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## Examining the Efficacy of Co-Teaching at the Secondary Level: Special Educators' Perceptions of Their Productivity as Co- Teachers

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EXAMINING THE EFFICACY OF CO-TEACHING AT THE SECONDARY LEVEL:  
SPECIAL EDUCATORS' PERCEPTIONS OF THEIR PRODUCTIVITY AS CO-  
TEACHERS

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DISSERTATION

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A dissertation submitted in partial fulfillment of the requirements for the degree of  
Doctor of Philosophy in the College of Education  
at the University of Kentucky

By  
Kera B. Ackerman

Lexington, Kentucky

Director: Dr. Robert G. McKenzie, Professor of Special Education

Lexington, Kentucky

2017

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## ABSTRACT OF DISSERTATION

### EXAMINING THE EFFICACY OF CO-TEACHING AT THE SECONDARY LEVEL: SPECIAL EDUCATORS' PERCEPTIONS OF THEIR PRODUCTIVITY AS CO- TEACHERS

For decades, federal legislation has mandated the education of students with disabilities to be in their least restrictive environment. Nationally, this has resulted in more than 60% of students with disabilities receiving the majority (80%) of their education in the general education environment. To provide special education services in the general education environment, co-teaching, commonly defined as two educators with distinct expertise providing instruction in a common setting, is often used. The purpose of this non-experimental cross-sectional survey study was to examine special educators' perceptions of their productivity in co-taught settings and the degree to which their perceptions were related to the variables of role, shared philosophy, training, and self-efficacy. Participants were 210 secondary special educators who co-teach in Kentucky. Results suggest significant differences in perceptions of productivity across all variables, although some are more robust than others. Implications for practice and future research are presented.

KEYWORDS: co-teaching, mild disabilities, secondary, perceptions, efficacy

Kera Ackerman  
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April 28, 2017  
Date

EXAMINING THE EFFICACY OF CO-TEACHING AT THE SECONDARY LEVEL:  
SPECIAL EDUCATORS' PERCEPTIONS OF THEIR PRODUCTIVITY AS CO-  
TEACHERS

By

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## DEDICATION

I dedicate this dissertation to my husband and daughters who cheered me on with unwavering support, to my colleagues and professors who knew what I could do long before I did, and to my father, who did not have the opportunity to complete his college degree but ensured that my sisters and I would.

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Lastly, I thank the respondents of my survey. They provided a wealth of information that, through this and future research, will improve the education of students with disabilities.

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## **Chapter One: Introduction**

In 1975, following twenty years of civil rights litigation and subsequent laws, the Education for All Handicapped Children Act (P. L. 94-142 [EHA]) was enacted enabling students with disabilities the right to an individualized education program (IEP), a free and appropriate public education (FAPE), and to be educated in their least restrictive environment (LRE). Prior to EHA, only one in every five students with disabilities attended school (Office of Special Education Programs [OSEP], 2010). Since 1975, EHA has been reauthorized multiple times and renamed the Individuals with Disabilities Education Act (P. L. 98-199; 1983; P. L. 99-457; 1986; P. L. 101-476; 1990; P. L. 105-17; 1997; P. L. 108-446; 2004; [IDEA]), but the same core provisions of an IEP, FAPE, and LRE remain. See Appendix A for a timeline of significant laws and litigation.

Most recently, the focus has shifted from access to the LRE to increased educational outcomes through access to the general education curriculum and accountability measures for students with disabilities (e.g., No Child Left Behind, P. L. 107-110 [NCLB]; 2002; Every Student Succeeds Act, P. L. 114-95 [ESSA]; 2015). As a result of these increasingly inclusive laws, students with mild to moderate disabilities spend extended amounts of time in general education classrooms. Across the nation in 2011, greater than 60% of students with disabilities spent more than 80% of their time in the general education setting (United States Department of Education [USDOE], 2015). Reported percentages for students with mild to moderate disabilities in Kentucky are even higher; in 2012-2013, 83.2% of students with a specific learning disability and 52.3% of students with an emotional disability were served in general education settings for more than 80% of their day (Kentucky Department of Education [KDE], 2016). To

ensure a degree of special education is provided within the general education setting and to meet the demands of academic accountability for these students, special educators often serve as co-teachers. A lower teacher-student ratio (i.e., two educators working in the same classroom versus two educators combining two classrooms) and the knowledge of the individuals involved (i.e., a special educator with pedagogical expertise and a general educator with content expertise) distinguish co-teaching from collaboration, in which professionals work together across a variety of settings, and team teaching, in which two educators combine their classes (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010).

### **Definition and Models of Co-teaching**

Co-teaching is commonly defined as two educators with distinct expertise equally planning, delivering instruction, and assessing progress in a common setting (Cook & Friend, 1995). Researchers have described a variety of co-teaching models, which are designed to be flexible and should be used as needed by the educators to address the specific needs of the students and the content (Cook & Friend, 1995; Dieker & Little, 2005). These include: (a) *one teach/ one assist*, in which one teacher leads whole group instruction while the other answers questions, clarifies concepts, and redirects the attention of individual students; (b) *station teaching*, in which students are divided into rotating groups, each teacher delivering a portion of the lesson to each small group; (c) *parallel teaching*, that divides students into two groups with each working exclusively with one teacher; (d) *alternative teaching*, in which the majority of the students remain with one teacher while the other teacher reteaches, provides enrichment, or pre-teaches a concept to a small group of students identified through assessment as needing additional

instruction; (e) *team teaching*, in which the teachers teach the whole group simultaneously; and (f) *one teach/ one observe*, in which one teacher leads instruction while the other collects data on the students (Cook & Friend, 1995; Friend et al., 2010; Friend, 2015).

The increased prominence of co-teaching is evidenced by the fact that 11 states recognize it as a service delivery model and 17 have adopted specific terminology to describe the practice (Müller, Friend, & Hurley-Chamberlain, 2009). For example, educators in Kentucky indicate co-teaching on a student’s IEP as a location of the specially designed instruction. Kentucky’s definition does not specify the model to be used, but rather defines co-teaching as

a specific type of collaborative teaching format and special education service delivery option which daily/weekly involves two or more certified teachers (i.e., regular and special education), who share instructional responsibility and joint accountability for a single group of diverse learners via partnership strategies in a general education setting. (KDE, 2011, p. 1)

### **Secondary Level Co-teaching**

At the secondary level the practice of co-teaching brings unique challenges. The emphasis on curricular content taught by content area specialists, high expectations for student proficiency through high stakes testing and course exit exams, and scheduling, impact the implementation of co-teaching at this level (Simmons & Magiera, 2007).

Secondary general educators who teach in the “lowest academic track” often find themselves scheduled to teach in co-taught classrooms disproportionately populated with students with disabilities. For example, Scanlon and Baker (2012) reported one co-taught

classroom in which over 80% of the class was students with disabilities. Other researchers have noted that sufficient planning time and shared philosophy toward co-teaching are concerns at this level (Keefe & Moore, 2004; Mastropieri et al., 2005) perhaps exacerbated by secondary teachers' content specialization (Dieker & Murawski, 2003).

Ideally, co-teaching affords students with disabilities access to the general education curriculum through embedded accommodations, modifications, and specially designed instruction in the general education setting. The intended benefit is increased instructional options for all students by way of two specialized teachers utilizing their diverse pedagogical strengths within the same classroom (Cook & Friend, 1995). In this manner, students should capitalize on the content knowledge of the general educator and the strategy knowledge of the special educator (Dieker & Little, 2005). Additionally, co-teaching should limit the fragmented nature of a pullout classroom situation, in which instruction for the students with disabilities is stopped so they can move to another setting for specially designed instruction (Cook & Friend, 1995).

This is particularly vital at the secondary level, where access to the general curriculum is crucial to meet the mandates of high stakes testing in specific content areas. As academic accountability and preparing high school students to be college and career ready upon graduation have increased, so has the necessity to validate the efficacy of co-teaching. Across the United States, high stakes testing reveals an achievement gap, particularly for students with disabilities. For example, in Kentucky in 2014, 80% of high school students with disabilities were not proficient in reading and almost 90% were not proficient in math (KDE, 2016).

## **Factors in Co-teaching Efficacy**

Various factors have been identified as necessary for successful, productive co-teaching. These include the educators' role (Kennedy & Ihle, 2012; Mastropieri et al., 2005; Murawski & Dieker, 2004; Scruggs, Mastropieri, & McDuffie et al., 2007); a shared philosophy between co-teachers (Keefe & Moore, 2004; Mastropieri et al., 2005; Pugach & Winn, 2011; Simmons & Magiera, 2007); and knowledge of content (Mastropieri et al., 2005), co-teaching strategies, and evidence-based practices (McKenzie, 2009; McLeskey & Brownell, 2015; Scruggs et al., 2007).

**Assigned role.** Successful co-teaching relies on parity, the work of two equal partners instructing and assessing a common caseload of students (Friend & Cook, 1993). It also capitalizes on the differentiated roles of the content knowledge specialists and strategy specialists (Scanlon & Baker, 2012). In order to build and maintain a strong co-teaching relationship, those involved need to engage in conversation about planning, professional roles, specialized skill sets, and classroom routines (Cook & Friend, 1995).

However, assigned roles in co-teaching classrooms have long been documented as an issue (Mastropieri et al., 2005). Special educators often find themselves on the periphery of the classroom, serving in a more passive role in the one teach/ one assist co-teaching model (Brusca-Vega, Brown, & Yasutake, 2011; Scruggs et al., 2007; Solis, Vaughn, Swanson, & McCulley, 2012). Harbort et al. (2007) observed special educators drifting (i.e., monitoring) in the co-taught classroom for an inordinate amount of time (29.93% of intervals) as opposed to presenting material (1%). When one teacher tends to dominate the teaching, the relationship can suffer and as a result, the co-teaching experience is less productive (Murawski & Dieker, 2004). Unclear role assignments

further exacerbate the issue. Hang and Rabren (2009) reported that both general and special educators saw themselves as more responsible for behavior management in the classroom. Similarly, Dev and Haynes (2015, p. 58) reported a “tug of war” in regard to behavioral management in co-taught classes.

A clearly defined role and purpose in the classroom would be reflected in special educators contributing to lesson planning and discussing the content, assessments, and classroom management issues that impact the students with disabilities in the co-taught class (Hang & Rabren, 2009; Scruggs et al., 2007). However, King-Sears and Bowman-Kruhm (2011) reported only 86% of special educators used IEPs to co-plan instruction. Additionally, a minority of co-taught lesson plans include accommodations and modifications (Bryant-Davis, Dieker, Pearl, & Kirkpatrick, 2012).

A lack of parity and role delineation limits special educators’ ability to provide high quality instruction (Kennedy & Ihle, 2012; Mastropieri et al., 2005; McKenzie, 2009; Scruggs et al., 2007). The amount of specially designed instruction in co-taught classrooms has been found to be minimal even though evidence-based practices have been clearly defined in the literature (Pugach & Winn, 2011; Scruggs et al., 2007). King-Sears and Bowman-Kruhm (2011) noted that half of the co-teachers they surveyed reported that specialized reading was not occurring during co-taught classes, despite the students’ IEPs requiring it. Weiss and Lloyd (2002) found less explicit, specialized instruction implemented in co-taught classrooms than in resource classrooms. During instruction, general educators reported using a whole group instructional format and instructional strategies that could be applied to the entire class while special educators provided accommodations, such as creating outlines, modifying worksheets, and



monitoring behavior (Scruggs et al., 2007) or providing accommodations for assessments (Scanlon & Baker, 2012).

**Shared philosophy.** Sound educational decision making depends on the educators' knowledge of the curriculum, content, students, and the pedagogy of teaching. Additionally, in a co-taught classroom, two educators must find a common vision on which to base the decisions they make.

A critical factor in the success of co-teaching models is the professional relationship formed between teachers prior to and throughout the co-teaching experience.... the first step in successful implementation includes establishing a co-teaching relationship by developing goals, expectations, and roles as well as understanding setting demands. (Solis et al., 2012, p. 499)

As co-teachers develop a common vision, they must discuss their philosophy of co-teaching, their expectations, and their instructional beliefs (Keefe & Moore, 2004). A manifestation of the lack of a shared philosophy was described by Magiera and Zigmond (2005) when they observed fewer interactions between the general educator and the students with disabilities when the special educator was present in the classroom. A shared philosophy of co-teaching expectations, as well as a mutual respect for each other's expertise, can impact the ability of the co-teachers to learn and grow from one another, and the success of the students in their classroom (Mastropieri et al., 2005). Likewise, co-teachers benefitted from their experiences and developed professionally when they were compatible with one another (Scruggs et al., 2007).

Volunteerism is often cited in the literature as a means to identify co-teachers who may be compatible and hold similar philosophies (Keefe & Moore, 2004; Pugach &

Winn, 2011; Simmons & Magiera, 2007). Some research indicates that co-teachers who are assigned, rather than volunteer, to work together report incompatibility leading to a “dysfunctional partnership . . . resulting in de-professionalism among special education teachers and frustration among the regular education teachers” (Isherwood & Barger-Anderson, 2008, p. 125). To that point, Friend (2015) stated this about co-teaching, “It’s less like a marriage and more like a business partnership. Each teacher brings important knowledge and skills to the classroom, and they learn from each other without trying to be interchangeable” (p. 21).

**Training.** Content knowledge on the part of the special educator has been cited as a necessary component for productive co-teaching. When special educators have strong content knowledge, they can play an active role in the co-taught classroom (Weiss & Lloyd, 2002). On the other hand, a lack of content training can limit the special educators’ role (Mastropieri et al., 2005; Nichols, Dowdy, & Nichols, 2010), reducing the amount and quality of specially designed instruction the students receive (Kennedy & Ihle, 2012).

Likewise, successful co-teaching depends on a clear understanding of evidence-based instructional strategies and co-teaching models. Teachers who receive specific training in evidence-based practices are more confident in their implementation of these practices (Martinussen, Tannock, & Chaban, 2011). Similarly, Solis et al. (2012) described a “broad variability in [co-teaching] implementation” (p. 499), which could be due to the limited training in practice-based collaborative practices preservice teachers receive (McKenzie, 2009; McLeskey & Brownell, 2015) or the lack of clarity in the purpose of the programs (Brownell, Griffin, Leko, & Stephens, 2011). Likewise, at the

in-service level, Nichols et al. (2010) found only a small percentage of schools actually provide professional development before implementing co-teaching (i.e., three out of 24 school districts surveyed). While others have found that, even when provided opportunities, educators' application of the skills learned can vary based on their philosophy and level of prerequisite knowledge (Brownell, Adams, Sindelar, Waldron, & Vanhover, 2006).

**Self-efficacy.** Researchers have linked the role special educators assume in the classroom to their self-efficacy, and likewise their self-efficacy to their training and preparedness (Dev & Haynes, 2015). Perceived self-efficacy is the belief held by the special educator that his or her role in the classroom is important and that it can be effectively accomplished. Quality of instruction, instructional choices, and motivation in the classroom have been associated with how co-teachers perceive their classroom role (Solis et al., 2012). Silverman (2007) suggested that successful co-teachers need to have a positive attitude toward inclusion, believe all students are capable of learning, and hold high level beliefs about knowledge and learning. He concluded that these characteristics lead to a strong sense of self-efficacy, supporting the teachers' beliefs that they have the capacity to fulfill their role in the classroom and hence perceive they are productive professionals in the secondary classroom.

### **The Problem**

Significant issues influencing the efficacy of co-teaching persist, in spite of the extensive research base of the factors needed for a successful co-teaching experience. Murawski and Swanson (2001) concluded that co-teaching is moderately effective, but the evident lack of data precluded generalizing any conclusions. Solis et al. (2012)

examined studies on the process of co-teaching and determined it had a limited impact because the majority of the studies did not provide student outcome data. Although increased student learning outcomes should be the ultimate goal of co-teaching, researchers may be missing the key component to successful co-teaching, which is teacher productivity. Scruggs et al. (2007) concluded that educators support co-teaching, but have many needs that must be addressed and that the “ideal of true collaboration between two equal partners.... has largely not been met” (p. 412). The question remains: What makes one co-teaching experience more productive than another?

The answer likely is teacher perceptions on the importance and purpose of their role in the co-taught classrooms. While some research has been conducted on perceptions of co-teaching, much has focused on implementation of a specific strategy in the co-taught setting (e.g., Brusca-Vega et al., 2011; King-Sears et al., 2015), bypassing what would be a typical day in the lives of most special educators where one co-taught classroom experience is likely more productive than another. Once the connection between perceived productivity and the resulting role is revealed, a definitive hypothesis on why some co-taught classes are successful and why some are not can likely be made.

### **Study Significance**

Collectively, research has addressed the themes of role, shared philosophy, training, and self-efficacy. Taken as a whole, this body of literature has revealed that, while there is consensus on what is needed to constitute a successful co-teaching experience (i.e., parity, planning, training, role delineation, etc.), very little is understood about the impact special educators’ perceptions have on their productivity in the classroom. To date, there is limited quantitative research on secondary special educators’

perceptions of co-teaching, and no research has analyzed specific variables that are likely impacted by perceived productiveness, such as the assumed role in the classroom, the existence of a shared philosophy with the general education co-teacher, or the training and subsequent self-efficacy of the special educator. To have a meaningful impact on the outcome for special educators (i.e., reducing attrition and increasing productivity) and students (i.e., increasing learning outcomes), researchers must be responsive to the educators' perspectives and focus our attention toward why some co-teaching settings, and relationships, work better than others (Burns & Ysseldyke, 2009; Dev & Haynes, 2015). What we lack in the research is a clear examination of how secondary special educators perceive their daily co-teaching experiences, which often range from very productive to very unproductive.

Therefore, the purpose of this non-experimental cross-sectional survey was to examine the construct of special educators' perceptions of divergent co-teaching experiences across the variables of assigned role, shared philosophy, training, and self-efficacy. Analyzing the perceived productivity of special educators in co-taught settings is necessary to further establish co-teaching as a viable means to educate students with mild to moderate disabilities.

### **Research Questions**

The following questions were developed to determine the extent to which perceived productivity was related to the variables of assigned role, shared philosophy, training, and self-efficacy.

1. When secondary special educators perceive they are more productive in one setting than another, to what extent is that difference related to:

- (a) their assigned role in the co-taught classrooms?
  - (b) having a shared philosophy of co-teaching with their co-teacher?
  - (c) the amount of training they received in the content area(s) which they teach?
  - (d) their self-efficacy?
2. How do secondary special educators perceive their training on the principles of co-teaching and the use of evidence-based practices in co-taught settings?
3. To what extent is there a relationship between:
- (a) the special educators' self-efficacy and the assigned role in the co-taught classroom?
  - (b) the co-teachers' shared philosophy and the special educators' assigned role in the co-taught classroom?

## **Chapter Two: Methodology**

### **Description of the Study**

This non-experimental cross-sectional survey study examined special education co-teachers' perceptions of their productivity within divergent co-teaching settings. The degree to which their perceived productivity related to their assigned role, the extent to which they held a shared philosophy with their co-teacher, their training, and their sense of self-efficacy were evaluated. The cross-sectional survey design allowed for perceptions on multiple topics to be gathered simultaneously and quickly from participants so conclusions could be made regarding Kentucky special educators' perceptions on co-teaching (Creswell, 2009; Nardi, 2006). The survey was a self-report, utilizing *Qualtrics* software and distributed via E-mail. Self-report surveys are efficient and can be used with larger sample sizes quickly, however, response rates are typically low (i.e., 20-30%; Nardi, 2006).

### **Procedures**

#### **Sampling Procedure**

The sample consisted of a simple random sample of special educators selected from the population of special educators in Kentucky. At the time of the study, Kentucky had 173 school districts with 448 public secondary schools (i.e., sixth through twelfth grade) in nine special education cooperative regions (KDE, 2016).

The sampling frame was developed using a multi-stage procedure. First, the researcher identified every public middle and high school in the state through an online search using the Kentucky Department of Education website. These schools were listed on a spreadsheet and sorted based on the special education cooperative regions in which

they were located. Next, simple random sampling using a random numbers table was utilized to select 50% of the secondary schools ( $N = 224$ ) in each cooperative region. This ensured the entire state was sampled. Last, E-mail addresses of all special educators teaching in the identified schools were collected from the schools' online staff directories ( $N = 1,164$ ).

### **Instrumentation**

**Development of the self-report perception survey.** The data source was a self-report 62 question perception survey developed by the researcher on *Qualtrics* software licensed through the University of Kentucky. The complete survey is located in Appendix B. From here forward, any references which contain a question number (i.e., Q#) will be located in Appendix B. A novel survey was developed because the scope of this study included additional components not addressed in previously designed co-teacher perception surveys (e.g., Hang & Rabren, 2009; King-Sears & Bowman-Kruhm, 2011). The survey items were designed to gather information on the extent to which special educators' perceptions of their productivity in divergent co-taught settings vary related to assigned role, shared philosophy, training in the curricular area co-taught, and self-efficacy. An additional set of items addressed their perceived adequacy of training in the principles of co-teaching and applying evidence-based practices. The survey items were developed using findings from previous perception surveys and literature from 2001-2016.

The survey was divided into three blocks. The first block of items included a list of definitions and screening questions which enabled potential participants to self-select based on the parameters of the study. In order to be included in the study, the participant



had to meet the following criteria: (a) special educator for students with mild to moderate disabilities at secondary school level (i.e., middle or high school), (b) co-taught in at least two content classes within the past two academic years, (c) able to identify one co-taught class as more productive and one as less productive, and (d) consent to complete the survey.

The first question, “Has it been your responsibility to teach students with mild to moderate disabilities (e.g., learning and behavior disabilities) in middle or high school at any point during the past two years?” eliminated potential participants if they responded “No” (Q12). Next, potential participants were asked “Some co-teachers feel that they are more productive in some co-taught classes than in others. In other words, they feel they can use their knowledge of specially designed instruction and supplementary aids and services more effectively in one co-taught class than another. Have you experienced such a difference?” (Q3). This question was designed to screen potential participants who had not experienced the dichotomy needed to be included as a respondent. Those who responded negatively were asked one follow up question to clarify their experiences and were exited from the survey.

The second block of the survey included attitudinal and behavioral (e.g., how time is spent) items designed to address the specific variables of interest (i.e., role, shared philosophy, training, and self-efficacy). The majority of the items were formatted in a matrix allowing the participant to answer the prompt for both the most and least productive classes. This format has been used previously where individual respondents have provided perceptions on dichotomous experiences (e.g., Allday, 2006; McKenzie & Houk, 1986). Most of the attitudinal items were assessed through a continuous four-point

Likert scale with the following indicators (a) “very adequate” [1] to “very inadequate” [4], and (b) “strongly agree” [1] to “strongly disagree” [4]. For example, “I have a clearly defined role in the co-taught classroom” (Q60). A four-point scale was used to eliminate the neutral option, thereby forcing the participant to make a choice (Nardi, 2006). Other attitudinal items were categorical in nature (e.g., yes/no), designed to elicit information on the participants’ assigned role and time spent in co-taught classrooms (Q42). Behavioral items asked participants to recall a particular behavior, such as “Indicate how you spend your time in your most/ least productive co-taught classroom” (Q34 and Q43).

Some items were redundant depending on the participants’ experience. Therefore, filter and contingency questions bypassed those participants around identified items (Nardi, 2006). For example, questions regarding training in a content area were redundant if both the most and least productive classes were the same content area (Q17 and Q16).

The final block of items addressed participant demographics (Nardi, 2006). This block consisted of six questions regarding professional training, years of experience, gender, and regional location (Q5, Q6, Q62, Q63, Q7, and Q74).

**Piloting.** The survey was piloted to determine any potential sources of error (i.e., poorly written questions) and establish content validity. On October 19, 2016 the University of Kentucky’s Institutional Review Board gave permission for distribution of the survey (see Exemption Certificate in Appendix C). That day, the survey was sent to 10 volunteers selected for their current assignments as middle and high school special education co-teachers. The volunteers were asked to evaluate the survey and make

recommendations for improvement regarding the (a) introduction E-mail and directions for completing the survey, (b) clarity of the survey questions, (c) clarity of the response choices, (d) correctness of the survey (i.e., grammar and spelling, navigation of the survey through filter and contingency questions, and avoidance of leading questions), and (e) the number of questions (Nardi, 2006). Additionally, the volunteers were asked to document the amount of time it took to complete the survey and the number of questions they answered.

Feedback from the volunteers included clarifying the operational definition of “productive” in the second question (Q3), and without changing the format of the survey, to clarify the “most productive” and “least productive” class within each question. The survey was revised with their feedback by modifying and highlighting the operational definition of productivity (Q3), and by using piped text from the responses to their most and least productive classes (Q15 and Q14) throughout the remaining questions. The volunteers indicated the amount of time required to complete the survey was a mean of 20 minutes (range = 15-32); this information was included on the introduction E-mail. The volunteers’ responses were excluded from the study.

**Survey distribution.** On November 10, 2016, the survey was sent electronically with the introduction E-mail including confidentiality information (see Appendix D). One week later, a reminder E-mail was automatically generated by *Qualtrics* and sent to non-responders (see Appendix E). To increase the response rate, a second follow up E-mail was sent to non-responders three weeks after the initial contact indicating an added incentive of a \$25 gift card to Amazon for 20 randomly chosen participants and an extended completion date of December 15, 2016 (see Appendix F). A final automatically

generated reminder was sent four weeks after initial contact to non-responders (see Appendix G). Thank you E-mails were sent to all participants at the close of the survey.

## **Variables**

**Dependent variables.** The dependent variables were conceptually defined as the special educators' self-reports of perceptions regarding assigned role, shared philosophy, training, and self-efficacy. The dependent variables were operationalized through the responses to questions on the survey in each of these concepts. Data were collected at the individual level.

Items measuring each variable were interspersed throughout the survey. The four primary dependent variables were not labeled as such in the survey. Assigned role was measured by a series of nine items, shared philosophy was measured by four items, training was measured by four items, and self-efficacy was measured by thirteen items (see Appendix H for the variables and corresponding survey items). Raw scores or scale scores were computed to determine the participants' perception to each variable in each classroom (i.e., most productive and least productive).

**Independent variable.** The independent variable was conceptually defined as the special educators' identification of a least productive and most productive co-taught class. It was operationalized through the responses to a screening item (Q3) which asked the participants if they had experienced a most productive and a least productive co-taught classroom situation. Productivity was defined as the special educator being able to use knowledge of specially designed instruction and supplementary aids and services effectively in the co-taught classroom. If a negative response was given to this question, the participant was directed to an additional screening question through the *Qualtrics*

software filter question option and given three options to choose from to define his or her experiences (Q78), and then was directed to the end of the survey and thanked for participating. Data were collected at the individual level.

### **Measurement Procedures**

**Data management.** Results were collected through *Qualtrics* software and were housed on a password protected computer. Following the closing of the survey on December 16, 2016, data were downloaded to Excel. The researcher used Excel to manage and clean the data as well as create a codebook to clearly define each variable. Once the data were cleaned and organized, the Excel spreadsheet was imported into SPSS for quantitative analysis.

**Cleaning data.** The data were cleaned using a four-step process. First, those who did not progress past the initial screening questions were removed. Second, those with a duplicate survey based on identification code were deleted. Third, those with no data (i.e., the survey window closed before they progressed into the first block of questions) were deleted. And, fourth, those participants with less than 50% of the data based on the *Qualtrics* progress report were deleted. Table 3.1 in Chapter Three shows the results of this screening process.

Descriptive statistics were used to screen data to define patterns, identify means, standard deviations, frequency, outliers, and range. A frequency distribution table was used to determine the percentage of participants that responded in a particular way and assisted in screening the data for errors. Missing data were handled through keying -99 within the Excel worksheet in all blank cells and indicating -99 as the missing value in

SPSS (Sprinthall, 2007). The number and percentage of participants, non-participants, and completers are described in Chapter Three.

**Quantitative data analysis.** The quantitative data derived from the survey were analyzed using SPSS. The first and second research questions were answered through descriptive and inferential statistics. Descriptive statistics (e.g., frequency, means, standard deviations, percentages) were used to summarize item responses that addressed the categories of assigned role, shared philosophy, and training. This allowed trends to be determined and provided insight into the extent various practices were used and the amount of training special educators have received. Descriptive statistics were also used to verify the data distribution and absence of outliers to prepare for inferential statistics.

Prior to using inferential statistics, items that were reversely coded were recoded using SPSS. Paired samples *t* tests ( $p < .05$ ) examined the extent to which the mean of the differences between the most and least productive classes differed from zero for each dependent variable. To address the third research question, Pearson's correlation coefficient ( $p < .05$ ) was estimated to examine the degree of the relationship between (a) self-efficacy and assigned role in the most and least productive classes, and (b) shared philosophy and assigned role in the most and least productive classes.

**Qualitative data analysis.** The qualitative data from the open-ended questions (Q5, Q43\_T, and Q50) were analyzed through content analysis which allowed for the textual information to be classified into categories (Nardi, 2006). Codes were developed using open coding by reviewing the responses to the open ended items on the survey multiple times and then forming a code list with key words that were meaningful (Nardi, 2006). Lists were created and the responses were coded using the Excel spreadsheet data

validation feature. Responses were then grouped into themes. Thematic analyses were used to qualitatively extend and support the findings for the variables assigned role and self-efficacy.

## Chapter Three: Results

### Survey Completion Rate

The survey was opened on November 10, 2016 and sent electronically to 1,164 potential respondents. Thirty declined participation via the opt-out feature in the introductory E-mail, and 10 declined participation via personal E-mail due to job description (e.g., Director of Special Education). These 40 potential respondents, in addition to two undelivered E-mails, were removed from the participant pool ( $N = 1,122$ ). One week later, a reminder E-mail was sent to unfinished respondents. The initial response rate was 15.9% ( $n = 179$ ).

A second E-mail was sent to 943 non-responders on November 29, 2016, with an extended completion date of December 15, 2016 and an added incentive of a \$25 gift card to Amazon for 20 randomly chosen participants. Six E-mails were undelivered, which decreased the viable potential respondent pool ( $N = 1,116$ ). One week later, a reminder E-mail was sent to unfinished respondents. This second round resulted in a 15.3% response rate ( $n = 143$ ). At the close of the survey, a total of 322 completed and partially completed surveys from potential respondents were recorded with a total response rate of 28.9%.

The first two survey questions were designed to screen potential participants based on the study parameters. The first question (Q12) removed respondents who had not taught students with mild to moderate disabilities in the past two years from the survey. Fifteen respondents were removed. The second question (Q3) allowed participants to self-select based on the study parameter of having experienced more productiveness in one co-taught class than another. A minority, 28 respondents, were



screened at this question because they had experienced either all productive or all unproductive co-taught classes. Respondents screened at this question were asked a follow up question to clarify their experiences. Of the 28 respondents, 14 (50.0%) indicated “All my co-teaching experiences have been very productive. I feel I can use my knowledge of specially designed instruction effectively in all of my co-taught classes,” eight (28.6%) indicated, “All of my co-teaching experiences have been very unproductive. I do not feel I can use my knowledge of specially designed instruction effectively in any of my co-taught classes,” and six (21.4%) indicated that they had not co-taught or collaborated in the past two years.

Following the data cleaning process presented in Table 3.1, 210 (18.8%) survey participants were used for analysis. Of those participants who made it through the cleaning process, 164 (78.1%) completed every question on the survey for which they were eligible.

### **Participants**

The participants were 210 secondary (i.e., middle or high school) special educators in the state of Kentucky who (a) served as a co-teacher for students with mild to moderate disabilities within the past two years, and (b) had experienced higher levels of productivity in one co-taught class than another. The participants represented all nine special education cooperative regions in the state as indicated in Table 3.2. Because 50% of the schools in each cooperative region were sampled, the majority of the participants were located in more populous regions (i.e., Central Kentucky Educational Cooperative, Jefferson County Exceptional Child Education Services, Green River Regional Educational Cooperative, and Northern Kentucky Cooperative for Educational Services).

Specific data on special educator demographics in Kentucky were not available from the Kentucky Department of Education website. However, demographic information on all teachers in Kentucky indicate the majority (78%) are female and hold a master's degree or higher (69%) with an average of 11 years of experience (KDE, 2016). This is comparable to the 2011 national teacher demographics in which 76% of teachers were female and 56% held a master's degree or higher (USDOE, 2016).

Basic demographic information including gender and years of teaching experience was collected to verify the sample was representative of the population, although the participants' demographics did not have bearing on this study. The reported participant demographics presented a representative sample of Kentucky teachers as a whole regarding gender, highest level of training, and years of experience teaching. Participants reported being a special educator ( $M = 11.4$  years) and a co-teacher ( $M = 8.4$  years) indicating that the clear majority of their special education teaching career (73.7%) has been spent as a co-teacher. Participant demographics are included in Table 3.3.

### **Dependent Measures**

The following sections provide an analysis of the survey responses as they apply to each of the research questions. When relevant, qualitative analysis descriptions are included.

A comparison between the special educators' perceptions of their most and least productive class was of specific interest. As part of determining this, participants were asked to identify the content area taught in their most and least productive classes. The results are displayed in Table 3.4. Some content areas were represented in both most and least productive to a similar degree, such as geometry, biology, and social studies/

government, while some were more heavily represented in the most productive category, such as algebra and language arts/ reading. Likewise, some were more represented in the least productive category, for example, advanced math (calculus/ trigonometry), basic science, and language arts/ writing.

**Research question one.** Research Question One asked the following: When secondary special educators perceive they are more productive in one setting than another, to what extent is that difference related to (a) their assigned role in the co-taught classrooms, (b) having a shared philosophy of co-teaching with their co-teacher, (c) the amount of training they received in the content area(s) which they teach, and (d) their self-efficacy?

**Assigned role.** To determine the extent to which participants' assigned role differed in their most and least productive classes, responses to nine items were analyzed. Those nine items were based on the following recurring themes in the literature: (a) the use of co-teaching models; (b) implementation of instructional and behavioral practices (i.e., evidence-based practices) in the co-taught classroom; (c) engaging in conversation with co-teachers about professional roles, specialized skill sets, and classroom routines; and, (d) actual roles held in the classroom.

The co-teaching models used and the implementation of evidence-based practices in the co-taught classroom are integral to the special educator's assigned role. Therefore, participants were asked to select as many of the six co-teaching models described by Cook and Friend (1995) that they used in their most and least productive classes. As presented in Table 3.5, an imbalance between the most and least productive classes was observed with one teach/ one observe more heavily weighted toward the least productive

class. There were clearly more participants who team teach, use alternative teaching, parallel teach, and station teach in their most productive class. Interestingly, one teach/one assist was nearly evenly distributed between the most and least productive classes. Additionally, more participants identified using all six models in their most productive class than indicated as such in the least productive class.

As presented in Table 3.6, nearly half of the participants indicated there were instructional or behavioral practices they were unable to use due to their assigned role in the classroom. These participants were presented an open ended follow up question (Q43) that asked them to elaborate. Sixty-five (66.3%) took the opportunity to do so. Their responses were organized by theme through open coding, with similar results being combined when possible. The themes that emerged included (a) co-teacher philosophy (e.g., "...I am unable to use fluency and reading comprehension strategies I use in my resource class such as whole class choral reading, repeated reading, close reading, reading think aloud, etc.; as my co-teaching partner considers those strategies inappropriate for the grade level and setting..."); (b) behavior management issues (i.e., "...I do not get to use any strategies. I am an observer, behavior management specialist or an assistant..."); (c) structural issues, such as physical space, time, scheduling (e.g., "[I cannot use] one-on one instruction [or] enough modification and adaptations ... because there is just not enough time and too many special needs students in one class..."); and, (d) training (e.g., "In biology I do not have a strong enough Biology background to teach anything. I struggle keeping up with content. It's been 10 years since I studied Biology in high school."). A thematic organization of the responses is in Appendix I.

To determine the extent to which participants engaged in conversations with their co-teachers in order to develop a strong partnership, they were asked if they had discussed classroom routines, professional roles, and their specialized skill set with their most and least productive class co-teachers. As noted in Table 3.7, the vast majority reported discussing both classroom routine and their professional role in their most productive class. Conversely, substantially fewer reported discussing these in their least productive class. To test if there was a difference in whether the special educators had discussed their specialized skill set with their co-teachers, a paired samples *t* test compared the means in the most and least productive settings based on a four-point scale ranging from “strongly agree” [4] to “strongly disagree” [1]. The results indicated a statistical significance and are displayed in Table 3.8.

Assigned role was further examined through a series of questions that required the participants to indicate how they spend their time in their most productive and least productive classes on a response scale from “a great deal of my time” [4], “a moderate amount of my time” [3], “a little of my time” [2], to “none of my time” [1]. Specifically, participants were asked about their role with both general education students and students with disabilities in regard to (a) behavior management, (b) providing accommodations and academic interventions, (c) grading and managing data, and (d) working with students who are English language learners. Results from paired samples *t* tests indicated a statistical significance in all areas and are displayed in Table 3.9. Participants reported spending more time managing the behaviors of students with and without disabilities in their least productive classes, and more time providing accommodations and academic interventions to students with and without disabilities in their most productive classes.

Clarity of role delineation and parity were reported through responses to the following two questions: a) “I have a clearly defined role,” in which the participants could respond on a response scale from “strongly agree” [4] to “strongly disagree” [1]; and, b) “My role in the co-taught classroom is best described as,” in which the participants could respond: “equal” [4], “somewhat equal” [3], “somewhat subordinate” [2], or “subordinate” [1]. Paired samples *t* tests found statistically significant mean differences between the most productive and least productive classes in both areas and are presented in Table 3.10.

***Shared philosophy.*** Participants responded to a series of four items to clarify the extent to which shared philosophy differs in regard to productivity. Central to the concept of shared philosophy is volunteerism. Therefore, participants were asked how assignments to co-teaching classes were made (i.e., schedule had time for co-teaching, students needed co-teaching per their IEP, volunteered, co-teaching training, content area background) and whether or not they had discussed their instructional beliefs, philosophy of co-teaching, and view of inclusion with their co-teacher.

Descriptive statistics, displayed in Table 3.11, indicate the majority of special educators and their co-teachers were assigned to their co-teaching duties because (a) the students’ IEPs indicated they needed the particular class, (b) had co-teaching as the LRE, or (c) the educators’ schedule had time for co-teaching. In the most productive classes, the special educators’ content knowledge also was indicated as a determining factor. Co-teaching training was evenly distributed between the most and least productive classes for both the special and general educators.

Another component of shared philosophy is the similarity in expectations of co-teaching held by the two educators. As displayed in Table 3.12, co-teachers discussed their instructional beliefs, their philosophy of co-teaching, and their view of inclusion more frequently in their most productive classes. Additionally, participants were presented the following, “My co-teacher and I have similar expectations of co-teaching,” and were asked to respond on a response scale from “strongly agree” [4] to “strongly disagree” [1]. Paired samples *t* test results (presented in Table 3.13) show that co-teachers hold more similar expectations of co-teaching with their counterparts in their most productive classes.

***Content area training.*** To determine the extent to which the special educators’ content area knowledge varied across settings, the participants were asked to rate the degree of training they received in their most and least productive classes’ curricular area across three levels: (a) undergraduate, (b) graduate, and (c) professional development. Nine participants taught the same content in both their most productive and least productive class; therefore, they were not asked to rate their training for their least productive class.

Frequency results displayed in Table 3.14 show the majority of participants feel they received “very adequate” or “somewhat adequate” training in the content area in their most productive class at all levels, and “very inadequate or none” in their least productive class content area at all levels. To further clarify these findings, paired samples *t* tests were calculated on the means for each level of training for the content areas in the participants’ most and least productive classes. Statistical significance in the differences of the means for undergraduate, graduate, and professional development

training were found and are displayed in Table 3.15. Of particular interest is the result for training at the professional development level, indicating that the participants feel training at this level for their most productive content area far exceeds their least productive content area.

*Self-efficacy.* To test if the special educators' self-efficacy was static across the most and least productive settings, paired samples *t* tests were run on the means of twelve survey items. These twelve items were categorized into three groups: a) general education co-teachers' beliefs, b) general education students' beliefs, and c) special education co-teachers' beliefs. The results from the items measuring the participants' perceptions of their co-teachers' and the general education students' beliefs are displayed in Table 3.16 and were measured with scaled choices ranging from "strongly agree" [4] to "strongly disagree" [1]. The participants believe the general education co-teacher in their most productive class feels the instructional expertise they bring to the classroom benefits both general education students and students with disabilities. Additionally, they believe the general education students view them as more valuable in their most productive class. Further, the participants hold the belief that their general education co-teacher views them as an equal partner in their most productive class.

The participants' beliefs about their role in the classroom were measured by a series of five items on a four-point scale ranging from "strongly agree" [4] to "strongly disagree" [1] and are presented in Table 3.17. The participants feel they are more prepared to teach the content and can implement evidence-based practices more effectively in their most productive class. They also believe they have a more valuable



role and a greater impact on the learning and behavior of students with disabilities in their most productive class.

One additional question was posed to elicit a response about their belief in the amount of specially designed instruction they can provide in the co-taught classroom. This question was, “I can provide my students with disabilities \_\_\_\_ specially designed instruction in the co-taught classroom than I can in a resource setting,” and was based on a five-point scale with the following choices: “much more” [5], “somewhat more” [4], “about the same” [3], “somewhat less” [2], and “much less” [1]. Results are displayed in Table 3.18. Participants who selected “somewhat less” or “much less” in either their most or least productive classes were directed to an open ended follow up question (Q50) to expand on why they feel this way. Of the 96 participants directed to the follow up question, 81 (84.3%) provided a response. Their responses were analyzed and coded by theme (see Appendix J). When appropriate, similar responses were combined for brevity. Themes included (a) co-teacher role (e.g., “When in the general education setting, students are expected to focus on instruction from the classroom teacher, preventing me from being able to adapt instruction to meet the specially designed instruction needs of my students.”); (b) philosophy (e.g., “[my co-teacher believes]...all students are treated equal, they should have to do the same work and get the same grades...”); (c) training (e.g., “I do not know the standards and materials as well.”); and, (d) structural issues such as student characteristics, time, and pacing. Comments related to structural issues included, “Larger class sizes means more behavior issues and a larger gap in student abilities. More time is spent on whole group instruction that teaches to the middle of the class.”

**Research question two.** Research Question Two asked the following: How do secondary special educators perceive their training on the principles of co-teaching and the use of evidence-based practices in co-taught settings?

To define the extent to which the participants were trained in the principles of co-teaching and embedding evidence-based practices in general education settings, they were asked to rate the adequacy of their training at the (a) undergraduate, (b) graduate, and (c) professional development levels with scaled choices from “very adequate” [4] to “very inadequate or none” [1].

***Co-teaching training.*** Frequency results, included in Table 3.19, demonstrate that the majority of the participants feel they received “somewhat” or “very” adequate training in co-teaching at the graduate and professional development levels as opposed to undergraduate level. Conversely, one-third indicated they did not receive training at the undergraduate level or it was “very inadequate.” Paired samples *t* test results displayed in Table 3.20 show statistical significance in the differences of the means between undergraduate and graduate, graduate and professional development, and undergraduate and professional development.

***Use of evidence-based practices training.*** Frequency results, displayed in Table 3.19, reveal nearly three-fourths of the participants felt their training in the use of evidence-based practices was “somewhat” or “very” adequate at the graduate and professional development levels as opposed to just over half at the undergraduate level. Paired samples *t* test results presented in Table 3.20 show a statistical significance in the degree of training between the undergraduate and graduate levels, and similarly the

undergraduate and professional development levels. However, no statistical significance was found between the graduate and professional development training.

**Research question three.** Research Question Three investigated the extent to which there was a relationship between (a) the special educators' self-efficacy and the assigned role in the co-taught classroom, and (b) the co-teachers' shared philosophy and the special educator's assigned role in the co-taught classroom?

***Self-efficacy and assigned role.*** To determine the extent to which there was a relationship between the special educators' self-efficacy and their assigned role, participants responded to four items. The first two items provided responses regarding the participants' perceived value and delineation of their role in their most and least productive co-taught classes. The prompts were: (a) "I feel my role in the general education classroom is valuable," and (b) "I have a clearly defined role in the classroom." Choices were scaled from "strongly agree" [4] to "strongly disagree" [1]. Participant responses indicate they believed their role was valuable in their most productive co-taught setting ( $M = 3.55, SD = 0.75$ ) and they had a clearly defined role in that classroom ( $M = 3.35, SD = 0.86$ ). Pearson's coefficient revealed a moderate positive correlation,  $r = .586, p < .001$ . In their least productive class, responses indicated the value of their role ( $M = 2.91, SD = 1.02$ ) and their role delineation in that classroom ( $M = 2.72, SD = 1.03$ ) were also moderately positively correlated,  $r = .530, p < .001$ .

The remaining two prompts correlated the participants' content knowledge and their role parity in the classroom. Participants responded to the statement, "I feel sufficiently prepared to teach the content in my class," with a response scale ranging from "strongly agree" [4] to "strongly disagree" [1]. This was correlated to responses

from the prompt, “My role in the classroom is best described as,” with scaled choices of “equal” [4], “somewhat equal” [3], “somewhat subordinate” [2], and “subordinate” [1]. Results indicated participants felt prepared to teach the content in their most productive class ( $M=3.59, SD = 0.64$ ) and viewed their role as “somewhat equal” to “equal” in that class ( $M = 3.36, SD = 0.80$ ). A Pearson’s  $r$  data analysis indicated a weak positive correlation,  $r = .220, p < .001$ . They were then asked the same questions regarding their least productive class. Their responses showed their belief about their level of preparation in teaching the content area ( $M = 2.62, SD = 1.09$ ) and the degree to which they experienced parity ( $M = 2.38, SD = 0.96$ ) were not statistically significant,  $r = .075$ , in their least productive class.

***Shared philosophy and assigned role.*** Two items were used to estimate the relationship between the participants’ perceived level of shared philosophy with their co-teacher and their assigned role in the classroom. Participants were presented with the prompt “My co-teacher and I have similar expectations of co-teaching,” and asked to respond on a response scale from “strongly agree” [4] to “strongly disagree” [1] to determine their level of shared philosophy with their co-teacher. This was correlated with their response to the prompt “My role in the classroom is best described as,” on a response scale of “equal” [4], “somewhat equal” [3], “somewhat subordinate” [2], and “subordinate” [1] to determine their assigned role and level of parity in the co-taught classroom. Pearson’s  $r$  showed a positive moderate correlation between shared philosophy with their co-teacher in their most productive class ( $M = 3.38, SD = 0.88$ ) and the degree to which they experienced parity in that classroom ( $M = 3.36, SD = 0.78$ ),  $r = .614, p < .001$ . Likewise, they were asked the same questions in reference to their least

productive class; their shared philosophy with their co-teacher in that class ( $M = 2.66$ ,  $SD = 1.05$ ) and the level of parity they experience ( $M = 2.38$ ,  $SD = 0.96$ ), resulted in a positive moderate correlation,  $r = .603$ ,  $p < .001$ .

### **Summary of Results**

This study quantified how secondary special educators perceive their day to day experiences within co-taught classrooms. Participants identified their most and least productive classes and were presented with prompts regarding their (a) assigned role, (b) shared philosophy with their co-teacher, (c) training, and (d) self-efficacy. The results demonstrated significant differences in how they perceive their daily co-teaching experiences as they vary from their most productive to their least productive co-taught classes. As will be discussed in Chapter Four, some of these variables were more robust than others.

Table 3.1  
*Data Cleaning Process*

Steps		Participants removed <i>N</i>	Participants remaining <i>N</i>
Potential respondents			1,116
Actual respondents			322
Step 1	Screening questions <sup>a</sup>	43	279
Step 2	Duplicate ID	4	275
Step 3	No data <sup>b</sup>	2	273
Step 4	Less than 50% item completion	63	210

*Note.* ID = identification.

<sup>a</sup> First two survey questions screened for study parameters. <sup>b</sup> Respondents who did not progress into first block of questions.

Table 3.2  
*Participant Location*

	Sample size ( <i>N</i> = 210)
Special education cooperative region	<i>n</i> (%)
West Kentucky Educational Cooperative	15 (7.1)
Green River Regional Educational Cooperative	21 (10.0)
Jefferson County Exceptional Child Education Services	23 (11.0)
Ohio Valley Educational Cooperative	19 (9.0)
Northern Kentucky Cooperative for Educational Services	21 (10.0)
Central Kentucky Educational Cooperative	45 (21.4)
South East/ South Central Education Cooperative	13 (6.2)
Kentucky Valley Educational Cooperative	3 (1.4)
Kentucky Educational Development Corporation	6 (2.9)
Unknown	44 (21.0)

*Note.* Unknown = no response to item.

Table 3.3  
*Participant Demographics*

	<i>n</i>	<i>%</i>
Total	210	100.0
Gender		
Male	41	19.5
Female	124	59.0
Unknown	45	21.4
Highest level of training		
Bachelor's degree	29	13.8
Master's degree	132	62.9
Terminal degree	2	1.0
Pursuing master's degree	21	10.0
Pursuing terminal degree	4	1.9
Additional certifications	42	20.0
Unknown	47	22.4
Teaching experience		
1-5 years	43	20.5
6-10 years	32	15.2
11-15 years	42	20.0
16-20 years	21	10.0
21-25 years	14	6.7
26-30+ years	13	6.2
Unknown	45	21.4
Years as a special educator		
1-5 years	48	22.9
6-10 years	31	14.8
11-15 years	40	19.0
16-20 years	23	10.9
21-25 years	11	5.2
26-30+ years	11	5.3
Unknown	46	21.9
Years as a co-teacher		
1-5 years	61	29.0
6-10 years	45	21.4
11-15 years	38	18.1
16-20 years	15	7.1
21+ years	3	1.4
Unknown	48	22.9

*Note.* Unknown = no response to item.

Table 3.4  
*Content Areas Co-taught*

Content area	Most productive	Least productive
	<i>n</i> (%)	<i>n</i> (%)
Basic math/ college math	25 (11.9)	14 (6.7)
Algebra	46 (21.9)	28 (13.3)
Geometry	11 (5.2)	13 (6.2)
Advanced math (calculus/ trigonometry)	0 (0.0)	18 (8.6)
Basic science	10 (4.8)	24 (11.4)
Chemistry	4 (1.9)	17 (8.1)
Biology	5 (2.4)	12 (5.7)
Physics	0 (0.0)	5 (4.5)
Language arts/ writing	20 (9.5)	34 (16.2)
Language arts/ reading	61 (29.0)	14 (6.7)
Social studies/ government	28 (13.3)	21 (10.0)
Unknown	-	10 (4.8)

*Note.* Unknown = no response to item.

Table 3.5  
*Co-teaching Models*

Models	Most productive	Least productive
	<i>n</i>	<i>n</i>
One teach/ one observe	63	92
Station teaching	57	26
Parallel teaching	58	24
Alternative teaching	65	35
Team teaching	101	28
One teach/ one assist	92	96
Unknown	38	47
All models selected	19	5
One teach/ one observe or one assist only	37	90

*Note.* Unknown = no response to item.



Table 3.6  
*Use of Instructional and Behavioral Practices*

Survey question	Yes	No
	<i>n</i> (%)	<i>n</i> (%)
Are there instructional or behavioral practices you are unable to use in any co-taught classroom due to the instructional arrangement or your assigned role?	98 (46.7)	110 (52.4)

Table 3.7  
*Discussion of Roles between Co-teachers*

Co-Teachers discussed	Most productive	Least productive
	<i>n</i> (%)	<i>n</i> (%)
Classroom routine	161 (95.8)	108 (64.3)
Professional role	134 (93.1)	71 (49.3)

Table 3.8  
*Discussion of Specialized Skills between Co-teachers*

	Most productive		Least productive		95% CI for mean difference	<i>t</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Discussion of specialized skills	3.47	.74	3.03	.95	[0.32, 0.55]	7.362***	198

*Note.* Likert scale for this variable ranged from: strongly agree (4) to strongly disagree (1).

\*\*\*  $p < .001$ .

Table 3.9  
*Roles Played as a Co-teacher*

	Most productive		Least productive		95% CI for mean difference	<i>t</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Manage GE behavior	2.31	.80	2.49	1.04	[-0.32, -0.05]	-2.698**	165
Manage SE behavior	2.72	.77	2.95	.94	[-0.35, -0.10]	-3.623**	166
Accommodations for GE	2.27	.92	1.93	.88	[0.21, 0.47]	5.242***	166
Accommodations for SE	3.09	.70	2.86	.86	[0.11, 0.34]	3.922**	165
Academic interventions GE	2.25	.80	1.94	.82	[0.18, 0.44]	4.653***	166
Academic interventions SE	3.10	.75	2.82	.89	[0.16, 0.39]	4.647***	167
Grading/ data GE	1.75	.82	1.58	.76	[0.07, 0.28]	3.233***	167
Grading/ data SE	2.87	.85	2.61	.97	[0.14, 0.37]	4.253***	166
Working with ELL	1.58	.78	1.47	.73	[0.03, 0.19]	2.588**	167

*Note.* GE = general education students; SE = students with disabilities; ELL = English language learners. Likert scale for this variable ranged from: great amount of my time (4); moderate amount of my time (3); little amount of my time (2); none of my time (1). \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Table 3.10  
*Perception of Role Parity and Clarity*

	Most productive		Least productive		95% CI for mean difference	<i>t</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Parity <sup>a</sup>	3.37	.80	2.39	.96	[0.82, 1.14]	11.908***	160
Clear role <sup>b</sup>	3.36	.86	2.72	1.03	[0.49, 0.77]	9.113***	198

<sup>a</sup>“My role in the co-taught classroom is best described as.” Likert scale for this variable ranged from: equal (4); somewhat equal (3); somewhat subordinate (2); subordinate (1).

<sup>b</sup>“I have a clearly defined role.” Likert scale for this variable ranged from: strongly agree (4) to strongly disagree (1).

\*\*\*  $p < .001$ .

Table 3.11  
*Factors Impacting Shared Philosophy*

	Most productive	Least productive
	<i>n</i>	<i>n</i>
Co-teaching assignment for special educator		
Master schedule	80	72
Students' IEPs state co-teaching as LRE	164	122
Volunteered	13	15
I attended a co-teaching training	25	22
Content background	43	21
Unknown	2	24
Co-teaching assignment for general educator		
Master schedule	68	60
Students' IEPs required this class	175	153
Volunteered	19	8
Attended a co-teaching training	13	11
Special education background	6	8
Unknown	1	17

*Note.* IEP = individualized education program; LRE = least restrictive environment.  
 Unknown = no response to item.

Table 3.12  
*Discussion of Shared Philosophy between Co-teachers*

	Most productive	Least productive
	<i>n</i>	<i>n</i>
Co-teachers discussed		
Instructional beliefs	145	74
Philosophy of co-teaching	127	53
View of inclusion	147	93

Table 3.13  
*Shared Philosophy*

	Most productive		Least productive		95% CI for mean difference	<i>t</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Co-teaching expectations	3.38	.89	2.66	1.05	[0.87, 0.57]	9.612***	198

*Note.* Likert scale for this variable ranged from: strongly agree (4) to strongly disagree (1).

\*\*\*  $p < .001$ .

Table 3.14  
*Content Area Training by Levels*

	Most productive			Least productive		
	Under-graduate	Graduate	Professional development	Under-graduate	Graduate	Professional development
Training	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>
Very adequate	60	44	67	18	16	17
Somewhat adequate	87	73	88	44	32	45
Somewhat inadequate	18	23	24	55	48	53
Very inadequate or none	40	54	21	81	98	82
Unknown	5	16	10	12	16	13

*Note.* Unknown = no response to item.

Table 3.15  
*Paired Comparison of Content Area Training by Levels*

	Most productive		Least productive		95% CI for mean difference	<i>t</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Undergraduate	2.81	1.07	1.99	1.00	[0.67, 0.98]	9.955***	197
Graduate	2.54	1.13	1.81	.97	[0.56, 0.91]	8.453***	189
Professional development	3.01	.94	1.98	.99	[0.86, 1.19]	12.495***	194

*Note.* Likert scale for this variable ranged from: very adequate (4) to very inadequate or none (1).

\*\*\*  $p < .001$ .

Table 3.16  
*Perceived Beliefs of General Education Co-teacher and Students*

	Most productive		Least productive		95% CI for mean difference	<i>t</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
My co-teacher believes my presence:							
Benefits GE	3.56	.75	2.83	1.04	[0.58, 0.87]	9.733***	198
Benefits SE	3.72	.64	3.23	.90	[0.37, 0.61]	8.383***	199
My co-teacher believes my instructional expertise:							
Benefits GE	3.41	.84	2.60	.98	[0.67, 0.95]	11.531***	200
Benefits SE	3.67	.67	2.99	.94	[0.56, 0.80]	10.949***	199
My co-teacher believes:							
I am an equal partner	3.40	.93	2.57	1.06	[0.68, 0.98]	10.820***	199
GE view me as:							
Valuable resource	3.48	.82	2.92	1.03	[0.41, 0.70]	7.808***	198

*Note.* GE= general education students; SE = students with disabilities. Likert scale for this variable ranged from: strongly agree (4) to strongly disagree (1).

\*\*\*  $p < .001$ .

Table 3.17  
*Beliefs of Special Educator*

	Most productive		Least productive		95% CI for mean difference	<i>t</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
I believe I:							
Have a valuable role	3.55	.76	2.91	1.02	[0.51, 0.78]	9.260***	196
Impact SE learning	3.64	.64	3.10	.90	[0.41, 0.66]	8.730***	198
Impact SE behavior	3.68	.59	3.45	.76	[0.15, 0.32]	5.287***	197
Can implement EBP	3.93	1.29	3.20	1.49	[0.53, 0.91]	7.617***	161
Am prepared to teach content	3.59	.65	2.62	1.08	[0.81, 1.13]	12.160***	203

*Note.* SE = students with disabilities; EBP = evidence-based practice. Likert scale for this variable ranged from: strongly agree (4) to strongly disagree (1).  
\*\*\*  $p < .001$ .

Table 3.18  
*Perceived Ability to Provide Specially Designed Instruction*

	Most productive		Least productive		95% CI for mean difference	<i>t</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Amount of SDI provided to SE in co-taught versus resource class	2.88	1.20	2.53	1.28	[0.20, 0.51]	4.627***	160

*Note.* SDI = specially designed instruction; SE = students with disabilities. Likert scale for this variable ranged from: much more (5); somewhat more (4); about the same (3); somewhat less (2); much less (1).  
\*\*\*  $p < .001$ .

Table 3.19

*Training in Co-teaching and Evidence-based Practices by Levels*

	Undergraduate	Graduate	Professional development
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
Co-teaching			
Very adequate	46 (21.9)	67 (31.9)	86 (41.0)
Somewhat adequate	45 (21.4)	72 (34.3)	67 (31.9)
Somewhat inadequate	46 (21.9)	28 (13.3)	32 (15.2)
Very inadequate or none	69 (32.9)	35 (16.7)	22 (10.5)
Unknown	4 (1.9)	8 (3.8)	3 (1.4)
Evidence-based practice			
Very adequate	45 (21.4)	61 (29.0)	73 (34.8)
Somewhat adequate	68 (32.4)	91 (43.3)	85 (40.5)
Somewhat inadequate	41 (19.5)	31 (14.8)	36 (17.1)
Very inadequate or none	52 (24.8)	18 (8.6)	12 (5.7)
Unknown	4 (1.9)	9 (4.3)	4 (1.9)

Note. Unknown = no response to item.

Table 3.20

*Paired Comparison of Training in Co-teaching and Evidence-based Practices by Levels*

Training	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	95% CI for mean difference	<i>t</i>	<i>df</i>
Co-teaching	2.30	1.15	2.84	1.07	[-0.73, -0.36]	-5.901***	200
EBP	2.49	1.09	2.97	.91	[-0.64, -0.32]	-6.012***	198
			Graduate	PD			
Co-teaching	2.85	1.07	3.03	1.00	[-0.35, -0.02]	-2.174*	200
EBP	2.98	.90	3.05	.89	[-0.20, 0.05]	-1.169	199
			Undergraduate	PD			
Co-teaching	2.32	1.16	3.04	1.00	[-0.90, -0.55]	-8.268***	202
EBP	2.50	1.09	3.06	.87	[-0.72, -0.40]	-6.895***	202

Note. EBP = evidence-based practice; PD = professional development. Likert scale for this variable ranged from: very adequate (4) to very inadequate or none (1).

\*  $p < .05$ . \*\*\*  $p < .001$ .



## Chapter Four: Discussion

The present study utilized a cross-sectional self-report survey to examine the relationship secondary special education co-teachers' perceptions have with their assigned role, shared philosophy, training, and self-efficacy in their most and least productive classes. Participants in this survey were secondary special education co-teachers in the state of Kentucky. Their mean years of teaching special education ( $M = 11.4$ ) and co-teaching ( $M = 8.4$ ) indicate that the majority were experienced co-teachers.

Prior research suggests there are factors (i.e., well-defined role, shared philosophy, training in content and use of the co-teaching models) that lead to more successful co-teaching (e.g., Mastropieri et al., 2005; McKenzie, 2009; Scruggs et al., 2007). However, no studies have examined the dichotomy in productivity (i.e., most and least productive co-teaching classes) that most co-teachers experience in their typical day to day practice. To date, studies have only looked at co-teaching as a whole, which leads to a moderation of the variables, thus reducing the ability to make decisions about what constitutes productive co-teaching.

This study revealed the majority (91%) of the respondents experienced this dichotomy which suggests these factors can be influenced to increase productivity in the co-taught classroom. To that end, the design of the survey evaluated their perceived productivity in their most and least productive classes. Consequently, it was anticipated that significance would be found in every variable. What was of interest was which variables would be more robust than others, or specifically, what was more impacted by the perception of productivity. This chapter will summarize the findings and embed

recommendations for future research within the context of each research question. It will conclude with a discussion of study limitations and implications for future practice.

### **Research Question One**

The first research question examined each of the variables in relation to the special educators' perceived productivity. It asked: When secondary special educators perceive they are more productive in one setting than another, to what extent is that difference related to (a) their assigned role in the co-taught classrooms, (b) having a shared philosophy of co-teaching with their co-teacher, (c) the amount of training they received in the content area(s) which they teach, and (d) their self-efficacy?

**Assigned role.** Previous research has suggested that parity is the center of successful and productive co-teaching (Friend & Cook, 1993; Murawski & Dieker, 2004). This study found that active engagement also influences the perception of productivity in the co-taught classroom. In their most productive classes, participants reported increased academic engagement with students and using co-teaching models that reflect equality such as team teaching, alternative teaching, and parallel teaching. A clearly defined role was not as important as the purpose of that role in regard to productivity, as the participants perceived their roles were clearly defined in both their most and least productive classes. The perception of being productive may be boosted by the fact that there is a clear role with active academic engagement and parity.

Conversely, feeling less productive may result from having a clear role that is perceived as unequal or non-instructional in nature. For example, just under half of the participants indicated there were instructional or behavioral practices they were not able to use in the co-taught classrooms. Themes that emerged as reasons, consistent with

extant literature, included co-teacher philosophy, behavior management issues, structural issues like space and scheduling, and training. In their least productive classes, participants described themselves as behavior bouncers and reported managing the behavior of all students (i.e., students with and without disabilities) for a significantly greater amount of time than in their most productive co-taught classes.

While it is reasonable to presume that special educators are better trained in behavioral principles than their general education counterparts, and therefore their role may be more of a behavior manager in the classroom, this seems to decrease their overall perception of productivity. Further, while the majority of participants engaged in conversations about classroom routine, professional role, and their specialized skills, the differences found between the most and least productive classes indicate that conversations do not necessarily produce a perception of productivity. Future research, both quantitative and qualitative, is needed to define the extent to which student behavior impacts co-teaching relationships and ultimately, productivity.

Of particular interest to the most/ least dichotomy is that the use of the one teach/ one assist model was nearly evenly distributed between the most and least productive classes. Previous literature has described this model as the most used, but the least engaging and least effective (Scruggs et al., 2007). Therefore, one would expect that this model would lead to a perception of lessened productivity. The fact that this model was used nearly equally in both most and least productive classes may indicate that in some cases, the special educator feels there is a value in their presence in their most productive classes beyond actively taking the lead in teaching. More quantitative research is needed that examines the use of the co-teaching models and their impact on both the perceived

and observed productivity of the special education co-teachers. Given one teach/ one assist was the predominate mode used, research should specifically focus on this model.

**Shared philosophy.** The relationship between the participants' perception of productivity and their increased involvement in the general instructional practices may be linked to a shared sense of responsibility for the entire population of students in the classroom, and hence a shared philosophy between co-teachers. Co-teachers who volunteer to work together often are reportedly more compatible and hold more similar philosophies (Keefe & Moore, 2004; Pugach & Winn, 2011; Simmons & Magiera, 2007). However, the present study did not find volunteerism to be consistent with the perception of productivity; the clear majority of the participants in this study were assigned roles because of scheduling convenience. Although, consistent with extant literature, more general education co-teachers in the most productive class volunteered to co-teach ( $n = 19$ ) than did co-teachers in the least productive class ( $n = 8$ ).

The clear majority of the participants discussed their philosophy of co-teaching, instructional beliefs, and view of inclusion, with the co-teacher in their most productive class nearly twice as often as they did with their co-teacher in their least productive class. Additionally, they reported sharing more similar expectations of co-teaching. This supports that a shared philosophy between co-teachers is needed in order for clear understanding and acceptance of the role delineation (Keefe & Moore, 2004; Mastropieri et al., 2005) and is the first step in creating a successful partnership (Solis et al., 2012). This can potentially increase the personal satisfaction and self-efficacy of the special educators. With deeper shared philosophy comes a greater self-efficacy and therefore greater parity and engagement in the classroom. Future research needs to address this

connection and provide means for teachers to develop this shared philosophy through training.

**Training.** Content area training has been reported as one of the leading factors in successful co-teaching partnerships (Mastropieri et al., 2005; Weiss & Lloyd, 2002). Therefore, as would be expected, content area knowledge was a more prevalent factor for the special educators' selection to co-teach in their most productive as opposed to least productive classes. Additionally, the present study found that participants perceived more adequate training in the content in their most productive classes. Likewise, the lack of content area training recurred as a theme in their ability to implement instructional and behavioral practices in the co-taught classroom. When compared across undergraduate, graduate, and professional development, participants clearly felt they received their most adequate training for their most productive class through professional development. Additional research should examine whether this is related to the shared philosophy they may have with their co-teacher. It could be concluded that if there is a shared philosophy and they perceive their role to be valuable, then they would be more likely to pursue training (i.e., professional development) in that content either individually or with their co-teacher.

**Self-efficacy.** With an increased sense of productivity there is also an increase in self-efficacy, leading to more effective instruction in the classroom and a more significant sense of wellbeing, potentially increasing both student learning outcomes and teacher retention. The participants' responses to queries that measured self-efficacy indicated there is a difference between the special educators' sense of self-efficacy in their most and least productive classes. Their productivity is defined not just by

instructional engagement and role parity, but also by their perception that they are valued by their co-teacher, and feel prepared and able to perform their role. Further, they perceive they have an impact on students' learning in their most productive class through their presence in the classroom, their instructional expertise, and implementation of evidence-based practices.

Interestingly, they feel they can implement specially designed instruction to a lesser degree in their co-taught classes as opposed to the resource classroom. This potentially leads to a sense of frustration and a decrease in instruction received by students with disabilities in the general education classroom. Extended responses from participants indicated that, overwhelmingly, structural issues, such as student characteristics or the pacing of the instruction in the co-taught class, interfere with the use of specially designed instruction. This finding may explain why existing research notes the lack of specially designed instruction in the co-taught classes (Pugach & Winn, 2011; Scruggs et al., 2007). Future research should clarify this connection and quantify the impact of self-efficacy on special educator retention.

### **Research Question Two**

The second research question investigated how secondary special educators perceive their training on the principles of co-teaching and the use of evidence-based practices in co-taught settings. The present study adds support to existing literature by identifying a lack of training in these areas in undergraduate programs (McKenzie, 2009; McLeskey & Brownell, 2015). However, participants did report more adequate training in the principles of co-teaching when delivered through professional development. This could be due to active co-teachers training together. Additional research is necessary to

determine the extent to which training impacts the co-teachers' practice and if there is an influence on co-teacher shared philosophy and self-efficacy. This study found that nearly an equal number of co-teachers in both the most and least productive classes were trained in co-teaching principles, indicating that training alone may not be sufficient. Brownell et al. (2006) found teacher qualities, such as their belief system, impact their use of strategies acquired through training. Future research should extend this work to the principles of co-teaching.

Throughout this study, a recurring theme was the discipline issues in the classroom. This limits the ability of the special educator to implement evidence-based practices and specially designed instruction in the co-taught classroom. Further investigation into the cause is warranted. For example, this could be a reflection of the lack of training in classroom management and behavioral principles. It could also be due to an increased number of students with behavior issues being placed in co-taught classrooms because of the presence of a behavior specialist (i.e., special educator). If this is the case, the result could be the special educators' time being diverted from instructional tasks. Ultimately, this relates to teacher productivity in the classroom and the learning of co-taught students.

### **Research Question Three**

The third research question analyzed the extent of the relationship between (a) the special educators' self-efficacy and assigned role, and (b) the co-teachers' shared philosophy and the special educators' assigned role. The findings indicate that when self-efficacy is defined as the sense that their role is valuable that it is moderately correlated to having a clearly defined role in the classroom. However, when self-efficacy is defined

as feeling sufficiently prepared to teach the content it is only weakly correlated to experiencing parity in the classroom in the most productive class, and not correlated to experiencing parity in the least productive class. Further, having a shared philosophy was moderately correlated to their perception of parity. Therefore, having a shared philosophy is more highly correlated to a sense of equality than content knowledge. It could be concluded that no matter the extent of the special educators' content knowledge, if there is the assumption of subservience, there will be less productivity.

This supports that successful co-teaching relies on interdependence, of which shared philosophy is a key component. This is likely independent of content area training, because in a successful co-taught class there should be a merging of expertise (i.e., the special educators' strategy knowledge and the general educators' content knowledge). Having a shared philosophy has to do with understanding each individuals' strengths and merging those skills together, providing a valuable role for each educator in the classroom.

The overall conclusion that can be drawn from this study is that holding a shared philosophy with a co-teacher is more robust in influencing the perception of productivity than other factors. This shared philosophy likely has an impact on the self-efficacy of the special educator in the classroom, resulting in an increase in productivity and a more active role, whether perceived or actual, greater teacher retention, and ultimately increased student learning outcomes. The connections this study has made between shared philosophy and productivity provide ample ground for future research that should focus on the outcomes of perceived productivity (i.e., special educator retention and increased student learning outcomes).



## **Limitations**

This study provides information on secondary special educators' perceptions of co-teaching, but the results must be considered within the study's limitations. First, the survey had a small sample with a relatively low response rate (28.9%), although it fell within the typical parameters (20-30%) for a self-report survey (Nardi, 2006). This rate was a great deal higher than the response rate (11%) King-Sears and Bowman-Kruhm (2011) had for their survey of secondary special educators' use of specialized reading instruction in co-taught classrooms. However, it must be noted that a low response rate increases the nonresponse error and limits generalization beyond those that responded to the survey.

The sample for the present study was taken at one point in time and from the population of secondary special educators who co-teach in Kentucky. While it was representative of the special educators in that state, caution must be exercised when generalizing beyond this state or population. It should be noted that co-teaching is contextual in nature and instructional practices and roles are not always consistent across time or contexts. Additionally, there were only a few opportunities for the respondents to provide textual responses. When given these opportunities, the overwhelming majority (66%) provided responses, indicating the need for more detailed follow up in these areas.

Lastly, this survey did not ask the participants to identify where, how long ago, or in what manner they received undergraduate or graduate training in the curricular content, the models of co-teaching, or the use of evidence-based practices (e.g., embedded clinical based model, online college). It could be possible they were sufficiently trained but have had few authentic opportunities to practice. Including

additional questions would have allowed for increased analysis of information regarding training. Future research should include such questions to provide insight into the types of training and the effectiveness of that training in increasing the productivity of secondary special educators.

### **Implications for Practice**

Several implications for practice were highlighted by the present study. While there is much literature on co-teaching, none has addressed the dichotomy in productivity that exists in day to day classroom experiences. Of the 9% of respondents who had not experienced a dichotomy, only half reported entirely positive co-teaching experiences. This warrants further investigation because the implication of this lack of perceived productivity is that it may contribute to the attrition rate and shortage of special educators (Cross, 2015; USDOE, 2014) and also to lowered student learning outcomes.

### **Practitioner Professional Development**

The lack of student learning outcome data supports that the practice of co-teaching cannot preclude the use of specially designed instruction to meet the students' needs in the general education classroom (Friend, 2015). The present study suggests that professional development on shared philosophies between co-teachers will positively influence teacher roles, equity, and self-efficacy in implementing evidence-based practices and specially designed instruction. Equally as important to the professional development is providing coaching by way of follow up and feedback with opportunities to reflect on their practice.

Professional development was identified as the most adequate means for training, perhaps due to the autonomy teachers have with selecting their professional development

topics. The percentage of participants who provided a textual response suggests that co-teachers have a lot to say about their experiences. Providing that opportunity within the context of an ongoing supportive, collaborative professional development within a given school would likely have a positive impact on productivity as well as the attrition rate of special educators.

### **Pre-service Training**

Pre-service training should focus on preparing special educators to be resilient and equipped for the inclusive classrooms they will experience. This can be done through increasing authentic opportunities within coursework and clinical experiences (McKenzie, 2009; McLeskey & Brownell, 2015). The present study suggests that training pre-service special educators to use evidence-based practices within content area classes may have a greater impact on productivity than focusing on content area training alone. Therefore, developing a shared philosophy with their general education pre-service peers and implementing evidence-based practices within inclusive settings should be embedded within these authentic experiences. Through these activities, an understanding of the interdependence of the general and special educator can be fostered, leading to more fulfilling and lasting relationships in future classroom.

**Appendix A**  
**Timeline of Laws and Litigation**

*Timeline of Significant Laws and Litigation Impacting Inclusion and Co-teaching Practices*

Date	Law or litigation	Significant mandates impacting co-teaching practices
1954	Brown v. Board of Education	Education should be equally afforded to all citizens
1965	Elementary and Secondary Education Act (P.L. 89-10 [ESEA])	Full educational opportunity through grants for districts serving low income students and special education centers
1966	ESEA Amendments (P. L. 89-750)	Established the Bureau of Education for the Handicapped
1968	ESEA Amendments (P. L. 90-247)	Bilingual Education Act (BEA) - funded limited English proficient programs
1970	ESEA Amendments (P. L. 91-230)	Provided grants to institutes of higher education for special educator training
1972	PARC v. Commonwealth of PA	The first right to education lawsuit in the country (PARC)
1972	Mills v. Board of Education, District of Columbia	A class action right to education lawsuit; expanded PARC case beyond children with developmental disabilities
1973	The Rehabilitation Act (P.L. 93-112)	Established Section 504-provided civil rights protection to individuals with disabilities
1975	Education for All Handicapped Children Act (P. L. 94-142 [EHA])	Free appropriate public education; least restrictive environment; individualized education program; due process; nondiscriminatory assessment
1983	EHA Amendments (P. L. 98-199)	Secondary transition; incentive education programs for children birth through age 3
1986	EHA Amendments (P. L. 99-457)	Handicapped infants and toddlers program, mandated children birth through age 2 receive a free and appropriate education
1990	EHA Amendments (P. L. 101-476 [IDEA])	Renamed Individuals with Disabilities Education Act [IDEA]; transition; related services; autism and traumatic brain injury; parent refusal of placement
1997	IDEA Amendments (P. L. 105-17)	Students with disabilities included in state and district accountability system
2002	ESEA Amendments (P. L. 107-110 [NCLB])	Renamed ESEA the No Child Left Behind Act [NCLB]; included provisions for disadvantaged students and increased accountability
2004	IDEA 2004 (P. L. 108-446)	Reauthorization of IDEA 1997; aligned IDEA with NCLB; identification of students with learning disabilities; early intervening services; discipline issues
2015	Every Student Succeeds Act (P. L. 114-95 [ESSA])	Renamed NCLB the Every Student Succeeds Act [ESSA]; provided increased state control of intervention for bottom 5% and gap schools; states determine student performance targets and school ratings

## **Appendix B**

### **Survey**

### *Co-Teaching Survey*

Q68 Here is a list of terms you will see in the survey. Co-teaching- two educators working together to plan and deliver instruction, and assess the progress of students with and without disabilities within one classroom One teach, one observe- one teacher presents content while the second observes Station teaching- three groups of students rotate through the three stations, one teacher directing activity at each of two stations, and one independent activity Parallel teaching- students are divided into two groups, with both groups receiving instruction from one teacher at the same time, the instructional strategies used are differentiated for the students' needs in each group Alternative teaching- one teacher works with the majority of the students while the second provides remediation, pre-teaching, enrichment, etc. with a small group Team teaching- the students are taught in a whole group format, with both teachers teaching together One teach, one assist- one teacher provides content, the other offers individual assistance as needed for the students Evidence-based practices- strategies that have been proven effective through research with a particular population of students Click NEXT when you are ready to begin!

Q12 Has it been your responsibility to teach students with mild to moderate disabilities (e.g., learning and behavior disabilities) in middle or high school at any point during the past two years?

- Yes (1)
- No (2)

If No Is Selected, Then Skip To End of Survey

Q3 Some co-teachers feel that they are more productive in some co-taught classes than in others. In other words, they feel they can use their knowledge of specially designed instruction and supplementary aids and services more effectively in one co-taught class over another. Have you experienced such a difference?

- Yes (1)
- No (2)

Display This Question:

If Some co-teachers feel that they are more productive in some co-taught classes than in others. In other words, they feel they can use their knowledge of specially designed instruction... No Is Selected

Q78 Please tell us why you responded "No" to the previous question.

- All my co-teaching experiences have been very productive. I feel I can use my knowledge of specially designed instruction effectively in all of my co-taught classes. (1)
- All of my co-teaching experiences have been very unproductive. I do not feel I can use my knowledge of specially designed instruction effectively in any of my co-taught classes. (2)
- I have not co-taught or collaborated with general education teachers in the past two years. (3)

If All my co-teaching experience... Is Selected, Then Skip to End of Survey If All of my co-teaching experience... Is Selected, Then Skip to End of Survey If I have not co-taught or col... Is Selected, Then Skip to End of Survey

Q15 Consider the class in which you have felt the MOST productive (in other words, the co-taught classroom you feel you have been most effective in using your special education knowledge and training). Please select the content area of that class.

- Basic Math/ College Math (1)
- Algebra (2)
- Geometry (3)
- Advanced Math (Calculus/Trig) (11)
- Basic Science (4)
- Chemistry (5)
- Biology (6)
- Physics (9)
- Language Arts/ Writing (7)
- Language Arts/ Reading (8)
- Social Studies/ History/ Government (10)



Q17 Please rate the training you received in teaching  
 \${q://QID15/ChoiceGroup/SelectedChoices}.

	Very adequate (1)	Somewhat adequate (2)	Somewhat inadequate (3)	Very inadequate or no training (4)
Undergraduate training: (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graduate training: (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional development: (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14 Consider the class in which you have felt the LEAST productive (in other words, the co-taught classroom you feel you have NOT been able to effectively use your special education knowledge and training). Please select the content area of that class.

- Basic Math/ College Math (2)
- Algebra (3)
- Geometry (4)
- Advanced Math (Calculus/Trig) (22)
- Basic Science (5)
- Chemistry (6)
- Biology (7)
- Physics (10)
- Language Arts/ Writing (8)
- Language Arts/ Reading (9)
- Social Studies/ History/ Government (21)

Q16 Please rate the training you received in teaching  
 \${q://QID14/ChoiceGroup/SelectedChoices}.

	Very adequate (1)	Somewhat adequate (2)	Somewhat inadequate (3)	Very inadequate or no training (4)
Undergraduate training: (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graduate training: (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional development: (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q51 I feel sufficiently prepared to teach the content in my:

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q52 How much emphasis is placed on high stakes testing (e.g. end of course exams, state wide testing) in your:

	Little or no emphasis (1)	Moderate emphasis (2)	Great emphasis (3)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q18 Please rate the degree of training you received on the concept of co-teaching (i.e., co-teaching models, collaboration, working together, etc.)

	Very adequate (1)	Somewhat adequate (2)	Somewhat inadequate (3)	Very inadequate or no training (4)
Undergraduate training: (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graduate training: (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional development: (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q19 Please rate the degree of training you received to embed evidence-based practices into the general education classroom (i.e., systematic instruction, explicit instruction, strategy instruction, etc.).

	Very adequate (1)	Somewhat adequate (2)	Somewhat inadequate (3)	Very inadequate or no training (4)
Undergraduate training: (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graduate training: (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional development: (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20 Which of the following describes how your co-teaching responsibilities were assigned? (You may select more than one.)

	My schedule had time for co-teaching (1)	My students' IEPs states co-teaching as the LRE (2)	I volunteered (3)	I attended a training on co-teaching (4)	My content area background (5)
MOST productive \${q://QID15/ChoiceGroup/Selected Choices} class (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEAST productive \${q://QID14/ChoiceGroup/Selected Choices} class (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q18\_SP Which of the following describes how your general education co-teachers were assigned to be your partners? (You may select more than one.)

	His/her schedule had time for co-teaching (1)	Content area was required for students with IEPs (2)	He/She Volunteered (3)	Attended a training on co-teaching (4)	He/She has special education background (5)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q34 My co-teacher views my presence in the classroom as benefiting general education students. In other words, your co-teacher values your time in the classroom as it benefits the general education students.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q56 My co-teacher views my presence in the classroom as benefiting special education students. In other words, your co-teacher values your time in the classroom as it benefits the special education students.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q33 My co-teacher views my instructional expertise as benefiting general education students.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q57 My co-teacher views my instructional expertise as benefiting special education students.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q36 My co-teacher views me as an equal partner in the classroom.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q35 My co-teacher and I have similar expectations of co-teaching.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q59 My co-teacher(s) and I have discussed the following: (you may select as many as apply for both the MOST and LEAST productive setting)

Instructional beliefs (1)	<input type="checkbox"/> <u>&lt;strong&gt;MOST&lt;/strong&gt;&lt;/u&gt; productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)</u>	<input type="checkbox"/> <u>&lt;strong&gt;LEAST&lt;/strong&gt;&lt;/u&gt; productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)</u>
Philosophy of co-teaching (2)	<input type="checkbox"/> <u>&lt;strong&gt;MOST&lt;/strong&gt;&lt;/u&gt; productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)</u>	<input type="checkbox"/> <u>&lt;strong&gt;LEAST&lt;/strong&gt;&lt;/u&gt; productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)</u>
Pet peeves (3)	<input type="checkbox"/> <u>&lt;strong&gt;MOST&lt;/strong&gt;&lt;/u&gt; productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)</u>	<input type="checkbox"/> <u>&lt;strong&gt;LEAST&lt;/strong&gt;&lt;/u&gt; productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)</u>
Classroom routines (4)	<input type="checkbox"/> <u>&lt;strong&gt;MOST&lt;/strong&gt;&lt;/u&gt; productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)</u>	<input type="checkbox"/> <u>&lt;strong&gt;LEAST&lt;/strong&gt;&lt;/u&gt; productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)</u>
Professional roles (5)	<input type="checkbox"/> <u>&lt;strong&gt;MOST&lt;/strong&gt;&lt;/u&gt; productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)</u>	<input type="checkbox"/> <u>&lt;strong&gt;LEAST&lt;/strong&gt;&lt;/u&gt; productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)</u>
View of inclusion (6)	<input type="checkbox"/> <u>&lt;strong&gt;MOST&lt;/strong&gt;&lt;/u&gt; productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)</u>	<input type="checkbox"/> <u>&lt;strong&gt;LEAST&lt;/strong&gt;&lt;/u&gt; productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)</u>

Q39 I have discussed with my co-teacher(s) the qualities and skills I can bring to the co-taught classroom.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q60 I have a clearly defined role in the co-taught classroom.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q38 I feel my role in the general education classroom is valuable.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q37 I feel the general education students in the classroom view me as an important resource.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q40 I am able to impact the learning of students with disabilities through co-teaching.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q41 I am able to impact the behavior of students with disabilities through co-teaching.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q42 Are there any instructional or behavioral practices that you are unable to use in any co-taught classroom due to the instructional arrangement or your assigned role?

- Yes (1)
- No (2)

Display This Question:

If Are there any instructional or behavioral practices that you are unable to use in any co-taught c... Yes Is Selected

Q43\_T You responded that there are instructional or behavioral practices you cannot use in the co-taught setting. Please list the practice(s) and briefly describe why you are unable to use them in the general education classroom.

Q23 When planning for a co-taught lesson, I typically do so:

	One on one with my co-teacher (1)	As a team with several co-teachers (2)	Alone (3)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:

If When planning for a co-taught lessons, I typically do so:

**MOST** productive - One on one with my co-teacher Is Selected

Or When planning for a co-taught lessons, I typically do so:

**MOST** productive - As a team with several co-teachers Is Selected

Q25 During planning for my MOST productive

\${q://QID15/ChoiceGroup/SelectedChoices} class, my co-teacher and I discuss the:

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
Model of co-teaching we will use during a particular lesson (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evidence-based practices we will use during a particular lesson (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:

If When planning for a co-taught lessons, I typically do so:

<u><strong>LEAST</strong></u> productive - One on one with my co-teacher Is Selected

Or When planning for a co-taught lessons, I typically do so:

<u><strong>LEAST</strong></u> productive - As a team with several co-teachers Is Selected

Q26 During planning for my LEAST productive

\${q://QID14/ChoiceGroup/SelectedChoices} class, my co-teacher and I discuss the:

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
Model of co-teaching we will use during a particular lesson. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evidence-based practices we will use during a particular lesson (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q61 I plan instruction in the co-taught classroom based on the goals and objectives from my students' IEPs.

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q27 I typically spend \_\_\_\_\_ minutes each week planning for co-taught lessons.

	0-9 (1)	10-19 (2)	20-29 (3)	30-39 (4)	40-49 (5)	50-59 (6)	60-more (7)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q31 How adequate is the quality of your planning for co-taught lessons?

	Very adequate (1)	Somewhat adequate (2)	Somewhat inadequate (4)	Very inadequate (5)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:

If How adequate is the quality of your planning for co-taught lessons?  
<u><strong>MOST</strong></u> productive - Somewhat Inadequate Is Selected  
 Or How adequate is the quality of your planning for co-taught lessons?  
<u><strong>MOST</strong></u> productive - Very Inadequate Is Selected  
 Or How adequate is the quality of your planning for co-taught lessons?  
<u><strong>LEAST</strong></u> productive - Somewhat Inadequate Is Selected  
 Or How adequate is the quality of your planning for co-taught lessons?  
<u><strong>LEAST</strong></u> productive - Very Inadequate Is Selected

Q49 Please tell us why you do not perceive your planning to be adequate.

Q28 Ideally, I THINK I should spend \_\_\_minutes each week planning for co-taught lessons.

	0-9 (1)	10-19 (2)	20-29 (3)	30-39 (4)	40-49 (5)	50-59 (6)	60-more (7)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q35 My co-teacher(s) and I need a common weekly planning time.

- Strongly agree (1)
- Somewhat agree (2)
- Somewhat disagree (3)
- Strongly disagree (4)

Q53 How many general education students are in your:

	0-5 (1)	6-10 (2)	11-15 (3)	16-20 (4)	21-25 (5)	26-30 (6)	31+ (7)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q54 How many students with disabilities are in your:

	0-5 (1)	6-10 (2)	11-15 (3)	16-20 (4)	21-25 (5)	26-30 (6)	31+ (7)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q55 How many English Language Learners are in your:

	0-5 (1)	6-10 (2)	11-15 (3)	16-20 (4)	21-25 (5)	26-30 (6)	31+ (7)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q34 Indicate how you spend your time in your MOST productive  $\{q://QID15/ChoiceGroup/SelectedChoices\}$  co-taught classroom.

	None of my time (1)	A little of my time (2)	A moderate amount of my time (3)	A great deal of my time (4)
Behavior interventionist for general education students (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Behavior interventionist for students with IEPs (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Modifying curriculum/providing accommodations for general education students (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Modifying curriculum/providing accommodations for students with IEPs (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic interventionist for general education students (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic interventionist for students with IEPs (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grading or data collection for general education students (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grading or data collection for students with IEPs (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working with English Language Learners (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q43 Indicate how you spend your time in your LEAST productive co-taught classroom.

	None of my time (1)	A little of my time (2)	A moderate amount of my time (3)	A great deal of my time (4)
Behavior interventionist for general education students (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Behavior interventionist for students with IEPs (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Modifying curriculum/providing accommodations for general education students (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Modifying curriculum/providing accommodations for students with IEPs (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic interventionist for general education students (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic interventionist for students with IEPs (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grading or data collection for general education students (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grading or data collection for students with IEPs (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working with English Language Learners (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q44 Ideally, in the co-taught classroom, the best use of my time would be:

	Not an effective use of my time (1)	Moderately effective use of my time (2)	Very effective use of my time (3)
Behavior interventionist for general education students (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Behavior interventionist for students with IEPs (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Modifying curriculum/providing accommodations for general education students (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Modifying curriculum/providing accommodations for students with IEPs (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic interventionist for general education students (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic interventionist for students with IEPs (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grading or data collection for general education students (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grading or data collection for students with IEPs (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working with English Language Learners (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q32 Rate the effectiveness of the following co-teaching models. (Recall: One teach, one observe- one teacher presents content while the second observes Station teaching- three groups of students rotate through the three stations, one teacher directing activity at each of two stations, and one independent activity Parallel teaching- students are divided into two groups, with both groups receiving instruction from one teacher at the same time, the instructional strategies used are differentiated for the students' needs in each group Alternative teaching- one teacher works with the majority of the students while the second provides remediation, pre-teaching, enrichment, etc. with a small group Team teaching- the students are taught in a whole group format, with both teachers teaching together One teach, one assist- one teacher provides content, the other offers individual assistance as needed for the students)

	Very effective (1)	Somewhat effective (2)	Somewhat ineffective (3)	Very ineffective (4)
One teach, one observe (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Station teaching (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parallel teaching (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative teaching (4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Team teaching (5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
One teach, one assist (6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q67 Which co-teaching models have you used in your MOST and LEAST productive co-taught classes.

	One teach, one observe (1)	Station teaching (2)	Parallel teaching (3)	Alternative teaching (4)	Team teaching (5)	One teach, one assist (6)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q45 I can implement evidence-based practices to the same degree in the co-taught classroom as I can in a resource or small group classroom. (recall: evidence-based practices are strategies that have been proven effective through research with a particular population of students)

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (4)	Strongly disagree (5)
<p>MOST productive</p> <p>QID15/ChoiceGroup/SelectedChoices class (1)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>LEAST productive</p> <p>QID14/ChoiceGroup/SelectedChoices class (2)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:

If I can implement evidence-based practices to the same degree in the co-taught classroom as I can in a resource or small group classroom. MOST productive - Strongly agree Is Selected

Or I can implement evidence-based practices to the same degree in the co-taught classroom as I can in a resource or small group classroom. MOST productive - Somewhat agree Is Selected

Or I can implement evidence-based practices to the same degree in the co-taught classroom as I can in a resource or small group classroom. LEAST productive - Strongly agree Is Selected

Or I can implement evidence-based practices to the same degree in the co-taught classroom as I can in a resource or small group classroom. LEAST productive - Somewhat agree Is Selected

Q46 From the following practices, select those you use most frequently by dragging and dropping into the box.

Most frequently used practices in co-taught setting.
_____ Strategy instruction (1)
_____ Creating outlines (2)
_____ Metacognitive instruction (3)
_____ Mnemonics (4)
_____ Hands on curriculum (manipulatives) (5)
_____ Self-monitoring support (6)
_____ Peer assisted learning (7)
_____ Modifying worksheets (8)
_____ Small group explicit or systematic instruction (9)
_____ Reading directions aloud (10)

_____ Functional behavior assessment (11)
_____ Curriculum based measures (12)
_____ Scribe for students (13)

Q47 I can provide my students with disabilities \_\_\_\_\_ specially designed instruction in the co-taught classroom than I can in a resource setting.

	Much more (1)	Somewhat more (2)	About the same (3)	Somewhat less (4)	Much less (5)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Display This Question:**

If I can provide my students with disabilities \_\_\_\_\_ specially designed instruction in the co-taught... **MOST** productive - Somewhat less Is Selected

Or I can provide my students with disabilities \_\_\_\_\_ specially designed instruction in the co-taught... **MOST** productive - Much less Is Selected

Or I can provide my students with disabilities \_\_\_\_\_ specially designed instruction in the co-taught... **LEAST** productive - Somewhat less Is Selected

Or I can provide my students with disabilities \_\_\_\_\_ specially designed instruction in the co-taught... **LEAST** productive - Much less Is Selected

Q50 Briefly describe why you do not feel you provide the same amount of specially designed instruction to your students with disabilities in the co-taught setting as you can (or could) in the resource setting.

Q33\_R My role in the co-taught classroom is best described as:

	Equal partner (1)	Somewhat equal (2)	Somewhat subordinate (3)	Subordinate (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q66 How academically successful are students with disabilities in your co-taught classrooms (e.g., passing grades)?

	Very successful (1)	Somewhat successful (2)	Somewhat unsuccessful (3)	Very unsuccessful (4)
MOST productive \${q://QID15/ChoiceGroup/SelectedChoices} class (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LEAST productive \${q://QID14/ChoiceGroup/SelectedChoices} class (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q22 Which of the following best describes the person who provides feedback on your implementation of co-teaching? (You may select more than one.)

- Building principal or administrator (187)
- Special education director or administrator (188)
- Resource specialist (189)
- I do not receive feedback on co-teaching (191)
- Other (192)

Display This Question:

If Which of the following best describes the person who provides feedback on your implementation of... Building principal or administrator Is Selected

Or Which of the following best describes the person who provides feedback on your implementation of... Special education director or administrator Is Selected

Or Which of the following best describes the person who provides feedback on your implementation of... Resource specialist Is Selected

Or Which of the following best describes the person who provides feedback on your implementation of... Other Is Selected

Q23 How does that person (s) provide feedback?

- Informal evaluation (1)
- Formal evaluation (2)
- Other (3) \_\_\_\_\_

Display This Question:

If Which of the following best describes the person who provides feedback on your implementation of... Building principal or administrator Is Selected

Or Which of the following best describes the person who provides feedback on your implementation of... Special education director or administrator Is Selected

Or Which of the following best describes the person who provides feedback on your implementation of... Resource specialist Is Selected

Q24 Do you ever receive feedback on the same lesson from a building administrator and a special education administrator (e.g., both administrators observe the same lesson)?

- Yes (1)
- No (2)

Q64 Have any of your co-teachers received feedback on your co-taught lessons from a building administrator or a special education administrator?

- Yes (1)
- No (2)

Display This Question:

If Has any of your co-teachers received feedback on co-taught lessons from a building administrator or a special education administrator? Yes Is Selected

Q65 Were you present when the co-teacher received the feedback?

- Yes (1)
- No (2)

Q5 Please select as many below as apply to your professional training.

- Bachelors Degree in (1) \_\_\_\_\_
- Masters Degree in (2) \_\_\_\_\_
- Terminal Degree (PhD, EdD, EdS) in (3) \_\_\_\_\_
- I am currently pursuing a Masters Degree in (4) \_\_\_\_\_
- I am currently pursuing a Terminal Degree in (5) \_\_\_\_\_
- I hold the additional Certifications (i.e., National Board; Reading Specialist; etc.) (6)  
\_\_\_\_\_

Q6 How many years of teaching have you completed (please include this current school year)?

\_\_\_\_\_ Number of years (1)

Q62 How many years of co-teaching have you completed (please include this current school year if applicable)?

\_\_\_\_\_ Number of years (1)

Q63 How many years have you been a special educator (please include this current school year)?

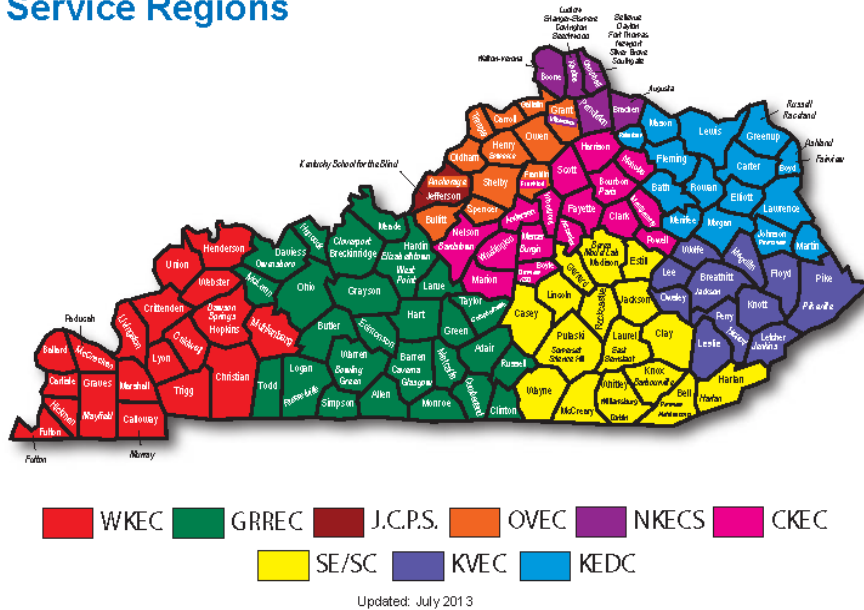
\_\_\_\_\_ Number of years (1)

Q7 What is your gender?

- Male (1)
- Female (2)

Q73

## Special Education Service Regions



Q74 Because we want to include a representative sample from across Kentucky, please select the Special Education Cooperative you teach in from the map above. (Map from Kentucky Department of Education website, 2016)

- West Kentucky Educational Cooperative (red on map) (1)
- Green River Regional Educational Cooperative (green on map) (2)
- Jefferson County Exceptional Child Education Services (maroon on map, Jefferson County only) (3)
- Ohio Valley Educational Cooperative (orange on map) (4)
- Northern Kentucky Educational Cooperative (purple on map) (5)
- Central Kentucky Educational Cooperative (pink on map) (6)
- South East/ South Central Education Cooperative (yellow on map) (7)
- Kentucky Valley Educational Cooperative (dark blue on map) (8)
- Kentucky Educational Development Corporation (light blue on map) (9)



**Appendix C**

**University of Kentucky IRB Exemption Certificate**

**EXEMPTION CERTIFICATION**

MEMO: Kera Ackerman, M.S.  
Special Education &  
Rehabilitation Counseling 229  
Taylor Education Bldg.  
Campus 0001  
PI phone #: (859)257-7927

FROM: Institutional Review Board  
c/o Office of Research Integrity

SUBJECT: Exemption Certification for Protocol

No. 16-0867-X4B DATE: October 19, 2016

On October 19, 2016, it was determined that your project entitled, *Establishing the Efficacy of Co-Teaching*, meets federal criteria to qualify as an exempt study.

Because the study has been certified as exempt, you will not be required to complete continuation or final review reports. However, it is your responsibility to notify the IRB prior to making any changes to the study. Please note that changes made to an exempt protocol may disqualify it from exempt status and may require an expedited or full review.

The Office of Research Integrity will hold your exemption application for six years. Before the end of the sixth year, you will be notified that your file will be closed and the application destroyed. If your project is still ongoing, you will need to contact the Office of Research Integrity upon receipt of that letter and follow the instructions for completing a new exemption application. It is, therefore, important that you keep your address current with the Office of Research Integrity.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" from the Office of Research Integrity's IRB Survival Handbook web page

[<http://www.research.uky.edu/ori/IRB-Survival-Handbook.html#PIresponsibilities>]. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI's web site [<http://www.research.uky.edu/ori>]. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at (859) 257-9428.

see blue.

315 Kinkead Hall | Lexington, KY 40506-0057 | P: 859-257-9428 | F: 859-257-8995 | [www.research.uky.edu/ori/](http://www.research.uky.edu/ori/)

*An Equal Opportunity University*

**Appendix D**

**Introduction E-mail**

Dear Colleague:

We are conducting a survey on co-teaching as a means to meet the needs of students with mild to moderate disabilities (e.g., Learning and Behavior Disabilities). The purpose of this study is to learn whether some co-teachers feel more productive in one co-taught setting than another, and if so, why.

Your name and email address were located through your district's website by searching for special educators. We hope to receive responses from 250 Kentucky special educators, so your answers are important to us.

This survey is voluntary. If you choose to participate, you can skip any questions or discontinue at any time by exiting the browser. You may choose not to participate by opting out below. There will be no penalties or loss of benefits for not participating.

Piloting indicates this survey should take approximately 20 minutes. You will only have to respond to a portion of the items. You will be asked to answer questions about your experience as a special education co-teacher in a secondary general education classroom.

The survey is confidential. That means that no one, not even members of the research team, will know that the responses you gave came from you. Only aggregate data will be collected and reported. No individual responses will be identified. Please be aware that we will make every effort to safeguard your responses upon receipt from the online survey company. However, as with anything involving the Internet, we cannot guarantee the confidentiality of the responses while still on the survey company's servers or en route to either them or us. It is possible the raw data collected for research purposes may be used for marketing or reporting purposes by the survey/data gathering company after the research is concluded, depending on the company's Terms of Service and Privacy Policies.

Your responses will help guide future research into the use of co-teaching as a model for special education service delivery. The aggregate data gathered from this survey may be shared with other investigators through articles, presentations, or at conferences.

Follow this link to the survey:

[\\${l://SurveyLink?d=Take the survey}](#)

Or copy and paste the URL below into your internet browser:

[\\${l://SurveyURL}](#)

Follow the link to opt out of future emails:

[\\${l://OptOutLink?d=Click here to unsubscribe}](#)

To ensure your responses will be included, please complete the survey by December 1, 2016. If you need to stop and return at a later time, the survey will remain available for two weeks after you have started.

If you have any concerns, questions, or suggestions, please contact us; our contact information is below. There will be a glossary of terminology at the beginning of the survey. If you have complaints, suggestions, or questions about your rights as a research volunteer, contact the staff in the University of Kentucky Office of Research Integrity at 859-257-9428 or toll-free at 1-866-400-9428.

Thank you for your participation in this important project.

Kera Ackerman  
Ph.D. Candidate  
Department of Early Childhood, Special Education, and Rehabilitation Counseling  
University of Kentucky  
859-257-7927

Robert G. McKenzie, Ph.D.  
Professor of Special Education  
University of Kentucky

**Appendix E**  
**First Reminder E-mail**

Dear Colleague:

Last week we sent you a survey on co-teaching. The purpose of this study is to learn whether some co-teachers feel more productive in one co-taught setting than another, and if so, why.

We hope to receive responses from 250 Kentucky special educators, so your answers are important to us.

Your responses will help guide future research into the use of co-teaching as a model for special education service delivery. The aggregate data gathered from this survey may be shared with other investigators through articles, presentations, or at conferences.

Follow this link to the survey:

[\\${l://SurveyLink?d=Take the survey}](#)

Or copy and paste the URL below into your internet browser:

[\\${l://SurveyURL}](#)

Follow the link to opt out of future emails:

[\\${l://OptOutLink?d=Click here to unsubscribe}](#)

To ensure your responses will be included, please complete the survey by December 1, 2016. If you need to stop and return at a later time, the survey will remain available for two weeks after you have started.

If you have any concerns, questions, or suggestions, please contact us; our contact information is below. There will be a glossary of terminology at the beginning of the survey. If you have complaints, suggestions, or questions about your rights as a research volunteer, contact the staff in the University of Kentucky Office of Research Integrity at 859-257-9428 or toll-free at 1-866-400-9428.

Thank you for your participation in this important project.

Kera Ackerman  
Ph.D. Candidate  
Department of Early Childhood, Special Education, and Rehabilitation Counseling  
University of Kentucky  
859-257-7927

Robert G. McKenzie, Ph.D.  
Professor of Special Education  
University of Kentucky



**Appendix F**  
**Second Follow Up E-mail**

Dear Colleague:

Last week we sent you a reminder about completing a survey on co-teaching. To thank you for your participation, those who complete the survey by December 15, 2016 will be entered into a random drawing to win one of 20 gift cards to Amazon (\$25 each). Your odds are good! If your name is selected, the gift card will be sent to you via email.

The purpose of this study is to learn whether some co-teachers feel more productive in one co-taught setting than another, and if so, why. We hope to receive responses from 250 Kentucky special educators. To date, we have received responses from 180 teachers.

Your responses will help guide future research into the use of co-teaching as a model for special education service delivery. The aggregate data gathered from this survey may be shared with other investigators through articles, presentations, or at conferences.

**Follow this link to the Survey:**

[\\${l://SurveyLink?d=Take the survey}](#)

Or copy and paste the URL below into your internet browser:

[\\${l://SurveyURL}](#)

Follow the link to opt out of future emails:

[\\${l://OptOutLink?d=Click here to unsubscribe}](#)

To ensure your responses will be included, please complete the survey by December 15, 2016. At that time, the survey will close and will not be accessible.

If you have any concerns, questions, or suggestions, please contact us; our contact information is below. There will be a glossary of terminology at the beginning of the survey. If you have complaints, suggestions, or questions about your rights as a research volunteer, contact the staff in the University of Kentucky Office of Research Integrity at 859-257-9428 or toll-free at 1-866-400-9428.

Thank you for your participation in this important project.

Kera Ackerman  
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University of Kentucky  
859-257-7927

Robert G. McKenzie, Ph.D.  
Professor of Special Education  
University of Kentucky

**Appendix G**  
**Second Reminder E-mail**

Dear Colleague:

Last week we sent you a survey on co-teaching. The purpose of this study is to learn whether some co-teachers feel more productive in one co-taught setting than another, and if so, why.

We hope to receive responses from 250 Kentucky special educators, so your answers are important to us.

Your responses will help guide future research into the use of co-teaching as a model for special education service delivery. The aggregate data gathered from this survey may be shared with other investigators through articles, presentations, or at conferences.

Follow this link to the survey:

[\\${l://SurveyLink?d=Take the survey}](#)

Or copy and paste the URL below into your internet browser:

[\\${l://SurveyURL}](#)

Follow the link to opt out of future emails:

[\\${l://OptOutLink?d=Click here to unsubscribe}](#)

To ensure your responses will be included, please complete the survey by December 15, 2016. At that time, the survey will close and will not be accessible.

If you have any concerns, questions, or suggestions, please contact us; our contact information is below. There will be a glossary of terminology at the beginning of the survey. If you have complaints, suggestions, or questions about your rights as a research volunteer, contact the staff in the University of Kentucky Office of Research Integrity at 859-257-9428 or toll-free at 1-866-400-9428.

Thank you for your participation in this important project.

Kera Ackerman  
Ph.D. Candidate  
Department of Early Childhood, Special Education, and Rehabilitation Counseling  
University of Kentucky  
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Robert G. McKenzie, Ph.D.  
Professor of Special Education  
University of Kentucky

**Appendix H**  
**Variables and Corresponding Survey Items**

Variable Alignment to Survey Items

Variable	Survey item
Assigned Role	Q39 I have discussed with my co-teacher(s) the qualities and skills I can bring to the co-taught classroom.
Assigned Role	Q60 I have a clearly defined role in the co-taught classroom.
Assigned Role	Q42 Are there any instructional or behavioral practices that you are unable to use in any co-taught classroom due to the instructional arrangement or your assigned role?
Assigned Role	Q43_T You responded that there are instructional or behavioral practices you cannot use in the co-taught setting. Please list the practice(s) and briefly describe why you are unable to use them in the general education classroom.
Assigned Role	Q34 Indicate how you spend your time in your MOST productive co-taught classroom.
Assigned Role	Q43 Indicate how you spend your time in your LEAST productive co-taught classroom.
Assigned Role	Q67 Which co-teaching models have you used in your MOST and LEAST productive co-taught classes.
Assigned Role	Q33_R My role in the co-taught classroom is best described as:
Assigned Role	Q59 My co-teacher(s) and I have discussed the following: (classroom routines; professional roles)
Shared Philosophy	Q20 Which of the following describes how your co-teaching responsibilities were assigned?
Shared Philosophy	Q18_SP Which of the following describes how your general education co-teachers were assigned to be your partners?
Shared Philosophy	Q35 My co-teacher and I have similar expectations of co-teaching.
Shared Philosophy	Q59 My co-teacher(s) and I have discussed the following: (instructional beliefs, philosophy of co-teaching, view of inclusion)
Training	Q16 Please rate the training you received in teaching the content area in your most productive class.
Training	Q17 Please rate the training you received in teaching the content area in your least productive class.
Training	Q18 Please rate the degree of training you received on the concept of co-teaching (i.e., co-teaching models, collaboration, working together, etc.)
Training	Q19 Please rate the degree of training you received to embed evidence-based practices into the general education classroom (i.e., systematic instruction, explicit instruction, strategy instruction, etc.)

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Self-Efficacy	Q34 My co-teacher views my presence in the classroom as benefiting general education students. In other words, your co-teacher values your time in the classroom as it benefits the general education students.
Self-Efficacy	Q56 My co-teacher views my presence in the classroom as benefiting special education students. In other words, your co-teacher values your time in the classroom as it benefits the special education students.
Self-Efficacy	Q33 My co-teacher views my instructional expertise as benefiting general education students.
Self-Efficacy	Q57 My co-teacher views my instructional expertise as benefiting special education students.
Self-Efficacy	Q36 My co-teacher views me as an equal partner in the classroom.
Self-Efficacy	Q38 I feel my role in the general education classroom is valuable.
Self-Efficacy	Q37 I feel the general education students in the classroom view me as an important resource.
Self-Efficacy	Q40 I am able to impact the learning of students with disabilities through co-teaching.
Self-Efficacy	Q41 I am able to impact the behavior of students with disabilities through co-teaching.
Self-Efficacy	Q45 I can implement evidence-based practices to the same degree in the co-taught classroom as I can in a resource or small group classroom.
Self-Efficacy	Q47 I can provide my students with disabilities _____ specially designed instruction in the co-taught classroom than I can in a resource setting.
Self-Efficacy	Q50 Briefly describe why you do not feel you provide the same amount of specially designed instruction to your students with disabilities in the co-taught setting as you can (or could) in the resource setting.
Self-Efficacy	Q51 I feel sufficiently prepared to teach the content in my (most/least) productive co-taught class.

---

## **Appendix I**

### **Responses by Theme, Q43 Instructional and Behavioral Practices**



*Q43 Responses by Theme, "You responded that there are instructional or behavioral practices you cannot use in the co-taught setting. Please list the practice(s) and briefly describe why you are unable to use them in the general education classroom."*

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### **Philosophy**

The general education teacher has made it clear to me that my role is for special education students only and then will tell me what that role is as far as their instruction is concerned. I am forced to adapt to what they want in the class and I am being told what to teach/how to teach it/method to do it with.

The co-general ed teachers most always feels that her way is right and mine is wrong. Students sometimes see me as an assistance because that is how the teacher treats me. In my least productive class, I am not able to teach lessons, review material with class, or take care of discipline issues.

Classroom teacher does not wish to have a co-teacher in his classroom therefore using me more as an aide.

The core teacher teaches as they learn that is not always the way children learn.

There are some routines that I implement daily in my resource classroom that I am unable to implement in the collaborative or general education setting due to the teaching style of the regular education teacher. This is not necessarily a negative thing, but a difference in teaching styles.

Teachers with a strong organizational level and routine have a hard time relinquishing control to another individual in the classroom.

Pull outs to explain difficult material, due to not knowing how to solve calculus problems, and extended processing time, teacher does not give enough time for certain students to answer due to how long it takes the students to process the information and give an answer.

In the general education classroom, I am unable to use fluency and reading comprehension strategies I use in my resource class such as whole class choral reading, repeat reading, close reading, reading think alouds, etc.; as my co-teaching partner considers those strategies inappropriate for the grade level and setting. However, the students are struggling with skills these strategies would support.

In the co-taught classroom with the teacher who did not want a co-teacher (or students with disabilities), I was not able to implement most strategies. The only one she was open to was alternative teaching. She was concerned that the students with disabilities negatively impacted her success as a teacher and made her scores 'look bad.' Her negativity kept me from being as effective as I have been in classrooms with co-teachers embracing co-teaching philosophies. It negatively impacted the progress of many students. One student even asked me why the regular ed teacher didn't like me...awkward...

Some behavior practices are difficult to use when the gen. ed. teacher does not support the practices. I.e. using preferential seating and then letting the students sit where he/she wants.

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Some teachers don't want you to do nothing in their classroom. Some even prefer you not to show up because they feel you are reining in on their territory. You are either a glorified baby sitter or want you to be their little teacher assistant making copies and grading papers.

I just believe that a couple of my students are not able to perform some of the tasks required of them in the regular education classroom.

In my least impactful co-teaching class, the general education math teacher is "not ready" to move into any co-teaching model, other than the general education lead (teach) and the co-teacher assist by pulling students that struggle to another room to re-teach concepts. Although the CRA (concrete, representational, abstract) model for introducing new math concepts is advocated in our instructional planning and data-team work and is implemented very successfully in my resource math class, the general education teacher remains "not quite comfortable" in making that move, yet. Also, the use of visual cues/supports and anchor charts are not allowed in that co-teaching class. Very rarely do we use any type of manipulative, despite the fact that I bring manipulatives to our planning sessions and provide suggestions for how to use them to introduce a new topic. The fear is always that they will take too much time and students should already know the basics, even if no data supports that opinion.

In classes where the gen. ed. teacher does not want to do true co-teaching I cannot do many of the strategies that I typically do in a gen. ed. class where the teacher and I truly co-teach.

Because we co-teach, I don't use many direct one-in-one practices (i.e., Time delay, timed readings, etc.) due to teaching requirements. I sometimes do them in peer-mediated formats.

Pull outs to explain difficult material, due to not knowing how to solve calculus problems, and extended processing time, teacher does not give enough time for certain students to answer due to how long it takes the students to process the information and give an answer.

### **Behavior/Classroom Management**

Many times, I am more of the behavior interventionist than teaching. The English Teachers have their own way of teaching and prefer not to give over that control I sometimes feel that I am entering into another teacher's room and I feel that, in her room and with her expertise of the content, she sets the tone of the classroom. I specifically have two co-teaching situations where the teachers allow a lot more than I would as far as discipline goes. This makes it hard for me to come into her room and create a new environment.

In the co-teaching classroom, I do not get to use any strategies. I am an observer, behavior management specialist or an assistant. I use my skills when I am able to give small group instruction in the resource room.

The General ed teacher often feels that the special education teacher is an aid who makes copies and takes out the behavior children, more than an equal person in the classroom. I feel like I'm used as a behavior bouncer.

Just was unable to use them because the language arts general education teacher was not professional, had a very chaotic classroom, and was not open to following through with any of my ideas

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It is difficult to use a point system to reward special education students in a classroom with general education students because it singles them out and the general education students in a classroom with general education students because it singles them out and the general education students want the same system, even when it is not appropriate for them to follow the system.

Classroom expectations - The general education teacher doesn't go by the rules of the school. The students struggle due to cell phone freedom and disrespectful language spoken to their friends and general education teacher.

Structure of the class and discipline issues mainly of students without disabilities.

### **Structural Issues (i.e., space, time, scheduling)**

I co-teach 5 periods a day: 3 in geometry and 2 in Algebra II. In a few of my classes, I feel I do more "one teach, one assist" than a variety of co-teaching models. I am thankful that I am at least able to assist students as needed and not just relegated to "observing."

Different Co-teaching Strategies- In the science room a lot of it relied on one teach-one assist

Parallel teaching can't be used because of the physical space limitations of the classroom.

Parallel Teaching -not enough space in the classroom

Parallel teaching- The general education teacher said the room can't be arranged that way because of his other classes. He also said we can't do it because he uses the Smartboard and whiteboard and therefore I wouldn't have a board to teach with/show examples on.

Trouble with monitoring IEP goals in some collaborative classrooms due to all the State Assessments which require time outside the classroom. Ex. Special Ed teacher could miss up to several days in the setting because of providing accommodation for ACT. (testing over multiple days)

Large classroom with constant instruction that moves rapidly(too)

I am assigned multiple classrooms during the same period.

One-on one instruction; enough modification and adaptations that are needed because there is just not enough time and too many special needs students in one class in which their needs can be met.

Utilizing different methods for solving problems due to not enough time to differentiate for each student

I am not able to teach certain content in ways that I think my students might grasp better because I feel I must present the content the same way as the regular classroom teacher. I also feel that I am not able to reward my students for progress made and good behavior as I would in a resource setting.

With small group settings the room is just not there, also class time does not allow for all activities.

Reading to students on assignments and tests-No time in the daily lesson

Some content I feel needs to be revisited or discussed and presented from another angle.

There is often not enough time to do that in the general education classroom.

One on one instruction due to splitting classes

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It is much more difficult to provide frequent breaks, one-on-one/small group instruction and use of reward systems when co-teaching because it can be disruptive to other students in the general education environment.

I am unable to modify classroom rules for student who needs clearly defined rules that serve a purpose that will enhance their learning (i.e. rules that serve a purpose for their learning, not because something annoys the teacher).

It is more difficult for me to utilize having students take a break within the classroom if they are disruptive to the classroom environment in the general education classroom due to space issues.

Social Skills instruction: due to the intensity of the instruction of social skills, it is very difficult to teach them in the whole group setting while content is being taught

I am unable to use some of the co-teaching strategies because I am only in the classroom for half of the period.

### **Training**

In my least effective co-taught class I am with an MAT student teacher for World Civ. and Gov't/Civics. She has never taught before and does not understand the policies and guidelines of IDEA. It makes it very difficult on my students when she gives assignments and only allows a day to complete. She doesn't take into consideration their reading levels or assistance at home. I have asked for PPT's to be printed ahead of time for my students; however, this does not get accomplished unless I print it myself. If she actually understood the foundations of teaching and classroom management I feel this setting would function better for my students and me. As for behavior, the lack of classroom management from this teacher impedes the behavior of my students. For example, my students (4 IEP's) are grouped with higher level students in order to help impact their learning. They are separated from students that impose distractions. There are times when the regular teacher does not enforce the seating arrangements; therefore, causing learning difficulties. I have expressed this concern, but she does not feel this is a problem. She gives assignments and feels they should complete on their own, while she sits at her desk. Her lack of monitoring (classroom management) also impedes the learning of half the class. With all that said, I as a teacher sometimes feel I do not know/understand what is going on in the class. The students do not know the standards, learning goals, or procedures for the class.

In biology I do not have a strong enough Biology background to teach anything. I struggle keeping up with content. It's been 10 years since I studied Biology in high school.

The teachers I work with let me interject different strategies and ideas that will help all students. The teachers I work with share my intervention and behavior skills that I use with special needs. You have that one teacher that wants you to be seen and not heard, or likes everything done their way. There are also those teachers that do not agree with the IEP modifications for special needs students. Many teachers still do not understand what co-teaching is. New teachers are better at this, but some of the older teachers still have the mindset that special ed teachers are glorified aides. Our best co-teaching classes are those that we "tag-teach" showing kids we have different ways of looking at the same material and both can learn from each other as well.

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## **Appendix J**

### **Responses by Theme, Q50 Amount of Specially Designed Instruction**

*Q50 Responses by Theme, "Briefly describe why you do not feel you provide the same amount of specially designed instruction to your students with disabilities in the co-taught setting as you can (or could) in the resource setting."*

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### **Role**

Some teachers just expect us (special education teachers) to be 'bouncers' in their classrooms -- not equal peers.

I have no control or say so about anything in one of the classrooms.

When in the general education setting, students are expected to focus on instruction from the classroom teacher, preventing me from being able to adapt instruction to meet the specially designed instruction needs of my students.

In my resource room, I can control how long we spend on skills or strategies. I can also go to a lower standard if necessary to help build foundational skills.

I feel that I have more control in the resource setting. This allows me to provide specially designed instruction in a smaller and more controlled setting. I also have the

flexibility to change instruction, reteach, or break lessons down when needed as this is harder to do with more students and another teacher.

In a resource setting, I am able to create and implement lessons according to SDIs in the IEPs. This is more difficult in the general ed setting.

The co-taught setting doesn't allow me to provide the one on one instruction or enough time to implement the specially designed instruction to students with disabilities as the resource setting would. In my experience students who are SLD in the content, MMD, or EBD do not receive enough specially designed instruction as they would in the resource setting. I strongly believe it is not the best LRE for these students.

However, OHI students can be provided the amount of specially designed instruction needed in a co-taught setting. I have been teaching LBD for seven years and the last two years have been extremely frustrating for me. The reason for my frustration is not having enough resource class settings. I am told the student must receive the content from the general education teacher and not the LBD teacher. However, I deliver the same content as the general education teacher in station, parallel, and other co-teaching strategies.

Because I was not always given opportunities in the science classroom.

Because I am spending more time with general Ed students.

As long as I have the freedom to pull students out to reteach the setting has minimal effect on the outcome.

Because I'm not in true co-teaching setting. I usually assist, so I can't control time to implement SDI as well as I'd like.

No ownership in shared space.

In my least productive class, I am only able to follow the curriculum set by the teacher of the class.

### **Philosophy of Co-teacher**

Personality/ demeanor of co-teacher.

He wanted me to manage behavior more than teach alongside him.

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Due to the cooperation of the gen ed teacher.

In my experience, the general ed teacher usually tries to be the boss and overrule the special education teacher. The reasoning is that if all students are treated equal, they should have to do the same work and get the same grades. It is so not fair to our population of students with disabilities.

The teacher was not receptive.

Teacher thinks everyone should be equal in class.

### **Philosophy of Special Educator**

I feel students can get more individualized instruction in the resource room, thus assisting with academic success.

I believe writing needs to be explicitly taught in resource if they qualify for a writing goal.

I feel that students that are in the co-teaching setting are lacking foundational skills. In the co-teaching/general education environment, I feel that our district pushes grade level content so much that we, as Special Educators, are not allotted time to reteach concepts.

### **Lack of Training**

Math concepts are ever evolving and I need to see the teacher's methodology. Students learn better when they are in small groups in class learning concepts and with math, it helps to be close to an expert if a question arises that I, one who doesn't have the specialty training, needs to ask a question.

Because I do not know the standards and materials as well. I would learn the material first and then teach it.

Lack of training and planning with co-teachers.

Because of inadequate training.

### **Structural issues (i.e., student characteristics)**

In a resource room I am dealing only with ECE students.

There are many more students who have more varying degree of needs.

Because there are 35 students in most general education classes and often many more students with an IEP than I would have in a resource class.

In the Resource room, I can get the students to work for me. In gen ed, they are normally embarrassed to ask for help and they do not wish to be brought to anyone attention

The co-taught classroom is larger in size and many of my students get "lost" in the shuffle due to the higher maintenance students requiring more attention.

I feel that I am able to provide the more individualized help because of the class size setting. The students do not want to ask as many questions also the general education students ask me just as many questions.

Time is split between a larger number of students.

The students that need more individualized instruction are usually very distractible and need to be in a smaller setting in order to provide clear instruction and directions without constant interruption.

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I cannot teach my students with disabilities as well in the general education setting because I will be disturbing the rest of the class. Also, these students require more time to process information and require repetitive practice with explicit instruction. I cannot do that in the general education classroom. The classroom moves at a much faster pace than my students can keep up with.

Attention is spread among more students. Pacing is much faster in a co-teaching class.

As the group's size increases, distractions also increase.

Smaller grouping, I'm able to reach more students more effectively.

The behaviors are too great with in the classroom.

Students are embarrassed to be singled out; therefore, I must judiciously implement specially designed instruction in the regular classroom to meet the student's need for emotional safety. In the resource setting, the students are more free to admit when they are struggling. I can try more ways of presenting information until I find what resonates with each student. Also, I can better implement guided, explicit instruction in the resource room. I can spend more time of difficult concepts that the regular ed kids got the first time in the resource room. I can address the deficiencies in individual's learning best in the resource room.

The class has 36 students enrolled, behavior management is a huge issue. Many of the students with IEP's are not able to concentrate.

Too much else going on, working on behavior of others in the co-teaching setting.

Smaller setting in a resource...too much distraction in larger setting.

There are some students who need one on one instruction, or small group. Many behavior issues or sensitivity to noise or larger groups, especially my autistic students sometimes need a quieter environment to learn. Students who are just above functional levels sometimes fall through the cracks in a regular ed class. I want them to feel successful and not intimidated and they can learn better in the small setting in some classes.

The resource room the students' needs are more closely related. The needs are more diverse in a co-taught setting.

Students in a co-teaching class often refuse help, and want the content teacher to teach or help them.

Students do not understand basic math skills and introduction of new ideas are given before students have mastered needed skills.

There are more students needing my time and attention and it is difficult to get all needs met.

The students behave better with their peers. They are more likely to stay on task. They have peer tutors and role models.

It difficult to provide SDI in collaborative setting because some student with IEP don't want the extra support because it can at time single them out.

Too large of classes and too many distractions.

Too much behavior issue to actually work with instructional strategies. Students are too widely varied in intellect.

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**Structural issues (i.e., time, pacing)**

I feel as though I can this year. However, last year the teacher wanted to move so quickly through the content that he said we didn't have time to go back and re-teach. I can slow down the pace without worrying that the other students are not being challenged.

Not appropriate amount of time allowed for implementation.

I provide less specially designed instruction to students with disabilities in the co-taught classroom than I do in the resource room. In the regular classroom, the teacher is giving instruction or the students are doing work bell-to-bell. There is no time for me to do specially designed instruction to individual students or small groups.

Regular teachers are very concerned that all students receiving a credit in their class complete all the work. (This is high school) This leaves no time for specially designed instruction. Only accommodations are given.

The co-taught setting moves at a much faster pace than in the the resource setting. The supplemental aids and services can be utilized freer and with more ease in the smaller resource setting.

In some cases, I feel I could utilize more effective practices to benefit students in a resource setting due to the structure of the class and the willingness (or lack thereof) of the general education teacher to make changes in class routine.

Within the highly structured, single lead teacher, non-differentiated classroom, to "pull" for strategy instruction causes students to miss core instruction only compounding student stress and widening the gap between students receiving additional instruction and those not.

Resource setting you are setting up the lessons and the pace of these lessons in a co-teach setting someone else is setting the lessons and the pace.

I can focus more on my students needs and slow down the pace of instruction. It gives me time to teach and re-teach as long as necessary to develop skills.

When students are spread out throughout a classroom with 25 or so students, it is harder to get to every student to give their SDI; since some SDI for students may be the same, it is much easier to do it in a smaller and more controlled environment.

Also, much quieter so students can receive the instruction the first time, instead of outside influences.

Larger class sizes means more behavior issues and a larger gap in student abilities.

More time is spent on whole group instruction that teaches too the middle of the class.

It is more of a challenge to build the skills of lower level learners due to time constraints and their openness in this type of setting.

Not able to provide in-depth instruction, pace is too fast for MMD/SLD students to absorb even with extended time. Before being to complete the assignment they have already moved on to assignment/topic.

Time is a constraint as well as the number of students. It is much easier to work one on one and small group in the resource class.

Whole group instruction.

The way that a general education class is scheduled and structured does not provide me the same flexibility to make adjustments for my students as I frequently need to do on the fly.

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Because I am not given the ability to plan with my co-teacher it is difficult to provide SDI to children with IEP's because it disrupts the other students learning.

The SDIs cannot be implemented in the co-teaching setting as it is in the resource setting due to the nature and potential disturbances to the whole class.

Regular education pacing guide is too fast for some students.

Specially designed instruction can be distracting to general students in the co-teaching setting.

The class goes at a much faster pace having to cover more content where in the resource class I can eliminate content, re-teach skills needed to go forward and go at their pace. Sometimes the regular teacher is moving on when I am providing re-teaching to students.

Classes are not modified all for special needs students. It's basically lecture then work which does not meet all learners.

Pace of instruction for whole class and class size do not always allow for time to implement specially designed instruction. It also makes it difficult to deliver the instruction without using it with the whole class. Many students may not need it.

I feel like I can focus on the students with special needs and accommodating them better than in the regular classroom. In the regular classroom there is a lot going on and the teacher expects a lot of time spent with the general education students too – not only just to help but also so we do not make the students with special needs stand out. It is easier to accommodate assignments and make faster progress in a resource setting.

The general classroom sometimes doesn't allow one-on-one opportunities that Special Ed. students need. The smaller the environment, the easier it is to provide additional support to such students.

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## References

- Allday, R. A. (2006). Prisoner perceptions of effective teacher behavior. *Education and Treatment of Children, 29*, 729-748.
- Brownell, M. T., Adams, A., Sindelar, P., Waldron, N., & Vanhover, S. (2006). Learning from collaboration: The role of teacher qualities. *Exceptional Children, 72*, 169-185. doi: 10.1177/001440290607200203
- Brownell, M. T., Griffin, C., Leko, M. M., & Stephens, J. (2011). Improving collaborative teacher education research: Creating tighter linkages. *Teacher Education and Special Education, 34*, 235-249. doi: 10.1177/0888406411404570
- Brusca-Vega, R., Brown, K., & Yasutake, D. (2011). Science achievement of students in co-taught, inquiry based classrooms. *Learning Disabilities: A Multidisciplinary Journal, 17*(1), 23-31.
- Burns, M. K., & Ysseldyke, J. E. (2009). Reported prevalence of evidence-based instructional practices in special education. *Journal of Special Education, 43*, 3-11. doi: 10.1177/0022466908315563
- Bryant-Davis, K. E., Dieker, L., Pearl, C., & Kirkpatrick, R. M. (2012). Planning in the middle: Co-planning between general and special education. *Journal of Educational and Psychological Consultation, 22*, 208-226. doi: 10.1080/1047/4412.2012.706561
- Cook, L., & Friend, M. (1995). Co-teaching: Guidelines for creating effective practices. *Focus on Exceptional Children, 28*(3), 1-16.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. (3<sup>rd</sup> ed.). Thousand Oaks, CA: SAGE Publications, Inc.

- Cross, F. (2015). *Teacher shortage areas nationwide listing*. Washington, D.C.: U. S. Department of Education. Retrieved from <https://www2.ed.gov/about/offices/ist/ope/pol/tsa.doc>
- Dev, P. & Haynes, L. (2015). Teacher perspectives on suitable learning environments for students with disabilities: What have we learned from inclusive, resource, and self-contained classrooms? *The International Journal of Interdisciplinary Social Sciences: Annual Review*, 9, 53-64.
- Dieker, L.A., & Little, M. (2005). Secondary reading: Not just for reading teachers anymore. *Intervention in School and Clinic*, 40, 276-283. doi: 10.1177/10534512050400050401
- Dieker, L.A., & Murawski, W.W. (2003). Co-teaching at the secondary level: unique trends, current trend, and suggestions for success. *The High School Journal*, 86(4), 1-13. doi: 10.1353/hsj.2003.0007
- Education for All Handicapped Children Act, Pub. L. 94-142 U.S.C. (1975).
- Education for All Handicapped Children Act Amendments of 1983, Pub. L. 98-199 U.S.C. (1983).
- Education for All Handicapped Children Act Amendments of 1986, Pub. L. 99-457 U.S.C. (1986).
- Education for All Handicapped Children Act Amendments of 1990, Pub. L. 101-476 U.S.C. (1990).
- Every Student Succeeds Act, Pub. L. 114-95 U.S.C. (2015).
- Friend, M. (2015). Welcome to co-teaching 2.0. *Educational Leadership*, 73(4), 16-22.
- Friend, M., & Cook, L. (1993). *Interactions: Collaboration skills for school*

*professionals*. Boston: Allyn & Bacon.

- Friend, M., Cook, L., Hurley-Chamberlain, D., & Shamberger, C. (2010). Co-teaching: An illustration of the complexity of collaboration in special education. *Journal of Educational & Psychological Consultation*, 20(1), 9-27. doi:10.1080/10474410903535380
- Hang, Q., & Rabren, K. (2009). An examination of co-teaching: Perspectives and efficacy indicators. *Remedial and Special Education*, 30(5), 259-268. doi: 10.1177/0741932508321018
- Harbort, G., Gunter, P., Hull, K., Brown, Q., Venn, M., Wiley, L., & Wiley, E. (2007). Behaviors of teachers in co-taught classes in secondary school. *Teacher Education and Special Education*, 30, 13-23. doi: 10.1177/088840640703000102
- Individuals with Disabilities Education Act, Pub. L. 105-17 U.S.C. (1997).
- Individuals with Disabilities Education Improvement Act, Pub. L. 108-446 U.S.C. (2004).
- Isherwood, R. S., & Barger-Anderson, R. (2008). Factors affecting the adoption of co-teaching models in inclusive classrooms: One school's journey from mainstreaming to inclusion. *Journal of Ethnographic & Qualitative Research*, 2, 121-128.
- Keefe, B., & Moore, V. (2004). The challenge of co-teaching in inclusive classrooms at the high school level and what the teachers told us. *American Secondary Education*, 32, 77-88.
- Kennedy, M. J., & Ihle, F. M. (2012). The old man and the sea: Navigating the gulf

- between special educators and the content area classroom. *Learning Disabilities Research & Practice*, 27, 44-54. doi: 10.1111/j.1540-5826.2011.00349
- Kentucky Department of Education. (2011, June). Collaborative Teaching Practices for Exceptional Children Question and Answer Document. Retrieved from <http://education.ky.gov/school/stratclsgap/instruction/Pages/CT4GC.aspx>
- Kentucky Department of Education. (2016). *Kentucky Education Facts* [Data file]. Retrieved from <http://education.ky.gov/Pages/default.aspx>
- King-Sears, M. E., & Bowman- Kruhm, M. (2011). Specialized reading instruction for adolescents with learning disabilities: What special education co-teachers say. *Learning Disabilities Research & Practice*, 26, 172-184. doi: 10.1111/j.1540-5826.2011.00336
- King-Sears, M. E., Johnson, T. M., Berkeley, S., Weiss, M. P., Peters-Burton, E. E., Evmenova, A. S., ... Hursh, J. C. (2015). An exploratory study of universal design for teaching chemistry to students with and without disabilities. *Learning Disability Quarterly*, 38(2), 84-96. doi: 10.1177/0731948714564575
- Magiera, K. & Zigmond, N. (2005). Co-teaching in middle school classrooms under routine conditions: Does the instructional experience differ for students with disabilities in co-taught and solo-taught classes? *Learning Disabilities Research & Practice*, 20, 79-85. doi:10.1111/j.1540-5826.2005.00123.x
- Martinussen, R., Tannock, R., & Chaban, P. (2011). Teachers' reported use of instructional behavioral management practices for students with behavior problems: Relationship to role and level of training in ADHD. *Child Youth Care Forum*, 40, 193-210. doi:10.1007/s10566-010-9130-6.

- Mastropieri, M., Scruggs, T. Graetz, J. Gardizi, W. Norland, J., and McDuffie, K. (2005). Case studies in co-teaching in the content areas: Successes, failures, and challenges. *Intervention in School and Clinic, 40*, 260-270. doi: 10.1177/10534512050400050201
- McKenzie, R. G. (2009). A national survey of pre-service preparation for collaboration. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children, 32*, 379-393. doi: 10.1177/0888406409346241
- McKenzie, R. G., & Houk, C. S. (1986). Use of paraprofessionals in the resource room. *Exceptional Children, 53*, 41-45. doi: 10.1177/001440298605300104
- McLeskey, J., & Brownell, M. (2015). *High-leverage practices and teacher preparation in special education* (Document No. PR-1). Retrieved from University of Florida, Collaboration for Effective Educator, Development, Accountability, and Reform Center website: [http://cedar.education,ufl.edu/tools/best-practice-review/](http://cedar.education.ufl.edu/tools/best-practice-review/)
- Müller, E., Friend, M., & Hurley-Chamberlain, D. (2009, May). *State-level approaches to co-teaching*. (inForum). Alexandria, VA: Project Forum at NASDSE.
- Murawski, W., & Dieker, L. (2004). Tips and strategies for co-teaching at the secondary level. *Teaching Exceptional Children, 5*, 52-58. doi: 10.1177/004005990403600507
- Murawski, W. W., & Swanson, L. H. (2001). A meta-analysis of co-teaching research. Where are the data? *Remedial and Special Education, 22*(5), 258-267. doi: 10.1177/074193250102200501

- Nardi, P. M. (2006). *Doing survey research: A guide to quantitative methods* (2<sup>nd</sup> ed.). Boston, MA: Allyn and Bacon.
- Nichols, J., Dowdy, A., Nichols, C. (2010). Co-teaching: An educational promise for children with disabilities or a quick fix to meet the mandates of No Child Left Behind? *Education*, 130, 647-651.
- No Child Left Behind Act of 2001, Pub. L. 107-110 U.S.C. (2002).
- Office of Special Education Programs. (2010). *Thirty years of progress in educating children with disabilities through IDEA*. Retrieved from <http://www2.ed.gov/policy/speced/leg/idea/history30.html>
- Pugach, M. C., & Winn, J. A. (2011). Research on co-teaching and teaming: An untapped resource for induction. *Journal of Special Education Leadership*, 24(1), 36-46.
- Scanlon, D. & Baker, D. (2012). An accommodations model for the secondary inclusive classroom. *Learning Disability Quarterly*, 35, 212-224. doi: 10.1177/0731948712451261
- Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children*, 73, 392- 416. doi: 10.1177/001440290707300401
- Simmons, R. J., & Magiera, K. (2007). Evaluation of co-teaching in three high schools within one school district: How do you know when you are truly co-teaching? *Teaching Exceptional Children Plus*, 3(3), article 4.
- Silverman, J.C. (2007). Epistemological beliefs and attitudes toward inclusion in pre-service teachers. *Teacher Education and Special Education*, 30, 42-51. doi: 10.1177/088840640703000105



- Solis, M., Vaughn, S., Swanson, E., & McCulley, L. (2012). Collaborative models of instruction: The empirical foundations of inclusion and co-teaching. *Psychology in the Schools, 49*(5), 498-510. doi: 10.1002/pits.21606
- Sprinthall, R. C. (2007). *Basic statistical analysis*. (8<sup>th</sup> ed.). Boston, MA: Allyn & Bacon.
- United States Department of Education, National Center for Education Statistics. (2014). *Teacher Attrition and Mobility: Results from the 2012–13 Teacher Follow-up Survey* (NCES 2014-077). Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=28>
- United States Department of Education, National Center for Education Statistics. (2015). *Digest of Education Statistics, 2013* (NCES 2015-011), Chapter 2. Retrieved from [https://nces.ed.gov/programs/digest/d15/tables/dt15\\_204.60.asp?current=yes](https://nces.ed.gov/programs/digest/d15/tables/dt15_204.60.asp?current=yes)
- United States Department of Education, National Center for Education Statistics. (2016). *Digest of Education Statistics, 2015* (NCES 2016-014), Introduction and Chapter 2. Retrieved from [https://nces.ed.gov/programs/digest/d13/tables/dt13\\_209.10.asp](https://nces.ed.gov/programs/digest/d13/tables/dt13_209.10.asp)
- Weiss, M. P., & Lloyd, J. W. (2002). Congruence between roles and actions of secondary special educators in co-taught and special education settings. *The Journal of Special Education, 36*, 58-68. doi: 10.1177/0022466902036002010

## **KERA B. ACKERMAN**

### **EDUCATION**

M.S. University of Akron  
1999 Special Education  
B.S. University of Akron  
1995 Special Education: Severe Behavior Handicap

### **PROFESSIONAL EXPERIENCE: Academic Positions**

2013-present University of Kentucky, lecturer  
2006-2013 Midway College

### **PROFESSIONAL EXPERIENCE: P-12 Teaching Experience**

2002-2006	Fayette County Public Schools	Lexington, KY
2000-2002	Richland School District Two	Columbia, SC
1999-2000	School District of Rhinelander	Rhinelander, WI
1995-1999	Medina City Schools	Medina, OH

### **PROFESSIONAL RESEARCH ACTIVITIES: Professional Presentations**

#### ***National***

McKenzie, R. G. & **Ackerman, K. B.** (2016). Change begins in our classrooms: A direction for preparing future co-teachers. Council for Exceptional Children Teacher Education Division Annual Conference, Lexington, KY.

#### ***State***

**Ackerman, K. B.** (2016). Graduate student symposium. KYCEC Annual Conference, Louisville, KY.

**Ackerman, K. B.** (2015). Researcher roundtable and graduate student symposium. KYCEC Annual Conference, Louisville, KY.

**Ackerman, K. B.,** & Flanagan, S. (2013). Systematizing the common core through graphic organizers. KYCEC Annual Conference, Louisville, KY.

Critchfield, A., Henderson, L., & **Ackerman, K. B.** (2010). Content vocabulary: See it, say it, use it. Kentucky Council on Post-Secondary Education annual conference, Lexington, KY.

#### ***Local***

**Ackerman, K. B.,** & Sartini, E. (2016). Classroom management and visual supports for students with ASD. Teacher Professional Development. Montgomery County, KY.

**Ackerman, K. B.** (2015). Meeting the mandate of 704 KAR 7:160 Restraint and seclusion. University of Kentucky Student Teaching Professional Seminar. Lexington, KY

**Ackerman, K. B.,** Sartini, E., and Crawford, D. (2015). Classroom management and visual supports for students with ASD. Teacher Professional Development. Montgomery County, KY.

**Ackerman, K. B.** (2014). Meeting the mandate of 704 KAR 7:160 Restraint and seclusion. University of Kentucky Student Teaching Professional Seminar. Lexington, KY

- Ackerman, K. B.** (2014). Using constant time delay to teach vocabulary graphic organizers to students with learning disabilities. Doctoral Student Research Symposium. Lexington, KY
- Ackerman, K. B., & Gibson, D.** (2012). Survivor: *Prezi* island. Utilizing *Prezi* and integrating technology into online and in-seat classes. Faculty Professional Development. Midway, KY
- Ackerman, K. B.** (2010). Online professional development in pedagogy, classroom discussions, and rapport. Faculty Professional Development. Midway, KY
- Ackerman, K. B., Ricks, B., & Kendall, S.** (2009). Critical thinking strategy integration across disciplines. Faculty Professional Development. Midway, KY

**PROFESSIONAL RESEARCH ACTIVITIES: Publications**

Rintamaa, M. & **Ackerman, K. B.** (February, 2016) Teaching collaboration collaborative: An evening of co-teaching. UK Communicator and Field Notes.

***In Preparation***

- Ackerman, K. B. & Allday, R. A.** (n.d.) Comparison of token economy systems with and without response cost.
- Ackerman, K. B.** (n.d.). Peer mediators' use of systematic prompting to elicit social communication skills in students with disabilities.
- Ackerman, K. B. & McKenzie, R. G.** (n.d.) Purposeful presence: An elusive component to co-teaching.
- Ackerman, K. B.** (n.d.) Using constant time delay to teach vocabulary graphic organizers to students with learning disabilities.

**PROFESSIONAL RESEARCH ACTIVITIES:**

**Grants**

- |         |   |
|---------|---|
| 2016-17 | Kera Ackerman (PI) & Dr. Eve Proffitt (Grant manager)<br>Project TRREE<br>Funded: \$99,897<br>Source: Kentucky Department of Education  |
| 2016-17 | Kera Ackerman (PI)<br>Aspiring Special Educator Academy<br>Funded: \$10,000<br>Source: Kentucky Department of Education subaward through Project TRREE (Teacher Recruitment and Retention for Educational Excellence) |
| 2015-16 | Kera Ackerman (PI)<br>Aspiring Special Educator Academy<br>Funded: \$15,000<br>Source: Kentucky Department of Education subaward through Project TRREE (Teacher Recruitment and Retention for Educational Excellence) |

**Awards**

- |      |  |
|------|--|
| 2017 | Blackhurst Student Research Endowment<br>\$1500.00 |
| 2017 | Nietzel Visiting Distinguished Scholar             |