, Kearney and Durand (1992) recommended that post secondary schools of education require general education teacher trainees to complete more course work and practical experiences relevant to maintaining successful integrated classrooms. In reviewing related literature, Kearney and Durand (1992) found that only fifteen states have certification requirements specific to preparing regular education teachers to work with students with disabilities. In addition, only twenty-one state education agencies required at least one course on exceptionalities. In addition to preparation received in post secondary teacher education programs, strategies to improve general education teachers' ability to serve students with special needs should be offered through professional development programs such as inservice trainings.

Recently, research indicated that inservice training is essential to the successful implementation of inclusive educational programs (Baker & Zigmond, 1990). In a study conducted by Schumm and Vaughn (1992), over seventy-five percent of the teachers surveyed were willing to participate in in-service programs or workshops in order to improve their ability to work with mainstreamed students with disabilities. This survey also investigated elementary, middle, and high school level general educators' perceptions and planning procedures for teaching students with disabilities in general education.
classrooms. Although nearly all teachers involved in the study rated their knowledge and ability for planning for general education students as excellent or good, only thirty-nine percent believed their skills regarding students with disabilities to be excellent or good.

Researchers examining the collaborative teacher roles of general and special education teachers cited lack of inservice training as a moderate to major constraint on the performance of such teachers (Voltz, Elliott, & Cobb, 1994). In light of the move toward wide-spread inclusion of students with disabilities in regular education classrooms, many researchers agree that it is imperative that regular education teachers be educated in areas of special education. Such education should be introduced in post secondary teacher training programs prior to employment as a general education teacher and supported by inservice training programs during employment (Cannon, Idol, & West, 1992). Adequate post secondary teacher training programs and inservice staff development programs can increase regular education teachers' competence to serve the needs of students with learning disabilities in the general education classroom.

**Efficacy**

Teachers' beliefs regarding their competence in teaching, and their perceptions regarding their students' abilities to learn affect student achievement (McDaniel & McCarthy, 1989). The academic success of students with learning disabilities educated in mainstreamed classrooms is influenced by teacher expectancies and role definitions (Brophy, 1979). These two elements form the construct of a teacher's sense of efficacy. Bandura (1977) introduced self-efficacy as a two-component concept including general outcome expectancy and a sense of self-efficacy. The former is a belief that actions will
lead to desired outcomes, and the latter is a belief that one has the skills to bring about these outcomes (McDaniel & McCarthy, 1989).

The Rand Corporation conducted two studies which applied Bandura's concepts to teaching. In each study (Armor et al., 1976; Berman, McLaughlin, Bass, Pauly, & Zellman, 1977), teachers' sense of efficacy was defined as "the extent to which the teacher believed he or she had the capacity to affect student performance" (p. 136). The first study revealed that teachers' sense of efficacy "was strongly and significantly related to increases in reading [achievement]" (Armor et al., 1976, cited in Ashton & Webb, 1986). The second study concluded that teachers' attitudes about their professional competence greatly affected learning outcomes (Berman, McLaughlin, Bass, Pauly, & Zellman, 1977, cited in Ashton & Webb, 1986). In their research, Ashton and Webb (1986) found that teachers' scores on the two Rand items used to measure teachers' sense of efficacy were not significantly correlated. One item corresponded "to an outcome expectation of the efficacy of teaching" (p. 8). The other item referred "to the teachers' specific assessment of personal competence" (p. 8). After considering these differences, Ashton and Webb (1986) asserted that teachers' sense of efficacy involves two independent dimensions: sense of teaching efficacy and sense of personal teaching efficacy. A teacher's sense of teaching efficacy involves the expectation that teaching can affect student performance. Teachers with a low sense of teaching efficacy "believe that some students cannot and will not learn in school and that there is nothing a teacher can do to alter this unhappy reality" (p. 4). Teachers with high levels of teaching efficacy believe all students are capable of learning. Sense of personal teaching efficacy refers to one's belief about his or her own teaching abilities. Teachers with a low sense of personal teaching
efficacy doubt their abilities as teachers, while teachers with a high sense of personal teaching efficacy are confident of their abilities to teach students. Teacher motivation and effort, teacher-student interactions, and student achievement are each influenced by these beliefs (DiBella-McCarthy, McDaniel, & Miller, 1995).

The distinction between teaching efficacy and personal teaching efficacy is important. In their research on learned helplessness, Abramson, Seligman, and Teasdale (1978) defined universal helplessness and personal helplessness. Universal helplessness involves situations in which an individual believes that neither he or she nor anyone else can solve a particular problem. Personal helplessness involves situations in which an individual believes that he or she cannot personally solve a solvable problem (Abramson, Seligman, & Teasdale, 1978). Ashton and Webb (1986) used these concepts to distinguish between a low sense of teaching efficacy and a low sense of personal teaching efficacy. They suggested that teachers with a low sense of teaching efficacy were likely to experience universal helplessness. As a result, these teachers found it difficult to believe that they, or any other teacher, would have an effect on the performance of low-achieving students (Ashton & Webb, 1986). Since teachers with low levels of teaching efficacy are apt to believe some students are beyond anyone’s reach, they are not likely to extend extra effort on their behalf. They expect such students to perform poorly, and, when their expectations are met, these teachers are unlikely to feel responsible for the students’ failures.

Teachers with low levels of personal teaching efficacy are likely to experience personal helplessness. Such teachers believe that low-achieving students are able to learn; however, they doubt their personal ability to foster
that learning. Unlike a teacher with a low sense of teaching efficacy, a teacher with a low sense of personal teaching efficacy shares the blame for student failure. As a result, teachers with low levels of personal teaching efficacy are apt to experience high levels of stress, guilt, depression, and/or shame when their students do not succeed (Ashton & Webb, 1986).

"Judgments of self-efficacy determine how much effort people will expend and how long they will persist in the face of obstacles or aversive experiences" (Bandura, 1982, p.123). A teacher with a low sense of efficacy, specifically teaching efficacy, may view a student's learning disability as an obstacle. A teacher with a high sense of teaching efficacy, however, is likely to view a student's learning disability as a challenge, inspiring the teacher to work harder to meet the needs of that student (DiBella-McCarthy, McDaniel, & Miller, 1995). If an individual seriously doubts his or her capabilities, his or her efforts to succeed may diminish, or the individual may give up all together. One who has a strong sense of efficacy, however, will exert greater effort to master the challenges (Bandura, 1982). A general education teacher may be optimistic about a student's ability to learn; however, if he is she is doubtful of his or her competence as a teacher, it is difficult to foster that learning.

Students with learning disabilities often need specialized instructional techniques and materials. If a general education teacher has unrealistic expectations for the instructional programs he or she implements, the potential for failure among students with learning disabilities in that teacher's classroom is high. As a result, a teacher's sense of efficacy may be minimized when a student does not meet the teacher's expectations (McDaniel & McCarthy, 1989).
Statement of Hypothesis

As hypothesized by Bandura (1977), a person's behavior is influenced by his or her sense of self-efficacy. Bandura (1982) explained that "people can give up trying because they lack a sense of efficacy in achieving the required behavior, or they may be assured of their capabilities but give up trying because they expect their behavior to have no effect on an unresponsive environment" (p. 125). Research suggests that a teacher's beliefs regarding his or her preparation and ability to serve students with disabilities influence his or her instructional practices. Considering these implications, a regular education teacher's sense of efficacy could greatly impact his or her tendency to make accommodations for students with learning disabilities in general education classes. Research has also suggested that student achievement is affected by teacher expectations (Dembo & Gibson, 1985). Teachers' low expectations of their students' ability to learn contribute to a low sense of teacher efficacy and result in a decreased effort to teach the students they believe to have low ability (Ashton & Webb, 1986). Ashton and Webb (1986) assert that "teachers' expectations about students' ability are the single most influential student characteristic affecting their behavior" (p. 14). One's belief that students can be taught (teaching efficacy) and one's personal assessment of his or her own ability to teach a student (personal teaching efficacy) influence teachers' behavior in specific teaching situations (Ashton & Webb, 1986).

Therefore, it is hypothesized that general education teachers with high levels of self-efficacy, including teaching efficacy and personal teaching efficacy, provide more accommodations for students with learning disabilities in their classrooms than do general education teachers with low levels of self-efficacy. The purpose of this study is to discern whether or not a relationship
exists between a general education teacher's sense of self-efficacy and his or her tendency to make appropriate accommodations for students with learning disabilities in the classroom.
Method

Participants

Subjects were obtained from middle schools serving students in grades six through eight in thirteen school divisions in the state of Virginia. The selection of middle school general education teachers was restricted to those individuals with instructional assignments in English, math, social studies, and science. Only subjects with at least one year of teaching experience were considered in this study. In addition, each teacher must have had at least one student with an identified learning disability included in his or her classroom for at least one period of instruction this year. The sample consisted of one hundred and five general education teachers from the four instructional areas.

Procedure

In January of 1996, fifteen percent of the school divisions in the state of Virginia were randomly selected using the Virginia Education Directory. Permission to involve each school division in the study was requested from the superintendent of each of the twenty school divisions randomly selected. Permission was granted in thirteen of the twenty school divisions selected. As a result, ten percent of the school divisions in the state of Virginia participated in this study. Once this permission was granted, an appropriate number of packets was mailed to the principal at each middle school involved. Each packet included a cover letter explaining the purpose of the investigation and assuring complete anonymity of those involved, two instruments, and a stamped, addressed response envelope. The principal was asked to forward the packets to general education teachers of each of the four previously identified instructional areas at the sixth, seventh, and eighth grade levels.
All those involved were assured of confidentiality and complete anonymity, as neither instrument included the names of school divisions, schools, administrators, or teachers. Having provided addressed, stamped envelopes allowed each participant to return the questionnaires directly to the researcher. Participation in this study was voluntary, and all participants were fully informed of their right to refuse participation.

Subjects were given four weeks to respond to the initial mailing. To maximize participation, a follow-up letter was then sent to the school divisions involved to further encourage those who did not respond.

**Instrument**

Each teacher's sense of self-efficacy was reported by use of a self-efficacy survey developed by McCarthy, McDaniel, and Miller (1995). This survey included thirty-two statements regarding one's personal beliefs and capabilities as a teacher. The survey was in the format of a 5-point Likert scale, asking the subject to respond to the series of statements by indicating the extent to which he or she agreed or disagreed with each statement. Responses included five possible ratings: strongly disagree (1); disagree (2); neutral (3); agree (4); strongly agree (5). For scoring purposes, the statements were divided into four subgroups (A, B, C, and D). The subgroup statements were randomly arranged on the survey for the purpose of being inconspicuous to the respondents. Statements in subgroups A and C measured levels of teaching efficacy, and statements in subgroups B and D measured levels of personal teaching efficacy. Each response was associated with a point value, and four scores were determined by summing the point values for each statement in the four designated subgroups. In the original development of this instrument, fifty
practicing teachers who were enrolled in graduate classes at a university completed the survey, offering suggestions for improvement in clarity and scoring. The self-efficacy survey was then revised using the feedback and suggestions provided by this group.

A two-part questionnaire was also used to gather demographic information from each subject and to determine what instructional strategies were used by each teacher to accommodate students with learning disabilities in his or her classes. This questionnaire was an adaptation of one developed by Ellett (1993) asking teachers to rate accommodations they would be most willing to use with students with learning disabilities in their classroom. In the first part of the questionnaire, subjects were asked to give background information including teaching experience, average number of students identified with learning disabilities in their classes, post secondary education, inservices offered by their school, etc. The second part of the questionnaire employed a 5-point Likert scale to determine the extent to which the subjects used different accommodations for students with learning disabilities in their classrooms. Instructional accommodations included in this survey were taken from a review of the literature. Five ranking possibilities were used: never (1); seldom (2); occasionally (3); frequently (4); always (5). Each response was associated with a point value. A single score for each subject was determined by the summing of point values for each statement. Graduate students working toward a Master's degree in special education and general education teachers were asked to judge the appropriateness and comprehensiveness of this questionnaire. Their recommendations subsequently guided the modification of form and content.
Design

A correlational design was used in this study. Four scores from the self-efficacy survey were obtained for each subject. Each of the four self-efficacy scores was correlated with the single score obtained for each subject for Part II of the accommodations questionnaire. The resulting correlation coefficients indicated the degree of relationship between a subject's sense of self-efficacy, specifically teaching efficacy and personal teaching efficacy, and the extent to which he or she used accommodations for students with learning disabilities in the classroom. In addition, the four subscores from the self-efficacy scale were correlated for the purpose of further validating the self-efficacy survey. Split-half reliability was estimated for the two independent measures of the survey. The resulting reliability coefficient was then corrected, using the Spearman-Brown prophecy formula, to determine the internal consistency reliability for the entire measure of each construct. Descriptive statistics were reported for the demographic section of the accommodations questionnaire.
Results

Of the 192 surveys sent, 118 were returned to the researcher, resulting in a 61% response rate. Prior to data analysis, the researcher eliminated eight questionnaires received from teachers who did not instruct students with learning disabilities and two questionnaires received from teachers with less than one year of teaching experience. In addition, three incomplete questionnaires were eliminated. Of the 118 surveys returned, 105 (55% of the total number mailed) were considered in data analysis.

Of the respondents, 75% (n=79) were female and 25% (n=26) were male. Thirty-seven percent (n=39) of the respondents had earned a Master of Science or Master of Arts degree. Forty-eight percent (n=50) had earned a Bachelor of Science or Bachelor of Arts degree. The group mean for years of teaching experience was 15.5 (SD=9.4), and respondents had a mean of 8 (SD=6.28) students with learning disabilities mainstreamed into their classes this academic year. Respondents reported a mean of six (SD=5.31) inservices offered annually at their schools. Of those inservices, respondents reported a mean of one (SD=1.27) inservice pertaining to serving students with disabilities in the mainstream. Seventy-seven percent (n=81) of the teachers surveyed reported that they did feel adequately prepared to meet the needs of their students. Thirteen percent (n=14) said they did not feel adequately prepared to meet such needs, and 10% (n=10) said they sometimes felt prepared to meet the needs of their students.

Each subject received five independent scores, one for the accommodations questionnaire and four for the self-efficacy survey. Prior to data analysis, each of the subjects' five scores was averaged to account for subjects who unexplainably left some statements unanswered. The mean
scores of each subject were then used during data analysis. Possible scores on the accommodations questionnaire ranged from 41 to 205. Possible scores for each of the four subgroups of the self-efficacy survey ranged from 8 to 40.

Data were analyzed using a Pearson r correlation. As shown in Table 1, results indicated a significant relationship (r=.28, p< .01) between teachers' scores on subgroup D of the self-efficacy survey and their scores on the accommodations questionnaire. Although results showed a positive correlation between teachers' levels of personal teaching efficacy, as measured by subgroup D, and their use of accommodations for students with learning disabilities in their classes, the relationship was weak. The common variance between the two scores was 7%, so the variability of one set of scores had little to do with the variability of the other set of scores.

No significant relationship existed between scores measuring teachers' levels of teaching efficacy (subgroups A and C) and scores measuring their use of accommodations for students with learning disabilities in their classes. Furthermore, no significant relationship existed between teachers' scores on subgroup B, which measured teachers' levels of personal teaching efficacy, and their scores on the accommodations questionnaire. A strong negative correlation between scores on subgroups C and B (indicating levels of teaching efficacy and personal teaching efficacy, respectively) and scores on the accommodations questionnaire was expected. In addition, a strong positive correlation between scores on subgroup A and scores on the accommodations questionnaire was expected. Although correlations between subjects' scores on subgroups A, B, and C of the self-efficacy survey and scores on the accommodations questionnaire were insignificant, they did move in the direction predicted.
For further validation of the self-efficacy survey, scores received on each of the four subgroups of the survey were correlated. As illustrated in Table 2, data analysis showed significant relationships between all subgroups. A moderate positive correlation \( r = .385, p < .001 \) existed between scores on subgroups A and D. This was expected as statements in these subgroups were congruent with the beliefs of one with high levels of teaching efficacy and high levels of personal teaching efficacy. A moderate positive correlation \( r = .582, p < .001 \) also existed between scores on subgroups B and C. This was expected as statements in these subgroups were congruent with the beliefs of one with low levels of teaching efficacy and low levels of personal teaching efficacy. Analysis also showed a negative correlation \( r = -.285, p < .01 \) between scores on subgroup A and scores on subgroup B and a negative correlation \( r = - .405, p < .001 \) between scores on subgroup A and scores on subgroup C. Furthermore, scores on subgroups D and B were negatively correlated \( r = .403, p < .001 \), and scores on subgroups C and D were negatively correlated \( r = -.35, p < .001 \). To determine the split-half reliability of the survey’s measure of teaching efficacy and personal teaching efficacy, the Spearman-Brown prophecy formula was applied to coefficients resulting from the correlation of subgroups A and C and subgroups D and B. After applying the Spearman-Brown correction formula, the estimate of split-half reliability between subgroups A and C, measuring teaching efficacy, was .577. The estimate of split-half reliability between subgroups D and B, measuring personal teaching efficacy, was .574. The split-half reliability coefficients indicated moderate internal consistency reliability for the two measures of the self-efficacy survey.
Discussion

Results demonstrated that general education teachers' use of accommodations for students with learning disabilities was significantly related to their levels of personal teaching efficacy. As explained by Ashton and Webb (1986) a sense of personal teaching efficacy refers to one's belief about his or her own teaching abilities. Results from the present investigation showed that teachers with high levels of personal teaching efficacy were more apt to use accommodations for students with learning disabilities mainstreamed in their classes, and those with low levels of personal teaching efficacy were less apt to use accommodations for such students. Teachers with high levels of personal teaching efficacy reported confidence in their abilities as teachers. Specifically, they believed that they were adept at behavior management and handling discipline. They also reported confidence in their knowledge of subject matter. In addition, teachers with high levels of personal teaching efficacy agreed that student progress was a reflection on one's teaching, and they believed that they were making a difference in the lives of their students. This supports Ashton and Webb's (1986) assertion that "teachers' perceptions of their own teaching abilities influence their choice of classroom management and instructional strategies" (p. 4).

Results also demonstrated that general education teachers' use of accommodations for students with learning disabilities was not related to their levels of teaching efficacy. As explained by Ashton and Webb (1986), a teacher's sense of teaching efficacy involves the expectation that teaching and teachers can affect student performance. Despite Ashton and Webb's (1986) assertion that teachers with low levels of teaching efficacy were unlikely to
extend an extra effort to teach low-achieving students, no such relationship was found in this study.

The presence of a significant relationship between teachers' use of accommodations for students with learning disabilities in general education classes and only one of the two subgroups indicating levels of personal teaching efficacy was one of the inconsistencies found after data analysis. Subgroups D and B of the self-efficacy survey were each designated by the developers, McCarthy, McDaniel, and Miller (1995), as measures of personal teaching efficacy. Essentially, statements from these two subgroups related to the same ideas: confidence in teaching and ability to make a difference in students' lives; knowledge of subject matter; ability to overcome student disabilities. The way in which the items were stated differed in that those on subgroup D were stated positively while those on subgroup B were stated negatively. Because subgroups D and B were designed to measure the same construct, one would expect a significant relationship to exist between scores on subgroup B and scores on the accommodations questionnaire, since a significant relationship existed between scores on subgroup D and the accommodations questionnaire. However, for an unknown reason, this was not so.

Furthermore, gross inconsistencies existed in scoring the self-efficacy survey. Teaching efficacy was measured by scores from subgroups A and C. Ninety percent of the subjects had scores indicating high levels of teaching efficacy on subgroup A. Of that ninety percent, however, only thirty-seven percent had scores indicating high levels of teaching efficacy on subgroup C. Only forty-two percent of the subjects had scores indicating high levels of teaching efficacy on both subgroups. Six percent of the subjects had scores
indicating low levels of efficacy on subgroups A and C. Of the 105 subjects involved in this study, fifty-two percent had contradicting scores, indicating high levels of teaching efficacy on one subgroup and low levels of teaching efficacy on the other subgroup.

In addition, ninety-nine percent of the subjects' scores on subgroup D indicated high levels of personal teaching efficacy. Of that ninety-nine percent, however, forty-seven percent had scores on subgroup B indicating low levels of personal teaching efficacy. Fifty-two percent of the subjects received scores indicating high levels of personal teaching efficacy on both subgroups D and B. No subject received scores indicating low levels of personal teaching efficacy on both subgroups D and B. Forty-eight percent of the subjects involved in this study had scores indicating high levels of personal teaching efficacy on one subgroup and low levels of personal teaching efficacy on the other subgroup.

Since data analysis indicated a negative correlation between scores on subgroups A and C and a negative correlation between scores on subgroups D and B, such findings were surprising. One would expect that if subjects had high scores on subgroups A and D, then they would have low scores on subgroups C and B. This was not always the case, as 38% of the subjects involved in this study received high scores on each of the four subgroups.

Finally, the research in this study was subject to several limitations. One limitation involves the inconsistencies that existed among subjects' scores on the self-efficacy survey. Although the self-efficacy survey was field tested among more than fifty practicing teachers, no further data on reliability and validity were available. In addition, data regarding the reliability and validity of the accommodations questionnaire were also insufficient. Furthermore, despite a sixty-two percent response rate, the sample size (N=105) was relatively small.
with respect to the population. In addition, the sample consisted only of middle school teachers from rural school divisions. The use of accommodations by these teachers may have been limited since some accommodations (i.e. computers, room dividers, etc.) were not available in these school divisions. Furthermore, nearly forty percent of the subjects left at least one item unanswered on one or both of the surveys. Although a mean score was established for each of the subjects' five scores to compensate for this, results were slightly affected. Finally, this study did not involve observations or interviews to gain information supporting the responses of each subject. Therefore, one must consider the lack of knowledge concerning subjects honesty and accuracy in responding as a limitation.

Many implications for further research exist. It would be interesting to investigate elementary and high school teachers' levels of self-efficacy and their use of accommodations. In addition, classroom observations coupled with survey responses would provide more information about teachers' beliefs, perceptions, and instructional strategies. Further research relating to general education teachers' service to students with learning disabilities mainstreamed in their classes is needed. Research on general education teachers' perceptions of mainstreaming and their perceptions of the needs and abilities of students with disabilities would be useful. In addition, more information about general education teachers' perceptions regarding the use of accommodations and what factors affect their use of accommodations is necessary. Finally, research regarding efficacy's role in teaching behaviors is also needed.
References


of follow-up consultation. Exceptional Children, 57, 246-257.


solving through computer-simulations. *American Educational Research
Journal, 25*, 72-86.
Appendix A

Letter of Permission
Dear (name of superintendent):

I am a graduate student at Longwood College, pursuing a Master’s degree in Special Education. I am currently writing a thesis on the relationship between general education teachers’ sense of self-efficacy and their use of accommodations for students with learning disabilities in their classrooms. My thesis has been approved by the Longwood College Human Subjects Committee, and it has been endorsed by a committee of education, special education, and psychology professors.

I am requesting permission to conduct research in the (name of school division). This study will include information received from general education teachers of Math, English, Science, and Social Studies at the middle school level. Two surveys will be used in this study: one to gain information regarding accommodations used by these teachers for any students with learning disabilities who may receive instruction in their classroom; the other to determine participants’ levels of self-efficacy, as reported by each teacher.

I would like to send packets to the principal at the middle schools in (name of school division). Each packet will include a cover letter to the teacher, two questionnaires, and a stamped, addressed envelope. Enclosed is a copy of this material. With the principal’s assistance, a packet will be placed in the mailbox of each Math, English, Science, and Social Studies teacher at each school. All information will be anonymously reported on the questionnaires, and it will remain confidential. Neither questionnaire will include the name of the school division, school, administrator, or teacher. Each questionnaire may be completed in approximately five minutes, and participants will return the completed questionnaires directly to me, using the stamped, addressed envelopes provided.

The information I receive will be analyzed to discern whether or not a relationship exists between a general education teacher’s sense of self-efficacy and his or her tendency to use accommodations for students with learning disabilities in the classroom. The findings will be presented to the committee of faculty members prior to my graduation in May. I will gladly send you a copy of my thesis upon the completion of my research.

I have enclosed an addressed, stamped envelope in which you can send your reply to this request. I look forward to hearing from you in the next week. Thank you very much for your time and attention.

Sincerely,

Lori Andrews Jones

Enclosures
Appendix B
Cover Letter to School Principals
Dear (name of principal):

I am a graduate student at Longwood College, pursuing a Master’s degree in Special Education. I am currently writing a thesis on the relationship between general education teachers’ sense of self-efficacy and their use of accommodations for students with learning disabilities who may receive instruction in their classrooms. I have received permission from the Superintendent’s Office to request the involvement of teachers at (name of middle school). This study will include information received from general education teachers of Math, English, Social Studies, and Science. Two surveys have been developed for this study, and I would greatly appreciate your assistance in distributing them at (name of middle school).

Enclosed are several packets, each of which includes a cover letter to the teacher, two surveys, and a stamped, addressed envelope. Would you please forward a packet to each Math, English, Social Studies, and Science teacher at (name of middle school). This will conclude your role in the study, as each participant will return the completed surveys directly to me, using the stamped, addressed envelope provided.

This study involves several Virginia school divisions. All information will be anonymously reported, as neither survey will include the name of the school division, school, administrator, or teacher involved. Each survey may be completed in approximately five minutes, so your teachers’ participation requires minimal time commitment.

I realize this is a busy time of the year for you and your faculty. I am grateful for your cooperation and the participation of teachers at (name of middle school). I am scheduled to complete my graduate work in May, and your assistance will certainly help make that possible. Upon completion of this study, a copy of my thesis will be sent to the Superintendent’s office. Should you have any questions or concerns, please do not hesitate to contact me. Thank you very much for your time and attention.

Sincerely,

Lori Andrews Jones

Enclosures
Appendix C

Cover Letter to Participants
Dear Sir or Madam,

I am a graduate student at Longwood College, pursuing a Master's degree in Special Education. I am interested in gaining information regarding your use of accommodations for students with learning disabilities who may receive instruction in your classroom. In addition, I am interested in your reported level of self-efficacy. I have received permission to request your participation in this study from the central office of your school division, and I have enlisted the assistance of your principal in distributing these materials.

All information on the enclosed survey will be reported anonymously. The survey will not include your name, the name of your school, or the name of your school division. To ensure confidentiality, a stamped, addressed envelope has been provided, so you may return the completed survey directly to me.

I am scheduled to complete my graduate work in May, and your participation in this study will help make that possible. I realize this is a very busy time of the year for you. Your participation is voluntary; however, it is extremely important to the completion of my thesis. Please complete the enclosed survey, and please return it to me as soon as possible. I am quite grateful for your time and attention. Should you be interested in the results of this study, a copy of my completed thesis will be forwarded to the Superintendent's office in May. I look forward to hearing from you.

Sincerely,

Lori Andrews Jones
Appendix D
Self-Efficacy Survey
Self-Efficacy Survey

Consider each statement below and indicate the extent to which you agree or disagree with it. There are five possible ratings:

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

At the end of each statement, please circle the number that best describes your opinion or your self-perception.

I am confident in my abilities as a teacher.  
With the right techniques and materials, all students can learn.  
When a colleague boasts about student progress, I feel inadequate.  
New research in education is just "old wine in new bottles."  
Some students are beyond my reach.  
The socioeconomic status of a student is not a critical variable of effective teaching.  
I am adept at behavior management and handling discipline.  
Even the worst home situations should not interfere with a teacher's ability to teach students.  
My enthusiasm for teaching makes me an effective teacher.  
In a given class, students from low-income backgrounds will probably not do as well academically as students from middle or upper class homes.  
There is little I can do to prevent the failure of my low-achieving students.  
Students' disabilities are challenges, not obstacles, that motivate teachers to do a better job.  
I am making a difference in the lives of my students.  
There is little I can do to influence change in a student from a dysfunctional or broken home.  
If students did not act out in class, I could do what I am trained to do—teach.  
Sometimes the out-of-school problems of students overwhelm teachers; it is no wonder teachers cannot teach.  
I have never met a student I could not teach.  
A teacher is only one person; only a miracle can help some kids.  
If teachers provide a positive role model for students, even those experiencing negative influences at home can succeed.  
My students' progress is a reflection on my teaching.  
Teachers have little effect on students' motivation to learn.  
My students know that I care about them, and they try hard to meet my expectations.  
Effective teachers are powerful influences in the lives of their students.  
Most of my colleagues seem to be more innovative and resourceful than I.  
Powerful teaching can overcome many negative home environmental factors.  
There is little I can do to help a student who just does not care about learning.  
Good teachers continually search for new ideas for research and inservice training to enhance teaching.  
I am confident in my subject matter and can answer students' questions in depth.  
A teacher's influence on student achievement is limited compared to the influence of the home environment.  
In some subjects I feel I am just a page or two ahead of my students.  
Certain disabilities of my students interfere with my ability to teach them.  
When my students fail to make the expected progress, I get discouraged and begin to doubt my skills as a teacher.
Appendix E
Accommodations Questionnaire
Accommodations Questionnaire

PART I.
Background Information
Please respond to each statement on the line provided.

Please indicate sex (circle one). Male Female

Please indicate the number of years teaching experience you have (including present year). _______

What subject area(s) do you teach (Science, Social Studies, English, Math)? ___________________________

What grade(s) are you presently teaching? _______________________

How many classes are you presently teaching? _______

What post-secondary degree(s) do you hold, and in what specialty area is each degree? ___________________

Approximately how many inservices are offered each year to teachers at your school? _______

Of these inservices, how many pertain to serving students with disabilities in the mainstream? _______

How many students with identified learning disabilities are mainstreamed into your class this year? _______

Approximately how many students do you teach each day? _______

Do you feel adequately prepared to serve these students? _______

PART II.
Please indicate the extent to which you use each of the following strategies to serve the student(s) with learning disabilities in your mainstreamed classroom. There are five possible ratings:

(1) Never  (2) Seldom  (3) Occasionally  (4) Frequently  (5) Always

Please circle the number corresponding to your ranking of each statement.

Encourage and support student’s attempts at academic improvement. 1 2 3 4 5

Use both auditory and visual modes when presenting new information. 1 2 3 4 5

Discuss academic problem(s) with student. 1 2 3 4 5

Demonstrate difficult tasks for student. 1 2 3 4 5

Give instructions step by step. 1 2 3 4 5

Give both oral and written directions. 1 2 3 4 5

Use peer tutors, volunteers, or aide to work with student individually. 1 2 3 4 5

Share grades with student on a regular basis between marking periods. 1 2 3 4 5

Talk with school special educator about strategies which can be used to better teach the student. 1 2 3 4 5

Use cooperative learning. 1 2 3 4 5

Talk with the student’s parent(s) about ways to work on the student’s academic problem(s). 1 2 3 4 5

Provide additional drill or practice. 1 2 3 4 5

Compile data in your classroom about the student’s academic problem(s). 1 2 3 4 5

Use Curriculum-Based Measurement to adjust instructional programs. 1 2 3 4 5

Use computer-assisted instruction. 1 2 3 4 5

Provide or require organizers, such as:
weekly assignment sheets 1 2 3 4 5
three-ring notebook 1 2 3 4 5
daily schedule 1 2 3 4 5
<table>
<thead>
<tr>
<th>(1) Never</th>
<th>(2) Seldom</th>
<th>(3) Occasionally</th>
<th>(4) Frequently</th>
<th>(5) Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>topical outline(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>study guides</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Provide additional or alternate ways of improving grades, such as:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>extra credit</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>retaking tests</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>extra-help sessions</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Provide modification of test-taking procedures, such as:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>extended time</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alternate forms</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>open-book or open-notebook</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adjust performance expectations in the student's problem area(s) to increase the likelihood that the student will succeed, such as:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reduce number of items on a task</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>change grading criteria</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alter objective criterion level</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Use supplementary instructional techniques, such as:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>calculators</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>audio recordings of textbook(s)</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide mnemonic devices</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide critical vocabulary lists for content material</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide essential fact lists</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide content/lecture summaries</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>highlight relevant words/features</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide visual displays</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Modify physical arrangement of classroom, such as:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seat student away from doors/windows</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seat student near model (student or teacher)</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide study carrels</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide room dividers</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix F
Self-Efficacy Subgroup Statements
Self-Efficacy Subgroup Statements

**Teaching Efficacy**

**Subgroup A**
With the right techniques and materials, all students can learn.
The socioeconomic status of a student is not a critical variable of effective teaching.
Even the worst home situations should not interfere with a teacher's ability to teach students.
Students' disabilities are challenges, not obstacles, that motivate teachers to do a better job.
If teachers provide a positive role model for students, even those experiencing negative influences at home can succeed.
Effective teachers are powerful influences in the lives of their students.
Powerful teaching can overcome many negative home environmental factors.
Good teachers continually search for new ideas for research and inservice training to enhance teaching.

**Subgroup C**
New research in education is just "old wine in new bottles."
In a given class, students from low-income backgrounds will probably not do as well academically as students from middle or upper class homes.
There is little I can do to influence change in a student from a dysfunctional or broken home.
Sometimes the out-of-school problems of students overwhelm teachers; it is no wonder teachers cannot teach.
A teacher is only one person; only a miracle can help some kids.
Teachers have little effect on students' motivation to learn.
A teacher's influence on student achievement is limited compared to the influence of the home environment.
Certain disabilities of my students interfere with my ability to teach them.

**Personal Teaching Efficacy**

**Subgroup B**
When a colleague boasts about student progress, I feel inadequate.
Some students are beyond my reach.
There is little I can do to prevent the failure of my low-achieving students.
If students did not act out in class, I could do what I am trained to do--teach.
Most of my colleagues seem to be more innovative and resourceful than I.
There is little I can do to help a student who just does not care about learning.
In some subjects, I feel I am just a page or two ahead of my students.
When my students fail to make the expected progress, I get discouraged and begin to doubt my skills as a teacher.

**Subgroup D**
I am confident in my abilities as a teacher.
I am adept at behavior management and handling discipline.
My enthusiasm for teaching makes me an effective teacher.
I am making a difference in the lives of my students.
I have never met a student I could not teach.
My students' progress is a reflection on my teaching.
My students know that I care about them, and they try hard to meet my expectations.
I am confident in my subject matter and can answer students' questions in depth.
Tables
Table 1

Correlations Between Subgroup Scores on Self-Efficacy Survey and Scores on Accommodations Survey

<table>
<thead>
<tr>
<th></th>
<th>Teaching Efficacy</th>
<th>Personal Teaching Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Use of Accommodations</td>
<td>.19</td>
<td>-.18</td>
</tr>
<tr>
<td></td>
<td>-.06</td>
<td>.28 *</td>
</tr>
</tbody>
</table>

Note. * p < .01
Table 2

Correlations Between Subgroup Scores on Self-Efficacy Survey

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Teaching Efficacy</th>
<th>Personal Teaching Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>C</td>
</tr>
<tr>
<td>A</td>
<td>--</td>
<td>-.405**</td>
</tr>
<tr>
<td>C</td>
<td>--</td>
<td>.582**</td>
</tr>
<tr>
<td>B</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

Note. * p < .01. ** p < .001.
Author Biography

Lori Andrews Jones was raised in Virginia Beach, Virginia where she graduated with honors from Princess Anne High School in 1991. She received a Bachelor of Science degree in psychology from Longwood College in 1995 and a Master of Science degree in special education from Longwood College in 1996. She and her husband now reside in Virginia Beach, where she is pursuing her career as an educator.