A Measure of Progress: Voices of Rural Secondary Students with Disabilities in Co-Taught Settings

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Abstract

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A Measure of Progress: Voices of Rural Secondary Students with Disabilities in Co-Taught Settings (370 pp.)

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The federal mandate, No Child Left Behind, demands that students with disabilities be exposed to the same curriculum as their peers, participate in the state’s graduation test, and have their scores incorporated in the district report card. Co-teaching is one method used by school districts as a means to expose students with disabilities to the curriculum. The premise is that students with disabilities will fare better academically in this environment, which should allow for improved academic performance. This is difficult to establish due to the number of models, differing needs of students, and expected outcomes posed by students, teachers, and administrators. There appeared to be little evidence as to who measures the progress of co-taught programs and how progress is measured.

This qualitative study analyzes perspectives of rural high school students with disabilities, their teachers, parents, and administrators regarding the impact of inclusion on co-taught mathematics classes for grades 9 and 10. This research determined that these 32 stakeholders measured student progress in co-taught classes. This phenomenological case study set in grounded theory focused on document review, interviews, and observations.

The findings of this study indicate that progress in co-teaching classes was measured by performance outcomes according to stakeholders’ roles. Administrators and
supervisors measured progress by class placement for maximum exposure to grade-level indicators. Teachers rated progress by scores earned through day-to-day classroom activities which were aligned to grade-level indicators. Parents and students rated progress by scores earned through class assignments represented by grades. Stakeholders felt the pressure of improved performance on high-stakes testing, and, based on roles, engineered appropriate settings to ensure student and district success.

Approved: ____________________________________________

Stephen P. Safran

Professor of Teacher Education
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CHAPTER ONE

Introduction

Background

The federal mandate, *No Child Left Behind*, demands that students with disabilities be exposed to the same curriculum as their peers, participate in the state’s graduation tests, and have their scores incorporated in the district report card. Further, special educators for grades 7-12 must show highly qualified status in any core subject area taught to students with disabilities (NASOSE, 2002). Co-teaching is one method used by school districts as a means to expose students with disabilities to the curriculum (Austin, 2001; Giangreco & Baumgart, 1995; Kavale, 2000). However, within the theme of co-teaching, there are several models of collaborative instruction (Dieker, 2005).

The basic idea of these service-delivery models is to have one general education teacher and one special education teacher jointly teach, or co-teach, a mixed class of students with and without disabilities (Dieker, 2005). The premise is that students with disabilities will fare better academically in this environment, which should allow for higher academic performance (Austin, 2001; Dieker, 2005; Zigmond & Magiera, 2001). This is difficult to prove due to the number of models, differing needs of students, and expected outcomes posed by students, teachers, and administrators (Lawton, 1999; Murphy, Grey, & Honan, 2005; Zigmond & Magiera, 2001). Additionally, researchers question whether these models meet the individual needs of all students with disabilities (McMaster & Fuchs, 2005). Further, there appears to be little evidence as to who measures the progress of co-taught programs and how progress is measured. This study will determine how rural high school students with disabilities are impacted by placement
in co-taught classes. Voices of students, teachers, parents, and administrators will help
determine how progress is measured in a co-taught setting.

The Problem

An Appalachian school district serves as the setting for this research. In March of
2006, the principal decided to include two co-taught mathematics classes into the
curriculum for the 2006-07 school year. As a result, he asked two high school special
education teacher and two general education mathematics teachers to be included.
Although there was support for the program, there was not specific direction. The
principal had extensive experience with co-teaching at the middle school level and felt
this strategy would improve student performance on the state’s high-stakes testing
program. Moreover, this approach was linked to the district’s middle school initiative for
the math department. Beginning in 2006-2007 middle school students in this district
would receive two periods of daily mathematics instruction, with the goal of introducing
higher level math skills at an earlier grade. Therefore, co-teaching at the high school was
seen by the principal as a logical step to improve performance results on the state’s high-
stakes test.

Co-teaching had been tried in a variety of formats at the high school level during
the past 20 years. The high school special education department questioned the need to
add co-teaching to the schedule because the addition of co-teaching would decrease
student services in other areas. The principal’s final decision led to many questions
within the high school special education department.

Were students with disabilities in co-taught classes showing academic gain? How
was progress being measured in co-taught classes? Who was measuring the progress?
How did students perceive their progress? Did parents agree with what their children perceived as progress? What did teachers and administrators have to say about students’ perception of progress? In other words, how were students, teachers, parents, and administrators determining if students with disabilities were making progress within a co-taught setting? These questions established the direction for this study.

*Purpose of Study*

This research sought to uncover how rural secondary students with disabilities, their teachers, parents, and administrators measure student progress in co-taught classes. This qualitative study described and analyzed the continued interplay among perspectives of students with disabilities, their teachers, parents, and administrators regarding the impact of placement in co-teaching classes. Concepts and hypotheses were discovered using constant comparative analysis involving observation, interviews, and record review. This resulted in the explanation and prediction of an empirically grounded theory (Glesne, 1999; Kavale, 1996).

The movement undergirding this study is the “regular education initiative (REI)”, the term used to describe the position of Madeleine Will, former Assistant Secretary of the United State’s Department of Education. In 1986 Will circulated a position paper entitled “Educating Children with Learning Problems: A Shared Responsibility” (Will, 1986). Will, the mother of a child with Down Syndrome, wanted to increase the number of children with disabilities in general schools and classrooms. To back her claim, Will suggested that educators consider the possibility that a child’s poor academic performance might be related to the environment of the general education classroom. Consequently, her focus was to modify general education classrooms to make them more
accessible to all students. Towards that end, REI offered that administrative control of service delivery models should be the responsibility of the local school, instructional time should be increased, classroom teachers should have more support, and instruction should be more personalized, assessments curriculum-based, and cooperative learning should be an integral part of the instruction (Kubicek, 1994).

Although politicians looked favorably on this approach because the proposed enterprise suggested sharing rather than increasing educational dollars, educators began choosing sides. REI advocates were critical of the increased numbers of special education students and the related funding going to these programs; the use of stigmatizing labels; the separation of children with special needs from their non-disabled peers; and the seeming lack of appropriate instruction (Fuchs, Fuchs, Mathes, Lipsey, & Roberts, 2001). For others, REI was a thoughtful response to identify problems in the systems for educating low-performing children, but it was not seen as a detailed blueprint for changing the system (Jenkins, Pious, & Jewell, 1990). Those opposed to REI felt Will and associates were denying the differences which profoundly affect children with disabilities who are placed in general education settings (Mostert, 1991). Currently, both sides seem to have reached an agreement that there is no evidence that co-teaching is superior, so both sides stick to their corners and invite the other to join their side. Consequently, pull-out programs and co-teaching continue at all levels.

*The Grand Tour Questions and Subquestions*

Although many questions arise, the central question of this study is: How is the progress of a co-taught class measured by students, teachers, parents, and administrators?
Subquestions relate to how co-teaching impacts student academics, social interaction, and self-confidence at different ages and grade levels.

First, what constitutes progress for students with disabilities in co-teaching settings? Wunder and Lindsey (1997) list four benefits from co-teaching: increased instructional options for all students, improved program intensity and continuity, reduced stigma for all students, and increased professional support. Student performance is not listed in these goals.

Second, were students with disabilities making academic gain in co-taught classes? Research suggests that inclusion does help some struggling students without disabilities (Giangreco & Baumgart, 1994; Hardy, 2001; Ward, 2003). And there is evidence that some students with disabilities do improve socially (Murphy et al., 2005). Currently, there is no clear evidence to indicate a conclusive outcome that co-teaching has an impact on standardized assessment (Dieker, 2005).

Next, were students with disabilities developing friendships and becoming involved in more activities due to co-teaching? Blanda-Hotzberg (2004) suggested that placement of students with disabilities in the general education setting was essential to promoting positive self-esteem. However, are teachers, parents, and administrators witnessing improved self-esteem? Further, were students with disabilities gaining self-confidence by placement in a co-teaching setting? Moore’s (2003) qualitative study revealed that students perceived they would make more friends by being in an inclusive setting. Did they?

Fifth, what co-teaching models are recommended for high school students? The basic rule appears to be the lower the grade level, the more co-teaching occurs (Freytag,
2003; Ward, 2003). The high school level offers the most challenges for scheduling purposes. With all the available models, how do co-teachers share the load? In one study, researchers stated that teacher roles were not well-defined by the school’s administration which led to confusion and discord between the co-teachers when classroom duties were divided (Miller, 2005). Moreover, this confusion added to the uncertainty for students as they were unsure of the teachers’ roles and were reluctant to ask for assistance. Consequently, students struggled.

Sixth, is there one co-teaching model that is most appropriate to use in a high school setting? In reality, there are various models associated with co-teaching. For instance, Cook and Friend (1995) suggest associate parallel teaching, supporting teaching, complimentary teaching and team teaching as co-teaching models, to name just a few. Others include one teaching/one assisting and the consultant model, the teaming model, and the collaborative/co-teaching model. As a result, there does not appear to be one consistent model that can be successfully duplicated for students with disabilities.

Finally, is there an established co-teaching model that can be successfully duplicated? Co-teaching has many names and many models including inclusion, full-inclusion, mainstreaming, cooperative learning, and collaborative teaching. However, co-teaching is typically perceived as two educational professionals working together to teach a class of students who are classified as students with and without disabilities (Dieker, 2005; Wunder & Lindsey, 1997). The literature review will address the different views professionals have concerning co-teaching.

**Definitions**

In this study these terms are used as follows:
• Accommodation: An allowable adjustment for students with disabilities that does not change content or structure (ODE, 2006c).

• Collaboration: Teachers working together to meet the needs of all students (Price, Mayfield, McFadden, & Marsh, 2000).

• Collaborative learning: Students working in groups with each assigned a critical role in order to meet a goal or assignment (Theroux, 2004).

• Core classes: Required classes such as English, mathematics, social studies, and science that are required for graduation (ODE, 2006a).

• Co-teaching: One general education teacher and one special education teacher jointly teaching a mixed class of students with and without disabilities (Dieker, 2005).

• Extracurricular: Additional voluntary school-sponsored activities such as clubs, band, drama, sports, student government, and community service projects designed for social interaction and reinforcement of skills (O’Brien & Rollefson, 1995).

• Evaluation Team Report: A written document from various professionals summarizing what a child with a disability can and can not do (ODE, 2006d).

• Full-inclusion: All children with disabilities educated in the general education setting with services brought into the general education classroom, with no pull-out classes or services recommended (Will, 1986).

• Full-inclusionist: Professionals who feel that all children with disabilities be educated in the general education setting, with no pull-out services (Will, 1986).
• Individualized Education Program: A legal document designed by committee to provide strategies to increase specific skill levels of students with disabilities (ODE, 2006c).

• Inclusion: A determined effort to increase education of students with special needs in the general education setting, with an emphasis that students will benefit, rather than keep up with, typical peers (Stout, 2001).

• Mainstreaming: The selective placement of students with disabilities into general education classes (Stout, 2001).

• Modified curriculum: A change in the general education curriculum based on a specific disability (ODE, 2006c).

• Modified grade: A change in grading practices that is different from the general education population based on a specific disability (Plainfield, 2006).


• No Child Left Behind: A federal education mandate that stipulates students with disabilities be exposed to the same curriculum as their peers, participate in the state’s graduation tests, have those scores incorporated in the district report card, and that teachers meet competency standards in core subject areas (NASOSE, 2002).

• Partial inclusionist: Professionals who feel that children with disabilities be educated in the general education setting, with pull-out services available according to student need (Fuchs & Fuchs, 1995).

• Progress: Moving forward towards a goal (Dictionary, 2007).
• Pull-out class: A service-delivery model whereby students with disabilities are pulled from the general environment and receive grade-level instruction in small classes in a special education resource room setting (Education, 1994).

• Regular Education Initiative: Movement starting with Madeleine Will recommending a significant increase of the number of children with disabilities into general schools and classrooms and a reorganization of special education (Will, 1986).

**Delimitations and Limitations**

There are two limitations to the study. The first concerns research conducted at the researcher’s employment site and the second is the number of students, most of whom are known by the researcher. Co-teaching has been attempted during my 25 years at this school district. This program option has been difficult to administer due to the high number of students with disabilities, limited special education faculty, graduation requirements, and vast levels of ability ranges. The principal, who administers grades 6-12, feels this is the method of choice for all students with special needs. From experience, I feel curriculum options need to be designed around student need, rather than designing a program and arranging students to fit. Consequently, the researcher’s subjectivity needs to be constantly addressed in order to remain impartial.

The middle and high school in this study follow two different philosophies: the middle school favoring full-inclusion and the high school favoring partial-inclusion. An informal interview with the special education departments concerning scheduling requests for the 2006-2007 school year displays the difficulty when the two models meet. For example, when scheduling science for the 28 incoming 9th graders, the middle school
staff recommended that all 28 students with disabilities be placed in pull-out science. Further, the initial requests for all pull-out classes for incoming 9th graders (71) exceeded the total number of pull-out requests for grades 10, 11, and 12, which was 65. The high school special education faculty felt that few of the incoming 9th graders needed pull-out science since the students were currently in the general education science class. The reasoning was that if the students were performing well enough to be placed in a general education 8th grade science class, then they really did not need to be placed in a pull-out science class for their 9th grade year. The middle school countered by stating that the students were not doing well in science class but they did not have the personnel to add a co-taught science class. This example illustrates the clashing of philosophies between buildings. Unfortunately, students appear to be caught in the middle.

Although this study was conducted in the researcher’s school district, which is uncommon, the results of the study were critically analyzed by teachers at both building levels and by administrators including the superintendent, director of curriculum and instruction, the principal, two assistant principals, school psychologists, and two guidance counselors. All wanted to do what was right for every student with disabilities. And, of course, all involved have an opinion about what is right. Therefore, this research is presented in factual terms with clarity and focus because it is the right thing to do, but also because these cold facts will be viewed by administrators to make critical decisions concerning programming options for students with disabilities and use of special education faculty representing grades 6-12. The researcher had to be absolutely impartial in order for these results to be accurate.
Consequently, the researcher built trust with the students, parents, and colleagues so all felt comfortable and confident. Inviting members to check records and summaries assisted in gaining and maintaining trust. Not only were clarity and accuracy handled in an efficient manner, but also these contacts helped establish rapport and honesty. The researcher further developed trust by recommending that students and staff have anonymity. Of course, the researcher upheld confidentiality while remaining impartial. Not only is this professional, but it is ethical. Colleagues might want to know specific statements; however, outcomes were only shared at the conclusion of the project. At no time was a student, parent, or staff member placed in jeopardy.

The second area of limitations is the number of individuals involved. First, there were a total of 17 students in two co-taught math classes, nine in the 9th grade and eight in the 10th grade. All of these students experienced co-teaching at the middle school; however, eight students in the 10th grade co-taught mathematics class experienced a pull-out mathematics class for their 9th grade year. An interesting arrangement is that the 10th grade co-taught math class consisted primarily of students with special needs. Therefore, the researcher had her work cut out for her to determine how the 10th grade co-taught class differed from the general education 10th grade math class. In other words, had the co-taught class become a roving special education mathematics class?

Next, the general and special education teachers involved in the co-taught math classes and the special education aide for the student with autism were interviewed (Appendix A). Since parts of this research will reflect attendance (Appendix B), behavior (Appendix C), achievement on high-stakes testing (Appendix D), grades earned in core subjects (Appendix E), failures in core subjects (Appendix F), and extracurricular
participation (Appendix G). A variety of documents were reviewed beginning at grade 6 and ending at grade 10. Finally, views from the principal, director of curriculum, guidance counselors, and school psychologist were (Appendix H).

The delimitations apply to the 17 students. These students were selected because of inclusion in the first co-taught mathematics classes at the high school. Therefore, these students fit the purposeful sample. Students in the 9th grade co-taught class were selected by the middle school special education faculty and the general education mathematics teachers based on classroom academic performance, results of high-stakes testing, attendance records, disciplinary records, work ethic, individual levels of performance, and special education teacher recommendation.

At the high school level, special education staff presented an alphabetic listing of all sophomore students with disabilities and rated each in the above areas. Distinctions were made by several groups. First, students with disabilities who were expected to do well in the core class on their own merit were placed in one group. The second group was for students who were expected to succeed in the general education mathematics class with the general education teacher making minor accommodations to the coursework. The third category represented students expected to succeed with additional assistance from the special education teacher scheduled sometime during the day. This placement assisted students to develop self-advocacy skills. The next group was identified as students who need the special education teacher in the mathematics class; thus, making this group the co-teaching class. The final group was comprised of students who needed to receive mathematics instruction in a small group setting with the special education teacher as the instructor.
The students with disabilities in the co-taught mathematics class fit the academic performance standards expected of typical grade-level mathematics students. In other words, of all the students not in a general education math class, these students had the highest mathematic skills. Therefore, it was expected they will make progress, especially with two teachers assisting. The study was limited to evidence gained through attendance records, disciplinary referrals, grade cards, progress reports, results of high-stakes testing, participation in school and community events, observations (Appendix I), interviews with students (Appendix J) and interviews with parents (Appendix K) obtained during a nine-week grading period.

Significance of Study

This research has implications for educators, parents, and students with disabilities who wish to consider student and professional perspectives for progress in co-taught settings. A review of current literature reveals the difficulty of conducting research regarding co-teaching since each professional seems to have his or her own idea of what to call the model and how to implement it. Further, there is not an agreed upon method of determining progress in this service-delivery model. For that matter, no one seems to be able to determine what counts as beneficial. The lack of evaluative evidence suggests that students who do not have disabilities seem to benefit the most; however, many researchers believe students with and without disabilities gain social skills (Giangreco & Baumgart, 1995; Hardy, 2001; Murphy et al., 2005; Ward, 2003).

Parents, students, and educators suggest that inclusion increases a student’s self-worth and advocacy during and following graduation. Academic achievement is an area that warrants further reflection because studies indicate there is no significant difference
in achievement. Class failure, being labeled, and earning poor grades are areas that students with disabilities report as being problematic. One question the literature fails to answer is how do secondary students with disabilities perceive progress in a co-teaching setting. The second question absent in the literature is do parents agree with their children’s perception of progress in a co-teaching setting? This lack of information in the literature provided the direction for this research study.

Summary

The federal mandate, No Child Left Behind, demands that students with disabilities be exposed to the same curriculum as their peers, participate in the state’s graduation tests, and have their scores incorporated in the district report card (NASOSE, 2002). Further, special educators for grades 7-12 must show highly qualified status in core subject areas taught to students with disabilities. Co-taught classes are one method used by school districts to meet this directive. In this qualitative study, I describe and analyze the perspectives of rural high school students with disabilities, their teachers, parents, and administrators regarding the impact of inclusion into co-taught mathematics classes. This research seeks to describe how rural secondary students with disabilities, their teachers, parents, and administrators measure student progress in co-taught classes. It is hoped that the study will contribute to curriculum options by hearing voices respond to this question: how do secondary students with disabilities, their teachers, their parents, and administrators measure student progress in a co-taught class?

Organization of Dissertation

Chapter 1 includes the statement of the problem, the purpose of the study, the significance of the study, research questions, limitations and delimitations of the study,
and definition of terms. The review of the literature comprises Chapter 2. Literature specific to the evolution of inclusion, special education practices at the secondary level, rationale for key components for secondary level models, and perspectives of inclusion and co-teaching from educators, parents, and students are described. This section reports and analyzes methodologies, purposes, and results of research studies specific to inclusion and co-teaching. Chapter 3 presents the traditions of grounded theory and phenomenology, assumptions and rationale for a qualitative design, type of design used, role of the researcher, data collection procedures, data analysis, methods of verification, and outcomes of the study and their relation to literature. The findings of the study and the summary of the results are detailed in Chapter 4. The conclusions, implications, and recommendations are described in Chapter 5. The appendices include profile of school personnel (Appendix L), the Institutional Review Board (IRB) approval (Appendix M), the grounded theory tradition matrix (Appendix N), insights gained from interviews with school personnel, (Appendix O), students (Appendix P) and parents (Appendix Q).
CHAPTER TWO

Literature Review

This chapter examines the evolution of the inclusion movement, with particular emphasis on students with mild disabilities from REI to present, and how this relates to practices for rural secondary special education students with disabilities. The effectiveness of existing co-teaching models and the rationale for key components for co-teaching are also addressed. Perspectives about inclusion and co-teaching according to professionals, parents, and students construct the foundation for summary points which conclude this chapter.

Evolution of Inclusion

Regular Education Initiative

Madeleine Will (1986), Assistant Secretary of Education in the Office of Special Education and Rehabilitation, circulated a position paper entitled “Educating Children with Learning Problems: A Shared Responsibility”. Will, the mother of a child with Down Syndrome, wanted to increase the number of children with disabilities into general schools and classrooms. This reform position became known as the “Regular Education Initiative (REI).” Will recommended four fundamental changes in special education:

1. Students with learning problems would receive more instruction in the regular education setting.
2. Teachers would work collaboratively to provide “special” education in integrated settings.
3. Financial, educational, and personnel resources would be pooled under a single administrator.
4. Administrative policies and procedures would be developed to encourage placement of students with special learning needs in general classes.

To back her claim, Will (1986) suggested that educators consider the possibility that a child’s poor academic performance might be related to the environment of the general education classroom. Consequently, her focus was to modify general education classrooms to make them more accessible to all students. Towards that end, REI offered that administrative control of service delivery models should be the responsibility of the local school, instructional time should be increased, classroom teachers should have more support, instruction should be more personalized, assessments curriculum-based, and cooperative learning should be an integral part of the instruction (Kubicek, 1994).

Advocates

Several of Will’s colleagues agreed. These included Temple University Professor of Educational Psychology Margaret Wang (Wang, n.d.), Distinguished Visiting Fellow of Psychology, Education Policy, and Education Productivity, school reformer Herbert Walberg (Hoover, 2003), and Maynard Reynolds, Professor Emeritus of Special Education at the University of Minnesota (Reynolds, 2005). Not only did these educators share philosophies, they also held leadership positions on committees and organizations that packed a political punch.

For instance, Wang was the founder and served as the Director of the Center for Research in Human Development and Education (CRHDE) (Wang, n.d.). Interestingly enough, Maynard Reynolds served as a Senior Research Associate for the same center (Reynolds, 2005.) Also, Wang published books, articles, and monographs campaigning for school reform. In fact, Wang’s Community for Learning Model (CFL) was cited as
one of the 17 research-based comprehensive reform programs in the Congressional Report for Comprehensive School Reform legislation, and is implemented in over 200 school districts (Wang, n.d.) Walberg is also linked to reform and government agencies. As former adviser to former United States Secretary of Education, William Bennett, Walberg was frequently called to testify before the U.S. congressional committees and federal courts on educational matters. Further, Walberg had written or edited more than 60 books, including Radical Education Reforms (Hoover, 2003). His research focused on educational productivity and human accomplishments (Hoover, 2003). Simply put, these educators had the political clout to share their vision and passion during the Reagan years. Moreover, since this proposed enterprise suggested sharing, rather than producing educational dollars, politicians were favorably impressed.

**Purpose**

These REI advocates were critical of the increased numbers of students receiving special education services and the related funding going to these programs; the use of stigmatizing labels; the separation of children with special needs from their non-disabled peers; and the seeming lack of appropriate instruction (Fuchs et al., 2001). Further, Will felt REI would favorably assist students with disabilities by removing obstacles such as eligibility requirements, administrative practices, stigmatization, and a placement process that adversely affected the quality and effectiveness of their education (Fuchs & Fuchs, 1994; Kubicek, 1994). Consequently, because of REI’s belief that separate special education reinforced socially constructed notions of difference (Mostert, 1991), the main focus was to transform general education into a more instructionally responsive system capable of accommodating a large majority of students with disabilities (Fuchs et al.,
REI advocates were convinced that students on the margin, those with mild disabilities, need not receive a different kind of instruction, but one that was more intensive and effectively conducted in an inclusive setting (Reynolds, Wang, & Walberg, 1998).

These placements called for special education teachers to have many roles which depended on certain conditions such as the definition held by the participants, pressure internal to the classroom, and pressure felt from the school and professional community (Weiss, 1999). Whatever the model, advocates felt that the advantages would outweigh the disadvantages. Benefits would include greater collegial exchange of strategies, increased understanding of all students’ needs, stronger instructional programs grounded in general education content for students with disabilities, increased acceptance of students with disabilities by their peers, and decreased burnout for professionals (Dieker, 2005).

**Educator Roles**

Many saw classroom teachers as being ultimately in charge of the instruction for all students (Jenkins et al., 1990), although general education teachers expressed a concern with teaching students with cognitive delays (Webb, 2004). In fact, all teachers appeared to hold a generally positive view of inclusion in theory, but in terms of practicing inclusion, they appeared to be less willing to have a variety of student needs in the same class (Sebasta, 2002). There does seem to be a limit on how resourceful and responsive inclusion can be (Fuchs & Fuchs, 1995). For example, Fuchs and Fuchs (1995) suggested that full-time placement of all students with disabilities in inclusion classes would result in the failure of some to obtain an appropriate education or one from
which they would benefit. Therefore, inclusion teachers seemed to constantly strive to find models and strategies that might work for their students. Consequently, there does not appear to be any set design that can be easily duplicated to assist schools; however, Will and associates offered suggestions to help accommodate school programs to include a diversity of student characteristics (Reynolds et al., 1998). The first involved organizational arrangements and the second featured instruction. Interestingly, these suggestions were not confirmed by research; rather, the ideas and practices were to serve as a starting point for educators to conduct their own research.

Suggestions

According to Reynolds, Wang, and Walberg (1998), the suggestions for organizational arrangements include inclusion (not sufficient evidence to justify removal of students with mild disabilities), early education (could result in reductions in later referrals to special education), intensive early preventive programs (making an early start is important for preventing learning difficulties), pre-referral interventions (learning specialist could be a consultant), parents (positive approach builds strong working relationship), cross-categorical programs (labels can be dropped and instruction conducted in general classroom), and mini-schools (clusters of students and teachers remain together for several years). Also, teacher assistance teams (support groups to help teachers during stressful times of uncertainty), intensive special education (time-limited intensive help on a particular skill), funding (distributed to individual schools to use for specific programs), coalitions of agencies (look for support within community, such as churches), waivers for performance (seek permission from existing rules and regulations
to try new modes of operation), and demissions (work on positive school climate) were areas of focus.

Concerning instruction, backers of REI suggest that teachers need not be separated by categories and that instruction needs to be better (Mostert, 1991; Reynolds et al., 1998). Important topics in the area of instruction concern time (time at school and at home needs to be spent more wisely), metacognition (students can help one another in learning to become more aware of their own learning), cooperative grouping/student interdependence (helps students gain awareness about individual differences and cultural backgrounds), frequent feedback (information about the learning process is reinforcing), and social skills (children can learn acceptable behavior).

Outcome

Because of these suggestions and ideas, floodgates opened and groups seemed to form within two main areas—the inclusionists and the full-inclusionists (Fuchs & Fuchs, 1994). The inclusionists looked for ways and means to add more students with special needs and special education teachers into the general education classroom. Conversely, the full-inclusionists suggested that all special education be eliminated, all students be returned to the general education classrooms, money be shared across the board, and that special education teachers be used as consultants. How could two groups of educators have such diverse opinions? The reason is that educators were representing two different groups of students with special needs (Kubieck, 1994). Those believing in inclusion, focused on students with mild disabilities; whereas, those believing in full-inclusion, represented students with more severe and profound disabilities.
Full-Inclusionists

A critical component of this endorsement was the philosophy of full-inclusion. Advocates of this model viewed pre-REI delivery system models as a dumping ground for unteachable children, and even went so far as to compare the former systems as the moral equivalent to apartheid and slavery (Fuchs & Fuchs, 1995). These professionals wanted students with profound disabilities to be surrounded by typical peers (Fuchs & Fuchs, 1995). Under the current system, there was not much opportunity for these two groups to intermingle. However, full-inclusionists felt that by literally finding room in a regular school, students with more profound disabilities would have the opportunity to form friendships and have a lifestyle more similar to their non-disabled peers.

Jumping on this bandwagon were professionals who were waiting for the right opportunity to push school reform. Maynard Reynolds stated that special education, particularly the learning disabilities category, was an educational invention to appease parents, unburden general classrooms of difficult-to-teach children, and was an avenue for special education administrators to build an empire of teachers and children, which all amounted to money, particularly since it costs 2.3 times more to fund a student in special education as compared to their non-disabled peers (Reynolds et al., 1998). Moreover, Reynolds went so far as to say that pre-REI special education simply did not work, that the curriculum was watered down, and that there was limited instruction (Fuchs & Fuchs, 1995). It was suggested that schools were not being held accountable and that instruction was lacking for all students, not just for those receiving special education services. In fact, some questioned whether or not this was the reason for so many special education referrals. If there was no special education, then previously identified students would
need to return to the general education classroom which would force school districts to be accountable and make instruction match needs of all students. Further, if special education was removed, then special education teachers would be available as consultants to assist on an as-needed basis. This cost-saving approach was attractive to all who wanted to share special education dollars. However, not everyone was happy with this situation.

**Inclusionists**

To some, REI was a thoughtful response to identify problems in the system for educating low-performing children, but it was not seen as a detailed blueprint for changing the system (Jenkins et al., 1990). Those opposed to REI felt Will and associates were denying the differences which profoundly affect children with disabilities who are placed in general education settings (Mostert, 1991). Fuchs and Fuchs (1995) affirmed the learning disabilities label is real because students with learning disabilities consistently perform significantly less well than non-disabled low-achieving students and that these two groups differ significantly and consistently. Consequently, several groups and parents provided factual evidence to back their claim of a need for pull-out classes. Calberg and Kavale (1980) suggested that resource rooms are more effective than general classrooms in improving academic achievement of students with learning disabilities or emotional and behavioral disturbances. Slavin, Leinhartdt, and Palley (as cited in Fuchs & Fuchs, 1995) proposed that special education programs appear to promote greater achievement than do general classrooms. Both sides seem to have reached an agreement there is no evidence that inclusion is superior, so both sides stick to their corners and invite the other to join their side. For instance, REI advocates suggest that since the
effectiveness of inclusion is difficult to measure, then all should revert to general education placements (Reynolds et al., 1998). Conversely, Fuchs and Fuchs (1995) suggest that special education programs can and do work, so programming should be left alone.

Some parents, groups, and teachers believe that full-inclusion is a threat to providing an appropriate education (Fuchs & Fuchs, 1995; Persinger, 1999). Groups backing this position are the Learning Disabilities Association, the Division of Learning Disabilities of the Council for Exceptional Children, and the National Joint Council on Learning Disabilities. Not only the academic needs of children, but the emotional needs should be considered for any placement (Blanda-Holtzberg, 2004). Additionally, there is a limit to the skill level and class size (Malanaply, 2005; McNamee, 1997). Currently, pull-out programs and inclusive settings continue at all levels, with inclusion being favored in elementary schools. However, inclusion also happens at the secondary level.

Special Education Practices at the Secondary Level

Participants and Their Roles

According to limited available research on secondary inclusive settings, the key players at this level are similar to their counterparts at other grade levels. This includes the general education teachers, special education teachers, students without disabilities, and students with disabilities. However, there are several differences at the secondary level (Cole, 1997). First, exiting students face requirements that must be met in order to graduate. Over the past two decades, Ohio high schools have seen an increase in the number of credits required for graduation; additional requirements in English, math, and social studies; a strict attendance policy; passage of the Ohio Graduation Test (OGT); and
an increase in competitive college scholarships and grants (SEO-SERRC, 2006; FastWeb, 2007). High school special education teachers also deal with three additional pages in the Individual Education Programs (IEP’s) that cover transition goals, objectives, responsibilities, and timelines (SEO-SERRC, 2006). Moreover, high school special educators oversee and monitor each part of this process. Therefore, each additional graduation requirement is one more responsibility added to the high school special educator’s job.

It is noted that secondary special educators have a history of collaboration with general education teachers for inclusion of students with disabilities before REI (Lapke, 2005). These groups did not wait for state or federal mandates. Placement was made based on individual needs of the child in preparation for career and employment opportunities. A suggestion for more successful special education services at the secondary level is to assign special education teachers by content area (Dieker, 2005). This act allows for a more efficient system for all stakeholders, especially for high-stakes testing (Dieker, 2005). However, some general education teachers at the secondary level express anxiety when students with special needs are assigned to classes (Webb, 2004).

**Components**

Research indicates key components for effective inclusion. Although the items were listed for secondary inclusion, they seem appropriate at any level of inclusion. Further, they all cost money (Sebesta, 2002; Uhing, 1994). Having adequate collaboration time between special and general educators, appropriate class size, professional development to build teacher knowledge and skills, and the use of accommodations and instructional supports to meet students’ needs were identified as
essential for successful inclusion (Dieker, 2005; Lapka, 2005; Malanaphy, 2005; McNamee, 1995; Mousel, 2004; Sebesta, 2004; Semmel, Abernathy, Butera, & Lesar, 1991). Professionals recommend the practices of monitoring student learning, including behavioral, academics, and social skills of all students, and examining placement as critical to achievement, while others recommended a constant assessment and reflection of practices and results (Deiker, 2005; Detres, 2005; Reynolds et al., 1998; Semmel et al., 1991; Whitehurst, 2004).

Time and Training

Hodge (2005) goes one further by suggesting teachers obtain training in multiple intelligences theory and that all teachers apply these strategies as a means to contribute positively to student learning and development. Social skills training leading to increases in academic achievement was also recognized as important (Dancy, 2005; Farlow, 2003). Understanding the culture and the particular needs of the population are listed as successful practices (Kuglemass, 1995; Lapka, 2005; Mousel, 2004). Additional resources (Detres, 2005; McNamee, 1997; Reynolds, 2005; Sebesta, 2004) extra fully-licensed personnel devoted to inclusion (Dancy, 2005; Malanaphy, 2005; Mousel, 2004; Sebesta, 2002), and knowing state and federal mandates, funding, and litigation policies, procedures, and accountability (Handler, 2002; Malanaphy, 2005; Moore, 2003) are all seen as necessary for successful inclusion. Moreover, a major theme in the research indicates that any district considering inclusive practices take the time to plan effectively. All stakeholders should be involved in a thorough investigation of the entire educational program. Since real inclusion involves restructuring the school’s entire program and on-going assessment of practices and results, constant reflection is necessary to assist both
teachers and students (Detres, 2005). Consequently, time, talents, energy, and money are necessary for inclusive secondary settings.

**Funding**

Inclusion can be a costly endeavor, both financially and in terms of teacher commitment (Freytag, 2003). Surveyed general education teachers in a rural setting felt there was inadequate time to help students with disabilities (Mousel, 2004). Additionally, teachers reported there was not enough training and not enough support. They felt unprepared to teach students with vast differences in ability, and that students’ language deficiencies made their job the hardest (Mousel, 2004). However, even with the limited time and resources, teachers in a rural secondary setting had positive feelings about students with disabilities (Mousel, 2004).

Rural school districts often have financial constraints which limit additional staff and resources. For example, a review of the rural school district in this research study (Answers, 2006) reveals a local school district situated in a county having a median household income of $26,322 and a median income for a family as $39,785. The per capita income for the county was $14,171, with 27 percent of the population and 14% of families living below the poverty line. Of these, 21.20% are under the age of 18 and 12.9% are 65 and older. Comparing the village to state statistics reveals that the village has more Whites by 12%, is slightly above the average family size by .32, is slightly below the median income for a family by $369 or 6%, is below the per capita income for the village by $4,956 or 24%, and has an increased poverty rate by 2.6%.

Within this district is a middle school that follows a co-teaching service delivery model. An informal survey revealed that the total number of allowable teaching periods
for the special education staff for three grades is 33. The staff shared that there were not enough special education staff members to cover core subjects in all areas. They are in favor of adding more special education staff to their building, but can not do so because of district finances. Consequently, if a middle school can not successfully cover the core academic areas involved with three grade levels, how can their high school, complete with graduation requirements, cover four grade levels with fewer special education staff? Creative solutions are needed.

**Most Effective Models at the Secondary Level**

*Descriptions*

There is no one established co-teaching model that can be successfully duplicated at all grade levels. Co-teaching has many names and many forms. Inclusion, full-inclusion, mainstreaming, cooperative learning, and collaborative teaching are all terms associated with co-teaching. Co-teaching is typically perceived as two educational professionals working together to teach a class of students with and without disabilities (Dieker, 2005; Wunder & Lindsey, 1997). Cooperative learning focuses on instructional methods used for small heterogeneous groups of students working together to meet learning goals (McMaster & Fuchs, 2005). Mainstreaming is a term that typically refers to the placement of a child with special developmental, physical, emotional or educational deficiencies or challenges into a general classroom setting for part or all of the school day (Stout, 2001). Another common term, inclusion, expresses commitment to educate each child, to the maximum extent appropriate, in the school and classroom he or she would otherwise attend. It involves bringing the support services to the child (Stout, 2001). Basically each of these approaches includes students with disabilities in the
general classroom, while having the special education teacher find ways and means to provide necessary services to the child within those settings. Full-inclusion is a service delivery model that places all students, regardless of disability, in general education settings with services taken directly to the child within that setting (Stout, 2001). Special educators see a difference between mainstreaming and inclusion. Professionals backing mainstreaming see the special education classroom as the starting point to build general education services (Stout, 2001). Whereas, professionals backing inclusion see the general education classroom as the starting point for services. Accordingly, this is one example of the differences in language key professionals have as a beginning point for assisting students with disabilities.

Types

Another area of concern is the various types of models associated with co-teaching. It appears that teachers seem to find what works for them and then give it a name. Daack (1999) identifies the consultant model, the teaming model, and the collaborative/co-teaching model as the most common models used by general and special education teachers. However, the collaborative/co-teaching model is further subdivided into parallel teaching, supporting teaching, and team-teaching models (Cook & Friend, 1996; Daack 1999). Moreover, Daack (1999) includes the alternative teaching design and the station teaching idea; whereas, Zigmond and Magiera (2001) add one teaching/one assisting to the list. Additionally, Wunder and Lindsey (1997) suggest the complementary instruction method.

Another model defines co-teaching by elementary, middle, and high school models, with co-teaching relationships defined between special and general educators;
paraprofessional and a special or general educator; two general education teachers; speech/language pathologists and a special educator or general educator; social worker and a special educator or general educator; other support personnel and special educator or general educator; and elective teachers and a special educator or general educator (Dieker, 2005). As a result, there does not appear to be one consistent action plan that can be successfully duplicated for students with disabilities. Therefore, how can professionals, parents, and students determine which model is effective and successful for meeting the individual academic needs of the secondary student with disabilities and the unique scheduling demands and graduation requirements at the secondary level?

Factors

Although there are endless co-teaching models, complete with an assortment of names, there are certain factors in successful co-teaching models that determine the effectiveness of the placement for students with disabilities. In fact, school districts are beginning to spell out responsibilities and duties of general and special education teachers involved with inclusion (Plainfield, 2006). For example, the general education teacher will receive a class list of students with special needs, a student profile and modification lists, a contract from the special education teacher to set up consultation, blank weekly overview sheets for curriculum modifications and accommodations, monitor sheets for identification of specific problems and student progress, and a request for annual review input (Plainfield, 2006).

The roles of the special education teacher is to maintain IEP’s, write goals and objectives, communicate with all interested parties, service students in the general education classroom, work with students individually or in small groups as appropriate,
make curriculum modifications, and acquire needed assistive equipment as necessary. The special educator is also responsible to coordinate peer tutors, observe and monitor the progress of students receiving special education services in the general classroom, attend meetings pertaining to students qualifying for special education, attend department meetings, provide inservice regarding supported education as needed, and meet with staff regularly to collaborate support services (Plainfield, 2006).

The general education teacher is to accept and include differences in students, provide opportunities for students to develop skills, communicate with all interested parties, and be cognizant of specific goals and objectives for each student with special needs. Further, the classroom teacher is to provide specific information on classroom activities to the special education teacher, make accommodations, use modified material when needed with student with special needs, and provide feedback on student progress (Plainfield, 2006).

Together, the general and special educators are to meet regularly to discuss upcoming instructional plans, identify curriculum concepts to be covered or modified, and coordinate plans to provide services for students with special needs. Additionally, these two are to communicate on a regular basis to reassess and reevaluate the needs and progress of students with disabilities. Furthermore, co-teachers are to work together to assign grades for students, co-plan for successful co-teaching lessons, and coordinate recommendations for future course selection (Plainfield, 2006).

Finally, appropriate modifications and accommodations are to be decided upon by both teachers. These areas include daily assignments, long-term assignments, classroom work, and testing procedures in the areas of reading comprehension, reading mechanics,
math calculations and computations, math problem solving, organization and attention, and written language. Modifications within each category are listed. A few examples in the reading mechanics category for classroom use include pre-teaching vocabulary, allowing extra time to complete reading assignments, tape recording classroom lectures, assigning alternate reading, outlining key information in reading, having a volunteer notetaker, and reading aloud on volunteer basis only (Plainfield, 2006). These steps help establish a successful foundation for co-teaching.

**Progress**

What constitutes progress for student with disabilities in co-teaching settings? Wunder and Linsdey (1997) list four benefits of co-teaching. First, this model increases instructional options for all students. Second, co-teaching improves program intensity and continuity. Third, there is a reduction of stigma for all students. Finally, professional support is increased. Please note that student performance is not listed in these goals. In fact, Kavale (2000) reports that perception and attitudes about inclusion are so vast, that debates continue on an ideological level, where competing conflicts of vision remain difficult to resolve. Research suggests that inclusion does help struggling students without disabilities (Giangreco & Baumgart, 1995; Hardy, 2001; Ward, 2003). However, this comes with a drawback, because often students with disabilities do not receive assistance from the special educator because that teacher’s time is spent assisting students without disabilities (Vaughn & Schumm, 1995). There is evidence however, that students with disabilities do improve socially (Murphy et al., 2005).

**Academic.** Janice M. Baker from Vanderbilt and Naomi Zigmond (1996) from the University of Pittsburgh analyzed case studies of inclusion in five elementary schools in
five states representing urban, rural, and suburban environments and reported that special education students were not getting very much that was special. For instance, co-teaching was a part of all five schools’ inclusion models, but these researchers did not see individualized instruction that was specific to the academic needs of students with disabilities who were clearly deficient academically. Further, these same students who were struggling with schoolwork were not receiving intensive, remedial instruction from special education co-teachers because the special education co-teachers were typically in and out of several classrooms throughout the day.

*Grading.* There does not appear to be a consistent grading policy for students with disabilities included in inclusive settings. This can lead to friction between teachers and students (Chandler, 1983). Recently there has been increased communication with stakeholders as to the establishment of guidelines and procedures (Salend, 2005; Salend & Garrick Duhaney, 2002). Further, there is evidence that schools are beginning to establish policies (Plainfield, 2006). Salend (2005) promotes that districts form a framework for grading for differentiated instruction that includes identification of purpose, impact of grade-level differences, types of grading systems, and factors teachers should consider when assigning grades. Other relevant components include learning about legal guidelines for grading and selecting policies that are consistent with these guidelines and district policies, and are accepted within the community (Salend & Garrick Duhaney, 2002). Additional factors that need clarification are weight of the grade, grade point averages, class rank, and their designation on transcripts (Salend, 2005). Overall, constant evaluation of policies and procedures need to be addressed.
through communication with all stakeholders in order to determine that grading policies are appropriate for all students (Plainfield, 2006; Salend & Garrick Duhaney, 2002).

Social. There is evidence that students with disabilities improve socially, as depicted in a literature review regarding the inclusion of children with disabilities in mainstream classroom settings (Murphy et al., 2005); however, Vaughn and Schumm’s (1995) position paper contrasting responsible and irresponsible inclusion practices stresses the importance of considering the student with special needs and his or her family first. Meanwhile, Dieker’s (2005) position paper on co-teaching adds the need to remain cautious of irresponsible inclusion, a dumping ground for students as a cost-saving attempt. Further, Stout’s (2001) review of inclusion and how it relates to educational and social values promotes a continuum of placements so that all students with disabilities are placed in the correct, least restrictive environment. In this manner, students who may not be successful in the co-teaching model can easily transfer into an existing pull-out academic class. Conversely, this also means that students performing at a higher level in pull-out classes can easily transfer into the co-taught academic class.

Standardized Assessments. Currently, there is no clear evidence to indicate a conclusive outcome that co-teaching has an impact on standardized assessment (Dieker, 2005). Additionally, McMasters and Fuchs’ (2005) literature review on collaborative learning for students with disabilities indicate that collaborative learning promoted achievement in only 6 of 15 relevant studies. In addition, in one high school study, students’ quiz and exam grades actually worsened during the co-teaching experience (Zigmond & Magiera, 2001). In all fairness, Zigmond and Magiera’s (2001) literature review of co-teaching models report that gathering research on co-teaching is difficult
because of the differing definitions of co-teaching roles, random assignment of teaching partners, and the difficulty of finding matched samples of students and teachers. Consequently, co-teaching does not lend itself to precise investigation.

\textit{Time and Training}. In order for co-teaching to work, additional time is needed in many areas (Detres, 2005; Hill, 2000; Mousel, 2004). First, Detres’ (2005) qualitative study of female high school students with disabilities indicated that accommodations and modifications needed to be improved, which involved time. Second, Mousel’s (2004) qualitative survey of general education teachers revealed that 70% of the teachers did not feel enough time was granted to effectively teach students with disabilities. Third, Hill’s (2000) qualitative study investigating the relationship between teachers’ beliefs about inclusion indicated that further teacher training and additional planning and consultation time during the workday was needed. Dieker’s (2005) position paper on co-teaching stipulates the greatest barrier existing across all levels is finding time to plan. Hazlett’s (2001) qualitative case study addressing major issues of co-teachers suggested having joint planning sessions scheduled within each teaching day, with on-going training at the district level. Further, smaller class sizes were recommended in a quantitative study involving 170 middle and high school teachers investigating the relationship between teachers’ beliefs and inclusion (Hill, 2000). McMasters and Fuchs’ (2005) literature review of co-teaching models stressed the need of scheduling small, heterogeneous groups of students who work together to achieve common learning goals. Stout’s (2001) literature review on inclusion as it relates to educational and social values promotes having a continuum of placements so that all students with disabilities are placed in an appropriate, least restrictive environment by the IEP committee. Further, the building
staff must agree on a clearly articulated philosophy of education and have extensive staff
development that includes higher-order thinking skills, integrated curricula,
interdisciplinary teaching, multicultural curricula, and life-centered curricula. Stout
(2001) concludes by purporting that real inclusion involves restructuring of a school’s
entire program and requires constant assessment of practices and results.

*Rationale for Key Components for Secondary Level Models*

*Overview of Secondary Level*

Special education teachers and students with disabilities at the high school level
face a different learning environment from any other grade level. The federal mandate,
*No Child Left Behind*, demands that students with disabilities be exposed to the same
curriculum as their peers, participate in the state’s graduation test, and have their scores
incorporated in the district report card. Further, special educators for grades 7-12 must
show highly qualified status in any core subject area taught to students with disabilities
(NASOSE, 2002). In other words, special education teachers must complete appropriate
academic training in all core subjects they instruct. Further, students with disabilities are
to be taught the same academic content standards as their peers. What makes the high
school level different from any other grade level is the requirement for credits needed for
graduation. Not only do students need to be exposed to grade-appropriate subject matter,
they must also earn at least a 60% in each course per semester or the student will need to
repeat the class. Additionally, high school students need a set number of credits in order
to graduate from high school, a specific curriculum for acceptance into a vocational
school, and a specific combination of requirements to gain admittance to the post-
secondary option plan of their choice.
Towards that end, high school special educators must meet the terms of the student’s IEP, design pull-out classes in core subjects that address the academic content standards of the grade level, and oversee individual transition plans which include participation within the community, exposure and involvement in appropriate employment opportunities, and participation and inclusion with prerequisites for post-secondary option plans. Moreover, high school special education teachers monitor student attendance, grades, credits, disciplinary action, and progress on high-stakes testing. Furthermore, it is not uncommon for some students with disabilities to take the Ohio Graduation Test twice in grades 11 and 12. Consequently, this means the special educator will be called upon to organize and administer the test in small-group settings. Compared to a junior high school, for example, a 7th or 8th grade special education teacher might need to administer a practice test or an off-year achievement test once a year, with neither carrying the dire consequences of the state’s high-stakes testing program.

Students planning to attend college need to take the college entrance examination. Again, the special education teacher is responsible for applying for special testing and arranging the administration of tests for individual students during their junior and senior years. High school special education teachers also monitor student progress in all general education classes and help students learn advocacy skills to be successful in the classes. Special educators oversee all accommodations needed for each student. Additionally, all high school seniors with disabilities need to have a successful transition plan for post-secondary. High school special education teachers assist with scholarship applications, financial aid packages, college applications, and other necessary paperwork deemed
appropriate by the individual student’s college of choice. Finally, school districts are feeling the sting of *No Child Left Behind*. Consequently, the high school is the only building that needs to be concerned with graduation rates, which are reported on the district’s report card.

In summary, high school special education teachers have more and different duties and responsibilities from special education teachers at other levels, none of which are addressed in the literature in relation to co-teaching. As a result, these responsibilities shed a different light on adding co-teaching to the high school schedule.

*Scheduling*

Co-teaching can be added to a schedule; however, it appears to be easier to accomplish at lower grade levels. For instance, a result of Freytag’s (2003) quantitative study assessing factors influencing secondary co-teachers’ perceptions of co-teaching, and Ward’s (2003) qualitative study examining general educators’ perceptions of effective collaboration was that co-teaching was more difficult to build into schedules with each advancing grade. The high school level offers the most challenges for scheduling purposes. Block scheduling does offer more hands-on learning; however, this schedule limits the number of classes special education teachers can cover. Thus, special educators tend to split time between classes, sometimes seeing one class two days one week and three the next. Therefore, the question remains if special educators are present enough of the time to adequately assist students with disabilities within the co-teaching classroom.
Educator Responsibilities

Responsibilities and duties of general and special educators in co-teaching settings have been studied. For example, Austin’s (2001) quantitative study investigating teachers’ beliefs about co-teaching suggests that general education co-teachers are perceived as doing more in terms of teaching and planning than their special education partners. One high school even went so far as to list specific duties and responsibilities within a co-teaching model into categories: what the general education teacher will receive from the special education teacher, and a complete listing of responsibilities of the special education teacher, the general education classroom teacher, and of the co-teaching environment (Plainfield, 2006). One finding in Miller’s (2005) qualitative study investigating the progress and process of co-teaching in a Spanish classroom was that teacher roles and duties were not well-defined which led to confusion and discord between the co-teachers when classroom duties were divided. However, the study did not clarify who was responsible for establishing duties. Moreover, this confusion added to the uncertainty for students as they were unsure of the roles and were reluctant to ask for assistance. Consequently, struggling students continued to have difficulty (Miller, 2005).

Roles, duties, and responsibilities should be established by the building staff. In fact, time must be set aside for staff to agree on a clearly articulated philosophy of education and to have extensive staff development that includes higher-order thinking skills, integrated curricula, interdisciplinary teaching, multicultural curricula, and life-centered curricula. Additionally, Stout’s (2001) literature review on educational and social values concludes by purporting that real inclusion involves restructuring of a school’s entire program and requires constant assessment of practices and results.
Certainly teachers in co-teaching classes would benefit by following Daw’s (1996) thesis summary recommendation that a research base be formulated as to how teacher decision-making during collaborative consultation and co-teaching is made. By doing so, an understanding of effective ways to meet the educational needs of students would be established. Weiss and Lloyd’s (2002) qualitative study surveyed special education teachers in co-teaching environments to determine teaching styles. This study using a grounded theory of data analysis discovered that special education teachers stated they taught differently in co-taught classes as compared to pull-out classes. For example, during co-taught classes, special educators stated they offered support, monitored student behavior, taught the exact content in a separate classroom, taught as a team, or taught a separate part of the lesson. However, within the pull-out classroom, special educators engaged in different strategic and explicit forms of teaching such as breaking lessons into smaller units, delivering instruction at a slower pace, and offering remediation. Pull-out classes provided time for specific explanations, questions, help, and feedback. It was suggested in one interpretive two-year case study examining teaching practices that one critical issue is the need to have strong teachers who display caring techniques, as well as pedagogical mastery (Washburn, 2004). Students perceive these caring teachers as ones who promote students’ academic engagement and care about student progress.

Adding co-teaching to the schedule does increase the opportunity for special educators to assist struggling students who do not have disabilities. As mentioned earlier, research suggests that inclusion does help non-identified students. However, this gain needs to be leveled against the cost to students with disabilities and special educator teaching time. During an informal review of records and interview at a rural district, one
special educator was spending 65% of her school day with struggling students in the English 10 class. Unfortunately, this teacher had three other subjects to teach and 9th and 10th grade IEP students to monitor. There simply was not enough of this teacher to go around. IEP students failed classes and students with disabilities complained they did not receive the individual assistance needed in the English 10 class because there was not another opportunity within the school day for the special educator to meet with these students. Another effect from this model was students started seeking assistance from other teachers, which increased other teachers’ workloads. Simply put, hard feelings began to emerge because the co-teaching model was preventing one teacher from doing her job which spilled into teachers being asked to pick up another’s load. Obviously, it would have helped to have perspectives on inclusion practices outlined and discussed.

_Perspectives on Inclusion_

Understanding students’ and educators’ attitudes, beliefs, and outcomes of co-teaching was a difficult area to research due to limited available information. Indeed, Curtin’s (1998) qualitative study that involved observation and interviews of co-teachers suggest that available research on co-teaching at the secondary level is descriptive rather than prescriptive. In other words, there is not much available research. Consequently, in order to assess attitudes, beliefs, and outcomes, it was necessary to broaden the view in order to gain a research base. The idea is that some of these findings from inclusion studies may generalize to co-teaching. This section describes views from professionals, parents, and students, with the vast majority of available research found on the views of professional educators.
Professional Views

Of the 28 research studies involving professional educators, the most prevalent in the literature dealt with assessing the beliefs, opinions, and attitudes of those impacted by inclusion, with perceptions about effectiveness following slightly behind. Learning styles incorporated in inclusion and the implementation of inclusion shared equal numbers, while evaluating inclusive programs and professionals had limited research. Overall, research on perspectives of professional educators centered on teacher training, administrative support, and effectiveness for students.

Teacher training. Mousel (2004) examined the perceptions of a rural inclusion program by the general education teachers using an attitude survey and a qualitative survey over a two-month interview and observation period. About 70% of the teachers surveyed felt they did not have enough training to effectively teach students with disabilities and felt unprepared to teach students with disabilities. As a result, learning effective instructional practices was an outcome of this study.

Detres’s (2005) 8-week qualitative study of four Hispanic female high school students with mild to moderate disabilities in an inclusive setting also revealed that teachers felt more training was needed, especially in the area of providing appropriate accommodations and modifications. Consequently, results of surveys, transcripts, and records divulged that training needed to be improved to assist with accommodations and modifications. This finding suggests that general education teachers did not feel skilled in these areas, which lead to frustration for teachers and students. Additionally, Barnett and Monda-Amaya’s (1998) quantitative survey of 115 randomly selected Illinois principals revealed that teachers were not adequately prepared to implement inclusive practices.
Another finding suggested that administrators needed additional training in order to facilitate, implement, and support teachers in inclusion. Consequently, if principals are hearing and seeing this phenomenon, then training and planning time would be useful to add to inservice training since these inclusionary practices would assist educators to build additional tools and strategies.

Hill’s (2000) quantitative study investigated the relationship between teachers’ beliefs about inclusion and several themes, including perceived level of needed supports. Recommendations for additional focused teacher training and additional planning and consultation time during the workday were a result of this study. One hundred and seventy middle and high school teachers were surveyed using Teacher Efficacy Scales, Regular Education Initiative Survey, Heterogeneous Education Teacher Survey, and a survey developed by the researcher. The need for specific training for enhancing teacher skills in curricular modifications for students with disabilities was a finding of this study. Furthermore, Robinson’s (2004) quantitative study of general and special educators in seven public high schools in a Maryland metropolitan school system concerning the effects of years of teaching experience as it related to perceptions of inclusive education stated the need for additional training. Clearly, qualitative and quantitative studies representing professionals in rural and metropolitan areas speak to the need of including additional on-going professional training which would allow teachers to expand their confidence in teaching students with different skill levels.

Along with training, principals and teachers surveyed in Dancy’s (2005) quantitative study investigating effectiveness of inclusion agreed that more resources should be made available, and a need for extra personnel. Moreover, two English classes
at two secondary schools were involved in a qualitative case study to determine the characteristics of an inclusion model (Malanaphy, 2005). Daily observations, informational interviews, and document analysis were utilized in this semester-long study. Results indicated that key components for successful inclusion were lacking in the classes. These included inadequate collaboration, inappropriate class size, infrequent training, and limited accommodations and modifications. Therefore, if inclusion is to be successful, class size needs to be smaller with effective collaboration and training administered, and schools need to find ways to add personnel to the inclusion program.

A quantitative study using questionnaires involving 91 general and special educators in two small rural schools was designed to determine if attitudes and practices of inclusion were changing (Leyser & Tappendorf, 2001). Results indicated that general educators did not seem to frequently implement differentiated instructional strategies to accommodate the special needs of students with disabilities. Consequently, educators were not seen as being strongly supportive of mainstreaming. This finding would benefit from additional research. For example, the limited research explains that teachers want and need additional training and more planning time in order to meet the demands of a variety of skill levels. Teachers may be in favor of inclusion; however, they may simply not have the extended time to plan for the wide range of performance levels inclusion adds to the mix. Also, general educators express a strong voice stating the need for consultation time during the school day. If that is not scheduled with related personnel, successful inclusion cannot happen. Therefore, an interesting study might be to reassess these professionals concerning views of mainstreaming after adequate training and
planning has been provided. Without these key features, teachers will have a slanted view.

Support. Principals were recognized as being instrumental in determining whether or not inclusion was implemented in schools and the extent in which it was accomplished (Martin, 2004; Scruggs, Mastropieri, & McDuffie, 2007). Perceptions, beliefs, and attitudes of principals in four Florida schools that represented high and low inclusion effects were researched through surveys, interviews, audiotapes, observations, and document analysis including the school improvement plans. The school deemed to be highly inclusive worked with a neighboring university to match students with disabilities with university interns at the school site. Research revealed another school rated as high in inclusion efforts provided release time and financial support for training. Also, training was provided for all school faculties and administrators. Even with this support, the use of co-teaching was found to be limited even in schools touted as being highly inclusive.

This study reveals the varying degrees of inclusion. For example, one school reported to be highly inclusive was quite limited in their course offerings of co-taught classes, even though the school offered training, release time, and financial support for inclusionary practices. Perhaps the strategy was to provide teaching tools and strategies that could benefit all students in all classes. An interesting study might be to investigate what teachers were doing differently due to their training, release time, and financial support.

Another theme identified by teachers and principals was the need was for administrators to provide more resources in terms of materials and personnel (Dancy, 2005). The purpose of this quantitative study using the Parental Perceptions of Inclusion
Survey was to examine the effectiveness of the practices of inclusion. Again, the need for additional teachers is highlighted by those on the front line. Moreover, this is the first time different types of materials, such as those the inclusion members feel essential to meet individual needs, surfaced in the literature. Could it be that teachers are feeling more confident with their skills, but now realize that classroom materials are not meeting the needs on the levels of performance of many types of students? Therefore, in addition to more money needed for personnel and training, additional funds are needed to provide different types of materials for students. Can schools afford this?

Money issues do not seem to disappear with inclusion. For instance, Sebasta’s (2002) quantitative study examining 77 elementary and secondary teachers’ perceptions and practices of inclusion emphasized the importance of providing appropriate funding. Training, planning, materials, and personnel are ongoing expenses attached to inclusion. Additionally, general education staff identified the need to have more support from the special education staff (Mousel, 2004). This qualitative survey of general education teachers in a rural inclusion program discovered that teachers were frustrated with their lack of effective training. In other words, general education teachers sought support from special education teachers due to their perceived lack of training to help all students. When and how can teachers in inclusive school districts add on-going support to the school day? Principals might be able to align planning periods during the school day. Perhaps substitutes could be arranged for one-half day training meetings throughout the month. Or, could teaching unions and school boards add to the master contract by providing weekly after-school trainings. Of course, this costs money, which is a disadvantage of inclusionary practices.
In a different quantitative study, research was designed to assess the efficacy of inclusion at the secondary level using 613 general and special educators in 48 middle and high schools in Central Florida (Freytag, 2003). Fifty-three percent responded to the Secondary Co-Teaching Perception Scale which assessed perceptions of one of inclusion’s service delivery models, co-teaching. Results indicated that the instruction of students with disabilities was found to be the single most significant contributor to overall perceptions of teacher efficacy. One outcome of that finding suggested that systemic change is needed to enhance teachers’ perceptions, and that these can effect positive change with students with disabilities within the general education classroom. In other words, teachers felt additional changes from within the school needed to take place so teachers could effectively instruct students with disabilities.

Systemic change was investigated in Lapka’s (2005) qualitative case study of the initiation of a secondary music ensemble. Eight of the 29 band members were identified as students with disabilities. Faculty, staff, students and parents were observed and interviewed as to the implementation of this inclusive situation. Findings revealed that the implementation was gradual and that mentors recruited, educated, and supervised peer tutors. Mutual respect, communication and shared responsibility were identified as key to successful inclusion. This study demonstrated that inclusion can be successful; however, systems need to be arranged to allow for a gradual transition that allows for reflective on-going communication and evaluation for all key participants.

The plea for administrators to take charge and provide more support for inclusion was a result of Robinson’s (2004) quantitative study using a 22-item Likert scale questionnaire of general and special educators in seven public high schools in a Maryland
metropolitan school system. This study investigated the effects of years of teaching experience as it related to perceptions toward inclusive education, effective instructional strategies, and administrative support for change. One result revealed that special education teachers had more positive perceptions toward inclusive education, instructional strategies and administrative strategies for change than their general education counterparts. Of course, the flip side of this is that general education teachers had less positive perceptions toward inclusive education. This should not come as a surprise since a part of the study focused on effective instructional strategies. Traditionally, special education teachers have a wealth of training in this area compared to their general education peers. Regardless, the main finding recommended that administrators take charge and provide additional support for all. That approach should help general educators gain confidence in their strategies and tools.

Regardless of particular perceptions concerning pieces of inclusion, a significant outcome of this research is the important role that administrators play in inclusion. Principals are seen by the staff as the ones with the power. Consequently, this is the group that is in the position to effect change. Principals have the power to provide effective training and professional support. Administrators can also recommend financial considerations for additional materials, staff, and related personnel that are needed for successful inclusion. In other words, principals set the tone and direction of inclusionary practices in secondary schools (Martin, 2004).

Effectiveness. Dancy’s (2005) quantitative study investigating teachers’, principals’, and parents’ perceptions of the effectiveness of inclusion discovered that the area of social skills was found to be important among teachers and parents. A result of
this study was that those surveyed believed that acquiring social skills was requisite for academic achievement since the child gains a sense of belonging to the school which could help to develop self-concept. Clearly, teachers and parents linked increased social skills to increased academic performance. The suggestion of a link is present, but current research does not yet support it.

Socialization issues were included in a quantitative study of 336 New Mexico teachers investigating perceptions about benefits and liabilities of inclusion (D’Alonzo, Giodano, & Vanleeuwen, 1997). Slightly more than half were concerned that inclusion would have a negative effect for students with disabilities. For example, over 55% of those surveyed agreed that there would be socialization problems for students in inclusive classes. Further, 50.9% believed inclusion would cause self-esteem problems for student with disabilities. Consequently, professionals were concerned about the acceptance of students with disabilities in the general education classroom. Since this study is nearly ten years old, it would be interesting to revisit these New Mexico teachers and compare findings. For example, did their perceptions hold true? Did their students with disabilities have socialization problems in the general education setting?

Socialization was also addressed in a 2004 study by Bunch and Valeo. Attitudes of elementary and secondary students towards peers with disabilities were measured in this qualitative investigation involving 52 students representing special education and inclusive settings. One outcome was that there was a lower degree of abusive behavior in the inclusive setting. A second was that self-advocacy was seen as being more routine in inclusive settings. Finally, friendships began to develop as students in both systems began to advocate for peers with disabilities. Consequently, in this study, students with
disabilities were accepted and friendships began to emerge, which might happen in other schools.

Inclusion versus full-inclusion was a topic of debate in the literature. For instance, Barnett and Monda-Amaya (1998) surveyed principals to gauge attitudes toward and knowledge of inclusion. This quantitative study randomly selected 115 principals in Illinois eliciting information regarding definitions, leadership styles, and effectiveness and implementation of educational practices associated with successful inclusive programs. No clear definition emerged; however, principals supported that students with mild disabilities were viewed as being most appropriate for inclusion. This finding holds true in other studies as well (Fuchs & Fuchs, 1995; Mousel, 2004; Sebesta, 2002; Webb, 2004).

In another quantitative study, Persinger (1999) surveyed and interviewed rural Midwestern teachers to examine the extent to which they viewed inclusion characteristics commonly advocated in co-teaching. Results revealed the teachers concurred with practices and beliefs definitive of inclusion, with the exception of “full inclusion”, which was rejected by virtually all participants. Likewise, a quantitative study involving 708 educators and administrators from a Southern California high school district concurred with this finding (Elkins, 2004). Using a 5-point Likert scale, participants indicated a positive attitude toward “appropriate” inclusion and a negative attitude toward “total” inclusion when responding to 20 dependent variables reflecting the themes of placement parameters, knowledge of practices, impact on the general classroom, and teacher support. In fact, a finding of this study stressed the preference of a case-by-case decision
for inclusion. Furthermore, teachers’ attitudes focused on maximum, as opposed to full inclusion for each student with disabilities.

These findings support Fuchs and Fuchs’s (1998) position for responsible inclusion as presented earlier in this chapter. Rather than making a sweeping gesture and including all students with disabilities in general education classes, the appropriate step to follow is making individual decisions based on the student’s levels of performance and individual needs. After all, there is a reason why there is an “I” in Individualized Education Programs.

A qualitative study consisting of open-ended interviews of teachers and students in a rural Georgia high school concerning the experiences of full inclusion backs this claim. General education and special education teachers take necessary specific steps to cooperatively make decisions and provisions for each student with disabilities in order to provide a positive experience, to increase achievement, and to improve self-concept (Smith, 2000). Interviews with 12 general education and 11 students with mild or moderate disabilities revealed beneficial strategies such as providing alternate instruction, frequent praising, prompting, and showing high expectations as being necessary for student success. Further, teachers indicated that these positive experiences would increase self-concept, which would increase academic achievement and encourage positive behavior.

This study illustrates that both teachers know the individual needs of each child and work together to provide a successful experience for all children. However, teachers are taking a leap of faith to state that an improved self-concept would increase academic achievement. Perhaps a better word would be “should”.
Professionals continued to seek the most appropriate placement for students with disabilities in Mousel’s (2004) qualitative and quantitative study using two surveys. One survey consisted of a two-month interview and observation cycle of teachers, while the second assessed teachers’ attitudes concerning their perceptions of inclusion. Seventy-five percent of general educators welcomed the inclusion movement in their school district, but concluded that the students with disabilities in their rural school seemed unprepared for the general education classroom. In fact, in this study, students with disabilities seldom spoke out in class which was a concern for the teachers.

Another quantitative study examined the perceptions and practices of inclusion using 77 elementary and secondary general and special education teachers from 17 schools within one district (Sebasta, 2002). Results indicated that teachers appeared to be less willing to have a variety of student needs within the same classroom. Although teachers tended to hold generally positive views of inclusion in theory, practicing inclusion seemed to be more difficult. Accordingly, one result of Webb’s (2004) quantitative study of 129 special educators and 104 general educators from a rural school district in Southeastern Texas revealed that secondary teachers became more anxious when students with disabilities were assigned to their classes. In fact, general education teachers expressed a concern with teaching students with cognitive difficulties as measured by the Scale of Teachers’ Attitudes Towards Inclusive Classrooms survey.

Since secondary teachers and students face different outcomes than their counterparts at other building levels, it should come as no surprise that secondary students were more anxious. Dealing with credits for graduation requirements, credits for vocational school placement, and requirements for post-secondary option programs, can
be stressful. When a large mixture of students who learn in a different manner and of students who have vast ranges in skill level are added, is it any wonder secondary teachers speak of nervousness when considering inclusion?

D’Alonzo, Giodanao, and Vanleeuwen (1997) studied a similar situation with their quantitative study of 336 New Mexico teachers investigating perceptions about benefits and liabilities of inclusion. Slightly over 40% of teachers did not perceive inclusion as a positive opportunity for general education teachers. In fact, teacher stress was listed as an area of concern for 85.4% of the participants, while 82.4% were concerned about classroom management difficulties. Certainly, these are areas that could be addressed by administrators and future research. Again, this 1997 study could be updated with results compared to the original findings.

The majority of available research dealt with views from professional educators. At times parents were included in inclusive studies; however, parents were not the primary focus. One study that does examine parental views of inclusion was by Dancy (2005).

Parental Views

Dancy’s (2005) quantitative study examined parental views of the practices of inclusion using a modified version of the Parental Perceptions of Inclusion Survey. Specifically, the study wished to discover if parents supported the practice of including students with disabilities in the general education classroom. Results indicated parents felt that the inclusionary practices were being satisfactorily delivered in the schools and that the teachers were using collaboration tools successfully. An important outcome of this study was the importance of gaining social skills. Parents felt that students with
disabilities needed to acquire social skills in order to gain academic achievement. Consequently, if a student with disabilities did not have the necessary social skills for the inclusion setting, then parents felt the child would not be able to gain academic achievement.

What does the child think about this? There is little research from parents concerning inclusion and not too much more from students. However, student voices have been heard concerning self-esteem and effectiveness.

Student Views

Self-esteem. Blanda-Holtzberg (2004) investigated the effect of classroom placement on the self-esteem of secondary students with disabilities. This qualitative study examined the perceptions of two secondary students who had experiences in pull-out classrooms and inclusive settings. Interviews, document review, teacher evaluations, observations, and self-esteem questionnaires were used. An outcome of the study revealed that these two students felt better about themselves in the general education setting. This finding suggested that it was likely that students who produced a more positive self-esteem would improve in academic achievement. Further, it was suggested that placement of students with disabilities in the general education setting is an essential variable to promoting positive self-esteem. However, what the study did not address is if the students were achieving academic progress in the general education classes, or, how students were measuring academic progress.

Self-image and inclusion were examined in a qualitative study that sought the voice of recent high school graduates with disabilities (Moore, 2003). Interviews concerning perceptions of educational placements revealed that students wished they had
been given more opportunities to succeed in a general education class rather than placement in a pull-out program. Moreover, students felt that placement in a special education setting decreased their opportunities for social interaction with typical peers. In fact, it was suggested that having a label resulted in a negative self-concept and greatly reduced opportunities for social interaction. As a result, this study confirms the strong tie that self-image has for students. Again, students speak to the social benefit of inclusion and not of academic achievement. Students wish to spend more time with their friends, or wish for more opportunity to make friends. However, does this translate into academic progress?

Detres’ (2005) qualitative multi-case study of four 18-year-old female Hispanic high school students backs Blanda-Holtzberg’s (2004) claim. In-depth interviews, observations, and surveys revealed that students with disabilities saw the value of placement in an inclusion class. These students appeared to have an increase in their level of self-esteem by receiving instruction in a secondary-level inclusion class. On the other hand, those surveyed recognized the value of receiving additional support and services in the pull-out program and stated that the special education staff offered more personal attention and care to needs. Again, the study did not measure if the students were successful in the inclusion class.

This point was somewhat addressed in Smith’s (2000) qualitative study which consisted of open-ended interviews of teachers and 11 students with mild to moderate disabilities. Students in a fully-included model were interviewed to determine their academic experience, self-esteem, and social behavior. Data confirmed that students with disabilities measured progress by making good grades, making friends, and participating
in activities. Conversely, their worst experiences were listed as failing the class, being stigmatized or labeled, and making poor grades. Surveyed general and special educators recognized specific instructional steps to assist students with disabilities to have positive experiences. These steps included prompting for answers, giving additional wait time and showing high expectations. It was hoped that these cooperative strategies would help students increase achievement, improve self-concept, and behave in a more positive manner. Does it work?

**Effectiveness.** Farlow (2003) examined the use of instructional practices within inclusive settings. This qualitative study involved three case studies consisting of one student with disabilities and two students identified as being “at risk”. Interviews, observations, and student reflections and assessments were examined. Data confirmed that learning was improved by using cooperative learning activities. It was suggested that students learned better and improved social cognition when instructional practices were effectively presented and maintained. In other words, all three students benefited when assignments were of a collaborative nature.

The importance of adjusting the curriculum based on student abilities was one outcome from Lapka’s (2005) qualitative case study that investigated the process of inclusion in a secondary music ensemble. Students, parents, faculty, and staff were observed and interviewed in this study. Being flexible and creative, as well as creating an alternative curriculum, were seen as necessary to meet the academic needs of eight students with disabilities in the 29 member music group. Malanaphy’s (2005) qualitative case study of inclusion programs at two secondary schools in Hawaii supported Lapka’s claim. Observations, interviews, and documents were studied during a semester. A major
finding was that the use of accommodations and instructional supports must meet the students’ needs. Cooperative learning was listed as one of the beneficial instructional strategies. Clearly, meeting individual needs is critical for academic progress of students with disabilities.

Research on inclusion is top-heavy in regard to professional perspectives. The need for extensive, focused training for all professionals involved in inclusion is repeated throughout the literature. Additionally, professionals feel the need for administrative support and direction, especially when teaching groups of students with varied needs. Parents and students recognize the impact of self-esteem. Both groups favor placement in a general education setting for social needs, but struggle if this is the best academic move for the child. Some students yearn for inclusive placements because of the hoped-for increase in friendships and activities. Clearly, meeting social needs are seen as a priority for students in inclusive settings; however, the research does not address if students in inclusive settings are meeting academic challenges effectively, or even how academic accomplishments are measured. It is hoped that the literature review on co-teaching perspectives will address that concern.

**Perspectives on Co-Teaching**

Assessing the significance of co-teaching at any grade level is difficult to investigate as there is little empirical research (Murawski, 2006). For example, Zigmond and Magiera (2001) report that the differing definitions of co-teaching roles, random assignment of teaching partners, and the difficulty of finding matched samples of students and teachers make it complicated to conduct effective research. Further, the various models and interchange of terminology used within the models make researching
a specific theme complex. The majority of research involves the establishment of teacher roles, including communication and compatibility (Wischonwski, Salmon, & Eaton, 2004), and methods for implementing co-teaching (Lawton, 1999). Consequently, the process of co-teaching does have a limited research base. Recent studies have been conducted to investigate student views, as well as achievement performance differences in co-taught classes versus pull-out classes. Findings for any grade level student with disabilities in co-teaching are rare, with the secondary level receiving scant attention. The next section will describe professional views, student perspectives, and student academic performance as related to co-teaching settings.

Professional Views

Austin’s (2001) quantitative survey investigated teachers’ beliefs about co-teaching. Information was gathered from 139 randomly selected participants using the Perceptions of Co-teaching Survey. A finding of this study revealed that general education teachers feel they carry a larger load of duties and responsibilities in the co-taught classroom. Therefore, locating planning and collaboration time would allow for better preparation for all involved, which might lead to a better working relationship. This strategy might prove useful in regard to decision-making skills, too. Burgin’s (2004) phenomenological study focused on open-ended interviews with 22 general education secondary teachers. The study’s purpose was to evaluate opinions as to educating all children in the least restrictive environment. A concern voiced by these Tennessee teachers was the frustration of being excluded from the decision-making process. In fact, these teachers felt that rules, mandates, and policies were handed to them from superiors. An outcome was the need for joint decisions as a means to provide support in the best
interest of children. Consequently, open communication and a common planning time
would lessen the frustration of teachers which should allow for a more productive, evenly
balanced working arrangement.

The need to plan effectively with all stakeholders is repeated in a qualitative
multi-case study of four 18-year-old female Hispanic high school students (Detres, 2005).
Two special education and six general education teachers were interviewed and surveyed.
In addition to needing appropriate training in administering accommodations and
modifications, this group stressed the need to have a thorough investigation of the entire
program with constant reflection and evaluation. In other words, the surveyed group
wished to have all involved informed at each step, including the sharing of the program’s
evaluation.

Professionals are also interested in the effectiveness of co-teaching in terms of
finance and teacher commitment. In Freytag’s (2003) qualitative study 613 general and
special educators involved in co-teaching in 48 middle and secondary schools in Florida
participated in the Secondary Co-Teaching Perception Scale. Over 50% returned
completed surveys. A major outcome of this study was that teachers want to know if the
instruction of students with special needs in a co-teaching environment is effective. In
other words, if a school district is making the professional and financial commitment to
the co-teaching program, is it too much to ask if the program is effective? This finding
suggested that a systemic change is needed to order to answer that question. Having that
answer could certainly be beneficial.

The effectiveness of a special educator in the co-teaching class was examined in
Hardy’s (2001) qualitative study of instructional behaviors and practices in a secondary
pull-out and co-taught biology class. Data collected from interviews, observations, and student academic performance revealed that the presence of a special educator impacted the classroom in many ways. First, instructional practices were different which changed the learning environment. Second, the special educator contributed to limited specialized instruction for some students, which lead to academic progress for some students. Further, the establishment of a collaboration partnership ensued. Interesting enough, what the data also revealed was the new instructional practices in the general education setting did not always continue if the special education teacher was not present.

An important follow-up study might be why the new instructional practices did not continue. This could be because only the special educator was responsible for different instruction, or it could be that the general educator did not feel confident enough to use these strategies. Another perspective is that the general education teacher thought these strategies might only be acceptable for students with disabilities. Another interesting question would be to investigate if the specialized instruction was the prompt for the improvement. These areas would benefit from further study.

Co-planning was examined in a qualitative case study that addressed the major issues of co-teachers with joint planning of units and weekly lessons plans (Hazlett, 2001). Data collection involved taped interviews with general and special educators at a targeted suburban school which had initiated full inclusion. Results stated that teachers who perceived an effective experience had open communication and joint planning within the teaching day. Co-planning was also seen as an important function of successful collaboration as revealed in a qualitative study of 22 general education teachers using an Effective Collaborators’ Checklist (Ward, 2003). This study concluded by stressing the
need for the school district to provide on-going training for all teachers involved with co-teaching and for the entire school. Additionally, an outcome detailed the need for school districts to establish and practice policies and procedures for co-teaching. Consequently, this study stresses that in order to have successful co-teaching partnerships, the school district must make a commitment to provide on-going training, support, and planning. In other words, make the program a priority and do all that is required to make it work.

Another outcome of Ward’s (2003) qualitative study examining educators’ ideas about collaboration indicated that teacher personality style did not matter. The finding suggested that successful partnerships did not have to depend on teachers having similar personality types and that the important focus was teachers’ attitudes. In other words, teachers who wanted collaboration and co-teaching to be successful, put professional issues first by focusing on what was best for the student. This is what education is supposed to do in the first place.

One might also conclude that education should be organized. Miller (2005) discovered that when co-teaching was not organized and implemented, confusion surfaced. This qualitative study using interviews and reflective journals investigated the progress and process of a co-taught Spanish class. Seven of the 19 students were identified as having disabilities. Findings indicated that students were often confused as to the roles of the teachers. In fact, teachers agreed that the roles were not well-defined by the administration, which led to issues for the teachers and confusion for the students. Data revealed that students were reluctant to approach one teacher for another teacher’s work. Obviously, this is an area that needs to be rectified because struggling students do not need any more reasons to struggle with academic performance.
Academic Performance

Why place secondary students with disabilities in a co-taught classroom? What is to be gained? Is the goal to propel students with disabilities to achieve higher academic standing and to perform at higher levels on high-stakes testing (Zigmond & Magiera, 2001)? If so, is this working? Current research indicates there is no significant difference in academic performance for students with disabilities in co-taught versus pull-out classes.

Gale’s (2005) quantitative study investigated a total of 67 middle school students with disabilities to determine if there were differences in school performance in regard to pull-out and co-taught placement. Students were matched according to length of time receiving special education services, allowable accommodations, grade-level, Individualized Education Plan’s (IEP) goals and objectives, chronological age, and intelligence quotients. In other words, the students studied were similar. Further, descriptions of the school environment were detailed illustrating how students received specialized services. Results indicated no significant differences on standardized tests or with attendance. This finding is significant because it speaks to a considerable group of children. What the study does not indicate is how well students without disabilities performed in these same areas.

Another middle school study investigated the effects that co-teaching had on the achievement of students with mild to moderate disabilities in a 7th grade language arts class (Knudson, 2005). The unique twist to this quantitative study was the researcher compared students with disabilities using diagnostic tests, teacher-made tests, and class grades. There was no significant difference between the diagnostic pre-and post-test. In
other words, students with disabilities receiving instruction in a co-taught class did not show improvement or regression on high-stakes testing. In fact, findings indicated that students scored in a basic to below basic level on both assessments. However, students with disabilities did score higher on teacher-made tests and class grades. In this regard, students with disabilities scored at a proficient to advanced level. Interestingly, students’ intelligence quotients did not predict student progress, though student motivation did. Both the general and special educators perceived that personal motivation correlated with higher scores on teacher-made tests and class grades. It would be interesting to compare these findings to students with disabilities in a pull-out class or even to students without disabilities in the co-taught class.

Haselden (2004) assessed whether co-teaching had the potential for increased academic achievement for all students. In this quantitative study, achievement results for typical and at-risk students in four traditional high school biology classes were analyzed. One class was co-taught, while a second received support from a special educator. The remaining two classes received traditional instruction from one general science teacher. Results indicated no statistically significant differences in passing rates for students in all four settings, which might lend credence to Knudson’s (2005) position that it is individual motivation that makes a positive difference.

Another study using four sites focused on secondary English classes taught by general and special educators. The purpose of this quantitative study was to determine if individual needs of students with disabilities were met in a co-teaching environment. Murawski (2006) found no significant differences in academic outcomes for reading and writing assessments for students with learning disabilities in the co-teaching environment.
as compared to students with disabilities in the mainstream class, in a pull-out class, or in a general education setting. A major outcome stressed that teachers who report to be following a co-teaching model may not have supports such as common planning time or training on various instructional practices, and that these might be the reasons why there were no significant differences found among the four placements. This leads to the question of what constitutes the make-up of a co-teaching class. Obviously, this is an area that warrants further study and reflection.

Belmarez (1998) studied the effects of co-teaching on mathematic academic achievement with middle school students with and without disabilities during a three-year period. Further, the researcher wanted to relate students’ final grade averages to the Texas Learning Index (TLI), which is a score that describes how far a student’s performance is above or below the passing standard (Texas, 2006). Three groups were used in this quantitative comparison study. The first comprised a general mathematics teacher and a special educator who co-taught the mathematics class to students with and without disabilities. Another group was comprised of students in a pull-out mathematics class taught by a special education teacher and the last group contained students in the general education class taught by a mathematics teacher. Raw scores from the Texas Assessment of Academic Skills Test (TAAS), final grade averages, and TLI scores were analyzed.

The findings of this study (Belmarez, 1998) suggested that students with disabilities in the co-taught classroom did not produce greater mathematic achievement. Another finding of this study featured students without disabilities in the co-taught classroom. In this investigation students without disabilities did not show any significant
difference in mathematic achievement either. Further, they did not achieve greater academic gains by placement in the co-taught classroom as opposed to the pull-out class. However, students with learning disabilities in the co-taught mathematics class scored significantly higher on standardized test scores (TAAS), but the final grade averages and TLI were significantly lower than those students with disabilities receiving instruction in the pull-out classroom.

Several questions emerge. First, what was different on the standardized test (TAAS) as compared to the TLI and final grade averages? One would believe that the standardized test scores should cover similar material that was presented in class. Perhaps the most troubling statement is the fact that students without disabilities in the co-taught classroom did not show significant differences in math achievement either. Further review of the class composition might prove helpful for understanding this finding.

Another middle school mathematics study involving students with learning disabilities investigated the effects of co-teaching on student participation (Baldwin, 2003). A sixth-grade co-taught mathematics class was the site of this study focusing on math calculation and math reasoning. Findings of this brief study indicated that students with disabilities were not negatively affected when co-teaching was introduced. In other words, according to this study, student performance did not move forward; however, it did not go backwards either.

A rural school district in New York served as the site for evaluating the success of co-teaching (Wischnowski et al., 2004). Data on student achievement was one of several categories studied during a two-year period at an elementary and middle school for this quantitative study. This school district took a strong stance for providing co-teaching as
the least restrictive environment of choice. Not only were employees given training, but two university professors were hired to design an evaluative tool to assess the success of co-teaching. Their findings revealed that the data on student achievement suggested that students with disabilities did not show any change in the co-taught classroom as compared to the more restrictive environment.

The limited available research on academic performance of students with disabilities investigated co-taught language arts, mathematics, and biology classes. These were compared to general education, pull-out, and mainstream classes. Results reveal that students with disabilities show no significant performance differences on standardized tests (Gale, 2005; Knudson, 2005), reading and writing assessments (Murawski, 2006), math reasoning and calculation (Belmarez, 1998), attendance (Gale, 200), passing rates (Haselden, 2004), overall achievement (Wischonowski et al., 2004), and participation (Baldwin, 2006). Research in these areas has been conducted with the middle school population more frequently than either the high school or elementary levels. In fact, this researcher was only able to locate two studies on academic performance for the high school level, and one at the elementary that was combined with a middle school study. Further, student voices have been rather quiet in the research, too.

**Student Voices**

Only two studies were found that express the views of students with disabilities about their perception of co-teaching. Limited research shows that students with disabilities have a few issues to share concerning their thoughts about co-teaching. These comments center on the organization of the co-taught classroom, the interplay between the two teachers, and the effectiveness of the co-taught program.
In the first study, Dozier’s (2005) quantitative survey of 300 secondary students with and without disabilities asked 38 questions concerning attitudes and perceptions toward co-teaching. Students from this single Midwestern high school represented populations from general education, gifted, mild to moderately disabled, and English Language Learners. Responding students reported being neutral in most areas; however, they did share both positive and negative comments.

First, they felt strongly that classroom rules were consistent between the teachers. Also, teachers were praised on being prepared to teach and having enough class work for the length of the class period. Significant differences were apparent when determining co-teacher roles. Some students were reluctant to ask one teacher about another teacher’s assignment. Also, the group indicated being uncertain if the second teacher of the dyad was a special education teacher. A third area involved grades. There were significant differences if students thought their grades might be different in a co-teaching versus a general education class. Interestingly, only one student, who was identified as having a mild to moderate disability spoke negatively about the co-teaching strategy.

Student voices were also heard in Miller’s (2005) qualitative study of a co-taught Spanish class. Nineteen students, seven of whom were students with disabilities, participated in a beginning Spanish co-taught class for one year. The teacher/researcher used reflective journals and interviews as the methodology. At the end of the school year, findings revealed that the co-teacher roles were not well-defined by the administration. Consequently, this led to confusion and dissension between the teachers concerning responsibilities and duties. Further, this carried over to the students, four of whom reported they were unsure of the roles and were reluctant to ask the co-teacher for
assistance. Consequently, struggling students continued to have difficulty even more in this arrangement.

Secondary student voices were heard in these few studies focusing mostly on the arrangement and organization of the co-taught classroom. Students with disabilities were specifically selected as research subjects for a year-long study in a foreign language class. Both studies speak to the importance of established roles for co-teachers and for the need of eliminating barriers that make it even more difficult for struggling students to succeed. Is that all students with disabilities have to say about co-teaching?

Summary

What are educators, parents, and students supposed to do about placement in co-teaching classes? All three groups are concerned with doing what is correct for the student, not only in terms of academic performance, but also in terms of self-esteem. Does the available literature on co-teaching tell interested parties which direction to take? What does it tell us?

What is Known About Inclusion?

Inclusion began in 1986 with the Regular Education Initiative movement (Will, 1986). Advocates of this group wanted all children served in the general education classroom with special services brought to the child in that setting. Suggestions were given as to how services could take place; however, none of these suggestions were research-based. Two groups quickly emerged (Fuchs & Fuchs, 1995). The full-inclusionists, who focused on students with severe and profound disabilities suggested that all special education be eliminated, money shared across the board, and that special education teachers could be used as consultants. The inclusionists, representing students
with mild to moderate disabilities, first focused on individual needs of each child and then looked for ways and means to include these children in more general education classes. There are still two groups twenty years later. Neither can declare a victory, so both invite the other to join their side.

Co-teaching appears to be easier to manage at the elementary level. With each succeeding grade level, co-teaching becomes more difficult to include. Further, the demands of the high school special education faculty (Cole, 1997) and the graduation requirements for students add another level of difficulty to the scheduling process. Currently, pull-out and co-teaching do exists at the high school level.

There is not one single co-teaching model that can be duplicated at all grade levels. Regardless of the model, certain factors are necessary for successful co-teaching. These include spelling out responsibilities and duties of all educations involved with inclusion (Plainfield, 2006), supplying specific types of information concerning each student with a disability, setting aside planning and training time, and providing funding for additional staff, training, evaluation, and supplies.

Determining progress in co-teaching classes is difficult to measure (Wunder & Lindsey, 1994) due to differing attitudes and perceptions about co-teaching (Kavale, 2000). Research suggests that inclusion does help some struggling students without disabilities (Giangreco & Baumgart, 1994; Hardy, 2001; Ward, 2003), and there is evidence that some students with disabilities do improve socially (Murphy et al., 2005). There is no evidence that co-teaching impacts standardized assessments (Dieker, 2005) or if specialized instruction takes place in the co-teaching setting (Baker & Zigmond, 1996). Moreover, professionals indicate the need for extensive, focused, and on-going training
(Detres, 2005), planning (Hazlett, 2001; Mousel, 2004), consulting (Hill, 2000), and evaluating (Stout, 2000). Professionals also feel the need for administrative support and direction (Martin, 2004; Robinson, 2004).

Parents want to help their children build self-esteem (Dancy, 2005). Students and parents favor placement in a general education setting for social needs, but struggle whether this is the best academic move for the child. Some students yearn for inclusive placements because of the hoped-for increase in friendships and activities (Bunch & Valeo, 2004). Clearly, meeting social needs is seen as a priority for students in inclusive settings; however, the research does not address if students in these settings are meeting academic challenges effectively, or even how academic accomplishments are measured.

*What is Known About Co-Teaching?*

First, there is limited research about co-teaching at the secondary level, with the majority of literature focusing on the establishment of teacher roles, including communication and compatibility (Wischonwski et al., 2004), and methods for implementing co-teaching (Lawton, 1999). Secondly, students with disabilities are beginning to voice their opinion concerning teacher performance.

For instance, students felt their teachers were prepared to teach, that there was plenty of work, and that the application of classroom rules was consistent (Dozier, 2005). However, students reported being unsure of teacher responsibilities (Miller, 2006), were reluctant to ask about the other teacher’s work, and felt their grades might be different because of placement in a co-taught class (Dozier, 2005).

Co-teaching literature also addresses the comparison of co-taught versus pull-out classes. Specifically, the limited research states that placement in co-taught classes did
not affect scores on pre- and post-diagnostic tests in reading and writing (Knudson, 2005; Murawski, 2006), mathematics (Belmarez, 1998), standardized tests, or attendance (Gale, 2005). Further, co-teaching did not reduce the achievement gap between students with and without disabilities, or affect passing rates (Haselden, 2004). Intelligence quotients did not predict student progress, but personal motivation did (Knudson, 2005). Moreover, co-taught placements did not increase classroom engagement activities such as raising hands or recalling prior knowledge for students with mild disabilities (Lawton, 1999). In fact, some students scored lower on tests and quizzes (Lawton, 1999). However, participation of students with disabilities did not decrease in this placement (Mitchell, 2003). Overall, the majority of students with disabilities receiving instruction in co-taught classrooms did not show academic improvement as compared to students in a pull-out program (Wischonowski et. al., 2004).

*What is Not Known?*

The available literature does not explain how secondary students with disabilities measure their progress in the co-taught setting. Also, it is not known whether students feel they are making progress in this setting. For instance, do students measure progress by forming new friendships? If so, are students gaining more friends? Also, who are these friends? Are they other students with disabilities or typical peers? Furthermore, are students measuring their progress by participation in school clubs and extracurricular activities? If so, what are these new activities? Further, do students with disabilities measure progress by academic achievement? If this is true, are students with disabilities making academic gains in the co-taught class? If so, what are students using as the rating
scale? Are they using grade cards, scores on high-stakes testing, or completed credits towards graduation?

Moreover, the literature does not explain what measures co-teachers, parents, and administrators use to measure student progress either. Do teachers, parents, and administrators agree on measures of progress? Further, do professional educators and parents measure progress the same as students? In other words, do these three groups who are all involved with co-teaching agree on any measure of progress? How do any of these three groups know if secondary students with disabilities are making progress in a co-taught setting?

One of the proposed benefits for co-teaching was being able to drop the stigmatizing labels for students with disabilities. Do students with disabilities in co-taught classes feel label-free? Is this a measure of progress students desire? Co-taught classes offer more opportunities of engagement with typical peers. Is this a measure of progress students with disabilities want? If so, at what cost? REI advocates claim students with disabilities received inappropriate classroom instruction pre-REI. Do students with disabilities feel that co-teaching instruction is working for them? If so, is that a level of progress?

These questions form the framework and apply the lens for this study. Co-teaching is a costly endeavor in terms of time, talents, and finances for teachers, administrators, and school districts. How do educators know if students are succeeding in the program? What is the measure of progress? Current research does not answer these questions. Consequently, the purpose of this study is to investigate how students with
disabilities, teachers, their parents, and administrators measure progress in a co-taught setting.
CHAPTER THREE

Methodology

Introduction

This chapter will present the method used to answer the research question: How is the progress in a co-taught class measured by students, teachers, parents, and administrators? A description of the setting of the study including a demographic profile of the community and school district, staff involved with co-teaching, and 9th and 10th grade students with disabilities in co-taught mathematics classes begin the chapter. Next, the type of design and the assumptions and rationale for this qualitative design will be explained. Third, grounded theory and the phenomenology tradition will be described as the methodologies employed for this research. Fourth, the role of researcher will be addressed. Next, data collection procedures, data analysis, and methods of verification will also be clarified. The outcome of the study and its relation to literature conclude this section.

The Setting

Community

A rural Appalachian school district served as the setting for this research. The local school district includes one village with surrounding townships. Students representing Pre-K through grade 12 are served in a single complex on a 40-acre site adjacent to the state highway. Approximately 1800 students attend the school district, which encompasses approximately 169 square miles involving the routing of 28 buses. Over 122 teachers and administrators comprise the professional staff. The average level
of teaching experience is 14 years, with 60% of the staff holding master’s degrees (ODE, 2006b).

The school is situated in the village and is surrounded by townships. According to the United States Census (2000) there are 808 people living in the village. The village is 97.28% White and 1.11% African-American. There are 352 households of which 26.7% have children. Fifty-one point four percent are married couples. Nine point four percent have a female head of the house with no husband present. The average family size is 2.81. The median income for the village is $31,534 and the median income for a family is $42,750. The per capita income for the village is $16,047. Thirteen point two percent of the population and 3.3% of families are below the poverty line of which 22.6% are under the age of 18 and 15.0% are 65 or older. [The poverty line is the unit of measurement established by the United States government in 1965 by Mollie Orshansky of the Social Security Administration (Fisher, 1997). The Department of Agriculture develops food plans as a measure of what an adequate diet should be. Orshansky tallied the costs of the cheapest food plan and multiplied this figure by three. This total represents what is known as the poverty line (Fisher, 1997).]

The district is located in a rural county. The median income for a household in the county is $27,322 (Answers, 2000), and the median income for a family is $39,785. The per capita income for the county is $14,171. Twenty-seven percent of the population and 14% of families live below the poverty line. Of these, 21.20% are under age of 18 and 12.90% are 65 and older (Answers, 2000).

According to the United States Census Bureau (2000), Ohio has an estimated population for 2005 of 11,464,042. In 2004 the state had a population mix of 85.2%
White, 11.9% Black, 0.2% American Indian and Alaska native, 1.4% Asian, 1.2% reporting 2 or more races, and 2.2% Hispanic or Latino origin. In 2000 there were 4,445,773 households with 2.49 persons per household. The per capita income based on 1999 figures was $21,003 and the median household income for 2003 was $43,119. Persons living below the poverty level in 2003 were 10.6% (U. S. Census Bureau, 2000).

Comparing the village to state statistics reveals that the village has more whites by 12%, is slightly above the average family size by .32, is slightly below the median income for a family by $369 or 6%, is below the per capita state income by $4,956 or 24%, and has an increased poverty rate of 2.6%.

Co-Teaching

In March of 2006, the principal of this rural high school decided to include two co-taught mathematics classes into the curriculum for the 2006-2007 school year. The principal felt this strategy would improve student performance on the state’s high-stakes testing program. Moreover, the principal felt this approach would align with the new mathematics initiative starting at the middle school of double-blocking daily mathematics instruction by introducing higher level mathematics skills at earlier grade levels. To illustrate, students in grades 7 and 8 would receive two full periods, or 90 minutes, of math instruction per day as compared to the other core subjects which would continue with the 45 minute period. Therefore, co-teaching at the high school was seen by the principal as a logical step of reorganization to improve performance results on the state’s high-stakes test.

Two special education teachers who previously taught in pull-out mathematics classrooms for 9th and 10th graders were asked to identify higher functioning students
with disabilities and place these students in co-taught classes. Further, the special education teachers were matched with general mathematics teachers. The special educator with the most experience selected the general mathematics teacher with the least experience. Both of the mathematics teachers were new to the classes. One mathematics teacher was moving from lower level math classes to higher level classes. The other mathematics teacher with two years of teaching experience in a neighboring district was new to the school. Consequently, this arrangement was new in more than one way to all four teachers.

Since this was the first year of the program these professionals were given the support of the administration and free reign to organize the class. In fact, the school district offered one-hour, extended day, common planning time three times during each month that professionals could use for planning. Additionally, the high school scheduled a voluntary retreat one day before school’s opening dedicated to short cycle assessment training. Three of the four professionals involved in co-teaching were unable to attend due to the short notice of the scheduled meeting. Consequently, the professionals entered co-teaching with little training.

Co-teaching at the high school level within this district had been tried using various models for the past 20 years. In fact, less than three years before this arrangement, a co-taught class was attempted with a 9th grade English class. An interview with the two teachers involved revealed that both were willing; however, the range of student performance and abilities was so vast that the teachers decided to assign the lower functioning students into a pull-out English class with the special educator as the teacher of record after the first nine-week grading period. Still, the teachers decided their attempt
had been successful because the higher functioning students with disabilities made a quick transition into the general education class. In fact, both teachers felt the general education teacher could make individual minor modifications to ensure that each remaining student with disabilities would be academically successful in the general education class. Moreover, the two teachers decided to continue sharing lesson plans and assignments so the same information was covered in both classes. The goal for the special educator was to continue working towards strengthening the academic skills of the lower functioning students, while working on their confidence at the same time. Another goal was to place these students in the general education English class in the future. A review of class records revealed this worked for eight of 11 students, three of whom had issues beyond academic concerns.

Building Logistics

This school district has an interesting organizational arrangement. All students are served within one large complex, with different wings representing various grade levels. For instance, grades 6-8 are located in the middle of the building with grades 9-12 housed in an attached right wing. One principal oversees grades 6-12, with one assistant principal covering grades 6-8 and the other managing grades 9-12. The high school serves approximately 438 students without disabilities and 112 students with disabilities. Approximately 300 students without disabilities and 75 students with disabilities are at the middle school.

The principal formerly supervised grades 7-8 before the schools were brought to this complex. At the former location, a middle school model using a block schedule and “teaming” for students and staff was implemented. Co-teaching was embedded in that
program which utilized three special educators, one special education aide assigned to a student with autism, another special education aide used as a paraprofessional, and one special education intern for these two grade levels. When the district reorganized to one campus, grade six was added to the middle school and block scheduling was removed because the entire complex needed to be on a similar bell schedule. Further, the special education aide assisting the student with autism moved with the student to the high school. However, an additional special education teacher was added to the district, to be shared with grades 6-12.

The point here is that the former arrangement for grades 7-8 seemed to be a better fit for co-teaching and teaming. Not only did the middle school have common planning time built within each school day, but the professionals also scheduled students in groups that could be easily monitored. Additionally, this group-style arrangement made it manageable to meet with students at different times throughout the block-scheduled school day. Furthermore, the special education staff seemed to have the professional personnel resources necessary to meet the needs of students with disabilities representing two grade levels.

Currently, the middle school follows the co-teaching model for English and mathematics in grades 6-8, with the majority of students with disabilities scheduled in general social studies and science. Some students, mostly students with cognitive delays, have been scheduled in pull-out classes for some core subjects. The middle school has four full-time special education teachers, one special educator scheduled for 66% of the time, one special education intern scheduled for 66% of the time, and one full-time paraprofessional. Co-teaching is the model of choice for the principal and special
education staff as their philosophy is that the general education classroom is the first choice for placement for students with disabilities. Consequently, the emphasis is on full-inclusion with the master schedule designed around the special education department.

The high school most closely follows a partial-inclusion model. For grades 9-12 there are pull-out classes in English (4), math (3), science (4), social studies (3) and co-taught classes for math (2). There appears to be an equal mix of students with learning disabilities and students with cognitive delays in the pull-out classes. Moreover, there are nine periods of tutoring which are used for special education teachers to assist students to learn to be their own advocate while meeting general education class requirements. The majority of these students are scheduled in all general education classes. The high school has four full-time special education teachers, one special education teacher for 44% of the time, and one full-time special education aide assigned to the student with autism. The philosophy of the high school special education staff appears to be student-centered with the special education schedule designed around the academic needs and levels of performance of students with disabilities. Consequently, the schedule changes every year.

Opinions

So, armed with a history and philosophy, the high school special education department felt co-teaching attempts had been previously made. Further, the special education department pointed to progress with graduation rates, attendance, and performance on the Ohio Graduation Tests. Further, some felt adding co-teaching to the schedule would decrease student services in other areas. For example, often special education teachers would arrange teaching activities in one class and allow other students to come in during this same period to complete tests, assignments, or to work on college
applications or other transition services. Co-teaching would remove this service.

Although the high school principal was new to the combined position, he had extensive experience with co-taught programming at the middle school level. Consequently, his decision was final and led to two periods of co-taught math and many questions within the special education department as to the impact of co-taught classes on students with disabilities.

Of all the questions raised, three seemed most important. First, in what ways were the conflicting programming options of the two buildings impacting students with disabilities? As previously mentioned, the middle school’s focus was on full-inclusion, while the high school’s focal point was on partial-inclusion. Were students making progress in these different program options? Or, were students being caught in the middle? Second, how was progress measured? Furthermore, were students’ individual needs being met? Third, what did students have to say about all this? In other words, how did students with disabilities measure progress in a co-taught class? These questions set the direction and tone for this research project. Particularly, how did students, teachers, parents, and administrators measure progress in co-taught classes?

The Type of Design Used

A qualitative case study allows the researcher to uncover the meanings students, teachers, and administrators associate with progress in co-teaching. In other words, these voices help clarify measures of progress in co-teaching settings. This single-case, within-site study allowed the researcher to identify themes concerning the perspectives of progress in co-teaching classes (Creswell, 1998). The purposeful and theoretical sampling was limited to students with disabilities in the co-taught math class, the general education
mathematics teachers, the special education teachers, an educational aide, the principal, curriculum director, guidance counselors, and school psychologist.

The context of the case describes the physical setting of the school, as well as the vision between administrator and teachers concerning co-teaching at a high school level. As this case illustrates, the issue of co-teaching is identified as an instrumental case study (Creswell, 1998). Analysis of categories and themes were gained through embedded analysis of specific aspects of the case. Following procedural and systematic steps for grounded theory, a theory as it closely relates to the phenomenon was created in a narrative form at the end of the study. The researcher’s primary outcome was to provide a theory with a central phenomenon, causal conditions, strategies, conditions and context, and consequences. This was a rigorous undertaking.

Assumptions and Rationale for a Qualitative Design

A phenomenological case study set in grounded theory focusing on rigorous structured, unstructured, semi-structured interviews was the method used in this study. In-depth analysis of interviews used in an auxiliary fashion concerning curriculum options assisted in understanding the phenomenon of co-taught classes in a rural school district. Repeated engaged interviews over a 9-week period with individuals involved with co-teaching: high-performing mathematics students with disabilities, their parents, the general education mathematics teachers, special education teachers, an educational aide, principal, director of curriculum, guidance counselors, and school psychologist provided background information to illustrate the phenomenon. A continual analysis of the data, which included archival records and observations, led to the development of a theoretical interpretation of what was seen and heard. These interpretations led to themes
and categories which were analyzed to gain meanings. Further analysis in the form of open, axial, and selective coding was used to help form a theoretical model of how scheduling and instructional options impacted the learning experiences of students with disabilities.

A phenomenological case study methodology was used as the design to better understand the interpretations and meanings given to reactions to this instructional option. Thick, rich description set in the natural school setting was based on data collected in words which enhanced understanding. Data was gathered from observations, records, and interviews. The researcher looked to understand how and why behavior occurred by repeatedly asking “What is going on?” and “What is the main problem and how are you trying to solve it?” The research procedures were flexible and evolved during the study due to insights gained during continual coding and recoding of the formal and informal interviews and observations (Creswell, 1998). The “case” was bounded by students with disabilities placed in the co-taught mathematics class. The phenomenology focused on participant perspectives of the new class structure. In other words, the co-taught class will be the phenomenon that is different from past years. The context leading to the change of curriculum and the school’s setting is thoroughly described (McMillan & Wergin, 2002).

Grounded Theory Tradition

Grounded theory is a set of concepts organized around a core category and integrated into hypotheses (Glaser & Holton, 2004; Rubin & Rubin, 2005). The theory contains both inductive and deductive thinking as it constantly compares conceptualized data on different levels to discover the participant’s main concern and ways to resolve the
concern. This complex repetitive process begins with raising questions which guide the researcher to gather data allowing core theoretical concepts to be identified and later linked to the data (Trochim, 2005). The analytical strategies involve open and selective coding into initial categories and core concepts, memoing, a process for recording thoughts and ideas, and integrative diagrams used to pull all the details together and to help make sense of data with respect to emerging theory (Trochim, 2005). Memos are important tools for refinement and keeping track of developing ideas. Eventually, this leads to a theory.

Validity of this tradition is judged as an active part of the research process through several connections. First, establish how closely the concepts fit with the incidents they are representing. The second process determines the thoroughness of the constant comparisons of incidents to concepts in relation to the participant’s real concern. The next process explains how the problem is being solved, and if the theory can be modified when new relevant data is compared to existing data (Crewsell, 1998; Glaser & Holton, 2004). Interestingly, Glaser and Holton (2004) do not recommend studying the literature as this might give the researcher preconceptions and borrowed concepts. Instead, the recommendation is to read during the sorting state as a means of gathering more data.

**Phenomenological Tradition**

Phenomenology was selected because of the need to emphasize the various perspectives of participants for measuring student progress in co-teaching settings. Kavale (1996) implies that the phenomenology tradition describes consciousness. Glesne (1999) adds that this approach discerns meaning. Phenomenology attempts to get beyond
the stated meaning and get to the truth of the situation (Kavale, 1996). The central purpose of a phenomenology study is to understand and describe a specific concept or phenomenon from an individual’s point of view (Creswell, 1998, Kavale, 1996, Mertens & McLaughlin, 1995). The person is not the focus of the study, but rather it is the event, item, situation, or issue that is critical. In other words, this approach seeks the individual’s perceptions and meaning of a particular event (Mertens & McLaughlin, 1995). Precise descriptions as to how the phenomenon impacts the individual lead the researcher to critical meanings of the phenomenon (Kavale, 1996). Additionally, in a phenomenology study, multiple individuals, up to 10, who have experienced the same phenomenon, are studied using a long interview protocol (Creswell, 1998).

This approach centers on the relationship between the interviewer and interviewee. The former must be an excellent listener and appreciate interpersonal relationships since this research tradition demands comfortable conversation (Kavale, 1996). In fact, Kavale (1996) states interviewers must be able to listen without prejudice, which allows the interviewee to unfold the experience without interruption, question, or comment. The researcher creates a safe atmosphere, yet asks probing questions in order to allow the interviewee to speak freely. However, this approach is not a reciprocal interaction between two peers (Kavale, 1996). The interviewer has the power, thereby setting the pace, the tone, the direction, and the atmosphere (Kavale, 1996). Information is bracketed to specifics presented by the interviewer since it is the individual’s subjective experiences of an event that are investigated (Mertens & McLaughlin, 1995).

Advance preparation is essential. In fact, Kavale (1996) suggests the bulk of the research be completed before the interview begins. This strategy allows for facts to be
gathered and sorted, which will promote an efficient, informative, and productive interview session. The researcher will classify the interview transcripts by finding and listing statements of meaning into groups. Data can be interpreted by the interviewer asking a series of questions, such as what happened and how did it happen. Significant statements can be separated and grouped by meaning. These are developed into an overall description of the experience, thus, capturing the essence of the phenomenon (Creswell, 1998). Tables or figures can be used to represent the data. Verification can be achieved by using an outside reader and determining whether the patterns logically fit together (Creswell, 1998).

Role of Researcher

Conducting research at one’s employment site is uncommon. In fact, this situation is unique for several reasons. First, the researcher knows half of the students and all four of the teachers. However, I do not teach these students mathematics, nor do I teach 9th or 10th grade mathematics. Further, although I have experienced co-teaching at the middle school level, it was in a different school district with a different subject. I attempted co-teaching four years ago with a 9th grade English class at the research site. This program was stopped within the first nine weeks due to the vast differences in ability levels of the students with disabilities.

The interview questions do not speak to personality traits or teaching styles. In other words, the questions are not asking about likes or dislikes of teachers or administrators but rather, focused on perspectives about progress. I believe my insider view of the school district, the students, teachers, and administrators, allowed participants
to speak freely and honestly as to personal perspectives. I do not feel my employment negatively affected research results.

The first step was to gain support and approval from the researcher’s committee. Once that was earned, the second step was to obtain approval from Ohio University’s IRB. After that was achieved, the researcher contacted the superintendent of schools by letter to schedule a meeting to present the proposal and gain entry. Once established, a letter to present the proposal to the building principal was sent. With the principal’s approval, letters were sent to the assistant principals, guidance counselor, curriculum director, school psychologist, special education teacher, general education mathematics teacher, and educational aide as a means of providing information, building rapport, and answering questions pertaining to confidentiality and anonymity. Permission forms for all involved were issued. Once approval was gained, the next step was to build rapport with the students. Before that could be accomplished, approval was granted from the parents. Towards that end, form letters explaining the purpose, confidentiality, and anonymity were sent to the parents. No student was contacted without guardian approval.

Activities as observer included limited participation, field observation, interviewing, and artifact collection (McMillan & Schumacher, 2006). Even though the goal was be unobtrusive, limited participation was necessary for acceptance in the setting. Direct and indirect observations and structured, semi-structured, closed, and formal interviews were planned. Documents and artifacts including grade cards, interim reports, IEP’s, lesson plans, progress reports relating to IEP goals, attendance reports, and discipline reports were used to obtain data. The researcher was onsite, taught a few of these students in a pull-out English class, and became an intense observer and listener
during this prolonged data collection period to guarantee an accurate reporting of student voices. The researcher had the opportunity to observe students in other settings such as the classroom, the hallway, and the bus. This strategy helped corroborate field observations through field notes and records (McMillan & Schumacher, 2006).

In-depth interviews to open-response questions using a small digital recorder provided thick and rich descriptions. Interview and observational protocols were used to briefly record the respondent’s words (Creswell, 1998). Of course, using the phenomenological design, questions were asked to investigate what was experienced, how it was experienced, and what meanings the interviewees assigned to the experience. It was helpful for the researcher to write a full description of her own experience in order to develop questions and to address subjectivity. Probes, pauses, and follow-up questions were asked (McMillan & Schumacher, 2006). In fact, participants were asked to clarify insights and themes.

Each school employee, all students, and a few parents were interviewed one time with a second meeting held to allow individuals the opportunity to clarify responses. By parental request, some parents were interviewed one time by telephone or through correspondence. Although some researchers discourage the use of tape recorders and transcriptions (Glaser & Holton, 2004), these tools were used. Consequently, a small digital recorder, field notes, and transcripts were present. Transcriptions and coding were completed within two days of the interviews. Data was collected and analyzed in a revolving process by organizing the data; generating categories, themes, and patterns; coding the data; testing the emergent understandings and looking for plausible relationships between concepts; searching for alternative explanations; and writing
propositions or hypotheses or presenting a visual theory (Creswell, 1998; Marshall & Rossman, 1999). The researcher did all transcribing and analyzing without the use of a computerized program. Guidance counselors were asked to check tables representing grades, the school psychologist was asked to verify levels of performance for selected students, and a special education teacher was asked to confirm testing results on high-stakes testing. Finally, guidance counselors were asked to substantiate class schedules.

The researcher’s plan was to assign pseudonyms to all involved (Locke, Spirduso, & Silverman, 2000). Since research was conducted at the researcher’s place of employment, special care for confidentiality was taken to protect all involved while honoring terms of the contract arranged with the school district and parents. There was interest in specific results of the study; however, by approval from the superintendent, findings will be issued directly to him.

Participants

Participants interviewed include students, parents, and school staff. Specifically, 17 total students with disabilities in 9th and 10th grade co-taught mathematics classes and parents will be interviewed. These students were selected because of participation in the district’s first-ever high school co-taught mathematics classes. Staff interviewed included two general mathematics teachers in the co-taught class, two special education co-teachers in mathematics, and the educational aide to the student with autism in the 10th grade co-taught mathematics class. The principal for grades 6-12, the assistant principal for grades 9-12, the district’s Curriculum Director, the middle and high school guidance counselors, and one assistant principal involved with scheduling will also be questioned. Additionally, one school psychologist was interviewed. These members were selected
because of personal involvement with the co-taught mathematics class or because of their decisions to add co-teaching to the curriculum. Excluded from the study were faculty who were not involved with co-teaching.

**Data Collection Procedures**

Glaser and Holten (2004) recommended to “just do it” as there was always a main concern and always a prime mover. Consequently, the best approaches for data collection was to simply get started by asking questions and listening to responses while remaining open to what was seen and heard. As the grounded theory approach treated emerging literature as a data source, it was recommended to update a literature review during the sorting process. Once the researcher began to gather data, first order emerging themes were identified allowing tentative linkages to be developed between the concepts and the data (Trochim, 2005).

It was critical that the researcher comprehend the rigorousness of the grounded theory tradition. Coding, analyzing, and collecting data take time and patience. The process of discovery cannot be rushed or forced to meet a deadline or personal goal. The researcher must grow with the process and allow both the research and the researcher to mature at his or her own pace (Glaser, & Holten, 2004). Eventually, the researcher decided the study has reached saturation, otherwise the process could continue indefinitely (Trochim, 2005).

Data collection activities included archival research, analysis, coding, and recoding of interview information. Documents, records, interviews, observations, and physical artifacts were the types of information to be collected. Observation took place during school and after-school related activities. Information was recorded using field
notes in the form of memoing, double-sided journals, and interview and observational protocols. The common data collection issues in the field consist of logistics of interviewing and bracketing experiences. Transcriptions, field notes, and computer files were used to store data (Creswell, 1998).

The strengths involved with interviews were that they foster face-to-face interactions with participants, were useful for uncovering participant’s perspectives, and allowed data to be collected in a natural setting. Further, immediate follow-up for clarification was utilized as members check responses and transcriptions. Interviews also facilitated discovery of nuances within the culture and allowed the researcher to facilitate analysis, check validity, and test triangulation (Marshall & Rossman, 1999). Document review was good for researching major events, crises, and conflicts. Additionally, this method provided context information that could be used for triangulation. The researcher was able to draw on established instruments found these easy and efficient to administer and manage (Marshall & Rossman, 1999).

Available research did not address how students’ perceive progress in co-teaching classes. To provide context for students’ perceptions, data collection included grade cards, teacher comments, transcripts, evaluation team reports (ETR), and IEP’s. The researcher needed to determine academic achievement in order to gauge student performance. Additionally, since socialization was addressed in the literature, the researcher wished to gather data as to how students with disabilities were included in clubs, sports, and community service projects. Moreover, the researcher needed to determine if there was a link between participation in co-taught classes and increased
involvement with typical peers in various clubs and organizations. Consequently, observations were arranged during the school day and at school events.

*Observations and Interviews*

Opportunities for observation were arranged with teachers. The purpose of the observations was to determine how students with disabilities interacted with peers and participated in classroom activities and assignments. Special notice was taken of student attention, on-task behavior, off-task behavior, demeanor, and instruction following. Next, students with disabilities were interviewed concerning their insights about placement in a co-taught class. Twelve total students agreed to be interviewed at school during their study halls or a time deemed appropriate by their teachers. Eight parents agreed to be interviewed in person, by telephone, or through correspondence.

Interviews with staff followed at the school site. Efforts were made to accommodate interview times before and after school, or during planning periods. Meetings with administrators and the Curriculum Director helped determine the co-teaching models used at the middle school and high school, the purpose of the model, how the program was evaluated, who evaluated the program, and the program results. Next, staff was interviewed to determine the same questions; however, additional questions were asked concerning student performance and transition from middle to high school. This included two guidance counselors, one teacher aide, two special education teachers, two mathematics teachers who are co-teachers, one school psychologist, two assistant principals, and one principal. Additionally, records to access files were issued to the attendance record keeper, athletic director, administrative assistant for the school psychologist, and to the yearbook advisor.
Once all the material was transcribed, those involved were asked to check material for accuracy. Arranging time with the special education teachers to speak with students in a small group setting provided a more private location to review materials. Once information was confirmed and data analyzed, contact was made with the superintendent to determine the manner in which results should be presented to the school.

Participant interviews assisted the researcher to begin conversation about student progress in co-teaching classes. For instance, how do students with disabilities feel they are doing in the co-taught class? How can students tell if they are making progress? How has the co-teaching arrangement impacted self-confidence? In what ways has student participation changed since being in a co-taught class? How do quizzes, exam, and grade card scores compare to scores earned in previous pull-out classes? How would students/teachers arrange co-taught classes?

The first procedural step was to obtain committee members approval for the research project. Next, authorization from the Institutional Review Board was needed. This step took longer since students were interviewed. Once permission was received from the university, a letter was sent to the superintendent of the school district. After waiting a few days, a follow-up telephone call was made to arrange a time to meet with the superintendent in order to gain permission to conduct research. At that time a formal presentation of the research project was made. With the superintendent’s permission, letters were sent to the school’s administrators, guidance counselors, curriculum director, school psychologist, teacher aide, and co-teachers. Individual introductory meetings took place with staff during the school day.
The third step was to meet with students with disabilities in the co-taught math classes. The best time for the initial meeting was in a small group setting, such as tutoring or another special education class where special education teachers were present. The research project was presented, questions answered, and permission slips explained. Further, a time for collection of materials was determined.

A review of documents was performed before individual interviews and observations. Contact was made with the administrative assistant who was in charge of attendance. The purpose of reviewing attendance records was to determine attendance patterns for students with disabilities beginning in sixth grade through the tenth grade. Discipline records were reviewed with the assistant principal to determine disciplinary referrals of students with disabilities in general classes, co-taught classes, and pull-out classes. Transcripts and grade cards were reviewed from grade six through grade eight to determine grading percentages. Special notice was taken of class placement. In other words, determination was made if students earned grades in general education classes, co-taught classes, or pull-out classes. The high school guidance counselor helped with this step.

Academic achievement according to Ohio Graduation Practice Tests, short cycle assessment, or standardized test scores was reviewed to determine performance levels. Specifically, student rankings were distributed to establish placement patterns. In other words, students’ scores on standardized tests were ranked and aligned to placement in general education classes, co-taught classes, and pull-out classes. The purpose was to determine how students were placed in particular classes; the assumption being that the higher the score, the less restrictive the class. Additionally, academic and athletic
involvement was reviewed with the yearbook advisor, athletic director, and other employees suggested by the assistant principal. The purpose of this activity was to determine student involvement and participation.

Data Analysis

The grounded theory approach relied on systematic and explicit coding using analytic procedures. The process involved connecting categories of information that help build a story by finding the best fit of many choices which enabled the generation of a theory (Crewsell, 1998; Glaser & Holton, 2004). Memoing was the analytical process that the researcher used to go through data, coding, sorting, and writing. Memos helped the analyst raise the data to conceptual levels while developing properties in each category that began to define them operationally. Further, memos revealed and related by theoretically coding the properties of descriptive data. This strategy was critical to the grounded theory process (Glaser & Holton, 2004).

During data collection, information was initially categorized through open coding, a system where the researcher finds several properties or subcategories of the study. Written data from field notes was conceptualized line by line, going back and forth to compare data, merge concepts, and sharpen the theory (Creswell, 1998; Rubin & Rubin, 2005). Next, using axial coding, the investigator aligned the data in new ways through coding paradigm or a logic diagram in order to tell the story and advance propositions. In this approach, a central phenomenon was identified as it related to and was affected by other conditions. For example, causal conditions, those that influenced the phenomenon, and strategies, those that resulted from the phenomenon, were identified. Next, the context and intervening conditions, both the narrow and broad conditions that influenced
the strategies, were identified and detailed. Finally, the consequences, or outcomes, for this phenomenon were delineated. During selective coding, a story line was identified that integrated the categories in axial coding with the hypotheses or propositions typically presented (Creswell, 1998). It was expected that the study will end at this analytical, substantive-level theory.

Methods of Verification

Triangulation was used as a means to enhance credibility. The researcher hoped that what was found through interviews will be confirmed with observations and mid-term progress reports. Having at least three sources in agreement increased credibility. Another strategy to increase credibility was to have member checking. In other words, the researcher met with the interviewees and confirmed the accuracy of the interviews, which the researcher hoped to analyze through probes and follow-up questions. An additional planned strategy was cross-examination of the evidence where a disinterested colleague analyzed the logic behind inferences (McMillan & Wergin, 2002). External validity was linked to translatability. In other words, it was hoped the theory can translate to other high school co-taught classes. However, since grounded theory was about theory building rather than testing theory, it was less focused on finding limitations of a study or the extent to which results could be generalized (Rubin & Rubin, 2005). The researcher ensured reliability by using detailed field notes, audio recordings, and having interview and observation notes reviewed for accuracy (McMillan & Wergin, 2002).

Trustworthiness during data analysis was crucial. The researcher had identical documents from each student to determine patterns and themes. Further, the levels of academic performance for all students revealed similar strengths and weaknesses.
Consequently, the group had similar strengths to bring to the class. Observations, review of records, and conversations with the two teachers helped gauge trustworthiness (McMillan & Schumacher, 2006).

*Outcome of the Study and Its Relation to Literature*

It was expected that voices involved with co-teaching will be heard and shared. Since there was limited literature concerning this topic, it was hoped that this information could begin a discussion about perspectives of student with disabilities concerning progress rates in co-taught classes. One of the premises of co-teaching was that students will increase academic achievement. The literature does not support that finding; however, the research does stipulate that students, parents, and teachers felt that the socialization skills gained were important. Consequently, were socialization skills the measure of progress for students with disabilities? If so, schools were going to a great deal of effort and money to promote social skills. Simply learning what students with disabilities, their teachers, and administrators hold as the standard for progress in a co-taught class was significant outcome.

Teachers benefited by hearing student perspectives concerning roles, responsibilities, and duties. Also, hearing what students have to say about grades as they were compared to the pull-out class helped teachers reflect and evaluate instructional strategies and practices. Additionally, hearing what students and professionals were saying about the impact of transferring from the middle school model of special education to the high school model was beneficial for all. Professionals want to provide a smooth delivery of services. Was that happening? Did students feel that is happening? Answers to these questions provided a foundation for interested professionals to begin
discussion as to the most appropriate and beneficial service delivery model. The answers and the lessons were eagerly awaited.
CHAPTER FOUR
Findings of the Methods and Summary of the Results

Introduction

This chapter will answer the research question: How is the progress of a co-taught class measured by students, teachers, parents, and administrators? A detailed procedural update will begin the chapter, followed by a review of archival documents for students with disabilities in grades 9 and 10. Specifically, behavior, discipline referrals, attendance, extracurricular involvement, testing results, correspondence, and grades earned from 6th grade through 9th or 10th grade will be presented. Next, staff and administrators involved in the co-teaching arrangement will be profiled based on materials gained through department minutes, curriculum guides, archival pre-scheduling materials and projections, and district certification listings. Summaries of interviews with selected staff members, students, and parents follow. In general, interview questions reflect perceptions concerning models, purpose, evaluation, results, and student impact. In addition, observation in co-teaching classrooms will be described according to class procedures and interactions. An analysis of record reviews, profiles, interviews, and observations conclude each section, followed by personal comments and questions gleaned from the research study. Finally, a narrative using the grounded theory tradition model concludes the chapter.

Procedural Update

At the proposal defense, the researcher’s committee recommended additions and deletions. Once those were completed, the committee gave the defense chair permission to process the proposal to the college. Approval papers were received on February 22,
2007. Following that, the researcher completed the proposal form for the Institutional
Review Board. Once approval was granted on March 6, 2007, the researcher met with the
superintendent of the district, presenting a summary of the project and providing all
necessary documents for review. When the superintendent granted approval, a meeting
was held with the school’s principal. Documents were reviewed and questions answered.
Having received administration authorization, letters were sent to the assistant principals,
guidance counselors, director of instruction, school psychologists, special education
teachers, general education mathematics teacher, educational aide, school attendance
record keeper, records officer in the special education department, the athletic director,
and the yearbook advisor. Follow-up visits, e-mails, and telephone calls continued until
each member made a personal decision for participation. All employees chose to
participate; however due to scheduling conflicts, one school psychologist was unable to
be interviewed.

Arrangements were made with the teachers involved in the co-taught classes for
observations and an opportunity to speak with 17 students. These students were taken to a
smaller classroom where the project was explained. Students were given the option to
take these papers home or have them mailed. All but one student delivered the papers
home. Three additional personal contacts were made with students in an effort to have the
highest number of participants. In some instances, a second letter was sent. As a last
resort, telephone calls were made and a prepared script was relayed to the parents. In the
end, 12 students and eight parents elected to be interviewed.
Record Review

Before interviews were scheduled, the researcher received permission to view each student’s permanent files which were located in the high school guidance office. The second set of files, the historical file of each student with an IEP, was located in the district office, which was housed in a separate building on the campus. The researcher reviewed, analyzed, and organized the content by each child, with the goal of completing five per week.

The first step was to organize the files by content. Of course, permission was given from the administrative assistants as long as the researcher reorganized the files by placing the most recent documents at the beginning. Both the permanent and historical files were viewed at the same time. For instance, the researcher placed the grade-level IEP next to the schedule and grade card. Further, correspondence or reports written within that year were organized by date throughout the year. The researcher’s idea was to walk through a school year in the life of each child.

Next, Multi-Factored Evaluations and Evaluation Team Reports were organized by date. These documents provided achievement profiles for each child. The researcher read these reports beginning with the child’s referral until the present time. Care was taken to determine what services the child needed, what services the child received, how the services were delivered and by whom, and by the frequency of services within the school day. Birth certificates were analyzed to determine mother’s age at birth and whether the child was delivered at full-term. Finally, IEP’s were read chronologically. The purpose of this activity was to follow the logic of placement from one school year to the next.
It was helpful to learn the district’s IEP writing procedures. For example, the front page listing a narrative for the levels of performance, attendance, behavior, discipline, and testing results were written in the spring of the school year by the student’s special education teacher. That teacher then gave this profile to the teacher the child would have the following year, who in turn, wrote the remainder of the IEP. Therefore, if the IEP was for grade 9, the front page of the IEP was written by the 8th grade teacher and the 9th grade teacher wrote the pages for the goals, transition, special considerations, and summary of services pages.

Another important step involved gathering scheduling ideas for the incoming 9th graders. The student’s 8th grade special education teacher would determine which classes the student would need in the 9th grade. This information would be given to the 9th grade teacher who would then develop all IEP pages but the first. The 9th grade special education teacher would then give that part to the 8th grade teacher for the annual review. This might better explain why the needs and services pages did not match at times.

Attendance patterns were followed, as was frequency with behavior referral forms. Grades and reports were read to determine why a child was placed in a grade level, as opposed to being retained or promoted. High-stakes testing results were analyzed, while accommodations and modifications were aligned to student need. All in all, the idea was to get a basic snapshot of each child’s educational plan.

Next, the researcher wanted to know as much as possible about the staff involved with the co-teaching classes. Curriculum guides revealed what special education services were offered each year for students with disabilities. Also, an interesting part of the puzzle was to identify the least restrictive environment options provided for children by
building level. Another interesting factor was to learn how the school district reorganized the department according to Highly Qualified Status in *No Child Left Behind*. Finally, it was insightful to discover the history of co-teaching in the district and recognize the key players. Overall, the purpose of gaining this background knowledge allowed the researcher to ask more thought-provoking questions.

Profiles for each student with a disability in co-taught math classes was gathered using several sources including a review of records, general observations, and interviews with school staff. A summary of the student will begin the subsection followed by supporting evidence. All names have been changed to ensure confidentiality.

To clarify, student schedules, including placement in pull-out, co-taught, and general education classes, were made annually by a committee including parents, general education teachers, special education teachers, the student, and a district representative. Placement in pull-out classes were made based on intensive instruction in a quiet environment. The idea was to provide concentrated lessons matched to student weakness as a means to lessen the gap between ability and performance. Special education teachers are required by law to place students in the least restrictive environment. Consequently, the goal is to have students placed in as many general education classes as possible, while still being able to provide services to assist the child develop strategies for competency.

In this district, all teachers are required to submit weekly lesson plans for each class detailing the subject, topic, grade-level indicators, and assessment procedures. In other words, class assignments, projects, homework, tests, and quizzes are to reflect grade-level indicators, which tie directly to the state graduation test. Further, this district requires quarterly assessments covering grade-level indicators. All departments are to
assess students at each level in the core subjects, with the purpose being exposure to high-stakes testing for both teachers and students. In other words, it should not matter if a student was placed in a pull-out, co-taught, or general education class because all teachers are to follow the state curriculum.

A total of 17 students were involved in the co-teaching mathematics class, nine were freshmen and eight were sophomores. Research indicated that some students had a disability in math; however, others did not. Also, some of the students were originally scheduled into a general education math class; however, the status was changed once students had difficulty grasping concepts. The profiles of the 9th graders represented a unique class dynamic because of the different disabilities and of the wide range of mathematics skills and abilities. Also, the group was ever-changing as some students had moved back into the district and one had recently moved in from a neighboring district. The profiles of the 10th graders represented a group of students who were somewhat forced to be in the co-teaching math class as their scores were the highest of the students who were not already in general education math classes. The special education teacher and general education teacher for co-math 10 altered, or modified, the class grades for student with disabilities in order for students to pass the class. Grades were not altered, or modified, for the 9th grade students with IEP’s. The high school special education scheduling records revealed that in the department’s opinion, the mathematics levels of the 9th graders were such that the students would be successful in the class with the general education teacher providing accommodations.
Record Review for Ninth Graders

Andy

Andy did not have issues with attendance or behavior, nor did he have an identified disability in math. His grades dropped during his middle school years and appeared to be improving in most areas during his 9th grade year. His lowest grades were in pull-out classes with the same special education teacher. Andy was active in school events, mostly the vocational agriculture program.

Andy, a white, muscular young man of average height and weight, wore his brown hair in a short style. He had worn glasses in the lower grade levels, but now seemed to manage without them. Although he did not speak out or to others during class, he carefully followed a teacher’s movements and directions with his eyes. Working independently, Andy quietly and quickly followed step-by-step procedures and then sought out an adult if further explanation or details were needed. He offered few words concerning his actions. For instance, he arrived at a decision after careful thought. When asked for justification, he mentioned a summary or conclusion statement rather than listing several steps. Andy was polite, attentive, and thoughtful with work that was important to him.

Andy’s teachers reported that he could be counted upon to solve complex problems. He liked to know the facts and particulars of a detailed assignment, and then he appreciated having the time and independence to solve a problem on his own. When asked if he needed assistance, he offered few words; however, he did respond positively if a teacher sat next to him and asked him for further details. During a community service project, Andy oversaw the construction of items needed for the set-up of a
display. He accepted the role and met the challenges. Andy worked purposefully and efficiently until the task was completed. Once finished, he looked for additional assignments. His teachers reported that his role was key to the success of the event.

Andy had many interests outside of school as his family owned their own small clothing business involving various computers, screens, and scans. Their items were sold locally, at school, and throughout the state. Andy and his older brother assisted their parents with all phases of the business. In addition to the business, Andy also enjoyed outdoor pursuits involving engines, mechanics, and firearms. One of his favorite classes was the Vocational Agriculture Program where he worked with his hands and his mind. Andy successfully participated in club competition and field events, as well as with community service projects.

Andy came from an extended family of builders, carpenters, plumbers, and musicians. In fact, he could learn on-the-job training in any of these areas through family connections. Andy’s family verbally encouraged him to be an active learner. His father worked for the city maintenance department and his mother oversaw the family business. Andy’s older brother worked for a local electrical contracting firm.

Andy’s records revealed that he did not have attendance or discipline problems. In fact, his last detentions were three years ago. Additionally, he missed less than 11 days of school each year. Further, his IEP did not list behavior or attendance as being problematic. Andy was placed in special education instruction for reading, language, writing, spelling, and math during the 6th grade. Final grades listed on his report card were 83% in reading, 88% in language, 88% in writing, 75% in spelling, and 84% in math. During this same period he earned 66% each in social studies and in science.
Andy was placed in co-taught language, writing, and math for the 7th grade year. His grades were 41% in language, 59% in writing, and 75% in math. He earned a 68% in general science, and a 46% in general social studies. For the 8th grade year he earned an incomplete in pull-out Language Arts, 78% in co-taught math, 62% in general science, and 62% in general social studies. Further, he earned a satisfactory in social skills for the year through the special education department.

Andy’s grade card for his 9th grade year listed solid attendance and passing grades. Interestingly, Andy’s grades in his non-special education classes were quite strong; whereas, grades earned in pull-out social studies and English from the same teacher listed grades in the 60% range. His grade in the co-teaching math score averaged 75%. Comments from the pull-out teacher showed that Andy needed to do daily assignments and show more initiative and concern. Grades from the pull-out science teacher averaged 89%. Andy benefited by having one period of tutoring per day to help with his studies.

Andy’s permanent records revealed that he was functioning within the low end of the low average range in cognitive skills. Andy’s scores on the state Achievement Test indicated that he scored in the basic range (391 out of 400) in math and that he was limited (372 out of 400) in reading. Records stated that the only math subtest where he experienced difficulty was the data analysis and probability section. However, his teacher stated the information was not covered in the classroom until after the assessment was given. Then, Andy seemed to grasp the information when it was covered. His special education teacher indicated he should be able to work at grade level in math as a ninth grader.
In addition, Andy’s levels of performance for his IEP did not list a need for mathematics. Also, his IEP stated he could obtain tutoring assistance for the math area if needed. Therefore, the question remained why Andy was placed in the co-taught mathematics classroom.

*Annie*

It would appear that Annie’s difficulty with school was due to her poor attendance and constant moving. When she was present, she performed at high standards and did not need much assistance. Annie’s records were difficult to track at times due to the number of school changes. Records indicated that math was a strong area for Annie so her placement in the co-taught math class was questionable.

Annie, a petite slim girl who was usually smiling, suffered from a thyroid condition, which resulted in her loss of hair. She wore colorful, cheerful hats instead of wigs. Annie had changed schools within neighboring counties a number of times. This might be related to her parent’s divorce and her subsequent move to her grandparents’ home. Annie had attended five schools during eight years. During her 8th grade year she moved to Montana, but did not stay long. Upon her return, new housing was found in a neighboring district. Her mother wished for her to remain with her most recent school due to her friendships. For that reason Annie was granted permission to attend her current school district. Annie has two older brothers.

Annie’s permanent records indicated that her learning disability has been impacted by her irregular attendance and number of schools attended. Annie missed 20, 37, and 25 days in her first three years of school. Following that, her attendance evened out a bit; however, her absences steadily increased to missing 18 days again. In fact, one
of her teachers stated she was absent one out of 10 days. Further, the school’s attendance record keeper stated that Annie’s attendance throughout her schooling had always been a concern. The results of the Weschslar Intelligence Scale for Children, Revised (WISC-III) revealed Annie was functioning in the low end of the low average range intellectually, but that relative strength was noted in arithmetic. In fact, that was her highest area.

Teachers reported that Annie was a worker and that she picked up quickly on information she missed; however, she lacked confidence in her skills. Reinforcement was often required in her classes and during time with her special education teacher. In addition, Annie’s attendance caused difficulty in her maintaining assignments, which caused gaps in her learning. Her behavior was good as there were no discipline reports. Moreover, teachers reported that Annie seemed to have a genuine interest in school.

Annie attended the school for the first semester of her 6th grade year where she was placed in all general education classes. Her grades were reading (80%), writing (83%), spelling (67%), social studies (83%), math (72%), and science (79%). Annie left the school, only to return for the fourth 9-weeks of her 7th grade year. No special education services were listed, nor was an IEP located for grade 7. Only three grades transferred from the previous school district for the third 9-weeks. With these combined, Annie earned a 79% in general language arts, 69% in general math, 83% in general science, and 53% in general social studies.

An IEP was in place for the 8th grade year; however, Annie moved to Montana and then returned. Consequently, her grades were difficult to track. Further, Annie failed all classes as she did not meet the school’s attendance policy. Records indicated she was
in a full inclusion program with special education support for her 8th grade year. Also, her reading and writing abilities were below average. No levels of performance were listed for math class; however, her teacher indicated that she asked good clarifying questions and sought assistance when needed. There was a math goal page stating that Annie would receive assistance with math in a co-taught setting and during tutoring.

Former teachers recommended Annie be placed in a 9th grade co-taught math. Her teacher stated she could perform grade-level math tasks when given a calculator and ample examples. Further, data analysis and measurement were areas of strength for Annie, while geometry, number sense, and patterns gave her the greatest degree of difficulty. On the state’s Achievement Test in math, Annie scored a 394, with 400 being passing. Annie’s 9th grade IEP listed levels of performance in math, as well as math goals and objectives. Grades earned through the third grading period of the 9th grade year averaged 95% in pull-out science, 89% in pull-out English, 92% in co-taught math, and 87% in general social studies. Annie benefited by having one period of tutoring per day to assist her with her studies. Records did not indicate Annie’s involvement with clubs or sports.

She participated in the community-based track and field event for Special Olympics. During this event, Annie was a bundle of energy who used her charm to make others feel welcome, happy, and productive. She sought out students and adults and offered praise and encouragement. She was surrounded by friends wherever she went. Annie was quick with a smile, a kind word, and positive energy. She appeared to make it her responsibility to make the event pleasant. Annie repeated this same pattern during formal and informal observations in the hallway, the library, and in class.
Beth, a shy and quiet young girl, began special education services in middle school. Teachers reported she took pride in her work and wished to succeed. Behavior was not an issue with Beth, but attendance was. Beth appeared to work on grade level, but benefited from support in the area of language arts. Her math scores fell slightly below proficient range, so her placement in a co-teaching math class seemed to be appropriate.

Beth, a petite, brown-haired, brown-eyed young girl, was the middle of five children. Teachers reported that Beth was extremely quiet and wished to not draw attention to herself. Beth’s parents attended the same school as Beth and both parents received special education services and assistance from various state and federal agencies. Records revealed the family wished for those services to continue. Beth’s records disclosed she did not have discipline problems, nor did she have issues with behavior. She was promoted to each grade level, with the exception of the 4th grade, where her teachers decided on placement. With the exception of kindergarten and 7th grade where her absences were in the single digits, she normally missed double digits. For example, she missed 18 days her 4th and 5th grade year, followed by 23 for her 8th grade year. The school’s attendance record keeper indicated Beth was in jeopardy of failing the school’s attendance policy this year, and that attendance was always a concern.

Beth’s scores on the Weschler Abbreviated Scale of Intelligence stated she was in the low-average range with abstract verbal reasoning slightly higher than verbal reasoning. It was expected she would have difficulty with abstract verbal reasoning.
According to teacher observation and the Woodcock-Johnson III, Beth’s math reasoning and spelling skills appeared to be in the expected range for her age. However, a significant difficulty with math calculation was noted. Beth’s state Achievement Test stated that her mathematics skills were in the basic range. She scored 388 out of 400. Measurement was the strongest area, with geometry and algebra being the weakest.

Beth was placed in special education pull-out classes for reading, writing, spelling, and math for her 6th grade year. She earned yearly averages of 89%, 91%, 81%, and 92% respectively. She was placed in general social studies class where she earned 79%. In general science class she earned 86%. For her 7th grade year she was placed in all general education classes, but received up to 74 minutes of small group instruction throughout the school day. Her 7th grade IEP did not list any math goals; however, her levels of performance stated she was missing important grade-level skills in math. The specifics of any math deficiencies were not listed. While in the 7th grade, Beth earned a 68% in language arts, 76% in math, 65% in science, 73% in social studies, and 89% in writing. The IEP listed the classes as being in general education; however, it was unknown if these were in co-teaching. A pattern appeared to be that co-teaching was generally organized around language arts and mathematics.

Beth participated in a full inclusion setting with support from the special education teacher for the 8th grade year. Her levels of performance for math indicated she worked very hard in the general education math class and always attempted her homework. Beth’s basic math facts were reported as being strong, but her skills with fractions and integers were a struggle. It was reported that Beth arrived to class prepared and that she solved simple equations with limited prompting. The area that presented a
significant challenge for Beth was story problems, which was not unusual due to her specific learning disability in the area of reading. Beth was placed in a co-taught math class for her 8th grade year. Further, she was able to receive small group instruction in a tutoring setting in the event she needed assistance.

Beth’s 8th grade score in general language arts was 69%. Her IEP did not list co-teaching in the language area; however, it indicated she would be in the general education classes and receive assistance during tutoring. Her score in general science was 69%, in general social studies 76%, and in co-taught math 67%. Her 9th grade IEP listed math in the levels of performance, as well as goals and objectives. Additionally, the co-taught math class was listed as the least restrictive environment. Beth’s grades through the third 9-weeks grading period were 86% in pull-out science, 88% in pull-out English, 77% in general social studies, and 83% in co-taught math. Beth’s score in tutoring was 100% for all three grading periods.

Beth’s teachers stated she valued an education and realized the relationship between learning and effort. It was also noted that she was very quiet and liked to follow established routines. Further, teachers indicated she was enjoyable, hard-working, and was willing to help others. Records indicated Beth was in good health, although she did receive surgery to repair holes in her heart. At this time Beth did not participate in clubs, organization, or extracurricular activities.

Ben

Ben was a polite young man who kept to himself as he walked through the hallways. Friends called to him and visited with him at the entryway to a classroom. Ben was respectful to adults and students. He received special services during each year of his
schooling beginning with speech therapy. Generally, his difficulties in school appeared to be hampered by his poor attendance. He earned high marks and praise from his Industrial Technology teacher this school year and appeared to be earning higher grades than in his middle school years.

Ben attended a neighboring school district until his transfer two years ago. He was of average height for his grade level; however, he was overweight. He was not on any medications and his mother did not report any medical concerns. Records revealed that as a preschooler Ben was identified with a disability in communication which resulted in speech therapy and specialized instruction during all his school years. Ben had difficulty with his attendance. In fact, records indicated the main academic concern was due to his poor attendance and lack of homework completion. Towards that end, he was referred to the juvenile court system and ordered to attend school. During his 6th grade year, which was also his first year in the school district, he missed nearly 40 days. He improved his attendance by missing 15 days each for his 7th and 8th grade years. There were no other discipline referrals or behavior concerns. Moreover, the school’s attendance record keeper stated attendance continued to be a problem with Ben throughout his schooling.

Ben lived with his divorced mother who was a manager of a local fast food restaurant. He has three older brothers. There were no records of Ben’s participation in school or club events.

A review of records indicated that Ben’s math reasoning skills were below the average range. Further, the Woodcock-Johnson Psychoeducational Battery showed that his academic achievement was below the average range in reading, written language, and math skills. His Evaluation Team Report stressed the need for Ben to receive pull-out
services in math and language arts. Further, homework modifications, accommodations for testing, and individual and small group educational services were recommended. Ben’s state Achievement Tests specified that he was proficient in reading and at the basic range in mathematics (384 of 400). Ben’s strengths were number sense and algebra, while his weaknesses were measurement, geometry, and data analysis.

During the 6th grade, Ben earned 83% in pull-out language arts, 80% in pull-out writing, 70% in pull-out math, 64% in general social studies, and 66% in general science. Ben’s 7th grade IEP did not include goals or objectives for mathematics because his areas of weakness at that time included basic reading skills and written expression. Ben benefited from 74 minutes of special education instruction each day for the 7th grade; however, his grade card did not list his special education placement. His grades for his 7th grade include 59% in language arts, 62% in math, 69% in science, 54% in social studies, and 69% in writing. His IEP listed time for reading and writing, so one could assume he was in co-taught classes for language arts and in general education for the remainder, which seemed to be the standard placement for students with IEP’s.

Ben’s 8th grade IEP listed the general classroom setting with support from the special education teacher as the least restrictive environment. Ben was reported to be very quiet and to not ask questions to gain clarification. Also, the IEP specified he showed tremendous improvement with his efforts in the general education co-taught math class. For example, it was reported that Ben was taking more time on his homework and was producing more legible work. Consequently, his grades improved. Overall, his IEP stated Ben’s difficulties with reading hindered his ability to organize story problems and order correct sequencing steps. Ben’s grades included a 59% in language arts, 62% in co-taught
mathematics, 63% in science, and 70% in social studies. This IEP reported that reading and writing were addressed in the general education classroom with support from the special education teacher. Discussion with the middle school teachers revealed Ben was in a co-teaching environment for this service.

Ben’s 9th grade IEP gave levels of performance, goals, and objectives in math. Also, the least restrictive environment for math was listed as the co-taught class. Through the third 9-weeks, Ben earned 88% in pull-out science, 76% in pull-out English, 82% in general social studies, and 71% in co-taught math. Ben had 45 minutes of tutoring per day for support. Teachers reported that at times he was a dependable worker who showed imagination and creativity; however, his grades would be much higher had he put forth more effort and listened more in class.

Records did not indicate any clubs, organizations, sports, or other extracurricular activities. Ben scored the highest in his basic wood working class. In fact, the teacher of this class indicated Ben was a dependable worker.

Brent

Brent did not like school. He would much rather be outdoors riding his dirt bike than being stuck inside a building. Brent was a petite young man who had not hit his growth spurt. His hair faded from blonde to brown. His records indicated he could show a stubborn streak when people got too close. He had a long history of involvement with special education services and medical personnel. Speech therapy and anger management issues were introduced. One finding of a psychological evaluation revealed he suffered from Attention Deficient Hyperactivity Disorder, Bi-polar Disorder, and Oppositional Defiant Disorder. Brent enjoyed extracurricular activities but sometimes did not get to
participate due to low grades. It was reported that Brent felt a sense of entitlement with his wants and needs and expected others to make things happen for him.

Brent was referred to the Juvenile Court system for excessive absences. He missed 31 and 27 days during his 6th and 7th grade years. He improved this area by only missing 18 days his 8th grade year. Brent earned detentions during his 6th grade year, but seemed to do a better job of managing his behavior in his 8th grade year as there were no discipline reports. Brent’s parents were divorced. He lived with his mother and sister.

Teachers reported Brent was a funny student who was well liked, but that his ornerness landed him into trouble. Further, he was very athletic and especially liked basketball. His 6th grade IEP stated math was an area of strength for him when he was trying, but that his absences and lack of doing homework negatively affected his performance. No math goals or objectives were listed in his 6th grade IEP. In fact, Brent spent 90 minutes a day in the special education classroom working on language arts skills. His grades were 64% in pull-out reading, 72% in pull-out writing, 82% in spelling, 61% in general social studies, 61% in general math, and 76% in general science.

Brent’s 7th grade IEP described his learning disabilities in the area of basic reading skills and written expression. No math goals were listed on his levels of performance. Brent’s small group instruction amounted to two class periods with the general education class and with the special educator. His grades for his 7th grade year were 59% in language arts (which was assumed to be co-taught), 0% in co-taught writing, 56% in co-taught math, 51% in general science, and 44% in general social studies. Seventh grade teachers were not impressed with Brent’s progress towards his goals and suggested he not be promoted. Comments included that Brent had low test scores, did not
complete assignments, did not have a good attitude, did not stay on task, and lacked reading comprehension, writing, and sentence structure skills. Brent continued to the 8th grade.

Brent’s Evaluation Team Report indicated he suffered from depression, had a tendency to hold a grudge, suffered from a problem with his kidney and bowel, and could be disrespectful, obsessive, and insubordinate. The report also stated his depression was affecting his overall performance. This 2005 report detailed math as being a problem area, which was backed by the state Achievement Tests. Brent actually scored lower on the mathematics subtest (373) than he did on reading (389). He was successful with measurement, but had difficulty with number sense, geometry, algebra, and data analysis. A teacher suggested this performance was due to his rushing about and not paying attention.

Brent’s 8th grade IEP reported his difficulty in mathematics resulted from his absences, poor work ethic, and refusal to complete assignments. The 8th grade IEP listed co-taught math as one of his services. Further, the IEP indicated Brent could have up to 180 minutes of special education assistance each day. Brent’s grades were 64% in co-taught language, incomplete in co-taught math, 65% in general science, and 75% general in social studies. Brent was not scheduled in the co-taught math class for the 9th grade; however, the decision was made to transfer him due to his poor performance in the higher level class. Brent was successful in all 9th grade classes. His lowest grade, 61%, was in the co-taught math. Grades in his core subject areas included 81% in pull-out science, 77% in pull-out English, and 81% in general social studies. At this time Brent was not
involved with extracurricular activities. Brent had 45 minutes of tutoring per day to assist with his studies.

Chris

Chris was a tall lanky young girl with long straight brown hair. She was rather shy until she felt comfortable with someone new, and then she broke out into a sincere smile and laughter. Teachers reported she displayed a quiet wit and did not appear to miss much; although, she seemed to appreciate keeping things to herself. In general, Chris did not have a disability in math but did have significant health concerns during her 8th grade year.

Chris had only attended this district. Her permanent records revealed she had been promoted for each grade level; however, it was suggested she be retained her 2nd grade year as her performance in all areas required special attention. The grade card for the next year stated Chris was moved to the next grade level at the beginning of the school year and that she received an adjusted curriculum in language arts and math. Her grades and attendance improved. Nevertheless, the school’s record keeper stated attendance continued to be an area of concern.

Chris was the oldest of three children. Following her parent’s divorce, she and her brother were legally adopted by their step-father. She began the 8th grade year with one name and arrived her freshman year with a new name. Records also included a current restraining order and termination of visitation against her biological father. Additionally, a recent medical report described Chris’s chronic mononucleosis infection which caused fatigue. During this period Chris’s mother indicated she did not wish for a home tutor and
would take responsibility of assisting Chris to complete her studies. A letter from the mother stated that Chris only have special education assistance if absolutely necessary.

Chris’s 6th grade IEP described a pleasant, hard-working girl who did not always complete her homework in a timely manner. No math goals or objectives were listed. In fact, Chris’s special education services consisted of receiving up to 90 minutes of instruction a day in the language arts area. Towards that end, in language arts only, Chris benefited from a modified curriculum, one that changed from the general curriculum to align with the disability. Her grades were 73% in modified language arts, 72% in modified writing, 72% in general social studies, 86% in general math, and 75% in general science. Although Chris had difficulty with attendance in earlier grades, she only missed 9 days for the 6th grade.

Chris’s 7th grade IEP reported that her learning disability was in reading skills and written expression. Once again, the IEP did not have math goals or objectives listed. Her 7th grade report card showed a 50% in co-taught language arts, 70% in co-taught math, 72% in general science, 56% in general social studies, and 86% in co-taught writing. According to the IEP, special education services for Chris amounted to 45 minutes of daily tutoring. Chris was reevaluated during her 8th grade year. Results indicated that Chris’s disability was in reading skills and written expression.

Further, the Team Evaluation Report stated Chris was capable of computation and reasoning in math, but that some support would be beneficial. Her 8th grade teacher stated Chris did well in the general math class with little accommodations and that she picked up new concepts quickly and did well with completing her assignments. Chris’s grades were greatly affected by her absences. She earned a 45% in co-taught language arts and
incompletes in general science, general social studies, and co-taught math. Chris missed 71 days of her 8th grade year. Chris did not complete the actual state Achievement Test due to her absences; however, she completed an earlier practice test. On that test Chris scored highest in data analysis, number sense, and geometry. Her areas of difficulty included measurements and patterns.

Chris’s 9th grade IEP listed co-teaching for math as a least restrictive environment. Consequently, there were goals and objectives. Levels of performance indicated Chris could perform at grade level on math tasks when given a calculator and examples. Grades earned through the third 9-weeks consisted of 94% in pull-out science, 93% in co-taught math, 80% in general social studies, and 60% in general English. Chris received 45 minutes of tutoring each day for academic support. Teachers reported Chris was a conscientious and diligent student who understood her work; however, her grades would be higher if she completed all daily assignments.

Chris participated in the school band and got along well with teachers and peers. Also, Chris’s behavior was fine and she had no disciplinary referrals.

Clinton

Clinton appeared to know everyone in school. If he did not know someone, he made it his point to meet and greet that person. Clinton, of average height and weight, was always quick with a smile, a polite word, an even-tempered attitude, and seemed to be a friend to all. Socialization appeared to be an important area for Clinton. Generally, he gave the impression that everything in his life would work out and that there was little reason to get upset about minor things.
Clinton attended the same school for his entire education. School did not appear to be a top priority for Clinton was not promoted into 6th, 7th, and 8th grades, but rather “placed” into the next class based on his age. The main complaint was that Clinton refused to complete work, a fact supported by his report cards. Language arts was listed as the area of disability.

Scores for Clinton’s 6th grade were 63% in general reading, 45% in general language arts, 52% in spelling, 56% in general social studies, 54% in general math, and 60% in general science. His IEP for grade 6 did not indicate a disability in math, nor did it include math goals and objectives. His areas of concern included increasing his written language skills and his adaptive skills. Specifically, for the latter, the goal for Clinton was to develop tasks that included preparing for class activities and completing assignments. It appeared Clinton was in all general classrooms with special education services given 45 minutes per day. Clinton was absent 15 days.

The IEP for the 7th grade stated Clinton only needed tutoring services to help keep him organized and on track as he was capable of doing grade-level work. Clinton’s levels of performance did not indicate a disability in the math area. Consequently, math goals were not listed in his IEP. In fact, 45 minutes of special education support was listed as the least restrictive environment for Clinton. Scores for the 7th grade included 28% in general language arts, 62% in co-taught math, 61% in general science, 23% in general social studies, and 0% in co-taught writing. Teachers stated Clinton did not complete assignments, did not accept responsibility, and lacked basic skills.

Math goals were added to Clinton’s 8th grade IEP. His special education teacher reported Clinton demonstrated very high math skills, but would not apply these skills to
out-of-class assignments. Clinton’s poor organization resulted in lost assignments. When that happened he did not make an effort to make up assignments even though additional time was granted. Clinton was added to the co-teaching 8th grade math class and goals and objectives were added to the IEP. Scores earned his 8th grade year included 48% in co-taught language arts, 61% in co-taught math, 60% in general science, and 59% in general social studies. Clinton’s attendance was excellent. He missed three days.

The state Achievement Tests documented that Clinton was a proficient reader and that he was very close to passing the math subtest. Clinton scored 397 out of 400. His strengths included number sense, measurement, and geometry. His weakest area was algebra followed by data analysis.

Clinton’s 9th grade IEP listed math levels of performance, goals, and objectives for Clinton. Further, his placement in co-taught math was listed as the least restrictive environment. Clinton averaged a 78% in co-taught math. Grades earned in other 9th grade core subjects consisted of 93% in co-taught science, 63% in pull-out English, and 82% in general social studies. Interestingly, Clinton’s lowest grades were in pull-out English. Clinton received one period a day for tutoring support.

Overall, teachers reported Clinton was a conscientious and diligent student and that his progress was improving. One teacher reported that he needed more initiative and concern and needed to do daily assignments. Clinton’s difficulties in math included using equations to describe number patterns and understanding the connection between an equation and its graph. His strengths included using percents, scientific notation, and exponents. Also, analyzing and selecting appropriate strategies to find perimeter, area, and volume of shapes were listed as strong areas. Using formulas to calculate rates and
drawing and comparing shapes and objects on a grid were skills Clinton successfully managed.

The Evaluation Team Report stated Clinton’s cognitive skills were towards the lower end of the average range. Also, the report noted that his lack of attention might have an adverse effect on his learning which would result in his learning information more slowly. According to the report, written expression was the only disability area for Clinton. All records indicated that Clinton was a pleasant student who got along well with peers and staff. However, if he did not take his medication for attention problems, he became very disorganized and distractible. Several attempts have been made for Clinton to learn independently, but Clinton did not wish to take part. For example, Clinton had been trained to complete an agenda and organize materials. Unfortunately, he did not follow through.

Clinton lived with his mother and her boyfriend along with several younger siblings at home. His biological father lived in Michigan. Clinton did not participate in extracurricular activities, but was seen throughout the hall and classrooms joking and laughing with different groups and ages of students.

_Denny_

Denny was an athletic young man who preferred to work with his hands and to be outdoors. He walked the halls with confidence and was unfailingly polite to all he met. Denny was fit, trim, and muscular. Denny’s main area of weakness was in the language arts area; however, math was added in the 8th grade. Currently, he was slightly below the proficiency level in math.
Denny was the youngest of three boys. His older brother quit school and his middle brother was killed in the 10th grade. Denny’s life was not easy. First, his mother died of cancer and within a few years, his brother was killed in a hunting accident. Fortunately, Denny had a strong support system with his father and grandmother. Denny was retained in kindergarten in part due to his August birthday. He remained in the same school district and had been promoted for each grade level. His absences remained in single digits for each year except for missing 11 days his 3rd grade year due to family circumstances. There were no discipline, attendance, or behavior issues listed in his permanent file.

Denny was identified as having a specific learning disability in written expression, basic reading skills, reading comprehension, and mathematics calculation and reasoning. Overall, Denny’s ability was in the average range according to the Weschler Intelligence Scale for Children, Revised. Further, the report stated Denny had no vision, hearing, motor, communication, adaptive delays, or emotional problems that have an adverse educational effect, and that cognitive skills were within the average range.

Denny’s 6th grade IEP described a very well-liked young man who worked hard in class and returned homework and class work in a timely manner. Additionally, it was reported that Denny sometimes made silly errors on his math work. There were no math goals listed on the IEP. Denny benefited from special education services in the language arts area up to 90 minutes a day. Grades earned for the 6th grade include 78% in pull-out reading, 84% in spelling, 73% in general mathematics, 85% in pull-out writing, 70% in general social studies, and 81% in general science.
The IEP for 7th grade detailed that Denny got along well with students and
teachers and that he was polite and reliable. Further, basic reading skills and written
expression were listed as his areas of disability. Math was not listed in his levels of
performance. In fact, his IEP stated that his ability to participate and make progress in the
general curriculum was limited because of his inability to read grade-level material and
demonstrate knowledge in writing at grade level. No math goals or objectives were listed
in the IEP. Denny’s 7th grade teachers stated that at times he was not working to his
ability and was not completing assignments. He earned a 49% in co-taught language arts,
70% in co-taught writing, 58% in general science, 48% in general social studies, and a
60% in co-taught math.

Math was listed in his levels of performance for his 8th grade year. Denny’s
teacher stated he struggled in class even with accommodations. Denny developed a habit
of rushing through work and not showing steps. His state Achievement Test scores in
math for the 8th grade indicated he fell in the basic range. His score was 391, with 400
listed as passing. Denny was proficient in number sense and measurement. Conversely,
he was not proficient in geometry, algebra, and data analysis with geometry and algebra
listed as his weakest areas. Math goals and objectives in a co-taught class were listed on
his IEP. Denny received language arts assistance 45 minutes a day in the special
education resource room and his placement for math was in the general education
classroom. In other words, math services were brought to Denny in the general education
classroom. Denny’s grades for the 8th grade year include 65% in the general education
language arts class, 77% in co-taught math, 62% in general education science, and 67%
in general education social studies.
Denny’s 9th grade IEP listed co-teaching in math as the least restrictive environment. Levels of performance indicated he could adequately perform grade-level math tasks when given a calculator and examples. Math goals and objectives were listed in the IEP. Denny’s scores through the third nine week grading period averaged 82% in pull-out science, 78% in pull-out English, 77% in general social studies, and 68% in co-taught math. One period of tutoring for academic support was built into Denny’s schedule. Denny’s science teacher indicated he needed to focus more in class and that he was a very caring individual. Denny’s grade in the elective class of basic wood working averaged 85% which indicated he followed directions well and was able to visualize and complete a complicated problem. Denny did not participate in extracurricular events or activities.

Ellie

Ellie was a quiet, petite young girl who was born in Colorado and later moved to Ohio where she attended a neighboring school district before transferring to her current school. As a preschooler she endured two heart surgeries. She lived with her mother, step-father, and two younger brothers. Ellie was identified as having cognitive delays. In general, Ellie’s services in the special education department did not seem to follow a logical order. For example, a deficiency in math was listed as an area of concern, but math goals or objectives were not included in the IEP. Further, her drop in grades at the middle school level indicated a concern.

Ellie’s Evaluation Team Report revealed that she was a hard worker and made good progress. As a 4th grader, she did not pass any of her proficiencies. Ellie benefited from placement in speech therapy to assist with abstract concepts. Due to her
improvement she was dismissed from this service. Ellie’s scores on the Weschler Intelligence Scale for Children, Revised indicated her overall ability was in the borderline range, but within a standard deviation of the average range. Consequently, it was predicted she would learn more slowly than her typical age peers and that special education services should be continued. Ellie did not pass her 6th grade proficiencies in math, reading, or science. Overall, Ellie’s written expression, basic reading skills, reading comprehension, and mathematics reasoning were all areas of difficulty. Ellie did not have visual, hearing, or motor impairments. Further, emotional disturbances were not a factor in her learning. Ellie’s family was described as supportive with no evidence of environmental, cultural, or economic disadvantages. In addition, Ellie had solid attendance and behavior. There were no behavior or discipline referrals, and she averaged nearly 10 absences per year.

Ellie’s 6th grade IEP described a conscientious student who tried her best. Spelling was listed as her weakest area, followed by reading, and math. The IEP reported Ellie knew many math facts and took her time to fully think before responding. Further, Ellie showed evidence of being determined to produce accurate work. A math goal and two objectives were included in the 6th grade IEP. Ellie received special education services for 90 minutes a day in language arts and 60 minutes a day for mathematics. Her grades in pull-out special education classes included a 94% in reading, 93% in writing, and 98% in spelling. Her general science grade was 80%. The math curriculum was in the special education pull-out class where she earned 87%. Finally, her science grade in the general education class was a 69%.
The 7th grade IEP listed that Ellie had many interests outside of school and seemed to enjoy being with her friends. Her levels of performance indicated she was not able to read grade-level material, not able to demonstrate knowledge in writing at grade-level expectations, and not able to independently manage her assignments. Further, she was missing important grade-level skills in the math area, although her math calculation score was an area of strength. However, there were no math goals or objectives listed in her 7th grade IEP, which did state she would receive support in the general education classroom or small group instruction up to 74 minutes per day.

According to her 7th grade IEP, Ellie scored 67% in co-taught language arts and 69% in co-taught writing. These were the only two classes listed as needing special education services. She earned a 62% in co-taught math, 61% in general science, and 49% in general social studies. Her teachers stated she did not complete assignments in language arts, did not work to her ability or stay on task in writing, and did not participate or complete assignments in social studies.

The 8th grade IEP indicated Ellie was succeeding in pull-out language arts and mathematics at the beginning of the school year, so she was moved into the general education classroom. Her grades were lower due to the fact that Ellie was not turning in all her work. Further, the IEP indicated Ellie had difficulty completing out of class assignments, including math. At the time of the switch, Ellie showed resistance to receiving assistance. She preferred working in a small group where she understood the concepts and was able to finish her work. Ellie received special education services in a co-taught math class. In addition, her reading and writing goals were met in the general education classroom with special education support. Finally, Ellie received 45 minutes of
daily tutoring in the special education resource room. Her 8th grade scores were 58% in
general language arts, incomplete in co-taught math class, 56% in general science, and
59% in general social studies. Ellie completed the state Achievement Test in the 8th
grade. She scored in the proficient range in reading and math. Her areas of strength in
math were number sense, measurement, and geometry.

Ellie’s 9th grade IEP listed pull-out math as the least restrictive environment;
however, she was placed in co-taught math. Goals and objectives for the pull-out math
class were included. Further, her levels of performance stated she was able to perform
grade-level math tasks when given a calculator and examples. Ellie’s scores through the
third 9-weeks grading period averaged 67% in co-taught math, 80% in general social
studies, 64% in general English, and 82% in pull-out science. Ellie failed the first
semester of general English. In fact, she earned a 40% for the first 9-week grading period.
She appeared to recover from that with a strong showing of 72% and 73% for the next
two grading periods. She earned an incomplete in Vocational Agriculture for the third 9-
weeks. Consequently, that grade would be changed by the next grading report. Ellie
benefited from 45 minutes of daily tutoring for academic support. Teachers reported Ellie
was a good student who understood most work, but that she needed to focus more in
class, put forth more effort, and complete all assigned projects. Ellie did not participate in
extracurricular activities.

Analysis of the Ninth Grade Record Review

As a group, the 9th grade students with IEP’s in the co-taught math class missed
the most number of days during the 8th grade year (see Table B.1). The average days
missed were 18 for 8th grade, 14 in 6th grade, 11 during 7th grade, and 6.5 through the
third 9-week grading period of the 9th grade year. All students who missed more than the allowable 12 days of school during 1st through 5th grades, continued this pattern with grades 6th through 9th. For instance, Brent exceeded the attendance policy a total of six times, three in the elementary and three in the middle school. Both Beth and Clinton exceeded the attendance policy a total of seven times, five in the elementary and two in the middle school. Only two students, Andy and Denny did not exceed the attendance policy during their school career. These averages back the record keeper’s claim that attendance issues followed the student regardless of placement.

As a whole, the 9th graders demonstrated relatively minimal problems with discipline (See Table C.1). Andy and Ben had detentions in the 6th grade and Ben and Brent were court ordered to attend school. Sixty-six percent of these students did not have behavior issues regardless of placement in grades 6 through 9.

Scores on the 8th grade state Achievement Test revealed that 6 of 8 students were either proficient in reading or math (see Table D.1). Five students were proficient in reading and two were proficient in math. However, three students scored in the 390+ range, with 400 representing passing. As a group, these students could either read the questions and understand what to do or already knew how to do the math. One student each was scored in the limited range in reading and math.

Overall, scores earned in pull-out math in grade 6 were the highest at 83%, followed by scores in co-taught math grades 7-9 with 71%, and grades earned in general education math grades 6-7 at 69%. Scores earned in pull-out language arts were also the highest in grades 6 and 9 at 80%. Students in general education language arts in grades 6, 7, and 9 averaged 70%. However, students in co-taught language arts in grades 7 and 8
averaged 55%. All students were enrolled in general education social studies for grades 6-8. The average score was 67%. The average score earned in general education science in grades 7-8 was 63%. Ten students were in pull-out science 9. Their average was 88% (see Table E.1).

At the middle school level, one student failed the co-taught math class; however, three students earned an incomplete. There were 13 failures out of 22 grades in co-taught language arts at the 7th and 8th grade level. This was a 59% failure rate. General education social studies in grades 6-9 had 10 failures out of 33 grades, making this a 30% failure rate. In general education science for grades 6-8 there were 3 failures out of 24 grades, making this a 13% failure rate (See Table F.1).

Generally, scores earned in all pull-out classes were higher. An interesting statistic was that students were more successful in general education language arts classes at the 7th and 8th grades as compared to the co-taught classes. Further, the majority of the failures in general education social studies occurred in the 7th grade. Eight of 9 students failed the 7th grade class, meaning there was an 89% failure rate.

All students were involved in school activities whether through class assignments or club events (see Table G). Further, each student had the opportunity to participate in up to four school-wide community service projects organized by the special education department. These included the track and field event for Special Olympics, the school’s Bloodmobile, a school-wide Thanksgiving meal, and a planting project for the Amish community.

Finally, this class was composed of students with cognitive delays and learning disabilities. Other disabilities included students with Attention Deficit Disorder,
Oppositional Defiant Disorder, Bi-polar, Other Health Impairments, and depression. A major factor was the large number of students with attendance issues.

*Record Review for Tenth Graders*

*Grant*

Grant’s teachers reported he could be obsessed with a detail and work on one part of an assignment only to become frustrated when the class moved on to another section. Further, it was observed that Grant did not handle his frustration well. For instance, Grant would let out a sudden outburst expressing his frustration when the class moved to a different topic while he was still working on the current subject matter. Grant worked better when the pace of a class was to his liking and when all procedures and guidelines were presented in their entirety. After some time, Grant seemed to be able to grasp a concept presented to someone else and reformat the concept to his understanding. Focused, determined, disciplined, and obsessive were words others used to describe Grant. In general, the co-taught math class has been a frustrating experience for him.

Grant was a thin young man who was described as being a hard worker as well as a contributing member of the classroom. He lived with his mother, step-father, and younger sister near his maternal grandparents. Grant had only attended this school district. In fact, he began special education services in 1st grade. According to the Evaluation Team Report, Grant’s cognitive ability was in the borderline range with significant difficulty with focused attention. Further, the report added that Grant enjoyed talking which resulted in his getting off-task easily, which had a negative effect on his academics. His speaking, reading, writing, and math were severely delayed. Additionally, his self-direction skills, such as completing tasks efficiently and carefully and working on
tasks despite an initial failure, were also delayed. Grant was able to express his needs and be understood and his expressive levels were consistent with his cognitive functioning levels. Grant was diagnosed as having cognitive disabilities. No medical, discipline, or behavior reports were on file. In other words, Grant managed his behavior.

Grant’s 6th grade IEP included goals and objectives for reading, written language, and math. Additionally, Grant was placed for a minimum of 450 minutes per week in the special education program for language arts. Also, he spent a minimum of 250 minutes in a pull-out setting for math per week. Modified assignments and grading were used for any general education class. Grant’s levels of performance indicated math was an aggravation. Both math reasoning and calculation scores were weak areas. Scores earned in pull-out classes during the 6th grade include 85% in reading, 81% in writing, 72% in spelling, and 81% in math. Further, Grant earned a 96% in a modified curriculum in social studies and 83% in a modified curriculum in science. He missed a total of five days for the school year.

Grant’s 7th grade IEP included math goals and objectives, with math services provided in the general education classroom with special education support. Grant earned 84% in general language arts, 86% in general social studies, 77% in general science, and 80% in general math. It was assumed that co-teaching was the service delivery for math and language arts, although neither the IEP nor the grade card made this clear. Teachers commented that Grant was doing outstanding work, was doing a wonderful job in class, took interest and pride in his work, was a genuine pleasure to have in class, and continued to show improvement. Grant’s was absent 10 days.
Grant’s 8th grade IEP did not list math skills in the levels of performance, although math goals and objectives were included in the IEP. Math services were provided in the special education class at least 30 minutes per day. Grant missed one day of school and had no behavior or discipline referrals. Grant’s score in pull-out language arts was 84%, in writing 89%, and in pull-out math 90%. According to the grade card, Grant earned an 85% in general science and 87% in general social studies. Teachers praised Grant for his interest and pride in his work. One teacher added he was a pleasure to have in class and that he was doing a wonderful job.

Levels of performance for the 9th grade stated that Grant was below grade level in math ability when it came to basic facts. Grant could count money and give change. Also, he was able to compute area and volume when given formulas and a calculator. Moreover, Grant was successful in cross multiplication of ratios and conversion of fractions to percentages. Math goals and objectives were included in the IEP. Overall, Grant’s teachers affirmed he was determined and set high standards for himself. Grant spent up to 180 minutes per day in special education classes. As a 9th grader, Grant earned 89% in pull-out English, 88% in pull-out math, 91% in pull-out science, and 92% in pull-out social studies. Grant earned scores in the 80’s and 90’s in his four general education classes. Teachers included positive comments on his grade card, such as that he took an interest and pride in his work and that he was an excellent student. Grant’s attendance was perfect.

Grant’s 10th grade IEP listed co-taught math, pull-out English, pull-out social studies, and pull-out science. Grant’s attendance and behavior were praised by his teacher. In fact, teachers added that Grant worked very hard in math on fractions,
decimals, and whole numbers. Grant completed the state Graduation Test during his 10th grade year; however, the results were not posted at the time of this writing. Yet, Grant completed the state Achievement Test in the 8th grade. His math and reading skills were both limited. In other words, Grant demonstrated skills and understanding of mathematics below the performance required at the basic range, which appears to be contradictory to teachers’ comments as to Grant’s ability to do outstanding work.

Grant’s scores through the third 9-week grading period averaged 91% in pull-out English, 88% in co-taught math, 84% in general social studies, and 91% in pull-out science. Grant’s teachers reported he was a dependable worker, he took interest and pride in his work, he showed alertness, interest, and initiative, and he was a conscientious and diligent student. Teachers also reported Grant benefited from 45 minutes of tutoring in the special education department, that his grade in the co-taught math was modified, and that he received the tutoring assistance in the general social studies class.

Jim

Jim was a short young man who was rarely alert in any morning class. On the few days he was rested, he was attentive, amusing, and witty. When made to remain alert in class, Jim’s behavior was irritable to everyone. Placement in the co-teaching math class might have worked better had his girlfriend, who became his ex-, not been present. Math was listed as one of Jim’s areas of weakness; however, the unclear description of who provided mathematics instruction and what specific services were needed during the middle school years made it difficult to align performance and service. He was succeeding in the co-taught math 10 class with ample support.
Jim attended three school districts in his short academic career. He was hopeful he would have the necessary credits and requirements to attend the vocational school his 11th grade year. Attendance had been an issue in recent years. For example, Jim did not meet the school’s attendance policy for the first semester of his 10th grade year. Most of Jim’s absences were due to medical appointments; however, he appeared to have difficulty bringing in proper documentation. Jim became easily frustrated when confronted by one of his teachers who tried to assist him with his attendance appeal. Eventually the teacher helped Jim work out a plan to appeal his absences, but Jim verbalized he was not happy about the situation. Jim’s file did not contain any behavior or discipline referral information.

Jim’s Evaluation Team Report indicated he lived with his mother, step-father, and three older sisters. The files indicated there was a restraining order preventing Jim from seeing his biological father. Jim was diagnosed with Bi-polar disorder and took medication. He failed many of his core subjects, mostly because he did not follow though on homework. Records showed a pattern of Jim missing school and not making up work. Consequently, he fell behind and became easily frustrated. The report added Jim was very sensitive to criticism, which made it difficult for teachers to make suggestions or redirect him. The report also concluded that Jim’s behavior depended on his level of interest. When he was interested in a topic, he read ahead and participated. When he was not interested in a subject, he withdrew but did not disrupt. If pressured or frustrated, Jim could become volatile.

During this past year Jim took part in a research study on Bi-polar disorders at a university medical center. A program requirement was for Jim to visit the hospital once a
week. Since Jim experienced difficulty gathering appropriate paperwork for his absences, he and his family eventually decided to schedule appointments after school. The findings of that report were not present at the time of this writing.

According to the Wechsler Intelligence Scale for Children, Revised, Jim had an average ability with strong visual spatial reasoning and poor focusing and attention. Moreover, Jim had difficulty shifting from one response to the next. Consequently, switching from task to task and completing work in a timely fashion were difficult for Jim to manage. The report summarized Jim’s learning disabilities in the areas of written expression, basic reading skill, reading comprehension, math calculation, and math reasoning.

Jim’s 6th grade IEP specified that Jim work on basic math facts and problem solving skill. Math calculation was listed as his weakest area. Consequently, math goals and objectives were included in the IEP. Further, special education services were provided 225 minutes per week for language arts and 225 minutes per week for math. In addition, modified assignments and tests were arranged in the general education classroom. Jim earned 75% in pull-out reading, 72% in pull-out writing, 80% in pull-out spelling, and 74% in pull-out math. Jim participated in the general education social studies and science classes. Even with a modified curriculum, Jim earned a 45% in social studies and 58% in science. His absences were high at 25.5 days.

In the 7th grade, Jim’s levels of performance in math again stated he was working on basic facts and problem solving skills with math calculation listed as the weakest area. Jim was assigned to all general education classes with pull-out services determined by need and parental request. Math goals and objectives were included in the IEP. As a 7th
grader, Jim earned 73% in math, 67% in science, 64% in language arts, and 43% in social studies. Neither the IEP nor grade card indicated specific special education services. Consequently, it was unknown whether Jim participated in pull-out or general education. However, it was noted that general education teachers were listed on the report card. Jim missed 13 days. Teacher comments included that Jim needed to pay attention, participate, and complete assignments. Teachers noticed Jim was making an effort.

The 8th grade IEP stated that Jim had a math disability resulting in calculation coupled with sequencing issues. Jim’s IEP listed math goals and objectives, with the general education class as the least restrictive environment. A summary of special education services specified that Jim received special education services for his writing and reading difficulties, as well as his organizational shortcomings. Math was not included. Grades earned for the 8th grade year include 62% in math, 66% in language arts, 21% in writing, 60% in social studies, and a 49% in science. Jim was absent 16 days.

Jim’s 9th grade IEP listed the same levels of performance for math with new goals and objectives. Further, four core classes in the special education pull-out program were included. Consequently, Jim had 180 minutes of special education instruction per day. Jim earned 80% in pull-out social studies, 79% in pull-out science, 67% in pull-out math, and 91% in pull-out language arts. Teachers indicated he worked well independently and was very cooperative in the classroom. Further, Jim’s improvement was duly noted. Jim missed 8.5 days.

Jim had co-taught math, pull-out language arts, pull-out social studies, and pull-out science for his 10th grade year. His scores through the third 9-weeks averaged 84% in pull-out social studies, 82% in pull-out English, 72% in co-taught math, and 82% in pull-
Jim’s teachers stated he was making progress and had showed significant improvement; however, he needed to participate more in class. Jim benefited from 45 minutes of tutoring per day, the assistance of an aide and student teacher for extra support in math, and modified grades in the co-teaching class. In this instance, Jim’s grades were changed from his typical peers to better align with his IEP goals.

Jim completed the state Graduation Test but the scores were not available. As an 8th grader he completed the state Achievement Test. His score of 379 (of 400) in math indicated he earned a score of basic, which meant that he had showed progress with concepts and skills in order to solve simple problems.

**Mitchell**

Mitchell was a quiet young man who appeared to be occupied by other tasks but who could correctly respond to a math problem seemingly out of the blue. Mitchell seemed to be in constant quiet motion. His foot jiggled, he fiddled with a pen, and he moved in and around his seat but did not enter anyone else’s space. His voice was soft and his manner was tender. He constantly manipulated small items and seemed to become obsessed with the construction of items and how they could be used. He was one of the leaders in the co-math class and looked forward to taking a higher level math class on his own next year. The new concern was having Mitchell develop skills to look after himself and his belongings.

Mitchell lived with his mother and two sisters. His mother had been married and divorced two times. Mitchell and the older sister were the result of his mother’s first marriage. Mitchell was born two months premature. At birth he had respiratory problems and had not developed the muscles in his lower jaw for the sucking reflex. He also had
jaundice. Mitchell attended three school districts and had been in the current district since the 6th grade; although he attended the district’s kindergarten for one month. Mitchell took medication for Bi-polar disorder, Attention Deficit Hyperactivity Disorder, and Asperger’s Syndrome.

Mitchell was placed in the district’s emotional disturbance (ED) unit for several years. He returned to this district in the 6th grade and received assistance in general education classes with support from the ED unit. The Evaluation Team Report stated Mitchell was capable of understanding and completing work in the general education classroom. However, his very low frustration tolerance and slow speed of completing work hindered his progress, especially with written work. He had difficulty with organization and needed opportunities to move around during class periods. Mitchell’s materials were often scattered about. At times Mitchell arrived to school quite upset and had to spend the majority of the school day with the special education teacher in order to be calm. When Mitchell did not get his medication, his behavior significantly deteriorated. Mitchell had significant delays with coping skills. He had a shorter attention span and was often less mature acting than his typical peers. When frustrated he would throw objects. Overall, Mitchell’s abilities were in the average range, with knowledge gained in social studies, science, and reading being stronger areas. His math and language scores were in the average range.

Mitchell’s attendance was quite good. Records indicated he missed fewer than 10 days per school year. On the other hand, Mitchell had a major behavior issue in the 8th grade which resulted in his being removed from the classroom for 10 days. Specifically, Mitchell said he was going to build a bomb and blow up everyone at school. An
intervention was held which resulted with Mitchell having in-school detention. His
teachers agreed upon a behavior plan that allowed Mitchell to be pro-active. Specifically,
Mitchell removed himself from a difficult situation by going to the office in order to calm
down. Further, referrals to Mitchell’s caseworker through the county mental health center
were made and requests for a review of his medications were suggested. Mitchell did not
repeat this situation.

Mitchell’s 6th grade IEP was through a neighboring school district. The report
indicated Mitchell was a talented and inquisitive young man who became frustrated
easily. Also, medication did seem to control his outbursts. Mitchell’s goals and objectives
were behavior-based. Additionally, Mitchell was in pull-out classes for all core subjects.
Mitchell’s grades for the 6th grade were unknown, but one report suggested an A- in
reading, S- for writing, A- in spelling, B in language, B+ in math, A in social studies, and
A in science. He was absent two days.

Mitchell’s 7th grade was in a new district. His levels of performance listed his
ability to organize himself and stay focused. Mitchell’s academic skills were listed as
being very strong. Mitchell was placed in all general education classes with special
education support. No time was listed for special education services. Therefore, exact
services and supports were not known. Mitchell’s scored 80% in co-taught language arts,
79% in general social studies, 75% in general science, and 68% in co-taught math.
Mitchell missed less than four days. Teachers commented that Mitchell showed
improvement and was a pleasure to have in class. However, two teachers addressed his
need to complete work and stay on task.
Mitchell’s levels of performance for his 8th grade year were almost identical to those listed in the 7th grade. Academics were not listed, but behavior and organization were. A math goal and objective were listed, but the service and least restrictive environment were left blank. Consequently, it was unclear where Mitchell had math instruction and what services were offered. It was thought that math and language arts were in co-taught settings. Mitchell earned a 47% in language, 73% in math, 59% in science, 59% in social studies, and 36% in writing. Mitchell’s teachers commented that he did not complete assignments and that he did not pay attention or participate. On a positive note, Mitchell scored in the proficient range in both reading and math on the state Achievement Test. An interesting fact was that Mitchell was tardy 25 times.

Mitchell’s 9th grade IEP was the first to list academic levels of performance. The teacher wrote that Mitchell typically grasped the concepts being taught, but often overgeneralized the concept. Also, Mitchell’s interest in geometric shapes was noted. Math goals and objectives were included with instruction to be given in a special class learning center. Mitchell’s school day included 180 minutes of special education instruction. During the year, Mitchell averaged a 76% in pull-out social studies, 70% in pull-out math, 65% in pull-out science, and 74% in pull-out English. Pre-Algebra was attempted, but Mitchell switched to pull-out math because he was failing. Mitchell missed 15.5 days. Teachers commented that he was willing to improve, but that he needed to complete all assigned work. Additionally, there were no discipline or behavior referrals for Mitchell in this grade.

Mitchell’s 10th grade IEP stated he was a sweet, caring, and polite young man who wanted to succeed in school. He struggled with organization, handing in
assignments, and focusing. His teachers noted he was extremely bright and could get easily bored. Math goals and objectives were listed; however, math was not indicated on the levels of performance. There were no discipline or behavior referrals for the 10th grade. Scores earned through the third 9-weeks averaged 72% in general English, 91% in pull-out social studies, 87% in co-taught math, and 86% in pull-out science. Mitchell’s teachers stated he showed imagination and creativity, but that he needed to work up to potential. Mitchell benefited from 45 minutes of tutoring per day, 45 minutes of advisory for students at risk per day, and modified grades in the co-taught math class.

Nick

Nick was a tall, well-built young man who adored hard rock and athletics. He had autism. Further, he mimicked the mannerisms of others. He appreciated a logical and sequential routine and did not like to deviate. Due to his autism, Nick had constant supervision and modified assignments. Nick followed directions from the co-taught math teachers, but he had adult supervision listing steps for him to follow. His grades were modified to ensure he passed the class.

He attended a multi-handicapped program (MH) in a neighboring school district until his 7th grade year. At that time an aide was hired to assist with the transition. The aide transferred to the high school with him. Nick lived with his mother, step-father, brother, and step-sister; however, he saw his father and grandparents often.

The Evaluation Team Report stated that Nick was a handsome, smiling, and very pleasant young man who was quite social. He was very conscientious of rules and expectations and worked earnestly to stay within these. Further, Nick was reported to be an excellent student, well-organized, and very responsible. He appreciated following
directions and staying on tasks. Additionally, Nick had good relationships with his peers, but worked best in a quiet environment. He could become over-stimulated and laugh inappropriately when he was in disruptive environments. He moved independently about the school building and had many friendly relationships with peers.

During 6th grade Nick was integrated for math, social studies, science, spelling, physical education, music, and art. Speech services began in the 1st grade. His speech therapists felt he made maximum progress and dismissed him from service in the 6th grade. Nick’s academic skills on the Woodcock-Johnson Achievement Test indicated that he was within the low average range for basic reading, basic writing, and math calculation. His oral language and listening comprehension skills were very low, while his oral expression score was low average. Goals and objectives for functional mathematics were included in the IEP. There were no records of attendance, grades, or behavior concerns.

Nick’s 7th grade IEP was actually included in part of his 6th grade IEP. The effective dates were May 15, 2002, through May 15, 2004. Reviewing his grade card for the 7th grade indicated he had a successful year. His social studies score was 92%, language arts 95%, math 83%, and science 85%. Teachers reported that Nick was a pleasure to have in class and that he was doing outstanding work. He missed almost seven days of school. Although there were no discipline reports in his file, there were lengthy hand-written notations from his aide describing strategies and helpful tips. Nick modeled positive behavior. In other words, he was under the watchful eye of a caregiver during the school day and he followed her lead.
Nick’s 8th grade IEP reported that Nick was able to complete grade-level material with appropriate modifications, including modeled problems, written directions, visuals, and restating instructions. Math goals and objectives were listed with his services provided in the general education class with special education support at least 30 minutes per day. Scores earned his 8th grade year include 80% in language, 94% in math, 81% in science, 87% in social studies, and 97% in writing. Teachers commented that Nick was a pleasure to have in class and that he took interest and pride in his work. Nick missed less than six days. Nick completed the state Achievement Test in the 8th grade and his skills were found to be in the limited range. There were no discipline or behavior referrals.

In the 9th grade, Nick’s levels of performance in math were listed as relating to his ability to memorize rules. Further, his use of a calculator was found to be helpful with basic math facts. Goals and objectives for math were listed. The least restrictive environment for math was in the pull-out class, where Nick spent one period a day. His aide was also present. Nick’s grades were 95% in pull-out English, 80% in general science, 86% in general social studies, and 90% in pull-out math. Teachers stated Nick was cooperative and an asset to the class. His outstanding worth ethic was also noted. Nick earned nearly perfect attendance.

Nick’s 10th grade IEP stated he was continuing to make progress with his functional math skills. His schedule specified that he and his aide were selected for placement in the co-taught math class. Math goals and objectives were included for this daily 45 minute class. Nick completed the state’s Graduation Test in March with results not available at the time of this writing. Nick’s scores through the third 9-weeks averaged 94% in pull-out English, 76% in co-taught math, 81% in general social studies, and 71%
in general biology. Nick’s grades were modified in the co-taught class, where he had the assistance of an aide and student teacher. Also, his grades were modified in the general biology class, where he had the support of his aide. Also, one period of tutoring helped with all classes, including the social studies class, which was also serviced by his aide. Nick’s schedule included one period of work study with the athletic director. Nick’s love of sports and willingness to help earned him the title of “Super Fan”. Nick attended and cheered at all school sporting events.

Sarah

Sarah was a worker. She took great pride in assisting with any project that needed to be done. Further, Sarah’s teachers praised her ability to work independently with solid results. Generally, Sarah’s performance appeared to be negatively affected by her absences. She was succeeding in the co-math class; however, her IEP’s proved to be difficult to align services to need.

Sarah was one of three daughters reared by a single mother. Her older sister by two years also benefited from special education services at the same district. Sarah attended this district for all but part of one school year when she moved to a neighboring district. Sarah began her school career in a developmental 1st grade at the recommendation of her kindergarten teacher. The purpose of this program was to move at a slower pace which would allow time for developmental gains. Sarah was placed into 4th grade and had been promoted ever since.

A review of the records indicated that Sarah had spells of missing a large number of school days. For example, during her 2nd grade year she missed 23 days. However, in her 6th grade year she only missed 5.5 days. During the 7th grade she missed over 12 days,
and for her 8th grade year she missed 22.5 days and was tardy 12 times. She seemed to rebound a bit and only missed 11.5 days for her 9th grade year. The school’s attendance record keeper indicated Sarah’s attendance was in jeopardy for this school year and that Sarah and her sisters struggled with meeting the school’s attendance policy.

Sarah began special education services in the 2nd grade. Scores from the Weschslser Intelligence Scale for Children, Revised indicated Sarah’s overall performance was in the average range. The Evaluation Team Report gave Sarah’s cognitive skills within the average range and stated there were no hearing, motor, communication, or emotional problems that would have an adverse education effect. The Diagnostic Achievement Battery-3 and the Terra Nova assessments revealed her weakest areas were in written expression, word recognition, and math calculation. As a result, assistance in language arts and math were recommended.

Her 6th grade IEP listed that Sarah was a very pleasant, polite student who was prepared for class and completed her homework. Although there were no levels of performance listed, the Diagnostic Achievement Battery specified that spelling and alphabet/word knowledge were her weakest areas, with math receiving an average score. Goals and objectives were listed in math. In fact, 225 minutes per week each in math and language arts were listed as special education services in the resource room. Grades earned in pull-out classes were reading 84%, writing 88%, spelling 85%, and math 83%. Social studies and science were held in the general education setting. Sarah earned a 79% in social studies and 80% in science. She missed less than six days of school.

In the 7th grade Sarah’s levels of performance were almost identical to the previous year; however, her testing numbers were different. However, her weaknesses in
spelling and average score in math were noted. Math goals and objectives were included. The IEP further added that Sarah would benefit from language arts and math services for up to 88 minutes, but not more than 210 minutes per week. Grades earned in the 7th grade include 81% in general science, 85% in co-taught math, 90% in general social studies, and 81% in co-taught language arts. Neither the IEP nor the grade card explained how special education services were delivered. Teachers commented Sarah was showing improvement, performing at an outstanding rate, and was a pleasure to have in class. However, one teacher wrote that Sarah was not working up to her potential. She missed over 12 days.

Sarah’s 8th grade IEP reported she had a reading and writing disability. Her teachers indicated she was a hard working student who willingly participated in learning activities and seemed to enjoy group learning activities. Sarah’s attendance issues were identified as being problematic. She missed over 22 days and was tardy for 12. Math was not indicated as a disability or in the levels of performance. However, a math goal was included in the IEP. The specific special education service for math was not listed, although the expectation was that she would receive a specific service three times per week for 30 minutes. A summary of special education services listed Sarah would receive special education for reading, writing, and math. The grade card only listed general education teachers which made it difficult to determine what services Sarah received that were special. Scores earned in co-taught language arts 51%, co-taught math 74% general science 63%, general social studies 78%, and co-taught writing 87%. Teachers commented that Sarah did not complete assignments, but took an interest and pride in her work. Another teacher commented that she was a pleasure to have in class.
Sarah’s 9th grade IEP listed the same levels of performance as her 8th grade IEP. Again, math was not listed as a disability. Further, levels of performance were not provided for math nor were there math goals or objectives. In fact, tutoring was the only service listed. Her report card indicated that a switch was made in her science class since she failed general science for the first semester. The IEP did not reflect this change. Scores earned for the 9th grade include 57% in general science, 89% in pull-out science, 76% in general math, 73% in general social studies, and 84% in general English. Sarah missed 11.5 days. Teachers commented that Sarah was very cooperative and displayed positive work habits.

The 10th grade IEP stated Sarah was organized, polite, respectful, and motivated. Sarah’s levels of performance did not list math, nor were there math goals or objectives. Sarah’s scores through the third 9 weeks averaged 77% in general English, 71% in co-taught math, 78% in general social studies, and 92% in pull-out science. Teachers reported that Sarah worked well independently, but that she needed more initiative and concern. Sarah’s scores were modified in the co-taught math class. Further, she benefited from 45 minutes of tutoring daily. Earlier this current school year, Sarah completed the state’s Graduation Test. Results were not reported from the state at this time. However, Sarah’s state Achievement Test scores revealed that Sarah achieved a limited range in reading and math. This is the lowest level. Sarah’s file did not list any behavior, discipline, or behavior referrals.

Sam

Sam was friendly to everyone he met. Teachers reported he participated in band, fine arts, choir, and community service projects at school and at the local university.
Observations revealed a strong, muscular young man with short brown hair and a ready smile. He was quick to help anyone in need, and even gave up part of his lunch period everyday to assist the band director. Sam liked to be on the move and in on the action. In general, Sam appeared to be succeeding in the co-taught math class. Of concern, however, was the difference in math calculation from 6th to the 7th grade, which moved from being a strong area to a weak area. Moreover, tracking progress in math through his IEP proved to be difficult because in some years math was determined to be a problem and other years it was not. Further, one IEP stated that Sam had a disability in math; however, the Evaluation Team Report written three months earlier did not identify math as a problem area. Consequently, his progress was difficult to assess.

Sam, his father, and two brothers relocated to this district following their father’s release from the military. Sam’s parents divorced with his father receiving full custody. The mother had little contact with the children. Sam’s father remarried a teacher who was employed in the same district Sam attended. Special education services have been provided for Sam since 1st grade.

Sam’s Evaluation Team Report reported he was a responsible student who enjoyed learning and who was very pleasant. He worked quickly on assigned tasks, but often did not produce what he demonstrated in conversation. His daily work did not reflect his tested achievement levels. He made passing grades in his general education classes. He benefited from services in occupational therapy and speech and language services, both of which he no longer needed. Consequently, the only areas of disability were in the areas of reading and written expression.
Sam came from a supportive family. Records indicated Sam might have suffered from pre-natal or infancy concerns but that he did have developmental delays. Sam was identified as having Attention Deficit Hyperactivity Disorder. Further, fine motor skills were an area of concern for Sam, although he made gains. Sam’s self-esteem could be low which resulted in his making self-deprecatory statements. Finally, testing results from the Diagnostic Achievement Battery-3 indicated that Sam worked at or above grade level in written and spoken language, but that math skills were slightly below grade level. He was friendly, outgoing, and seemed to be surrounded by friends.

Sam’s 6th grade IEP listed goals and objectives for reading and writing. Further, his levels of performance listed math calculation as being one of his strongest areas. According to the IEP, Sam was in the general education classroom for math, science, and social studies. In fact, the IEP stated he would have 450 minutes per week of special education services for language arts. According to the grade card, Sam earned 84% in pull-out reading, 83% in pull-out writing, and 85% in pull-out spelling. Sam scored 78% in general math, 82% in general social studies, and 72% in general science. His attendance was nearly perfect.

Sam’s 7th grade IEP did not list any math goals or objectives. For that matter, math was not listed in the levels of performance. However, standard scores on the Diagnostic Achievement Battery-3 indicated math calculation was now Sam’s weakest area. Special education services in a tutoring service were offered to Sam for 45 minutes a day. Grades earned include 79% in co-taught language arts, 72% in co-taught math, 82% in general science, and 80% in general social studies. Teachers indicated Sam took
an interest and pride in his work and showed imagination and creativity. Sam missed less than three days of school.

The 8th grade IEP listed a disability in reading, writing, and math, although math was not indicated on the Evaluation Team Report written three months earlier. His levels of performance indicated that his math disability involved the sequential components to processes. Tutoring was listed as a special education service that would be offered in the general education classroom a minimum of three times per week for 30 minutes. Grades earned in the general education classroom include 67% in co-taught language arts, 73% in co-taught math, 68% in general science, 82% in general social studies, and 81% in co-taught writing. Sam missed less than five days of school. Teachers stated Sam was doing a wonderful job in class and took an interest and pride in his work. Further, praise was listed for his participation skills and for his imagination and creativity.

Levels of performance on the 9th grade IEP were almost identical to the 8th grade. Math was listed as a disability and goals and objectives were given. Services were provided in a tutoring setting with Sam being placed in all general education classes. Grades earned were 71% in general science, 73% in general math, 95% in general social studies, and 85% in general English. Sam missed only one day of school. Also, his positive work habits and abilities were praised by his teacher.

Sam’s 10th grade IEP stated Sam was a polite, hard-working, bright, and courteous young man who wanted to succeed. His teacher found it helpful to clarify math assignments for him during tutoring. Once this strategy was developed, Sam gained confidence. Sam had one period of tutoring to assist in developing better learning strategies. In March the state Graduation Test was given. It was expected that results will
arrive at the end of the school year. Consequently, Sam’s status on those tests could not be reported at this time. Nevertheless, Sam’s scores on the 8th grade state Achievement Test indicated he was at a basic reading level and limited in math. There were no discipline, attendance, or behavior concerns in Sam’s files.

Math goals and objectives were included in Sam’s 10th grade IEP. His scores through the third 9-week period averaged 86% in general English, 83% in co-taught math, 78% in general social studies, and 84% in general Biology. Teachers reported Sam was a good student who was self-directed and one who could work well independently. Further, Sam’s progress in all coursework was stated. In addition to tutoring, Sam benefited from modified grades in co-math math.

Tom

Tom was a bright, well-spoken young man who could easily pick up side conversations and make accurate decisions. Teachers reported he was an excellent problem-solver who could calm others and gently lead students to an acceptable plan. Tom knew he was smart and knew how much effort was needed to be successful. Grades did not matter that much to him because he knew he could pass. He had little patience for teachers who wasted his time. In general, Tom was passing the co-taught math class; however, he expressed a desire to be in a different setting, one that had more order and logic. Tracking the sequence of his educational services was a difficult task.

Tom was a tall, slim, lanky brown-headed young man. He lived with his mother and step-father; however, he saw his father and step-mother often. Moreover, records indicated a shared custody arrangement which explained letters in the files from both mothers. Tom was born three months premature to a teenage mother. A double-hernia
operation was performed at 2 months of age, followed by surgery at age 2 for inserting tubes in his ears. His early health records spoke of significant problems with sight and attention. Results of a visual efficiency tests revealed Tom’s focusing system had lost its flexibility and that he could not maintain focus at the reading distance. Moreover, his eyes had a tendency to turn in and up and the ability to compensate was inadequate. Further, his eye tracking skills were below the level of adequacy to support academic achievement. Interestingly, none of the school photographs posted in the permanent files showed Tom wearing glasses. Further, Tom had not worn glasses during his 9th or 10th grade year. Although Tom’s files included evidence of his difficulty maintaining focus and completing work, Tom met the requirements for inclusion in the talented and gifted program.

Tom was placed into 1st and 2nd grades and then again into the 5th grade. Records revealed the school’s position to retain him in the first grade; however his parents disagreed with the decision and stated they would work with him throughout the summer. Further, at that time, his parents did not wish for Tom to be placed on any medication. A Curriculum Adjustment Plan was implemented to support Tom in the early grades. The 2nd grade plan suggested shortening assignments as needed, breaking tasks into one and two steps, having frequent teacher checks of assignments, and supplying a reading partner.

Results of Tom's Weschler Intelligence Test for Children indicated Tom was in the high average range with verbal skills and at the low end of the average range with visual spatial skills. He was diagnosed with Attention Deficit Disorder and struggled with spelling, phonics, reading, and writing. Teacher observations reported Tom had a difficult
time keeping personal belongings in any kind of order and that keeping him on task was very difficult. However, teachers noted his great verbal skills, and the ability to be able to retell something he had heard before. Additional comments stressed that his fine motor skills were questionable as his handwriting was light, sloppy, and difficult to track. Further, Tom did not appear to track spacing. Not only were his words tricky to read, the spacing of his letters was suspect. Writing frustrated him and he showed little patience with performing these skills correctly. Teachers indicated Tom knew what he had written and would rather tell someone about his content than write it.

According to scores on the Woodcock Johnson Psychoeducational Battery, Tom managed well with calculation and applied problems in math. Calculation was in the high average range and applied problems ranked in the average range. Tom completed the state’s Graduation Test, but results had not arrived. His scores on the 8th grade state Achievement Test indicated he scored in the basic range in both reading and math. His scores were 385 and 387 respectively, with 400 being proficient. Tom’s attendance was good. In fact, the attendance record keeper for the school district supported this fact. The most days Tom missed was 13 when he was in the 6th grade. Behavior was another issue.

Tom was sent to the district’s alternative school which was housed off-site. According to the records, Tom was placed there in his 6th grade year, although there were no records indicating the change of placement. He earned failing grades in math, social studies, science, and English. His only passing grade was in vocational instruction. Further, instructors rated his behavior as being minimally compliant. Areas such as cooperation, caring, and respect were reported as non-existent.
The second trip to the alternative school was during his 9th grade year. This 10-day stay was due to his confrontation with another student. The third stay, also for 10-days, happened his 10th grade year. In that instance Tom brought a knife to a school dance. He did not threaten anyone, but was showing it to a friend outside the school building. Records indicated behavior referrals for accumulation of detentions during two different grading periods of his 6th grade year.

Tom’s 6th grade IEP described a very creative student who possessed a very active imagination and one who had great ideas for writing. His levels of performance listed standard scores on the Diagnostic Achievement Battery-2. Math reasoning and math calculation were average at eight and his writing skills were low. Punctuation and writing composition were at five, whereas his strongest areas were story comprehension, story characteristics, synonyms, and reading comprehension. He scored highest in story comprehension and story characteristics at 15. The only goals and objectives were for writing, and math was not listed throughout the document. In fact, Tom’s special education services were for 300 minutes per week for language arts instruction within a tutoring environment. Scores earned his 6th grade year included 74% in pull-out reading, 75% in pull-out writing, 71% in social studies, 69% in math, and 77% in science. Overall, the majority of comments by all Tom’s teachers listed his need to improve in most subject areas. The area receiving the fewest negative marks was math.

The 7th grade IEP included goals and objectives for written language. The majority of the goals and objectives stressed the need for Tom to develop strategies to be more organized and focused. Tom received one period of tutoring in 7th grade. Records did not indicate who assisted Tom or when he had tutoring. Scores for the 7th grade
averaged 70% in general science, 43% in co-taught language arts, 67% in co-taught mathematics, and 43% in general social studies. Teachers commented that Tom was not working to his potential, did not complete assignments, did not do a major project, but, at times, did show improvement. Tom did not earn a passing grade in all four grading periods in social studies or language arts.

Tom’s 8th grade IEP stated that Tom had a reading disability; however, this was not confirmed in the files. Moreover, his writing disability was described in the IEP. His teacher stated he had not mastered letter formation which made his work difficult to assess. Tom’s lack of organization and misuse of materials were addressed in his levels of performance. Math skills were not included. The IEP stated that Tom was to receive tutoring assistance a minimum of three times per week for 30 minutes in the general education setting. Scores earned in the 8th grade averaged 43% in co-taught language arts, 37% in co-taught writing, 70% in co-taught math, 52% in general science, and 56% in general social studies. Teachers reported Tom did not do a major project, did not work to his ability, and lacked attention and participation. However, his technology teacher stated that Tom took an interest and pride in his work. Tom did not pass any of the four grading periods in language arts or science. Additionally, supporting documentation as to how Tom made progress on his IEP goals was not present. In other words, it was difficult to determine when special education services were provided in the general education classroom.

Tom’s 9th grade IEP listed disabilities in reading and writing. Math was not listed on the levels of performance. Standard scores on the Diagnostic Achievement Battery-3 stated that math calculation was an area of weakness, although no other explanation
followed. Math goals and objectives were listed. Tom’s IEP listed pull-out in the math classroom and assistance for writing skills. A summary of special education services was not listed on the back page. Tom’s grade card indicated he had pull-out social studies (86%), pull-out English (84%), pull-out science (75%), and pull-out math (74%). Teacher comments included that Tom’s work was satisfactory and that he took and pride in his work. One teacher stressed Tom’s need to complete all assigned work.

Tom’s IEP for the 10th grade did not address levels of performance or testing scores in math. Further, math goals and objectives were listed with the co-taught math class listed as the least restrictive environment and in his summary of services. Scores for the 10th grade through the third 9-weeks averaged 84% in pull-out English, 65% in co-taught math, 60% in pull-out social studies, and 75% in pull-out science. Tom was originally in general social studies but transferred to the pull-out class since he earned failing grades. Tom had 45 minutes of tutoring assistance per day, modified grades in the co-taught class, and the assistance of an aide or student teacher in the co-taught class. Teachers stated that Tom was willing to improve, that he took interest and pride in his work and that he wanted to succeed. Teachers also indicated he needed to take more initiative and concern. Tom’s attendance was good and he did not have any behavior referrals or concerns since his return from the alternative school.

Wendy

Wendy was a quiet, brown-haired slender young girl who was described as hard-working by her teachers and her parents. She was born to a single teenage mother who later married a high school drop-out. Two younger brothers completed the family. Wendy attended three school districts. In fact, during one year she moved out and then moved
back into a district. In general, Wendy’s poor attendance negatively impacted her progress.

She was tested for special education services in a neighboring district. Results indicated Wendy functioned within the mildly impaired range of intellectual ability. Within the verbal range of the Differential Ability Scale Wendy scored below average skills. Areas in this domain included knowledge of verbal concepts, comprehension and expression of language, general knowledge, and level of vocabulary development. Wendy’s non-verbal reasoning skill area was classified in the significantly below average range as compared to other children her age. This area assessed more complex non-verbal thinking skills such as reasoning, perception of spatial orientation, and the ability to identify important elements of visually presented material.

A third area, spatial, was also a weak area for Wendy. She scored in the significantly below average range with spatial imagery, perception of orientation, analytic thinking, and attention to visual details. Further, Wendy’s Visual-Motor Integration assessment indicated her skills were within the low range. Consequently, Wendy was having difficulty with fine motor skills and speed of handwriting. Overall, Wendy’s mildly impaired range indicated she would experience difficulty learning new concepts at a rate and depth comparable to other children her age and grade.

Wendy returned to the district for her 4th grade year. Unfortunately, attendance issues were immediately identified. Wendy missed 29 days her 1st grade year, 22 her 2nd grade, and 57 in her 3rd grade. Following a few moves, attendance improved in the 5th grade during which she missed 18.5 days, followed by 23 in the 6th grade, and then 22 for her 7th grade. Fortunately, her attendance improved her 8th grade year to five missed days.
Wendy missed 30 days her 9th grade year and failed the majority of her classes due to poor attendance. The school’s attendance record keeper stated Wendy was in attendance jeopardy for her 10th grade year.

Records disclosed that Wendy’s first special education services were for speech, a service she continued to receive. Levels of performance showed learning deficits in all areas; however, math was listed as one of her strongest areas. Goals and objectives were listed for reading, writing, and math, as well as for speech therapy. The exact amount of time Wendy received special education instruction was not identified. Scores earned in the 6th grade were 85% in pull-out reading, 88% in pull-out writing, 88% in pull-out spelling, 97% in pull-out math, and 97% in general social studies and 82% in pull-out science. No behavior concerns were listed, other than attendance.

Wendy’s was described as a hard-working student who always completed her work whether it was class work or homework. Further, praise was given for her ability to organize and complete her agenda on a regular basis. Goals and objectives were written for adaptive behavior, reading, written language, and math. Services included support in the general education classroom, and support in the special education classroom at least 240 minutes every week. The summary of special education services stated Wendy would be in the general education classroom for all subjects, but would be pulled-out of that setting for modified assignments and tests. Scores earned in the 7th grade were 84% in co-taught language arts, 90% in general social studies, 80% in general science, and 86% in co-taught math. Five teachers wrote that it was a pleasure to have Wendy in class and that she was doing outstanding work. Wendy failed one class, Health, with a 52%. There were no behavior referrals listed.
Wendy’s 8th grade IEP stated her math skills were very strong and that she used
modeled problems to complete grade-level material. Math goals and objectives were
provided stating Wendy’s least restrictive environment would be the general education
classroom, with a minimum of 30 minutes of support provided daily. Scores earned for
the 8th grade include 60% in co-taught language arts, 74% in co-taught general math,
60% in general science, 75% in general social studies, and 74% in co-taught writing.
Interestingly, Wendy failed over half of her semester exams. Teachers reported Wendy
was making an effort and that she was interested and showed pride in her work.

Wendy’s 9th grade IEP described a diligent worker who sought peers for
assistance and clarification. In math, Wendy struggled with concepts that required multi-
step processes. Her strong basic skills were applied to formula and equations. Again,
Wendy was praised for seeking clarification when uncertain. The levels of performance
did not list any standard scores, percentile ranks, or any testing scores. The frequency of
service was hard to calculate; however, the summary of services indicated Wendy would
receive 90 minutes of special education services per day. Further, math goals and
objectives were given, but the least restrictive environment was not. Even though Wendy
passed all 9th classes academically, she failed the majority of her classes due to poor
attendance. She earned 84% in pull-out English, 72% in pull-out Science, 77% in general
social studies, and 83% in pull-out math. Teachers reported Wendy had positive work
habits and ability. Once again, there were no behavior referrals for Wendy.

Wendy’s levels of performance for the 10th grade indicated percentile scores, but
did not reference any assessment. Consequently, it was difficult to determine the
meaning. Interestingly, math was listed as her strongest area. Math goals and objectives
were given, and co-teaching in math was listed as the least restrictive environment. However, co-teaching was not listed in the summary of services, but science, tutoring, and social studies were. Wendy received 135 minutes of special education support each day. Wendy’s scores through the 3rd 9-weeks averaged 70% in general English, 89% in pull-out social studies, 69% in co-taught math, and 78% in pull-out science. Wendy benefited by having one period of tutoring per day and modified grades in co-taught math. Teachers praised Wendy’s imagination and creativity, her desire to succeed, her self-advocacy skills, and her determination. An additional comment stressed the importance of Wendy being present at school.

Analysis of the Tenth Grade Record Review

As a group, the 10th grade students with IEP’s in the co-taught math class missed the most number of days during the 6th grade (see Table B.2). The average days missed were 12 for 6th grade, 10 in grades 7 and 9, nine through the third 9-weeks grade period of the 10th grade year, and eight in the 8th grade. Interestingly, both females had attendance issues during elementary and middle school. For instance, Wendy exceeded the school’s attendance policy a total of seven times, whereas Sarah exceeded the policy twice in elementary school and once in the middle school. On the other hand, Jim met the attendance policy during elementary school, but did not meet the terms of the policy in the 6th, 7th, 8th, or 10th grades. Only one student, Sam, followed the attendance policy during every year in school.

Only two students had discipline problems (see Table C.2). Tom was sent to the alternative school during his 6th, 9th, and 10th grades. The most serious infraction was committed by Mitchell, who threatened to blow up the school and everyone in it.
Seventy-five percent of the 10th graders had excellent behavior in grades 6 through 10. During this span, students were placed in a mixture of general education, co-taught, pull-out, and tutoring settings. Consequently, placement did not affect the behavior of these students during grades 6-10.

Scores on the 8th grade state Achievement Test revealed that one student was proficient in both reading and math (see Table D.2). Consequently, seven of eight students were not proficient in either reading or math. In fact, five of eight students were in the limited range in both reading and math and two of eight students were in the basic range. No student scored in the 390 range, only one student scored in the 380 range, two students scored in the 370 range, and four students scored in the 360 range. This pattern was similar to the reading scores. No student scored in the 390 range, two students each scored in the 380 and 370 ranges, and three students scored in the 360 range.

Overall, scores earned in pull-out math for grades 6 and 9 were the highest at 82%, followed by scores in co-taught math grades 7-10 with scores at 76%, and scores earned in general education math grades 6 and 9 at 74%. Scores earned in pull-out language arts were also highest in grades 6, 8, 9, and 10 at 85%. Students in general education language arts for grades 6, 7, 9, and 10 earned an average of 78%. However, students in co-taught language arts in grades 7 and 8 averaged the lowest scores of 66%. One student was in pull-out social studies in grade 6, but the other seven were in general education class with three students receiving assistance with an aide in the 10th grade. Overall, the students in pull-out social studies averaged 87%. Students in the general social studies classes for grades 6 through 10 averaged 76%, with the three students in general social studies with an aide averaging 75%. Students were either placed in general
or pull-out science. The pattern appeared to be in general education for grades 6-8 and in pull-out for grades 9 and 10. Students in pull-out averaged 80%, while students in the general setting averaged 73% (see Table E.2).

At the middle school level, 50% of the students failed 8th grade co-taught language arts. Those who passed averaged 61%. All students were successful in math in grades 6 through 10. Two of eight students failed social studies in the 7th and 8th grades. Thirty-eight percent of the students failed science in the 8th grade; however, with the exception of one student in grade 9 and one in grade 7, all students passed the balance of science classes (see Table F.2).

Generally, grades earned in all pull-out classes were higher. An interesting statistic was that students were more successful in the general education language arts classes at the 8th grade as compared to the co-taught classes. Further, the majority of the failures in general education classes occurred in the 8th grade. Nine classes were failed by 50% of the students.

All students were involved in school activities whether through class assignments, club events, or school-sponsored extracurricular events (see Table G). Further, each student had the opportunity to participate in up to four school-wide community service projects organized by the special education department. These included the track and field event for Special Olympics, the school’s Bloodmobile, a school-wide Thanksgiving meal, and a planting project for the Amish community.

Finally, this class was composed of students with cognitive delays and learning disabilities. Other disabilities included students with autism, Bi-polar, Attention Deficit Disorder, Autism, Asperger’s Syndrome, and Other Health Impairments. Further, these
students had previous placements at the alternative school, an emotional disturbed unit, and a multi-handicapped program. Additionally, a few students had attendance issues.

*Major Themes from Record Reviews*

**Grades**

Student performance based on grades earned in all classes proved to be another point that impacted students with disabilities. Overall, grades were difficult to assess in terms of whether the grade was modified per IEP modifications and accommodations, what services the child did or did not receive, and how grades varied from one school year to the next.

Students with IEP’s are permitted allowable accommodations and modifications as related to the specific disability. According to IEP guidelines, the case for these allowances must be made on the first page of the IEP and must match the child’s ability and performance levels. After the need is established, the specific allowances a child is permitted to use throughout the school year must be written throughout the document. In addition, students either need to use these services or they do not. In other words, students can not decide to only use these accommodations and modification during high-stakes testing.

In recent years, the difference between accommodations and modifications has been established. For instance, an accommodation is seen as a tool that assists the student. For example, extended time, a private setting, a calculator, or a scribe are allowable accommodations if the student has a documented need. Modifications are actions that change the context of an assignment. Examples would be to supply a word
bank for a test, to reduce the number of multiple choice responses, or to have fewer required pages per report. Again, these modifications must match student need.

Currently the state Department of Education provides a listing of allowable accommodations for high-stakes testing. Schools are beginning to use these for students with IEP’s in an effort to match daily instructional practices to high-stakes test-taking procedures. The idea is to assist students to become more familiar with what they will be allowed to do on high-stakes testing.

All grade cards listed the name of the teacher of record. By cross-referencing the faculty directory it was easy to determine which classes were taught by special education teachers for the 6th, 9th, and 10th grades. However, this was not true for all grade levels. Students with cognitive delays were placed in pull-out classes for 7th and 8th grade English and math. This was learned by matching grade cards to the faculty directory. On the other hand, all students with specific learning disabilities were placed in co-taught English and math classes for the 7th and 8th grade, with the general education teacher listed as the teacher of record. Since the IEP’s were not specific as to how students performed based on their goals and objectives, it was not possible to determine what the grades truly indicated.

For instance, the grades earned on the 6th grade report card clearly listed the name of the special education teacher and further indicated if the grade or curriculum was modified. Report cards for the 9th and 10th grades also listed the name of the special education teacher. Although these grade cards did not indicate if the material was modified, there was an opportunity for each teacher to list two separate comments per subject to illustrate how the child performed in the class. The report cards for grades 7
and 8 only listed the name of the general education teacher who had the opportunity to list two comments per subject. Unless students had a cognitive delay and were in the pull-out English and math classes, there was no indication from the special education teacher as to how the child was performing in the class or how the student earned that particular grade.

Further, two teachers, one in the 6th grade and one in the 10th grade, were the only teachers to include actual progress reports based on the student goals and objectives. In both cases comments were made for each goal for all four nine week periods. Since there was not one particular form to follow, perhaps each teacher prepared a progress report and kept this in a different file. Nonetheless, with the exception of the two reported cases, there were no progress reports in the permanent files in the guidance office or in the archival files with the school psychologist.

Overall, grades were higher in pull-out classes as compared to co-taught classes. However, since district grading standards were not known, these are not really comparable. Further, attempting to find corresponding patterns through state achievement testing scores was unavailable because students did not complete the state Achievement Test until the end of their 8th grade.

With this being said, students who had pull-out classes in the 6th grade were often placed back into pull-out classes in the 9th grade. Data revealed that grades in the pull-out classes were higher than the grades received during the co-taught classes in grades 7 and 8. For instance, Denny received a 78% in reading in grade 6. This dropped during the two years of co-teaching. In the 7th grade he earned a 49% and in the 8th grade he earned a 65%. Then, in the 9th grade pull-out class, he averaged a 78%. Also, Ellie earned 87% in
pull-out math in grade 6. She then earned a 62% in co-taught math 7 and an incomplete in co-taught math 8. She had a 67% in co-taught math 9. Andy dropped from a 84% in a pull-out math class to a 75%, 78%, and 75%. Further, Beth dropped from a 92% in pull-out math to a 76%, 76%, and 83%. However, this did not hold true for all females. Sarah originally held a similar score from pull-out math 6 to co-teaching math 7. Then, she dropped to a 60% in co-taught math 8, then moved up to a 76% in a general math 9 class, and then to a 71% in co-taught math 10.

Of particular concern were the very low social studies and science grades earned in general education classes. No student failed 9th grade social studies in either the general education setting or the pull-out setting. However, in social studies, three students failed the 6th grade, nine failed the 7th grade, and three failed the 8th grade, with an additional student receiving an incomplete. Only four of 17 students passed all 5 grade levels of social studies. Of the five, two were female, one had an aide, and one was a student with a cognitive delay who was in a pull-out class for a year, had the use of an aide for another year, and followed a slightly different curriculum than typical peers. These lower grades could be due to the fact that grades Pre-K through 8 do not require passing grades for promotion. For that reason, the same approach might be true for grades 9-12 if specific credits were not required for graduation.

Grades in science were better; although, 13 out of 17 students earned grades in the 60-69% range during grades 6 through 9. Two students failed science in grade 7 and only four failed in grade 8, with an additional student earning an incomplete. One student failed the first semester of science 9 and repeated it her 10th grade year. She passed the second time. Another pattern revealed in the data was that students in grades 7 and 8 had
science and social studies in the general education setting. There was little mention in the IEP’s of how services were brought to the classrooms or how accommodations or modifications were provided and by whom.

Another concern was viewing the grades per student horizontally by grade level. There were a few students whose grades appeared to be about the same each year. For example, Brent, a 10th grader, consistently scored in the 81-96 range. Also, Nick’s grades generally ranged from 80-95, with a few grades in the 70 range. On the other hand, there were grading patterns in core classes that illustrated that something needed attention. For instance, Denny, a 9th grader, had grades ranging from 70-85 in his 6th grade year. These changed to 48-70 in grade 7. Another 9th grader, Ellie, had grades that ranged from 69-94 in grade 6. These dropped to 49-69 in grade 7 and to 56-58 in grade 8. Mitchell, in grade 10, earned grades of 68-80 in grade 7. These dropped to 36-73 in grade 8. In grade 9 they increased to 65-76. Andy, a 9th grader, earned grades 66-88 in grade 6, followed by grades of 41-75 in grade 7, and 62-78, with an incomplete in grade 8. In the 9th grade he earned 60-89. Finally, a 10th grader, Tom, earned 69-75 in grade 6, 43-70 in grade 7, 43-70 in grade 8, 75-86 in grade 9, and 60-84 in grade 10. Overall, the pattern seemed to show a decline in grades 7 and 8. Of course, this could be due to other factors such as students gaining preparation skills for the state Achievement Test or were learning to adjust to the newness of a middle school schedule as opposed to an elementary schedule. Further, students are exposed to new extracurricular activities at the middle school, such as organized athletic teams and academic clubs. As a result, students were learning to budget time, talents, and skills. Perhaps the change could be contributed to maturity and transitioning skills.
Grades earned in core classes representing reading, writing, mathematics, science, and social studies for grades 6 through 9 or 10 were averaged for each student, with incompletes not included. These averages were tallied by grade level. Then, the number of general education, co-taught, and pull-out classes were averaged and ranked. Starting at the 6th grade and continuing through the 9th grade students were included in 47% general education classes, 29% co-taught classes, and 24% pull-out classes. The highest core subject averages by grade level were the 9th graders at 75.6%, followed closely by the 6th graders with 75.4%. Next, were the 8th graders with 62% and then the 7th graders with 59%. Sixty percent was considered passing for this school district. Based on this number, one student scored below in the 6th grade (55.6%), three at the 7th grade (34.8%, 42.0%, and 57.0%), and three at the 8th grade (45.0%, 57.0%, and 57.6%). All students scored above 60% at the 9th grade level. In other words, in an average of core classes, 11% of the students fell below 60% in the 6th grade and 33% of the students fell below in grades 7 and 8.

The same procedure was completed for the 10th graders. Starting at the 6th grade and continuing through the 10th grade students were included in 40% general education classes, 28% co-taught classes, and 32% pull-out classes. The highest core subject averages by grade level were the 9th graders with 80.4% followed very closely by the 10th graders with 80.3%. Next, were the 6th graders with 79.2% and then the 7th graders with 76.3%. The last group was the 8th graders with 68.2%. No students fell below 60% at the 6th, 9th, or 10th grades. One student averaged a 55.7% in the 7th grade and three students averaged scores of 51.6%, 51.6%, and 54.8% in the 8th grade. In an average of core classes, 13% fell below 60% in 7th grade and 38% fell below 60% in the 8th grade.
Taken as a combined group, this data revealed students with IEP’s in grades 6 through 9 or 10 had core classes in general education settings 43.5% of the time, in co-taught 28.5% of the time, and in pull-out 28% of the time. As a group, students scored the highest in grade 10 with 80.3%, followed by grade 9 with 78%, and 6th grade with 77.3%. Next, was grade 7 with 67.6% and 8th grade with 65.1%. Further, within this group one student fell below 60% in grade 6 (6%), four in grade 7 (23.5%), and six in grade 8 (37.5%). All students scored above 60% in the combined core classes in grades 9 and 10.

IEP’s

One must realize these IEP’s spanned up to five years for some students and many were written through other agencies and for different programming needs. Also, several students benefited from services from various professionals, such as physical therapy and speech therapy. Therefore, each IEP reflected the individual needs of the child, as it should. Further, although this district allowed time during the school day to write IEP’s, several teachers, especially those in co-teaching situations, might have felt overwhelmed to leave the classroom due to their role as a co-teacher. Also, developing skills and knowledge to write IEP’s for co-teaching placements appeared to be difficult. In fact, a review of the IEP writing guidelines for the district did not reveal specific directions for co-taught settings. This backed Lee-Tarver’s (2006) claim that IEP’s were difficult to develop for day-to-day activities.

Tracking student information systematically was difficult because different forms of IEP’s were used, different styles were used matching building service-delivery models, and some of the IEP were not as complete as others. For example, the levels of performance per individual student located on page one often had identical information
listed for sequential years. Also, in a few cases the levels of performance were identical to other students, which made these levels suspect. Sometimes performance levels were listed in a specific area such as reading; however, there was no supporting evidence such as standard scores, percentiles, state testing information, or other relevant data sources. Conversely, sometimes scores were listed by themselves in an abbreviated code, such as RC-4. Since there was not a narrative to back this claim, a reviewer needed to go to a different file to locate an assessment for the particular year and read the protocol to determine that RC stood for reading comprehension; however, the 4 was never spelled out. It was believed that the higher the number the stronger the area. Conversely, the lower the number was the weaker the area. However, it was unknown if the numbers represented standard scores. Therefore, at times it was difficult to determine the exact levels of performance for the child.

Further, a student’s Evaluation Team Report would list specific testing results and observations which would be part of an academic summary. A reader should be able to determine the areas of disability based on this report. At times the report stated that a student had a disability in math; however, the IEP would not list math as an area of disability in the levels of performance. Consequently, no math goals or objectives were given. Therefore, services were not given to this child in the area of disability. On the other hand, the committee might have made a decision about this issue and felt it was the right approach, but there was no evidence supporting the claim. Conversely, there were cases where math was not a disability, but the student had goals, objectives, and services in math.
Another issue was the section listing accommodations and modifications on each goal page. Sometimes these sections were left blank. As a result, it was unclear what a child needed and what service a teacher provided. Obviously, if the section was blank, then no accommodations or modifications should be allowed. Moreover, without these listings it was unclear how students were assessed. In other words, were the grades listed on the report card the actual grade a student with disabilities earned in a co-taught classroom based on the exact same content without any allowances? Or, was the grade modified to show the level of progress a student achieved with allowable accommodations and modifications based on individual need? It was unclear.

Overall, it proved difficult to rate progress using IEP’s. Services were provided; however little mention was included as to how students made progress towards individual goals and objectives. Perhaps individual teachers keep these reports in their personal case files.

*Attendance*

Co-teaching did not appear to positively or negatively impact attendance for students with disabilities. However, students who were absent a large number of days tended to show a drop in their scores as reported on grade cards. Additionally, placement in a pull-out program did not impact attendance either. What appeared was that students with disabilities, who had attendance problems in the past, were more likely to continue to have attendance problems. Moreover, in the sample, students who had poor attendance in one school district continued to have poor attendance at the next district. Following this pattern, students who had concerns with attendance in an elementary school, seemed to have the same problem at the middle or junior high school, and then on to the high
school. Conversely, students with disabilities who did not have attendance problems in the past did not have attendance problems at the high school. A review of the records illustrated that students were in a combination of pull-out and inclusion classes from the 6th grade to their current grade level. There was not a significant difference of attendance patterns in any of the grade levels regardless of class placement.

As a group, the 9th graders with IEP’s missed the most number of days (18) in the 8th grade, whereas, the 10th graders missed the most number of days (12) in the 6th grade. Only three of 17 students (18%) met the school’s attendance policy during their school career. Twelve percent of the students, both 9th graders, were referred to the court for consistently missing school. Consequently, 88% of the students did not abide by school attendance policy during their elementary and middle school careers.

The elementary and middle schools have a basic no retention policy meaning that a student who fails due to attendance continues to the next grade level. The attendance records were incomplete for three students. Therefore, of the 16 remaining students, 10 did not meet the attendance policy during their elementary years. Sixty-three percent of the students had poor attendance. Absences were higher for the 9th graders (6 of 8 for 75%) than for the 10th graders (3 of 6 for 50%).

Jim and Wendy did not abide by the terms of the attendance policy in grades 6, 7, or 10, with both exceeding the terms in either grade 8 or 9. During every grade level at least one student went over the 12 days attendance policy. Seven students exceeded the policy in grades 6 and 8, six in the 7th grade, and two in the 9th and 10th grades. (However, records were not complete for this year’s 9th and 10th graders.) Sixth grade
had the highest average at 60% exceeding the policy. This was based on 9 of 15 students, since two had incomplete records.

Unless there were unusual medical conditions, students who had excessive absences from school also failed classes. For instance, Clinton failed three core classes and missed 15 days in the 6th grade. During the 7th grade he failed two core classes and missed 19 days. Moreover, Brent missed 27 days in the 7th grade and failed all four core subjects. Jim, an 8th grader, missed 25 days his 6th grade year and failed two core classes. The following year he missed 13 days and failed one core subject. Conversely, Grant missed few days of school and did not fail any core subjects for grades 6 through 10. The same was true for Nick and Sam. Generally, more absences equaled lower scores.

A review of grade cards and IEP’s illustrated students were in a combination of pull-out, co-taught, general, and tutoring settings during each of these years. Also, transcripts revealed that at least seven of these students attended other schools and had other placements, such as the multi-handicapped program. None of this mattered. It appeared that students who had poor attendance in the past, regardless of placement, continued to have poor attendance and that students who had good attendance continued to have good attendance.

Behavior

Disciplinary referral forms revealed that the majority of students with disabilities in both co-taught classes behaved similarly throughout their academic career regardless of class placement. Reports in the permanent file listed a few students with an accumulation of detentions for minor infractions which occurred at the 6th grade level. This was documented by letters mailed to parents explaining the circumstances. Three
male students had serious problems. Two of the young men, one a 9th grader and the other a 10th grader, were referred for major infractions during their middle school years. One young man was diagnosed with Bi-polar Disorder and Oppositional Defiant Disorder. The second young man, diagnosed with Bi-polar Disorder and Asperger’s, was actually placed in an emotional disturbances unit until grade 6. The third student, a sophomore, was sent to the district’s alternative school for a 10-day stay during his 9th and 10th grade years due to poor choices and escalating pranks. Also, this same young man spent time at the alternative school in the 6th grade for accumulation of detentions for two grading periods. Other students were referred to the court system for poor attendance. However, overall, students in the sample had few behavior issues regardless of being placed in co-teaching or pull-out.

One situation that did stand out was the 10th grade student who was originally placed in the emotionally disturbed unit. While there, he was in all pull-out classes through his 6th grade year. He switched to the new district for his 7th grade year and was placed in all general education classes with special education support. Exact services and supports were not listed on the IEP. Mitchell earned one B, two C’s, one D and missed 3.5 days. A dramatic change occurred in the 8th grade. Mitchell earned one C and four F’s. During this period Mitchell was absent seven times and tardy 25 times. Academics were not listed on the levels of performance, but behavior and organization were. Therefore, it was difficult to piece together what special education services Mitchell did have and where these were provided. It was known that Mitchell was placed in all general education classes. It was not known what happened to evoke Mitchell’s proclamation that he was “going to build a bomb and blow up everyone at school.” It would be interesting
to learn what transpired from the 7th to the 8th grade, and if a change in class placement had anything to do with it. Mitchell went from a severely restrictive environment his 6th grade year to a totally included program his 8th grade year. Did anything happen at the school or were Mitchell’s medications an issue? This event has not been repeated.

Twelve of 17 students (71%) did not have behavior issues in grades 6-10. Further one student had a minor infraction in the 6th grade resulting from accumulation of detentions. One student (6%) was placed at the alternative school for short stays during his 6th, 9th, and 10th grades. Two students (12%) were court-ordered to attend school during their middle school years. Interesting, none of the girls (41%) received any discipline referrals from 6th grade on.

Generally, students in this study were well-behaved. Consequently, their scores in classes were not negatively impacted by time out of the classroom.

**Transition Among Grade Levels**

Rating progress from one grade level to the next was difficult because the district did not follow a consistent plan. An emerging theme was the shifting of curriculum options from one level to the next, without a sequential, logical flow. For example, several students in the elementary grades had predominately pull-out classes in most core subjects. However, at the middle school level many of these same students had predominately co-taught classes in math and English, with little mention as to how their educational needs were addressed in science and social studies. Then, once the students entered the high school, many fell back into pull-out classes for most core subjects and had tutoring classes to learn advocacy skills. Consequently, the sequence of these services seemed questionable. In other words, would it have been better, when
appropriate, to gently place students into less restrictive environments, instead of
drastically going from one style to its direct opposite? It appeared the district might wish
to organize an on-going systematic plan that smoothly shifts students into fewer pull-out
classes, while building support systems to help students become independent learners.

For example, in the 6th grade seven of nine students (78%) were placed in pull-out
language arts with all students receiving passing grades. In fact, the lowest score was
64%. These students were placed in 7th grade co-taught language arts where six failed
reading or writing. The lowest score was a 0%. All but one of these students continued in
8th grade co-taught language arts where four of seven students (57%) failed and one of
seven (14%) received an incomplete. Then, in the 9th grade seven of nine students (78%)
were scheduled in pull-out language arts. This total sequence made little sense.

There are two schools of thought concerning scheduling needs for students with
disabilities. The first approach is to build a master schedule around student needs. The
second approach is to establish a schedule and then make the students fit the master
schedule as best as could be expected. As mentioned above, one would assume that if a
child was in pull-out language arts for their 6th grade year due to a significant disability in
reading comprehension, for example, then there was a likelihood that a child might need
a similar pull-out program for the 7th grade. That was not the case (see Table E). In the
majority of files, students were switched to co-taught English 7. However, the middle
school staff then recommended that the student be placed back into pull-out for English
9. There were several questions about this pattern.

First, was the child in the correct placement in grade 6? In other words, should
that child have been in a general setting for English 6? Continuing this thought, was the
placement correct in grades 7 and 8? In other words, was co-taught the best fit for the child? And, should the high school have offered a co-taught English 9 class for this child? In other words, was the goal to make the child fit a schedule or the schedule fit the child?

Second, if a child’s disability demanded that English be in a co-taught setting, then where were the co-taught sections for science and social studies? After all, if a child was experiencing difficulty with reading skills in English, then, would not those same difficulties carry over into other core subject areas? Why were math and English the only two areas earmarked for co-teaching?

Third, were all the sections in math and English co-taught? Was it necessary for the special education teachers to be in all sections of this subject? Did all students with disabilities have identical disabilities? Did all students with disabilities need a co-teacher in that subject? Could there be an easier way of scheduling to permit the co-teacher to be present in the periods that only house the students with disabilities? In other words, could more students with disabilities be placed in one or two selected periods which could free up the co-teacher to help students in areas such as science and social studies?

Scheduling appeared to be the most difficult component of co-teaching. As verified by later interviews, the decision at the middle school was to offer co-teaching in English and math to students with mild disabilities who were grouped in grade-level teams. With that goal, special education teachers’ schedules were designed to co-teach students who were placed in that class. Interestingly, students with cognitive delays were placed in pull-out classes with a special education teacher assigned. In this regard, it appeared that broad guidelines were followed based on label. All students with cognitive
delays were in pull-out and all students with specific learning disabilities were in co-taught classes, facts confirmed by the principal. With that approach, the teaching schedules were set first and the students fit into the schedule.

It also appeared that there were not enough special education faculty to cover services for social studies and science at certain grade levels. The basic thought seemed to be that it was better to cover math and English and hope that students could transfer the skills to other areas. A difficult discovery was that several students transitioned from a more restrictive environment in pull-out social studies and science in the 6th grade, to minimal assistance in these same two areas for the 7th and 8th grades.

The placement of students in the math co-taught classes could be further studied. According to the results of the state Achievement Test, 9th grade students were already proficient in math or reading. On the other hand, the 10th graders experienced difficulty from the beginning due to much lower skill levels as evidenced by results from the state Achievement Test. For example, only one student was proficient in math and reading. Also, five of the eight students (63%) scored in the lowest level, limited, in reading and math. Furthermore, 50% of the students were nearly 40 points removed from the passing score of 400.

Socialization

None of the group interviewed rated progress in co-teaching classes to socialization. In fact, both groups of students were well immersed in school activities including band, sports, choir, and clubs. Additionally, the special education department organized four school-based service projects throughout the year so all students had an opportunity to be included. In fact, students with IEP’s organized the school bloodmobile
which included 125 teachers, students, Red Cross staff, and community members. Also, these same students organized a Thanksgiving meal for over 300 students and school employees. The group also performed a number of responsibilities such as running the concession stand, providing music, and organizing the track for Special Olympics, an event that brought in nearly 1000 people. The special education staff made a determined effort to play vital roles in the school. Consequently, all students with IEP’s were involved.

**Summary**

Inconsistent IEP’s from one building level to the next made it difficult to track progress. Issues concerning placement and grades emerged. First, the percentage of failures was unexpected. Particularly, the fact that so few students with IEP’s passed the 7th grade co-taught language arts class was surprising. The average score in co-taught language arts was 55%, with the average score in the general class at 70%. Also, the failure rate of the 7th grade social studies class was high. The average score for the 9th grade group was 50%. Unfortunately, the school was unable to schedule more assistance in science and social studies during the 7th and 8th grades. The school did a nice job of balancing the number of students in general, co-taught, and pull-out classes. It was not surprising to learn that grades in the pull-out classes were higher than in general or co-taught classes.

This review illustrated that attendance in any class affected scores earned in that class. Also, the review revealed that this group of students had few behavior issues which allowed them to spend more time on task. Therefore, neither attendance nor behavior was viewed as measurement of progress in co-taught classes. Also, this combined group on
average appeared to be well involved in the school and community. Additionally, students had established friendships that remained regardless of placement. An area of concern, however, was the inconsistent service delivery model used throughout the district. Trying to understand the logic of student placement did not lend itself to an ordered, sequential, or well-thought out approach.

**Record Review for Staff**

There were 13 staff members involved with co-teaching. This included four administrators, two guidance counselors, two school psychologists, two general education math teachers, two special education teachers, and one educational aide. Records reviewed included teacher licensure information, faculty directories, curriculum guides, minutes of department meetings from 2004 through 2007, and scheduling records. A snapshot of each employee revealed experience, degrees, license, co-teaching experience, and relevant personal information.

*Cindy*

The district’s Curriculum Director held this position for three years. Prior to this appointment, she served as an elementary school principal and as an elementary school special education teacher. In addition, Cindy taught special education at a neighboring school district before moving to the current district. Cindy had many duties, including testing coordinator, overseeing textbook selection, reviewing IEP’s, and providing inservice training. In her present position she managed curriculum development for the entire district, but supervised training for Pre K-5 teacher. A second administrator supervised curriculum issues for 6-12.
Cindy had 22 ½ years of experience and held a 5-year Professional License as Administrative Principal in grades Pre K-12 and an 8-year Professional Standard Certificate in the Education of handicapped K-12, Developmentally Handicapped K-12, Severe Behavior Handicapped K-12, and Specific Learning Disabilities K-12. Further, she will have completed her Superintendent Certificate by summer of 2007.

As an elementary special education teacher Cindy utilized pull-out programs and inclusion. Records revealed Cindy’s correspondence detailing individual summary reports stating the services children received in the co-teaching model, how students were served, what accommodations were made, and how students performed with the model. Grade cards and transcripts disclosed her students performed satisfactorily in the program.

On a different note, Cindy’s oldest child had a disability in reading. In fact, it was uncertain if he would ever learn to read. He attended three different schools, graduated high school, and attended a local college for two years. By word and deed Cindy modeled successful strategies in the classroom, for her son, and on the job. It was apparent she did whatever it took to help all children be successful. Moreover, a handout from one of Cindy’s trainings stressed her position that student schedules should be built around individual needs of students with disabilities first, and not try to make students fit schedules. Lastly, a memorandum stressed her position that a continuum of services should be offered at every grade level in order to better serve students. Consequently, Cindy did not believe in one particular service delivery model.
Jan

Jan graduated from the district and taught at the middle and high school levels. Jan took a leave of absence to work at the neighboring state-supported university and complete a Master’s Degree. Upon completion, she returned to the district as a middle and high school teacher and later became an assistant principal at the middle and high schools. Although she was listed as working in both wings of the school, her main responsibilities were to deal with discipline at the middle school level and to supervise curriculum in grades 6-12. In previous years, both Cindy and Jan shared offices in the same suite, which was located near the center of the school complex. This approach had a distinct advantage in the fact that they were able to meet daily about curriculum issues. Presently, Jan was housed in the middle school office complex while Cindy was in an elementary school wing. Consequently, their paths did not cross as easily as before.

Jan had a permanent certificate in High School English and Reading K-12. Additionally, her principal’s certificate was for grades 7-12. Curriculum notes revealed Jan was the general education teacher in an earlier co-teaching program at the high school when one of the high school special education teachers was completing her Master’s Degree and used co-teaching as a research model. Jan transferred to the school’s 7th and 8th grade and taught English. At that time, the junior high reorganized itself by including block scheduling, dividing students into teams, adding daily common planning, and building strategies that would allow all students with disabilities to become included in the general education curriculum. Newspaper archives revealed a Venture Capital Grant was obtained to assist teachers in this reorganization and allow travel time and expenses
for out-on-state conferences and training. Eventually, Jan transferred to the upper grades and taught 10th grade English.

Presently, one of Jan’s duties was to oversee the middle and high school schedules. She reviewed IEP’s, assisted with training, and served as a facilitator to merge scheduling options. Jan had extensive experience with inclusion models at different age groups which allowed her to see the advantages and disadvantages of the programs. Further, her experiences helped determine how models could better align with schedules in order to include indicators and state standards. Most recently Jan helped produce the class projections for incoming 9th graders. This act assisted the merging of the middle and high school programs as before a middle school special education teacher recommended that all students with IEP’s be placed in a pull-out class for a core subject. Jan had children and nieces who attend this school district. Consequently, she had a personal investment to ensure that schedules and curriculum needs were both strong and appropriate for all students.

Kent

The High School Assistant Principal had also been a high school coach and a middle school mathematics teacher in the same district, an athletic director at a neighboring district, and a high school business teacher in another neighboring district. He held an 8-year Professional Certificate in Elementary, grades 1-8, a 4-Year Provisional Standard Certificate as an Elementary, Middle, and High School Principal, and a 5-Year Professional License as a High School Bookkeeping and Basic Business and Sales Teacher. Kent earned a Master’s Degree in Education and completed coursework beyond this degree. He had 13 years in the field. He did pursue other
Kent and his elder daughter both graduated from this district, whereas, his younger daughter is still in the high school. A third daughter has not entered school.

As an Assistant Principal, Kent’s responsibilities did not include scheduling. He dealt with the majority of discipline issues. Therefore, he was very aware of wanting students with disabilities to be placed in appropriate courses that met individual needs so that students were spending more time focused on learning. Kent’s teaching tenure at the middle school was before co-teaching became the predominate model. Consequently, Kent did not have co-teaching experience. Currently the students involved in the co-taught math classes did not have behavior concerns, so Kent did not have much negative contact with these students. However, some of the students did have attendance issues and Kent had addressed this. One of Kent’s duties was to evaluate teachers who have continuing contracts. Accordingly, Kent did not evaluate any of the four co-teachers as that was a responsibility of the head principal.

Len

Len, the head principal, had no ties to the school district when he arrived 15 years ago as a High School Dean of Students and Athletic Director. During this five-year period he decided to pursue his Doctorate at an out-of-state institution. Following completion of this educational degree, he became the principal at the junior high school, which housed grades 7 and 8. At that time a neighboring middle school began a reform movement to reorganize the schedule into block periods with a teaming approach. Using the neighboring school as a model, the district adapted the model to fit the needs of the students and teachers. Co-teaching was started as the model of choice with the three
special education teachers. Conferences and professional visits for this young staff were made available through a state grant.

Even though co-teaching was the focus of one of the building, one of the special education teachers continued to find alternative approaches to meet with all the students; however, this proved difficult since the number of special education students increased. A teaching fellow from the neighboring state-supported college was brought in to help with the numbers, which was a strategy that continued. Basically, the veteran special education teachers co-taught the academic subjects, and the teaching fellow and one of the other special education teachers arranged the pull-out program.

Len believed in co-teaching as he felt it was important that all students were exposed to the grade-level indicators and have grades that reflect how well they are performing. Further, Len showed Achievement Test scores that backed his claim that students were benefiting from this model. Len had 26 years of experience and permanent certificates as an elementary and high school principal.

Marie

The head school psychologist was new to the district. Actually, she transferred two years ago from the neighboring district that started the reform approach. One unique twist was that the neighboring school also used a block schedule at their high school and promoted more college education classes. Consequently, there was an increase of high school students with disabilities who transferred to the vocational school for their junior and senior years.

Marie had 19 years experience as a school psychologist. She had a Master’s Degree and a 5-Year Professional License in school psychology. Due to her history, she
was willing to add co-taught classes to the high school. She did not see scheduling options as one of her responsibilities.

Lisa

Lisa was the head psychologist until her retirement two years ago. She currently worked on a part-time basis, mostly handling reevaluations. Lisa held Bachelor’s and Master’s Degrees in speech pathology. Her doctorate was in psychology. Before her employment with the district 23 years ago, she served as a director of a speech clinic in a neighboring town. Lisa’s approach to management was different than her co-psychologist. She voiced her opinion that models and programs should be built to meet individual needs of all students with disabilities.

Rachel

Rachel was the guidance counselor at the middle school. After earning a degree in music, she decided to become a school counselor. Following a one-year internship in the district, she joined the middle school as the guidance counselor four years ago. Rachel had a total of 16 years of experience and held two Five-Year Professional Licenses. Rachel inherited block scheduling and co-teaching. However, due to adding 6th grade to the middle school two years ago, block scheduling was modified.

Some years Rachel had control over the schedule and in other years she did not. In fact, the Director of Curriculum and the Middle School Assistant Principal also assisted Rachel with this task. She used computerized scheduling systems as well as hand-scheduling approaches. The middle school philosophy stated the staff believed in co-teaching and that schedules were build around the implementation of this model.
Rachel voiced that all schedules should be built around the individual needs of each student.

*Stephanie*

Stephanie’s entire 26 years of experience had been in this district. She began her teaching career as an elementary school music teacher. Eight years ago she earned a Master’s Degree as a school counselor. Many of the students she served as high school students were her elementary music students. Stephanie was in charge of the schedule. As a result, she worked diligently to build a schedule that reflected the needs of every student from special education to advanced placement options. Interestingly, Stephanie actually built the schedule. Computerized versions were tried in the past, but Stephanie liked the hand-scheduling approach. Once schedules were written, she inputted all the data and worked with the district’s information system coordinator to build sections and generate the schedule.

Stephanie’s style was to work with each department, assessing the needs of the students and making appropriate projections. She followed best practices by including a continuum of course offerings and a balanced schedule within each department. Stephanie was a member of the district’s endowment fund and the staff development committee. She worked with the local state-supported university to have a graduate student as a counselor-in-training. Both worked to maintain a positive working relationship with faculty, staff, and administration.

Stephanie’s position was that any schedule should first meet the individual needs of the students. Further, Stephanie believed all students should learn to be their own
advocate as this was a necessary step in personal development. Stephanie answered to many bosses and was assertive about explaining her point of view.

*Sue*

This special educator with 29 years of experience began her education as a social worker. Midway through her undergraduate degree, she switched to special education. Specifically, her Five-Year Professional License was for Education of Handicapped-K-12; Developmental Handicapped-K-12; Severe Behavior Handicapped-K-12; and Specific Learning Disabilities-K-12. This professional began her teaching career at the same location where she completed her student teaching. Undergraduate training for her Bachelor of Science in Education was earned from two institutions. The first was a private college in a neighboring state and the second was from a state-supported university in the state where she taught.

Until three years ago, this professional only taught students with cognitive disabilities. Further, the structure of this program was basically a self-contained classroom with students also having homeroom with her. As freshmen, students with cognitive delays normally spent five of eight periods with this teacher. These classes included English, social studies, science, math, and occupational education. Additionally, locker placement was located directly at the classroom door for ease of use. As sophomores, students with cognitive delays usually spent up to four periods a day with the same teacher. Moreover, records indicated that female students basically followed the same schedule which included art or a work and family life class, while males typically followed the same schedule which included industrial technology or art. As juniors these students were strongly encouraged to attend the local vocational school.
The Highly Qualified requirement and a change of administration changed this structure. Since the teacher did not have Highly Qualified status in all areas, the teacher had to teach fewer subjects but teach more types of students. Consequently, the teacher taught English and math to students with learning disabilities and to students with cognitive delays. All students were placed in age-appropriate homerooms and the Occupational Education class was dropped, since the subject was addressed in the Work and Family Life Program. The teacher enrolled in the state training program to gain Highly Qualified status in all core subject areas hoping her former schedule would be returned. It was not.

The second year brought even more changes to the special education department due to a switch in special education faculty, the desire from administration to add co-teaching, and the increased number of students with IEP’s. When the principal asked for special education teachers to be co-teachers, Sue volunteered for inclusion in both co-teaching math classes; however, the principal wished to try one teacher at grade 9 and a different one at grade 10 to see how this might impact student performance. Therefore, Sue was assigned to the co-taught class for grade 9. In addition, her schedule changed to include English, math, social studies, and tutoring. Although she had more preparations than other special education teachers, she was given the fewest number of students.

Sue had the proper credentials to teach mathematics, but had limited experience teaching higher level math to higher functioning students. Further, she had articulated her desire to return to her schedule before the Highly Qualified movement. In Sue’s opinion, students with cognitive delays needed different types of math skills in order to be successful in the working world. Further, she felt that breaking up her self-contained
classroom was detrimental for students in their need to gain vocational skills that would propel them to the vocational school.

This professional was an officer in the teacher’s union and served as department chair of the special education committee. Also, she served as the department’s representative at the building level.

Vivian

The second special education teacher had 22 years of experience in two different school districts in the same area of the state. Her 8-year Professional Standard Certificate was for Education of Handicapped-K-12; Developmental Handicapped-K-12; Severe Behavior Handicapped-K-12; and Specific Learning Disabilities-K-12. Her Bachelor’s of Science in Education was earned at the local state-supported university. This professional earned Highly Qualified status in mathematics and social studies.

Vivian arrived at this school district five years ago following a successful tenure at a larger school district in a neighboring county. The switch was made to be closer to the family business. Vivian’s teaching experience had been at the secondary level. Although she was hired primarily as a teacher of students with learning disabilities, she had experience teaching students with all types of disabilities. Further, Vivian decided to join the teaching field in order to gain more education which would help with her developmentally delayed older daughter. In addition, she served on local boards of mental retardation to bring services to all children and their families.

Within two years, Vivian’s job description changed to include the department’s cross-categorical programming approach. Vivian taught grades 9, 10, 11, and 12, and taught students with cognitive delays, specific learning disabilities, multiple
handicapping conditions, and other health impairments. Vivian gladly accepted any teaching assignment. Further, she completed additional training from the state to gain Highly Qualified status. Vivian did not care what she taught or whom she taught. She accepted student teachers and other pre-service teachers.

Wesley

The math teacher had 15 years of experience and a Bachelor of Science Degree in Education. His 5-Year Professional License was in High School 7-12: Mathematics and Data Systems. Wesley began his teaching career as a substitute teacher. He knew the school district where he wished to be employed, so he waited patiently for an opening to occur. It did. He had been at the school district for seven years. At the beginning of his career he taught mostly the lower level classes. However, due to new faculty positions, he currently taught some classes of higher level math.

Wesley was told by the principal that he would be teaching a co-math class. Consequently, he spoke to colleagues to determine how this model was used at the middle school. Armed with that information, he felt he had a starting point. Wesley continued his studies through coursework and workshops. He remained on top of teaching requirements for renewal of his license. Towards that end, he religiously completed extra training throughout the school year. Wesley did not feel he had enough experience to mentor a pre-service teacher. He did have a supplemental contract as a parking lot supervisor.

Amy

The youngest teacher had 5 years of teaching experience; however, this was her first year at the district. Her Bachelor’s of Science in Education was for Adolescent to
Young Adults, grades 7-12, for Integrated Mathematics. She had a 5-Year Professional License. Amy began her career in the district as a substitute teacher. She and her boyfriend moved to this state due to her boyfriend’s employment at the local state-supported university. Through sport and with substituting, Amy quickly became immersed in the school district. She began coaching in the district before she obtained a teaching position. Consequently, her transition as a teacher into this district was an easier one since she had already established connections. Amy continued to coach and be an active member of the staff.

Amy had limited experience in co-teaching when she was employed in another district. She knew who her co-teacher at this district would be, but there was no opportunity for planning or conferencing. Amy primarily taught the lower levels of math mostly because she was new to the district. She accepted co-teaching, but had very limited experience in the area.

**Barb**

Barb served the district in a variety of roles. She began her career 16 years ago at the Elementary School as a pre-school aide. Later she transferred to the High School and became a lunchroom cashier and an unofficial tutor for struggling students. Due to her friendship with the family of a brain-injured sophomore, Barb provided tutoring assistance with the student upon his return to high school. Four years ago the possibility of accepting the transfer of a student with autism, Nick, from the multi-handicapped program of a neighboring district to the district’s junior high was discussed. The child’s parents were willing if a suitable aide could be found. Barb had a longstanding history with the student as his grandparents lived in the same neighborhood. The family
approached Barb to be the student’s daily tutor. She agreed and held this position for four years.

Nick made positive adjustments each year. Consequently, he thrived to be more independent in several classes. For that reason, Nick’s family and Barb agreed to watch Nick from afar and move in if he was in jeopardy. Nick continued to thrive; therefore, Barb helped other students in different classes.

Barb had two sons, the older son had a learning disability and the younger son succeeded academically without difficulty. The older son was killed in an automobile accident at the end of his junior year. Following a difficult period Barb returned to school and was praised by both students and colleagues for her courage and grace under pressure. Accordingly, struggling students sought Barb’s assistance as she was seen as someone who was a survivor. Further, colleagues praised her hunger to learn new skills and tackle difficult assignments.

*Analysis of Record Review for Staff*

All professionals involved in co-teaching were properly licensed and had appropriate certificates and credentials for their positions (see Table L). In fact, 62% of the employees had Master’s Degrees or beyond and held several teaching licenses. With the exception of the newly hired 9th grade general math teacher, the remainder of the staff had extensive experience. The average was slightly over 19 years. Moreover, the full-time school psychologist and the 9th grade general math teacher had less than two years of experience within this district; however, the psychologist had long-term experience in the field in a neighboring school district whose demographics were similar to the current school. Most of the professionals had experience at another school district and a few had
teaching experience at the post-secondary level. Three employees remained at one school district for their entire career.

Eight of the employees (62%) had experience with co-teaching and all had practice with various forms of inclusion. Two of the administrators (15%) used co-teaching when they were in the classroom. In fact, one of the administrators began her career as a special educator and used co-teaching for several years at the elementary level. Also, two employees were familiar with co-teaching at the middle school and at the high school level. Moreover, two of the employees had children with special needs and seven of the employees (54%) lived in the district. In fact, five of the employees (38%) had children who attend this school. Further, these employees were involved with various clubs, organizations, athletic events, teaching groups, and community service projects which were based at the school. Consequently, these staff members were personally connected to the district.

*Interviews*

There were three sets of interviews for this project. The first was with the professionals involved in co-teaching. This included the two special education teachers and general education teachers involved in the co-teaching math classes, two guidance counselors for the middle and high schools, one school psychologist for the district, two assistant principals and the head principal, the special education aide serving in the math 10 co-taught class, and the district curriculum director. Twelve students with disabilities in the co-teaching math classes were interviewed. This included six freshmen and six sophomores. Completing the interview process were eight parents of the students in the co-teaching classes. Four were parents of freshmen and four were parents of sophomores.
Questions were arranged separately for students, parents, administrators, and staff. There were 11 questions for educators (Appendix A), 10 for administrators (Appendix H), 11, 15 for students (Appendix J), and 11 for parents (Appendix K).

Face-to-face interviews were held in the district over a two-month period with employees and students. Parents were interviewed through telephone calls, correspondence, and face-to-face meetings held at the school. Summaries of the initial interviews were typed and follow-up meetings were held. At that time, findings were shared and the researcher asked for clarification. Employees and students were interviewed during previously arranged meeting times. Usually these were at the beginning or the end of the school day. Students were interviewed during tutoring periods, study halls, or free periods. The typical interview lasted about 20 minutes; however, a few were 45 minutes. Notes of appreciation were mailed to all parents and similar notes were hand-delivered to staff and students. At the conclusion of the interview process, lunch was arranged at school for participants.

*Interviews with Administrators, Supervisors, and Counselors*

*Len.* In general, Len felt the purpose of the co-teaching model was two-fold. The first was to expose all students to the grade-level indicators and the second was to help remove the stigma of “special” from the students and teachers. He felt that having two teachers in a classroom presenting material in different ways would increase learning for all. No formal evaluations took place, but district-wide scores were used to gauge progress.

Len was the principal of both buildings and began the co-teaching model at the middle school. Consequently, he had background knowledge at that level, and a vision
for the high school. Len indicated there was not one particular model that was used at the middle school. His hope was that the staff would organize a workable plan to meet the needs of all students. Len appreciated seeing both teachers collaborating and teaching to share duties and responsibilities so both were seen as equal teachers. Len added, “Ultimately both teachers are responsible for all students, but the special education staff is responsible for tracking students with disabilities and the general education teachers are responsible for tracking the remaining students.” Len appreciated having the special educators interject into the main lesson by implementing different strategies and using a variety of tools to reach all students, not just those with an IEP. Len said, “After all, everyone learns in a different way, so it is good to have different strategies to follow.”

According to Len, the purpose of the middle school model was to remove the stigma from students with disabilities and to give all students exposure to the general education curriculum. Len said, “I believe in removing the label from both special education students and teachers. Having a second teacher in the classroom can assist all students, especially those students who are not identified as special education, but struggle academically nonetheless.” Further, Len stated that the program was evaluated by test scores, teacher input, and by research, especially of the district-wide testing scores. Len added, “The administration has access to the district test scores. Obviously, we analyze that.” Len was pleased with the results of the evaluation. He stated, “Overall, the scores on the state tests are up. But we still see areas for improvement. Our snapshot shows academic gaps, so we work to bridge that gap.”

Len served as the high school principal, too. He said, “We are not at the model stage at the high school just yet. We are trying to arrange the schedule so that all students
are exposed to the state indicators, and I believe we are moving in the right direction. For example, for next year the higher functioning students with disabilities who were in pull-out classes this year are going to be in a less restrictive environment next year. These students will be in the general education classes with a paraprofessional present to assist these students, and others who struggle. We feel this is good for the 10th graders especially as this group will be taking the Graduation Test next spring.”

Finally, Len added, “This worked better when we were two grades at the middle school. Once all the buildings came together, the 6th grade was added to the mix and we had to move from block scheduling so that the entire complex would follow an 8-period day.” Len continued, “Common planning was beneficial for our model, as it allowed daily planning and collaboration for all staff. We can still do this, but it is harder since we do not have as much time.” Len concluded by stating that it was too early to speak about the high school model because that building was in the beginning stage of design. Lastly, Len emphasized the need for all students to be exposed to the general education curriculum.

**Kent.** Overall, Kent felt that philosophical differences should be put aside in terms of offering co-teaching. He did not believe that any formal evaluation had taken place or that any training for teachers was offered. Kent’s position was that all educators needed to help all students find a way to achieve and learn to live in the real world. Moreover, he felt workable plans for all children need to be put in place.

As the assistant principal of the high school, he felt that any teaching model should reflect best practices and that educators should prepare students for life in the real
world. Although there were philosophical differences with each educator, Kent believed
the important task was to meet the individual needs of each child.

Kent added there had not been a formal evaluation of the co-teaching model at the
high school, but that individual teachers were evaluated throughout the school year.
Therefore, he did not know who evaluated the model, but he thought the head principal
might be the one who would do this. To his knowledge there was not any formal training
for any of the teachers involved in co-teaching, nor was there a formal evaluation of any
type. Kent added, “I believe we might have placed teachers in uncomfortable situations
on both sides. Training would have been helpful.” In reference to the purpose, Kent said,
“We need to help students find the best fit in the real world. Now is the time to help
students learn to be independent workers so they will be successful in life. I am uncertain
if there is one particular model to do this. However, in my opinion, philosophical
differences need to be put aside, and workable plans for each child need to be put in
place.”

Cindy. Cindy, the district curriculum director, felt that the middle and high school
special education programs were organized differently and she was unaware if the staff
might know what the purpose of co-teaching could be. In her opinion, co-teaching could
work but the program demanded planning, organization, training, evaluation, and
common meeting times. Cindy felt co-teaching might be easier to implement at the earlier
grade levels due to the fewer number of teachers a child saw daily. Cindy believed the
purpose of co-teaching was to expose all students to the general education curriculum.
However, in Cindy’s case, she believed special education should be at the core of co-
teaching so that individual needs of students with disabilities were regularly addressed and evaluated.

Cindy stated there were differences between the middle and high school special education departments in regard to organization. The co-teaching model used at the middle school focused on the majority of students being placed in the general education setting, with a few struggling students receiving a modified curriculum with a special education teacher in a separate setting. In the general education class the special education teacher focused on the needs of the students with disabilities and helped a few other students at risk if those students were grouped with the students with disabilities. Cindy felt the special education teachers retaught lessons to students who were in need. However, she did not feel this was done very often.

Cindy also reported that the middle school program addressed the academic needs of students in the areas of English and mathematics while a paraprofessional split time in the science and social studies general education classes, since a special education teacher was not present. Cindy was uncertain how much co-teaching was done at the 6th grade level of the middle school, but reported that co-teaching was happening in the 7th and 8th grades. For example, in the 8th grade co-taught math class the special education teacher offered instruction and presented material to the whole group in a different way during guided practice exercises.

Cindy was uncertain if there was co-teaching at the high school. She did know that one special education teacher was in a co-taught setting, but that the teacher was mostly in an observation mode as this was the first year for the program. Cindy felt the special education teacher assisted during guided practice exercise, but was uncertain how
often this was taking place. Cindy summarized that the high school and middle school programs were different.

Concerning the purpose of the middle school co-teaching model, Cindy reported, “My guess is that they are hoping that students with disabilities will receive the best of both worlds. Also, I imagine they are hopeful this model makes certain there are no holes in the curriculum and that the students are learning how to work cooperatively with all types of students. When students are out in the real world, there are no exclusions. Therefore, it is good for students to learn to get along with a variety of personalities now.”

Cindy pondered a bit about the purpose of the middle school program. She said, “You know, you asked me about the purpose. I wonder if the staff knows the purpose. If people feel that grades will improve with co-teaching, they are wrong. Students must learn strategies in order for skill levels to increase. I believe that students with disabilities should experience the core curriculum, but should have extra services to build skills. Say, for example if a student with disabilities had 45 minutes of a co-taught class, then I believe that student should have an additional 45 minutes of tutoring. This will level the playing field.”

Since Cindy had co-teaching experience when she taught at the 4th grade level, she shared the need for adequate planning time. Cindy said, “What really helped us was that we had one year of careful planning before we even attempted co-teaching. Our staff met every month. Sometimes the general education teachers came, too. During our first year, the general education teacher observed differentiated instruction. As the year wore on, these strategies became second nature to the general education teacher. She started
using these tools which allowed me time to work individually with students who needed assistance. I am here to tell you it can work, but it takes a lot of work and a lot of preparation. There is so much that can be done. Plus, you have to know your purpose. If you do not know your purpose, you do not know what you are trying to achieve. Therefore, you will never get there. Purpose has to be first.”

When asked about scheduling conflicts at different grade levels, Cindy felt that co-teaching might be easier at lower grade levels because of having fewer teachers to work with. She said, “My students worked with two teachers. At the high school level students are with five or six teachers. I believe co-teaching might work better if a subject was selected, such as math or English so that these strategies could be applied to social studies and science. It would be perfect to have one period of co-teaching a day, with another period of tutoring offered for pre-teaching. This would be pro-active, rather than re-active. However, schools can not financially afford to do this. Plus, there is not space to do this either.”

Cindy reported she did not know how the middle school co-teaching program was evaluated, who evaluated it or what the results of an evaluation were. However, she added, “It might be evaluated by gut feeling. Or, since it has been done this way in the past, it is just decided we are going to continue to do it this way.” Cindy also added that two years ago pull-out classes were introduced in the schedule because some students did not survive in the general education setting. At that time, tutoring was offered. However, tutoring has since been dropped because of scheduling conflicts. Cindy offered, “The middle school does do a good job of looking at their needs and trying to schedule to meet those needs. However, I do not feel the special education model is evaluated.” Cindy
stated the middle school completed a survey a year ago about special education services with the result being that the co-teachers had mostly positive comments about the co-teaching arrangements; however, the other core subject teachers who did not have support services had negative comments concerning special education services. Finally, the special education teachers involved in co-teaching stated that there was not enough time to provide services in both the co-teaching setting and in the other core subjects.

Concerning the evaluation of the high school co-teaching classes, Cindy did not know the purpose of the model, how it was evaluated, who evaluated the program, or if there were results. Cindy added, “One thing that might work is if the pull-out classes could join the general education classes from time to time, especially in the science area. It would be great to see those lab experiences. Also, perhaps when a new unit is being introduced, the two groups could be involved and then return to their same settings to teach. This might work better at a 9th grade level since it is a transition period for everyone.”

Cindy finished by saying that educators needed to find a way to make all students feel as though they belong at every level. Plus, Cindy added, “This is the responsibility of all teachers to make students feel they belong. Students should not be identified as only special education or only general education. All students belong and we should make that happen. Also, we need to remind teachers that students with disabilities are general education students first. We need to remember that fact.”

Jan. In particular, Jan felt the purpose of co-teaching was to expose all students to the curriculum and to meet grade-level indicators. Further, Jan felt this was difficult to do because neither co-taught or pull-out met the needs of all students with disabilities. In her
opinion, trying to offer both programs was very hard to execute. Jan believed the district would benefit by following a consistent plan for the offering of services from Pre-K-12.

According to this middle school assistant principal, the middle school co-teaching model was more established than the high school model since the high school was in the beginning stages of design. Also, the middle school special education staff devoted more time to the areas of math and language arts as these were the two areas assessed by the state. As a result, support services for other core classes were limited, which resulted in the general education teachers having to make modifications. Finally, Jan added that everyone seemed to have an opinion about co-teaching; however, formal evaluations and various sources of data were not available to back any claim.

Jan said, “At the 7th and 8th grades the intervention specialists go into the math and reading classes for largely 90 minute blocks of time. The plan is for the intervention specialists to pull-out the students who are struggling during the last 45 minutes of the class in order to modify assignments or to re-teach content.” Jan added that the intervention specialist could adjust the time to fit the demand. Consequently, if a special education teacher felt that more time was needed, the entire 90-minute block could be used in a pull-out format. Interestingly, the 6th grade has a 90-minute block of math, but only a 45-minute block for English. As a result, the 6th grade followed a slightly different format than their counterparts.

Jan added, “The purpose of the program is for all students to be exposed to the same curriculum in order to meet the grade-level indicators.” For this reason, students with disabilities were included in science and social studies; although, the students
received little support. Accordingly, the general education teachers modified the overall grades and then modified assignments.

Everyone in the complex seemed to have an opinion concerning co-teaching. Jan said, “I do not believe there is a process for a formal evaluation, but state department testing data is analyzed. The majority of the students with disabilities fare well on the test. However, I believe we need to be careful when using only one source of data because it may not be all that reliable.”

Concerning the high school, Jan stated, “We are just in the beginning stage so we do not have much data. My understanding of the high school is that there is pull-out in all core classes and that some co-teaching is starting. In my opinion, it is hard to try to do both pull-out and co-taught at the same time because one or the other will suffer. In fact, co-teaching is only going to help the special education staff if more students are placed in general education settings. If they are not, then the staff gets spread too thin and it is tough to schedule. Right now I am trying to find a way to work more support for science and social studies. We need it. It is tough to do.” Jan confirmed that the purpose of the high school model was the same as the middle school. That is, to expose students to the same curriculum as everyone else. Overall, Jan added, “It would be helpful and nice if our district followed the same plan. Right now it is inconsistent. I believe a consistent plan would work best for meeting the needs of the students.”

Lisa. The school psychologist recommended that the district establish a comprehensive service-delivery system so that students would have a more ordered, sequential, and logical pattern to follow and not be pulled one way and then another. Lisa praised all staff members for their support of children and trying to do what was best.
However, Lisa felt that whatever program was used must provide support and help
students build individual skills by using successful, specific intervention. Students must
exit with skills they can use today and tomorrow.

When asked to express an impression about various models, the school
psychologist responded, “There are differences between the middle and high school
programs. I believe the middle school offers more support in the classroom setting by
helping students with IEP’s, as well as other students identified by the general education
teacher as struggling. The middle school seems to focus on the general curriculum and
then incorporates special education within the curriculum. Decisions are made on a daily
basis according to need. The high school program incorporates direct instruction and
support according to individual needs of the student. High school instruction is more
specific to the individual education needs identified by the IEP.”

“Regardless of the differences, however, both levels have a similar purpose which
is to allow students to utilize and expand skills in the general curriculum so the student
can be more competent with the general education curriculum.” Lisa also added that she
was not aware of program evaluation, procedures, and results.

Lisa’s impression of how student progress was measured was similar for the
middle and high schools. At the middle school level Lisa felt the measure was the content
of the class; whereas, at the high school level it was how the IEP goals met the content of
the class. Therefore, although both rely on content, Lisa’s impression was that the middle
school measure was with specific content and the high school measure was how the IEP
goals met the content of the class.
Lisa did not feel that attendance was impacted by co-teaching, but she did feel that on-task behavior might be impacted. Her hope was that students would be on-task more often because of having more resources available in the classroom. When asked about how confidence and self-esteem could be impacted, Lisa summarized her response with one word, “Competence.” She added, “Once a student gains a personal confidence the student is able to complete a task independently and successfully manage it the next day, then competence is built. That equals confidence. The goal is to help students learn to be a self-advocate. Learning that skill, would positively impact confidence and self-image.”

When asked about the differences in the two programs, Lisa stated, “I believe it would be ideal if our district was consistent with programming from Pre-K through 12th grade so students would not need to change to meet the demands of a different structure. The district could have constant evaluation to determine what is measured and the data to support the findings. At the end of the year, and with everyone in agreement, recommendations could be made as a group. I believe this would be a help to students. Also, students with cognitive delays often need pull-out programs so that modifications and strategies can be provided for their success. I would be surprised if students with cognitive delays could pass general classes without support.”

Lisa was asked if she had further comments she wished to add. She said, “I feel every teacher has the best interest of the students at heart. Co-teaching is full of pressure because there are a wide variety of needs. It is hard. It can be stressful. When more support is needed, then there is less opportunity to provide specific skills for students. Therefore, it can be easy to dilute the role of a special educator because of the students. I
believe the middle school is able to give more of the same type of instruction; whereas, the high school is able to offer different solutions and offer different approaches.”

“Co-taught programs sell well,” Lisa added further. “Parents are pleased to hear that their children are able to succeed academically in the general education setting. In a co-taught program the emphasis appears to be on the content and what the general education teacher has assigned for the class. I have noticed that the high school special education staff meet as a group and everyone has something to say about each child. It is focused, precise, and prescriptive discussion to determine the problem and what accommodations and modifications can be done for a successful, specific intervention. This may take place at the middle school but I do not hear about it as much.

“We have to be careful in instruction to see the difference between providing support and building skills. A good question might be to ask what skills students are leaving with. In all fairness, everyone works very hard running in all directions trying to keep students up with the curriculum. Co-teaching demands precise instruction for students to build skills they can use today and tomorrow. We should be able to know what skills each student has and how these are measured. Co-teaching can do this, but it is very hard.

Rachel. Overall, this guidance counselor believed the individual needs of students should be met. Consequently, Rachel felt that student need drives a program and that a program should be designed to fit those needs. Rachel was unaware of a model, whether it was evaluated, or who evaluated the program. In addition, Rachel was in favor of having a district-wide plan for how services were offered to students. Finally, Rachel
believed progress in a co-teaching class was measured by grades earned in academic subjects.

Rachel was first asked a series of questions concerning the co-teaching model at the high school. She responded “No” to the first 10 questions which asked about the model type, purpose, evaluation, results, and impact on students. Rachel stated, “I know that the middle school model of teaching students with disabilities in co-teaching settings is different than the high school and different than the elementary. I believe it would be best if there was a district plan and that everyone follows a consistent plan because co-teaching can be successful; however, it is very hard work.” Rachel offered, “A friend of mine who is a veteran teacher in another district was in a resource room and now did co-teaching. She moved with fear. My friend said she is working harder than she has ever worked before. From her stories, I believe there should be places for all our students—those who do excel and do not wish to be set apart. However, there are other students who do not excel in this setting. We need to be aware of them, too. From all I have heard I believe that it takes a lot of communication and collaboration for this setting to be successful so that it is truly equal and truly even for each student and each teacher. The setting must be consistent. We need to place students in settings where individual needs are being met so all students can be successful. In my opinion, co-teaching is both teachers fully collaborating, communicating, and taking equal roles. There should not be one sitting and one teaching.”

When asked about the middle school model, Rachel smiled and laughed, and then said, “There’s a real-life model?” After giggling, she said she did not know about a model but was told that students with learning disabilities were placed in co-teaching
settings because the general education classroom was the least restrictive environment. Rachel stated she did not know how the program was evaluated, but she assumed the administration evaluated the program; however, if there were results of the evaluation, these were not shared.

When asked how student progress was measured, Rachel stated she thought the answer was by academics, but that she did not know. Further, she did not feel that the attendance patterns of students with disabilities changed because of co-teaching, but that she would need to look. She added, “I do not sense there is a difference.” Moreover, Rachel did not see a change in behavior of students with disabilities; however, she did have one case of a student’s self-esteem dropping because of placement in a co-teaching class.

This student was earning high grades in a pull-out language arts class in a different school district. In fact, the student was in all pull-out core classes in the other district. When she moved she was placed in the co-teaching math class where she began receiving failing grades. The student’s mother telephoned with a concern for her daughter’s academics and was told that the daughter was “making progress in the setting”. The mother did not equate failing with “making progress at the grade level” and was concerned that her daughter was paying a big price for being included in a class where she was not succeeding.

*Stephanie.* Another guidance counselor felt the purpose of co-teaching model was to support staff members to gain skills to teach a wider range of students. She expressed her frustration in the increase of students who lack accountable, self-advocacy, or personal pride. As a counselor, Stephanie heard the frustration expressed by students,
many of whom were placed in co-teaching classes. Finally, Stephanie felt there was a place for pull-out.

Stephanie did not feel that the co-teaching model was at all clear. In her opinion, the purpose of the model was to support staff members to gain necessary skills to teach a wider range of students. Stephanie said, “Some teachers teach to the higher end of the scale and do not have a wide range of tools to help the struggling students without disabilities, who are sometimes known as the bubble students.” As far as program evaluation goes, Stephanie said, “I have no idea how the program is evaluated, who evaluates it, or if there are program results.”

When asked about progress, Stephanie added, “I don’t know how students measure their progress, but I can tell you that students report to me that they do not like co-teaching. About six students have come to see me throughout the school year to tell me they do not like being in that environment and that they do not feel safe. In fact, students tell me that they feel their weaknesses are exposed.” Stephanie added she did not believe attendance was impacted by co-teaching, nor did she feel behavior changed. Although, Stephanie reported, “My instincts tell me that students would be better behaved in a smaller group, but I really could not say if that is true or not. Further, I believe that both groups would benefit if the students were allowed to be in pull-out classes. In my opinion, large numbers do not necessarily bring about good results. At least that has not been our history.”

Stephanie reported she has not seen a change in confidence or self-image. However, it was reported to her that some of the students with disabilities have put their heads down on the table and have to be prompted by the teachers to act in a different
manner. Stephanie stated, “In my opinion that is not good behavior to model.” Stephanie added, “I believe there is a fine line with the least restrictive environment. When I am told by district leaders that parents do not want their children in pull-out classes, I counter and ask them if they have explained the difference between mastery and exposure. Yes, in my opinion, students would gain more exposure in a least restrictive environment. On the other hand, I question what the students with disabilities are actually retaining. In other words, what price is being paid for exposure? I believe students would be better served in smaller classes with intense skill-building activities. I imagine parents would want that, too.”

“Parents need to ask themselves what they want for their child. Do they want what everyone is doing? Or, do parents want their children to learn to develop self-advocacy skills such as self-discipline, self-control, and self-motivation? Which is more important? An experience or mastery? There are other ways to get an experience. For example, an experience can be gained in an elective class. In my opinion, it would be better for students to learn mastery of skills in core subject areas in the most appropriate placement for the individual child. This is not a one-size fits all model. It is really hard for me to get my head around the philosophy of compromising skill mastery for an experience at any age level. I do not think parents are being told the difference in what the programs offer. Students need to learn how to function independently. If they are unable to perform independent tasks, then they need to learn how to do this. Pull-out can do that. We need to validate people for what they celebrate. Why are we trying to make everyone the same? Why is pull-out seen as a bad thing?”
When asked about the differences between the two programs, Stephanie responded, “Things collide. Students enter the 9th grade without having to own up. They have learned behaviors and habits to avoid working. Further, they are not prepared to own their own learning. Students do not seem to arrive with personal responsibility. They do not seem to arrive on time to class, bring necessary materials, or have the ability to concentrate. I have seen a lack of personal responsibility and lack of being prepared. We are hurting our children in the process by allowing this to happen. If the goal of co-teaching is to gain exposure, then we are meeting that goal. However, if the goal is to learn self-advocacy, retain knowledge, and develop personal skills, then co-teaching is not meeting that goal. Children are individuals. We should treat them like that.”

*Analysis of Interviews with Administrators, Supervisors, and Counselors.*

Administrators and supervisors feel the pressure from state-department directives and district board members for all students to meet competency and proficiency standards. Consequently, these professionals assessed available staff, students, and resource to determine the most viable option. Since decisions must be made that are educationally sound for all, administrators and supervisors had tough choices to make.

In this particular instance, the principal decided to start small. He showed his respect for the performance of the high school special education staff by only changing two of 16 pull-out classes. Additionally, he decided to focus on one department only. Next, he asked for volunteers and did not handpick teachers for assignments. In all fairness, he felt he was lightening the load of the high school special education staff. Moreover, since this was a veteran staff with teachers who had co-teaching experience, it was a logical assumption that the staff had ideas and plans.
Administrators and supervisors were privy to conversations with parents, staff performance evaluations, and weekly lesson plans submitted by each teacher. Therefore, these professionals had data that teachers did not have. In other words, administrators and supervisors have documents supporting the amount of exposure students are given in terms of grade-level indicators. Since administrators and supervisors were hired to make crucial decisions for all students, then the principal had the authority to add co-teaching and track student performance.

All involved knew a purpose to co-teaching; however, few agreed on a consistent purpose. Seventy-five percent of the administrators felt the purpose was for all students to be exposed to grade-level indicators, while supervisors and counselors listed different purposes such as supporting staff members, having students fit into the least restrictive environment, and expanding student skills to be more competent with the general education curriculum. Fifty-seven percent of those interviewed did not know how the program was evaluated, but two administrators felt the scores on the state’s Achievement Test served as the evaluation. All agreed there was not a formal evaluation. Fifty-seven percent did not know who evaluated the program, but two (29%) thought the administration evaluated the program with 14% believing the head principal was in charge of evaluation. Eighty-eight percent were unaware of any evaluation results, with 14% stating the state’s Achievement Tests were improving, 14% believing students were failing, 14% reporting that students did not like co-teaching, and 14% listing that general education science and social studies teachers at the middle school did not like co-teaching because students with IEP’s were provided services.
Nearly half of those surveyed (43%) stressed the importance of establishing a district Pre-K through 12th grade service delivery system so there would be a consistent plan. Both counselors and the school psychologists (43%) recommended that individual needs of each student be met, while one administrator (14%) urged the district to provide training. The head principal (14%) suggested the need to keep trying to make this program work. One employee (14%) stated the program sold well to parents and one employee (14%) stated that co-teaching benefitted some, not all, students. Three employees (43%) stressed the need to assist students to learn mastery and improve individual skill level which would result in competence. This could be done; however, it required communication, collaboration, precise instruction, and hard work. None of those interviewed felt that co-teaching impacted discipline, friendships, or extracurricular activities.

*Interviews with Educators*

*Vivian.* This special education teacher felt unprepared for her co-teaching assignment this year. In her opinion, this was unfair for all involved, especially the general education teachers. All grades were modified for students with disabilities so that students would receive passing grades. Vivian believed it would be helpful to better align the middle and high school special education programs so that individual needs of students were met.

The high school special education teacher who served as the co-teacher for the math 10 responded that she did not know what co-teaching model was used in the high school, what the purpose of model could be, how the program was evaluated, who evaluated the program, or what the results of the evaluation could be. In fact, five quick
“No’s” were given to the first five questions. When asked what she might like to add about co-teaching, Vivian responded, “I need answers to how things are supposed to be. I need all five of those questions answered. Everyone involved with co-teaching at the high school this year was uninformed. It was not fair, especially to the general education teachers.”

Vivian stated the acceptable measure of student progress of students with disabilities was based on the general education teacher’s grade. However, Vivian was quick to point out that, “The grades are modified. We work together to modify the grades so students will receive passing grades. The general education teacher is concerned about whether students are learning.” Vivian did not notice any change in attendance or behavior with student placement in the co-taught class. When asked about a change in confidence or self-esteem, Vivian stated, “Two of the eight students feel good about their work. They are hard workers and have a good work ethic.” Vivian quickly added, “Of course, the grades have been modified so all are passing; however, those two students are very hard workers and should be proud of their effort.”

The difference between the middle and high school programs did impact students according to Vivian. “The transition into the high school is difficult. Having two separate programs makes it even harder for incoming 9th graders. I feel there should not be hard and fast rules about who is placed in a particular program. I think it would be best if individual student needs and testing results are looked at. These could be used as a good indication to predict student success. We do not separate students according to label. In fact, I believe cross categorization works for us. I think it would work fine for other grade levels, too.”
Barb. This high school aide believed thorough planning and preparation should be put into action before implementing co-teaching. Since a purpose or model was not designated at the beginning, Barb felt the department did not do a good job of student selection for the new class. Consequently, students were frustrated and bad habits were learned. As a mother of a student with a disability, Barb felt that the individual needs of students should be addressed and a schedule should be built around the students, not the students built around the schedule.

“I am the mother of two sons—one who was on an IEP and another who breezed through school. Plus, I have worked at both the middle and high schools. I have seen what works and what has not worked,” said the special education aide.” Right now I do not know what co-teaching model we were supposed to use, I do not know the purpose, how it was evaluated, who evaluated the program, or what the results were,” she added. “But, I do know how a mother of a struggling child feels.”

Barb added, “A parent wants to hear that their child can be in the general education setting and succeed. But, I am here to tell you that a mother wants to know that her child is going to learn the necessary skill levels to be successful in all parts of life. I pulled my son out of general education classes so he could work in a smaller setting on skills specific to his disability. Letting him stay in the general education classes would have put him in with the wrong mix of students. Pull-out helped him develop personal leadership skills, self-confidence, and people skills. In co-teaching settings he would have developed his sense of humor skills and being the class clown, especially at a younger age. I believe it would be wise for parents to actually observe what is really going on in a pull-out class and a co-taught class just so they could see what is really happening and
then see what approach is needed for their child. Parents want environments that are well-defined and with a specific purpose. Personally, I do not want something that is good in theory. I want proof that my child will gain precise skills to compensate for the disability.”

When asked about other concerns, Barb mentioned the use of stigmatizing labels. She said, “I wonder what it is like in a large school? Here everyone knows everything about everyone. For instance, everyone knows who has special education classes. Special education at our school is not viewed as a dumping ground. I believe that co-taught classes might show teachers and students different types of strategies. But, the co-taught class we have right now is hard. There is too wide of a gap with students. I am not talking just about ability levels. There are students without disabilities in our co-taught class who are apathetic and do not want to work. In my opinion, it is not good for students with IEP’s to have these apathetic students around as some of our students will try to emulate them. After all, students with IEP’s may think this is acceptable behavior in general education classes. Everyone needs to know that a disability is not going to go away and that students with disabilities need to learn individual skills to cope. I believe people need to look at the least restrictive environment differently. Place students in classes where they need to be to learn necessary skills for all areas of life.”

Barb mentioned she had seen a difference in behavior, confidence, and self-image with students with disabilities in the co-taught class. For instance, Barb reported that students with IEP’s mimic the disruptive mannerisms and actions of two boys without IEP’s who were doing very well in class. Barb observed the students with IEP’s try to copy these mannerisms as a means of showing off. She said, “It is humiliating. The
disruptive boys clown around, but still understand the material. Therefore, they earn good
grades. The students with IEP’s try to clown around but know that they do not get the
material, get low grades, and then get frustrated.” Barb added she had seen a drop in on-
task behavior and an increase in frustration. She says, “Students hit frustration at about
mid-point in the year. And, after the state Graduation Test, they have simply shut down.
Now, even the students are questioning why they are even in this setting.”

Barb believed that progress was measured by test scores; however, she really was
not clear about that. A factor she noticed was what happens to students with disabilities
following the test. Since scores were modified to ensure that students passed, it was
assumed that the class would go on to the next lesson; however, the students with
disabilities did not know the material and there was no time for any re-teaching. Overall,
Barb felt there was a problem with the placement. Some students with IEP’s were
removed at the beginning of the year because they did not have the background
knowledge and could not keep up the pace. It was decided to move them into a pull-out
program to further develop skills. Barb added, “I believe we did not do a good job with
placement of students. There are some students in the general education class who should
be in pull-out, some in pull-out who might be able to manage in co-taught, and some in
co-taught who should be back in pull-out. This is probably due to the fact that we did not
know the purpose of the program at the very beginning. It would have helped to know
what was expected of us at the beginning because staff is frustrated, too. Also, some of
the special education students know they are holding back the pace of the class and that
adds more frustration.”
According to Barb, the middle school co-teaching model was more defined with roles split 50-50. She felt the purpose of the middle was to integrate the classrooms and to use the special education teachers as support staff for teachers and students, including those students who did not have IEP’s, but needed support. She did not know how the program was evaluated, who evaluated the program or what the results were. However, Barb felt that all testing results were used to measure student progress of all students. This included the state Achievement Tests and grades earned on tests in the classroom. Barb wondered, “If the high school co-taught classes are going to use similar measures, I wonder what the results will be this year? I am frightened they will be lower for everyone in the co-taught class because everyone was impacted by the wide range of skill levels present in this setting.”

One plus that Barb did see to co-teaching was that some general education teachers benefited by having a special education teacher in the classroom for discipline purposes. She added, “Some general education teachers were strong enough to handle that mix; however, some were not. It took two to handle the behavior. But, I would like to point out that well-behaved students who were struggling were often overlooked since the students causing problems received the attention. There was only so much that can be done.”

Barb has worked with the sophomore students since the 7th grade. She added, “One of the special education students was in pull-out at the middle school and he really wanted to try something else since he was excelling. Now that he is struggling in the co-taught math class he knows he needs to go back into the pull-out and it is killing him. There just is not a way the special education staff can support every student who needs it.
in a co-taught setting. Maybe by defining all roles and responsibilities ahead of time, the teachers can offer more support in co-taught settings. In many cases, there will never be enough support because the least restrictive environment is different for each student. We should remember that.”

*Sue.* In particular, the veteran high school special education teacher did not feel co-teaching was handled correctly because there was no training, planning, or communication. Further, Sue felt that the two special education programs collided with students on the receiving end of the consequences. Additionally, Sue felt that the incoming freshmen entered the high school with low self-esteem and poor academic skills.

“No guidance. We were given no guidance as to how to co-teach,” said the veteran teacher. Further, she added, “I do not know what co-teaching model we are supposed to be using, the purpose of it, how the program is evaluated, who evaluates it, or what the results of the evaluation are.” She quickly added, “I really do not think anybody evaluates the program.”

Progress in this co-teaching class was measured by student achievement. In fact, Sue added, “Amy, the general education teacher grades all students as to getting their assignments in, grades earned, and how well they do on tests.” Sue had nothing but praise for Amy. “She runs a straight, structured class. Consequently, none of the students have behavior issues. There have been a few times she has needed to address a concern, but it is rare. Generally, all the kids are good. I believe that those students with disabilities who were placed in this co-teaching math class were placed because of their higher ability
levels and good behavior. We did need to switch some schedules around at the beginning of the year because a few students with disabilities were very lost.”

Attendance was a concern for some of the students with disabilities. However, records indicated attendance had always been a concern for these students so this was not new. Sue stated, “It is a shame, really. When students are absent they miss the work and then their grades drop. Grades go up and grades go down. Attendance plays a big part in the learning process. Students can not afford to miss these assignments because of the sequential steps that must be learned. However, being placed in a co-teaching class did not cause these students to change their attendance patterns. It is nice to see self-confidence increase with higher grades. Students feel better about themselves when they are doing better academically.”

Sue had this to say about the merger of the two programs, “When the students enter the high school they lack self-esteem and I think it is directly related to the failing grades they receive in the middle school. Some deserve to fail because of not doing any work. But, I have noticed an increase in failures.” Sue further added that in her opinion students did not seem to equate failure with consequences. She said, “We are getting more and more students with special needs who have failed core classes at the middle school. They fail and then they are sent on to the next grade. This is teaching students that failure did not have any consequences.” Sue also saw a connection between failing grades and student success. She added, “Failure and poor self-esteem greatly interfere with a student’s ability to be successful.”

When asked about skill levels, Sue was quick to add, “Yes, some of the students arrive with some skills, but they do not know what to do with them. Reading levels
appear to be lower and so is their self-esteem. It is nearly the end of the year and this freshman class is finally getting the message that their work produces success. I have seen a change in their work habits, but it has taken all year.”

*Amy.* The mathematics teacher did not see that the co-teaching classroom was different from her other classes as she continued to do the same job. In her opinion, there was no co-teaching happening in the classroom and she did not see how co-teaching was benefiting teachers or students.

“Co-teaching is not happening,” said newly hired math co-teacher. “I do not know what model we are using, I do not know who evaluates the program, and I do not know what the results of any evaluation,” she added. “We have not evaluated the program, but I believe the purpose of our co-teaching is to help students with special needs have more success academically in the general education classroom,” Amy included, “however, the students are not succeeding academically.”

Amy measured progress of students with disabilities in her math class by their academic performance consisting of grades earned on homework and tests. None of the grades were modified. Consequently, earned grades for students with disabilities followed the same guidelines as typical peers. Amy did not see a difference in behavior or attendance for students with disabilities. Further, Amy added she did not have behavior problems from any of the students. When asked about confidence levels, Amy said, “I have seen a change in a couple of students in either direction. A few have more confidence and a few have less confidence. Grades enter into this. Students who have lower grades tend to have lower confidence. Conversely, the same is true with students who have higher grades. They have more confidence.” Amy felt that the transition into
high school was a part of learning to grow up and become confident. In fact, she added that she did not see students caught in the transition between middle and high school, but she added that freshmen, in general, may have more confidence with the high school setting because of the number of new opportunities.

Amy’s role in co-teaching was not much different than her role in her other classes. For instance, she was the teacher of record who designed lesson plans, instructed, graded, and prepared grades and mid-term progress reports. The special education co-teacher at times did see if students needed help, but she did not feel confident instructing the class. When asked about this setting being the least restrictive environment, Amy responded, “It is probably more restrictive for the students without IEP’s in the classroom. Ten out of 17 students in the class have an IEP, so it is basically a special education math class. Nearly 59% of this class is made up of students with IEP’s. Consequently, this class is more restrictive for students who do not have IEP’s. We are a small school. The students know a special education teacher is in the classroom. They just do not know why. In fact, it might be better to have an aide in the classroom because our aide has the reputation of helping all students so no one would be singled out.”

Wesley. In general, this mathematics teacher was told he would be involved in a co-teaching classroom for one period and that was that. He felt frustrated because of the wide range of ability and skill levels in the classroom and of the different paces he had to try to match in order for students to learn material. Overall, Wesley felt students with disabilities would not pass the class unless the grades were modified.

The 10th grade math teacher did not know what co-teaching model was used, what the purpose of the model was, how the program was evaluated, who evaluated the
program, or what the results were. Wesley said, “Well, I suppose the administration evaluates the program, but I do not really know.” Wesley measured progress of all students by test scores, homework, and participation. He added, “It is necessary to modify grades so students will pass. I purposefully design different types of tests so all students will be successful. That way the scores get bumped up. If I did not do this, the students with disabilities would fail.”

Wesley did not see any change in attendance, behavior, confidence, or self-image with any of the students with disabilities in the co-taught class. However, he stated that he observed one student with disabilities become more frustrated as the year progressed. He said, “These are great kids. In fact, they are not the ones who misbehave. There is one student whose behavior has changed but I do not know the reason for the change. Perhaps he was on his best behavior when he first arrived and now that he is comfortable we are seeing his true colors.”

Since Wesley teachers 10th graders, he was one grade level removed from the transition period from middle to high school. Therefore, Wesley did not see that the different programs used at the middle and high schools impacted the students. Wesley added, “What does impact the program is the wide range of ability and skill levels of these 18 students. Overall, there are four solid, high-performing students in the class who are ready to work at higher levels. Unfortunately, these are non-IEP students. Two of the four become restless once activities have to be presented again. I feel I am losing them. I am between a rock and a hard place. If I move at a slower pace, I lose the higher functioning students. Then, if I move at a faster pace, I have lost the lower functioning students. Half of the students in this class have IEP’s. Perhaps the class dynamics would
be better if we had a smaller number of students with disabilities in the class. Another idea that might work is if the students with disabilities have higher skill levels. Right now these students do not have the skills. It is frustrating for everyone. I continue to search for plans that might work. I have not found one.”

Analysis of Interviews with Educators. All five professionals involved with co-teaching measured progress by grades recorded by the general education teacher. The special educator for grade 9 felt students did not need two teachers for the class, whereas, the special educator and aide in the 10th grade class felt the majority of students with IEP’s were in the wrong placement. The 10th grade math teachers praised students for their efforts and behavior; however, he was quick to point out that few strategies worked because the academic needs of the group were immense. The special educator for the 10th grade stressed the importance of not skipping steps in student learning. In other words, she felt students continued to struggle all year because students did not have background knowledge. Therefore, simply teaching at a higher level was not working because of the wide gaps in performance.

Both math teachers did not see many benefits from co-teaching. In fact, there was no co-teaching in grade 9; therefore, there were no benefits. The special educator for grade 10 felt two of eight (25%) students had a positive experience. However, three professionals (60%) did not see positive benefits from co-teaching. In fact, these professionals stated students were learning the wrong behaviors, self-esteem dropped with failing grades, and teacher roles were undefined so special educators did not know if they were seen as disciplinarians or support staff.
The two teachers involved in co-taught math thought the majority of 9th graders would do well on the state Graduation Test. The 10th grade teachers did not feel the same. Reasons for poor performance included that the class moved too fast, there were too many distractions, and the gaps in background knowledge and wide range of performance skills.

All five professionals were frustrated with the program for different reasons. First, teachers felt they needed training. Second, three of five (60%) did not know the purpose of the program, how it was evaluated, or who evaluated it. Two professionals differed on purpose. One felt special educators were brought in to support teachers or to help with discipline. The other felt it was to help students have more academic success. Since there was not a clear vision, teachers felt unprepared and disorganized. Moreover, one teacher felt the presence of a special educator actually made the class more restrictive to students who did not have disabilities. One professional stated that this was not a service she would want for her child. In fact, all five were discouraged.

Teacher roles and responsibilities are different than an administrator or supervisor. In the case of co-teaching, special education teachers were concerned with time for collaboration and planning. Day-to-day activities took over and all teachers became consumed with how to implement co-teaching. It appeared difficult for the teachers to see the administrators’ larger picture of gaining exposure to grade-level indicators when some teachers felt they had been doing that all along.

An interesting fact was that two special educators volunteered for co-teaching. One approached the curriculum director concerning expectations, procedures, and standards. The curriculum director was helpful sharing books, models, and ideas;
however, the curriculum director was uncertain of the action plan since this was a building decision. Apparently, the organization of administrator roles varied as to who should provide selected services. Therefore, the four co-teachers were uncertain how to proceed. Furthermore, there were no indicators of any of the teachers meeting directly with the principal or assistant principal for clarification or support. Perhaps the principal felt the model was working satisfactorily since no one voiced a concern.

Teachers gave several suggestions for improvement. First, a consistent district plan which detailed purpose, roles, teacher responsibilities, appropriate on-going training, and guidelines for student selection were made by three of five teachers (60%). Second, the need for better grouping of students was reported by two of five teachers (40%). Finally, the suggestion of having an aide in the classroom instead of a co-teacher was recommended by one teacher (20%). Her reasoning was that an aide would be seen as less restrictive to all students because the stigma of special education would be removed.

Overall, none of the five professionals (100%) witnessed a change in student attendance, friendships, or involvement with extracurricular activities. Additionally, all five noticed a drop in self-confidence, with two (40%) citing low grades. Conversely, two teachers noted a positive change for a few students when grades increased. Only one teacher (20%) mentioned a drop in one student’s behavior; however, two professionals spoke about students learning inappropriate behaviors. In fact, one math teacher stated that the behavior of students with IEP’s was outstanding; however, it was the behavior of students without IEP’s who caused issues. For this reason, students with IEP’s were often removed to quieter locations.
Summary

The pressure of achieving high performance on the state Graduation Test appeared to be the moving force behind adding co-teaching to the high school schedule. This district had a high percentage of students on IEP’s. Consequently, administrators felt these students represented the crucial point as to whether the district met the state’s academic checkmark. Therefore, the administrators’ purpose for adding co-teaching was to expose students to grade-level indicators while receiving special education instruction as a means of increasing student performance and to help students achieve to their highest level. Others involved with co-teaching did not know the purpose or had other ideas (see Tables O.1, O.2, O.3). Everyone agreed there was no planning, but no one addressed it.

Those involved with the day-to-day operation of co-teaching were frustrated. Teachers did not know what was expected of them or what they were allowed to do. Further, they did not know what to do. In fact, even though the master schedule indicated two separate periods of co-teaching per day, co-teaching did not really happen. What might have been a better description was that there were two periods with two teachers in the room. Further, both co-teaching classes were handled differently. One class modified grades and the other did not. One class had as many as four adults assisting and the other did not. One similarity was that the general education teacher was in charge and controlled all parts of the class. In this manner, the special education teachers were seen as aides.

There was a major philosophical difference among those interviewed. A few thought that co-teaching should be the primary model as it was the least restrictive environment for all. On the other hand, others felt that a broad stroke should not be
painted for all students. In other words, some felt that the least restrictive environment should be determined on an individual basis. Perhaps the biggest separation for co-teaching was a philosophical issue. Which came first, the individual need or programming? It appeared that the middle school model built the schedule of what would be offered and then worked students into the schedule. Conversely, the high school looked at individual need first and built the schedule to fit those needs.

In terms of progress, scores earned on class assignments were used as the indicator. Both general education and special education teachers rated progress by grades. This included test scores, homework, participation, and other assignments. However, in one class the grades were modified and in the other class they were not. Interestingly, the administrators who had actual co-teaching experience voiced concern as to the difficulty of implementing co-teaching. In fact, the employees responsible for curriculum stated that co-teaching was easier to implement in earlier grades and that schools might want to consider doing either pull-out or co-teaching because trying to do justice to both at the same time was extremely difficult. For instance, the program design at the middle school made it difficult to provide support in science and social studies since there was limited staff. Also, at the high school the addition of co-teaching resulted in other services being absorbed into other periods. As a result, teachers reported frustration with not being able to go deep into subject matter and build individual skills. Added to this was the ever increasing numbers of special needs students at both buildings. Wesley’s quote, “I am still searching for methods to make things work and I can not find it” might best sum up the attitude and atmosphere of adding co-teaching to the high school schedule.
Interviews with Students

Classes tend to have their own dynamic. This proved true in this research study. An emerging fact was that freshmen with disabilities were quite different than the sophomores with disabilities. For instance, several of the 9th graders did not have a disability in math. Consequently, their placement in a co-taught math 9 class was questionable. In searching through the pre-scheduling materials it was determined the high school special education department felt those students with IEP’s in the co-taught math skills had adequate skills to complete the class on their own with one period of tutoring assistance. In other words, the high school special education department would not have scheduled two teachers into this teaching block. Due to the high numbers of students with IEP’s, the special education teacher would have been placed in a separate math class to balance the number of students in the pull-out math 9 class.

Furthermore, the special education department was uncertain as to which students to include in the co-taught math 10 class. As a result, the special education department selected the higher functioning students who were in the pull-out math class. What became evident was that the majority of these students did not possess the skill level to be successful in the co-taught class. Grades were modified and tutoring time was spent re-teaching the lesson. A side effect was that students and teachers needed to find other times to address other tutoring concerns because tutoring time was needed to reteach math or to complete math assignments.

The point to this was to introduce the fact that the 9th grade students with IEP’s viewed co-teaching differently than the 10th graders because math was a strong area for
the majority of 9th grade students with IEP’s. In fact, most of the 9th graders had been in a
general education math class or a co-taught math class during their earlier school years.

Andy, 9th grader. This tall, well-built blonde was punctual, attentive, and focused.
Andy said, “Math is not a problem area for me. English is where I need help.” In general,
Andy felt that co-teaching had a minimal impact on him, that he measured his progress
by his grades, and that he was succeeding in the math class.

When asked about his performance in the class, Andy said, “I am doing pretty
good in math class, my grade is going up, and I learned some things I did not know. I
check out my progress reports, read the comments, and stay on top of things.” Andy felt
being in a general education class was better for him because he would learn more math.
Also, Andy added, “It was nice to have two teachers to help in the class.”

Andy said he made a few new friends at school this year, but said this was
because he saw some of the same students in other classes during the day. Also, Andy felt
his self-confidence this school year was up a bit, but credited that to the overall year, not
just to the co-teaching class. Further, Andy did not feel that co-teaching impacted
extracurricular activities or community service projects. Since Andy was not in a pull-out
math class before, he could not compare one setting to the other. Overall, Andy’s goal
was to get a good grade in the class because he did not wish to repeat any classes.

Andy did not have any suggestions or recommendations for the special education
curriculum. He said, “I would not change much because everything works.” Interestingly,
Andy said, “I do not think I would be as prepared for the state Graduation Test if I were
in a pull-out math class.” Andy concluded by saying, “I do not have a need for support in
math, but I do need help in English. I know I need to be in a pull-out English class and I
Chris, 9th grader. A tall, thin young woman focused on her computer work, but came willingly to an interview, giving short and to-the-point answers. In general, Chris felt fine with her progress in the co-taught class, rated her progress by her grades, and did not feel impacted by her placement in this class.

Chris believed her grade in the co-taught math class was a high B, although, she was quick to add, “I earned in the A range, but I slid back a bit.” Chris credited doing every part of her homework and preparing for tests as keys to her success. Also, Chris said, “I am good in math. In fact, it is a strong area for me. I already knew quite a bit of math, but I believe I have learned a little bit more in my math class.” However, Chris added that she had the same friendships, felt the same about herself, did not increase school activities, and did not increase participation in school events. In other words, Chris did not feel impacted by the placement.

Chris was not placed in pull-out math classes before; therefore, she did not have an opinion as to how she might have performed. Chris concluded by stating she did not have any suggestions for improvement of the co-teaching arrangement. Finally, Chris added that she would be prepared for the state Graduation Test in math because math was a strong academic area for her.

Beth, 9th grader. Beth was a quiet young woman who spoke softly while glancing about. She was polite, attentive, and serious in her actions and responses. In particular, Beth felt she was doing fine in class because she made the honor roll. She based her progress by her grades. Further, Beth did not feel impacted by the co-teaching
arrangement; however, she felt an improvement could be the addition of a second period of tutoring.

Beth said, “I am doing good in class. In fact, I have made the A/B honor roll! I rate my progress by my grades. As I said, “I am doing good!”” Beth then added 6 “No’s” to impact questions. In short, Beth did not feel that co-teaching impacted her academics, performance, friendships, self-confidence, outside activities, or community service projects. Further, Beth did not have experience in pull-out classes. Consequently, she could not compare her performance. Beth took her studies seriously and believed others should do so, too. She says, “One suggestion I have is for students to do their homework and be prepared. They can get good grades, too.” Beth concluded by saying she felt prepared for the state Graduation Test in math because math continued to be a strong area for her. If Beth were in charge of scheduling, she would make a change with tutoring. Beth said, “I would arrange the schedule so I could have more time to do my work. It would be nice to have another period of tutoring a day because all I get done in one period is my math homework.”

Annie, 9th grader. A bubbly bundle of energy described Annie, a 9th grader. She seemed to be on the move and always smiling. She bounced things on top of the table and slid around in her chair during the 30-minute interview. Further, Annie used her hands to make a point, laughed often, and smiled during the entire interview. Also, Annie came willingly to the interview and started answering questions immediately. Overall, Annie rated her progress in co-teaching math class through her grades. She took pride in her academic accomplishments and wanted to earn high grades. Further, Annie did not believe that placement in co-teaching impacted her personally, academically, or socially.
Annie says, “First, you are going to have to tell me what co-teaching is!” After hearing the explanation of the difference between co-taught and pull-out, Annie was ready to start talking. She said, “I am passing everything, but my grades slipped a bit when I missed a few days.” Being in the co-teaching class had not changed her academics, self-confidence, extracurricular activities, or friendships. Annie added, “I have the same friends and I still do the same things. I like where I am because it is nice to have two teachers there if you need them.”

Annie’s goal was to earn an “A” in the class and she felt co-teaching should stay. She says, “I do not really need the special educator in the class. At times this teacher helps students with reading, but mostly I feel strong about my abilities and I know I would pass with only one teacher. Since I have not been in a pull-out math class before, I can not compare these two.” Annie said, “I believe I would keep the schedule as it is because there are probably students out there who need more help.” Annie did believe her math class is preparing her for the state Graduation Test. Annie concluded by saying that she liked her schedule and that she was glad to have been in the co-taught class.

Clinton, 9th grader. A polite 9th grader willingly jumped into the interview.

Overall, Clinton related progress to grades earned on homework and on tests. Further, Clinton believed he made a “couple of new friends, but added that he felt everything else in his life was about the same. In other words, placement in a co-teaching class did not alter much in his life. Clinton says, “I believe I have earned a pretty good C in the class right now. But, my goal is to get back up to a B so I can get on the A/B honor roll. I can do that if I turn in my homework. At least that is what my progress reports say. I like those reports because it lets me figure out where I am in the class.”
Clinton added that math was not difficult for him and that he really did not need a second teacher in the room. In fact, Clinton added, “I like to do things on my own. Sometimes I think that the second teacher gets a bit on edge if we do not know how to do something. She walks around sometimes and sees if we are doing our work. Usually the kids do not ask for help because they like to do things on their own.”

Further, Clinton said, “Co-teaching has not changed anything in my life. I still feel the same about myself. For example, I have been helping in the library recently. I do not get a grade for it and no one helped me get that job. But, I get to work. I like that. I like helping other people. Plus, they pay me off in food, so that is great!”

Clinton felt that the class would help with his state test. In fact, Clinton said, “I have kept all work and I plan to take it home this summer and study. I want to pass.” Clinton did not remember if he was ever in a co-taught or pull-out math class. Therefore, he could not determine if pull-out was different than co-taught. However, Clinton did say that he thought co-taught classes might be better if students of different ability levels could be mixed. He added, “There are some really smart people in our class. The only reason they are in there is because they did not do their homework. Then, you have struggling students who do their homework, but still can not grasp the concepts. It is frustrating. Maybe the ones who do understand could help the ones who do not get it.”

“I like to relate things to animals because I like nature. Therefore, I will tell you why I think it is important for everyone to learn to live where they are supposed to live. For example, if a wild animal is only raised by humans, then the animal will not learn how to live in its natural habitat. I believe we need to help all people learn to live in their natural habitat so they can make it on their own. If we protect people all the time, they
will not learn to live independently. But, you have to know when is the right time to let someone be independent. I think we all need to help each other live in this habitat.”

Clinton finished by saying, “It would be nice to change our class structure around a bit. We do the same thing everyday. It would be great to interact more. I would like things to be livelier. Our teacher does ask if we need help, but no one ever raises their hand.”

*Ben, 9th grader.* Ben, an extremely polite young man, sat down quietly and softly answered questions. His responses were short and to the point. He patiently listened and then summarized that grades determined his progress in class, but that he did not see that co-teaching changed his friendships, extracurricular activities, or his self-confidence. Overall, Ben felt co-teaching might have helped his grades “a little bit”, but that he preferred pull-out classes to co-taught classes because of the specialized instruction he received. Ben said, “They help me more.”

Ben felt he was doing “okay” in math class and that his progress was determined by his overall grade, which consisted of participation, tests, and class work. The co-teaching arrangement has been “okay” and that he thought his overall math grade was helped because of the class. However, he reported no change with friendships, self-confidence, functions after school hours, or with community service involvement.

When asked which placement he preferred, Ben said, “I like pull-out better because I can receive help with problems that are specific to me. Plus, the pull-out classes are usually smaller, so I do not have to wait as long. Also, in pull-out classes teachers can teach step-by-step in smaller steps. When I learn better, my grades are higher. That is
what works for me.” Ben added that he hoped his grade was either a low B or a high C. Overall, Ben added, “My goal is to get a good grade.”

Ben thought that placement in a co-taught math class might have helped him some with the state Graduation Test preparation, but he quickly added, “I do not think there would have been that much of a difference had I been in the pull-out class.” If Ben were in charge of co-taught classes, he recommended that the classes be the same because “some students do not need that much help in class.”

Mitchell, 10th grader. A soft-spoken, blue-eyed young man came eagerly to our interview. He was concerned that his shoes made a clicking noise when he walked so it was necessary to help repair his shoe before the interview began. Overall, Mitchell used his grades as the determining factor as his measure of progress in all classes. He did not believe the co-taught class impacted his friendships, academics, self-confidence, or his extracurricular activities. Mitchell believed the schedule should remain as it is because the current curriculum helped all students. However, Mitchell was quick to point out the importance of getting into the right class from the very beginning.

Mitchell said, “I am getting A’s in the class and I know the material. I am getting it on my own. That is how I measure progress. I study the progress reports and grade cards. Not only do I know the material, but I am turning in my work.” Mitchell did not feel the co-teaching class impacted his academics. He said, “What has helped me is my tutoring period and the other period when I am in advisory class. I have time to do my work. And, I have someone to help if I need it.”

Further, Mitchell did not feel he made new friends because of the co-taught class. He said, “My best friend is still my best friend. I have met a new student who is in my
math class and my advisory class. That was nice.” Mitchell felt his self-confidence increased because he was older and more mature. He said, “I have had success and that makes me feel good.” Mitchell did not feel that his extracurricular activities or involvement in the community have changed because of co-teaching.

Last year Mitchell was originally placed in a general education Pre-Algebra class. He was not succeeding so he transferred to a pull-out math class for 9th graders. Mitchell said, “The work in the pull-out class was way too easy. I was in the wrong class. I do not think the pull-out math class helped me with preparation with the state test. I do not think I was taught what I needed to learn. Therefore, I think I need to be in the general education classes.”

Mitchell praised how the general education teacher organized the math class. “He is okay. I like the teacher’s set-up. I like how he organizes the class,” Mitchell added. “I guess if I were in charge of program options, I would keep things as they were. Students are always going to struggle because that is how things are when something new is being learned. I think we should leave the schedule as it is, but I would change the pull-out math 9. It is too easy. Some of the kids think it is too easy, too. We learned a lot of new things this year, but they might have been things we were supposed to learn last year.” Mitchell finished by saying, “I would like to try Pre-Algebra again. I want to give it a try.”

_Sam, 10th grader._ Sam eagerly walked with me to the room where the interviews were conducted. While walking, he smiled, laughed, spoke to his friends, and then sat down and started on time. In general, Sam felt very confident about his academics and life, but did not feel that co-teaching had anything to do with his current status.
He says, “I am doing pretty good in class because I know what is going on. I feel successful. I measure my progress by my ability to understand the work. My grades, progress reports, homework, and test scores seem to be fine. In fact, I go up to the teachers and ask how I’m doing. I want to know. I think co-teaching has helped in some ways because it is nice to have two different teachers present material in different ways.”

Sam was quick to praise his tutor. He added, “Having one period a day with my special education teacher for tutoring has made a positive difference. I get things done.” Sam felt his self-confidence has increased, but he related the success to his involvement with various school events such as drama, choir, band, and community service projects. Sam said, “I have the same friends as I did before, but what has changed is that I feel a lot better about myself. I know I can do things by putting in the effort. I know I can do it! I feel I am maturing.”

Sam did not remember being in pull-out classes during his school career, but he believed the classes should be left alone because they seem to be working for the students who need them. Sam’s goal for his co-taught class was to earn high grades. He would like a B+ or an A. Sam continued by saying, “At the junior high level I felt I needed help but I could not always get help. I had to work things out on my own. That has not happened at the high school.” Finally, Sam said he felt he was mostly prepared for the state Graduation Test.

Tom, 10th grader. Tom was a tall, lanky young man with mid-length shaggy brown hair. He was dressed comfortably in jeans and a loose fitting shirt. He was relaxed, attentive, and pleasant. In general, Tom did not feel impacted by placement in the co-teaching class. He measured progress by grades and progress reports. Tom preferred
classes that offered more structure and a slower pace. To Tom the best placement option was to be in general education classes without a co-teacher, but have one period each day for tutoring so he could receive one-on-one assistance.

When asked how he was doing in the co-taught class, Tom responded, “I am doing okay, but I could be better by getting more one-on-one help. It would be nice to slow the pace down bit by bit and maybe even present easier material. This stuff is kind of hard right now.” Tom rated progress by reading the progress reports. He added, “If the grades are good I think it is awesome, but if it is not, I say something else!” Tom analyzed the data of his progress reports. He says, “If I have several 0’s, then I know I need to kick it in gear and bring in more material. I think I do enough to get a “C” average and not very much more.”

Tom felt that having two teachers had been beneficial because he received additional support and individual attention. Overall, Tom summarized, “There has not been any drastic change since I have been in this class. I guess it is nice to have the second teacher around.” Tom believed he could have been in the general education class on his own as long as he had one period of tutoring per day. “Tutoring helps,” he added. Tom stated, “I lose interest quickly, especially if something is hard. I like the one-on-one help I receive in tutoring.”

Tom did not feel that co-teaching impacted his friendships, self-confidence, outside school activities, or community service projects. “To be fair,” he said, “grades do not equal self-confidence to me. Plus, my friends are still my friends. Nothing has really changed because of the co-taught math class. When school is out I do not think about it anymore.”
When asked about pull-out versus co-taught classes, Tom said, “I really like pull-out classes. I like the individual help and the pace is great. In co-taught we have about two days to learn something and then we move on. My grades in pull-out were a lot better. Sometimes in co-taught my grades fall because we go so fast. I can keep up in pull-out.” Tom would like to earn a “C” in the class and felt he could do that. Concerning recommendations, Tom added, “I think it would be great if we had even more help in co-taught. During the fall we had four adults for 18 kids. That was great. I did way better then. All I had to do was ask for help and it was right there. It was easier to get individual help. Having the teacher slow things down so we can really get the subject would be great, too. I want to understand things. I want to learn those skills. I can not do this if the pace is too fast.”

Tom had a good practice idea for the state Graduation Test. He liked the idea of having a refresher course about two weeks before the test. He added, “I knew a lot about the state test from information I learned before. Consequently, a refresher course would be great. Actually, I would like a refresher course in every subject. In my opinion, co-teaching did not impact my performance one way or another.” When asked about recommendations for program options, Tom said, “I think more pull-out and tutoring classes would be great. Perhaps we could ask the kids to help decide. I believe it would be better to minimize the co-taught classes so students could get one-on-one help.”

Nick, 10th grader. Nick was a tall, lanky active young man who was polite and kind. He seemed to want everyone to get along and have things work out smoothly. At times I felt he was waiting for me to tell him “the right answer”. Once he relaxed and realized that all his answers were correct, he stated talking. In general, Nick felt that he
was doing alright in the class but would like to be someplace else because the class has too many distractions. Nick used grades to measure his progress and felt that the class was just too hard. He would like to return to a pull-out setting.

Nick said, “This is a hard class. There are too many distractions. Students should be quiet and focus on their work. Kids are screwing around and I do not like it. I think I am getting a B or a C in the class. Sometimes I look at my grade card and rate my progress, but I do not think this class has changed me.” Nick felt he made many new friends but not because of the class, but rather his involvement with school activities.

Nick would rather return to the pull-out math class because “I understood the work better because the class was smaller and it moved at a slower pace. It was quiet. I liked that. Kids were not screwing around. I liked that, too. I think some of those kids will fail. I do not want to fail.” Nick expressed nervousness with the state Graduation Tests. He said, “I am just nervous and I hope I did fine.” Finally, Nick said, “I would rather have pull-out classes because they are quiet and small. Students should be loud during ballgames, but not during class. It is quiet in pull-out and that is one of the reasons why I think pull-out classes should be included.”

Grant, 10th grader. Grant was a neat young man who arrived prepared and on time. His answers were short, but to the point. Grant said, “This class goes too fast. It is too difficult. I follow my grades and progress reports to determine my progress. Everything is too fast. I am always lost.” In general, Grant felt he should return to pull-out math class so that material was presented in a slower fashion.

Grant said, “This class has impacted me because I am more frustrated. We seem to start on one thing, switch to another, without any time in the middle to understand
what was learned. I am always lost. Because I am more frustrated, my self-confidence is lower, which makes everything more frustrating. I do not think I can apply anything I have learned.” Grant added, “Next year I am back in a pull-out math class and that is fine by me. I will do better.”

Grant recommended that the pace of the class be slower. Even with being in the co-teaching class, Grant did not feel prepared for the state Graduation Test. He added, “I learned a little but I could not apply it. I like the fact that I was in a general education class, but I am ready to go back to pull-out. I will do better.”

_Jim, 10th grader._ Jim was an articulate sophomore who was well spoken and direct. He did not feel that placement in a co-teaching class impacted his friendships or his activities, but that it had affected his self-confidence. Jim measured progress by his grades, which he felt were impacted.

Jim said, “Overall, all my grades are on and off. Not just in the math class, but in all classes. That is usually the way it goes. Some days things are good and some days are bad. I rate progress by my homework and test scores. I just look at these grades and see if there are things I have turned in and have not turned in.” Jim stated the best part of being in the co-taught class was being pulled-out so he could go to a different room. “I like to leave the room to go to a smaller place where we can have material presented to us at a slower pace. Things go too fast in the general education class. Plus, we cover harder material faster.”

Jim believed his self-confidence was negatively affected by being in the co-taught classroom, but that this had very little to do with the subject. He said, “My former girlfriend was in the class. We broke up with each other at the same time and now we
have to see each other all the time. I do not really want to talk to her. It really is not the subject, it is my social arrangement. I do not think I have been happy since we broke up.”

Jim’s goal was to earn a C average. If he were in charge of the special education curriculum he would slow things down in the general education classes and have the material presented to students in different ways. Jim added, “I believe I would have liked to have had the special education teacher for pull-out math because I would have understood the material better. I see her another period during the day and sometimes it seems that all we get done is math. I would like to have another period for help. It might just work to have two periods of tutoring.”

Concerning the state Graduation Test, Jim did not feel too good about it. He said, “I wish I could have had math in a pull-out class because my special education teacher knows different ways to teach the subject. Math is not my strong area. I believe I would have done better on the Graduation Test if I could have been in a pull-out math class.”

Further, Jim added, “If we are going to do this co-teaching class, we need more than two teachers in that classroom. We had as many as four teachers and that was great. Whenever I needed help, someone was right there to offer assistance. More help is needed.”

*Analysis of Student Interviews.* Parents and students wanted the teaching environment to be a comfortable one. Some parents felt students would be more focused in a classroom where students felt safe. Of course, the reverse was true. When not comfortable, learning could take a back seat to frustration. Some students spoke of enjoying the systematic and organized general education classroom, while others stated the classroom was too noisy. An interesting point would be to determine if students felt
comfortable in pull-out classrooms. If not, did the same level of frustration take over? If so, could this lead to failure?

Overall, all students used grades to rate their progress in the co-teaching class. This included scores on tests, homework assignments, and participation (see Table P). Additionally, students did not know if grades were modified or unmodified. Furthermore, all students with disabilities did not feel that placement in a co-taught math class impacted their friendships, behavior, self-confidence, attendance, or extracurricular activities. Fifty-eight percent expressed their opinion that math was a strong area for them and that they did not need a second teacher in the classroom. Sixty-seven percent of 10th graders expressed frustration with the fast pace of the co-taught class and the constant disruptions from classmates. Three 10th graders (50%) wished to return to pull-out. In fact, two 10th graders (34%) stated that more than two teachers were needed in the class in order to gain skills for subject mastery. Fifty percent of the students felt that having two teachers in the classroom was beneficial. The consensus for all students was that grades was their measure of progress in a co-taught class.

Fifty percent of the 9th graders felt co-teaching prepared them for the state Graduation Test while two 10th graders felt it “might have helped a little bit”. One 10th grader (17%) urged the school to change the curriculum in pull-out math 9 class because the curriculum focused on functional math, which was not the curriculum he felt was needed. Thirty-four percent of the students praised tutoring and wished to have tutoring assistance throughout the day. Overall, students earning higher grades felt more confident about their placement. Conversely, students earning lower grades, felt less confident about themselves and their placement.
Interviews with Parents

Four separate attempts were made to contact parents for the interview. Letters were sent home with students, some letters were mailed home, and efforts to reach parents by telephone were made twice. Some parents allowed their children to be interviewed while they elected not to be. A few parents wished to complete the interview in writing and have a follow-up telephone call. Other parents arranged to meet at school.

Matthew. The father of Sam, a 10th grader, supported the use of tutoring as a preferred means of service delivery. During the face-to-face interview, Matthew said, “My son is doing pretty good in class. The state Graduation Test scores will be out soon so we can see how he performed. Basically, I look at his grades, progress reports, and comments on the grade card to determine his progress.” Matthew added, “I do not think co-teaching has impacted my son. I do know that he is getting more tutoring help which I believe is great. Not only did he have one period of math class, he also has a period where he gets extra help. Overall, I have not seen a change in his self-confidence, outside activities, or with his community service projects. Matthew said, “Sam is always busy with school and community events. He likes working!”

Matthew believed that Sam had pull-out classes at the elementary level. Matthew added, “I think the reason Sam has done so well in school is because of everyone’s help. Right now he has exceeded my goal for him. By the time he graduated high school, I wanted him to learn strategies and skills to manage his attention delays because I wanted him to be free of medication. He has already made it!”

With his son’s history, Matthew knew his son needed a very quiet setting free of distractions in order for him to perform at a high level. “Being in a loud setting with kids
who are distracting others is restrictive to Sam. That is not good for him. Therefore, I believe the quieter the setting, the better,” said Matthew.

Concerning the state Graduation Test, Matthew reported that Sam felt he did pretty well. “Well, we will wait and see. Sam reported to that the CD version of the state test slowed him down, which was great because he has a tendency to rush.” Matthew said that he liked the idea of co-taught classes because the stigma of special education was removed a bit. “It is always better if the kids blend in. I think I like the tutoring class the best because students get the help they need. Everyone Sam has had through the years has been great,” reported Matthew.

Leah. Leah was the mother of a sophomore male. The interview took place on the telephone and through written correspondence. In particular, Leah measured progress by grades. Her goal for her son was for him to be in a larger setting and keep his grades up.

Leah said, “I am not seeing much progress in the co-taught class. In fact, Tom’s grade has actually dropped. Since I rate his progress on his grades, I do not believe this has been successful. Also, I do not feel co-teaching affected his self-confidence. He still has many friends and takes part in various activities. Therefore, I do not believe co-teaching has impacted those areas at all. But, I do note that his grades are lower than what he earned in a pull-out setting. That concerns me. Somehow I would like the school to come up with a plan so that Tom will be in with a larger group of students, still keep his grades up, and slowly move away from one-on-one.”

Helen. Helen is the mother of a 9th grade male. The interview was conducted through correspondence. Overall, Helen rated Clinton’s progress by his grades and she felt that good grades related positively to a good self-concept. She said, “When Clinton’s
grades go up, so does his self-confidence. This carries over to activities outside of school. In fact, he is more helpful with his family. My goal for him is to be the best he can be. Clinton likes the high school and he says he is doing good. He is an easy-going young man. I want him to continue to build his confidence.”

*Marta.* Martha was the mother of two sons who have IEP’s. The older son graduated last year and the younger son is a freshman. The formal interview was completed via telephone; however, the interviewer had an informal meeting with the mother at a school event. At that time Martha talked openly about the frustration she felt with services during earlier grades. Further, Martha stated she rated her son’s progress by grades and that she also connected grades to the special education services he received, or in earlier years, did not receive.

Martha said, “Finally, I am seeing a new person. Andy has reached a comfort zone and I could not be happier. I have been talking with teachers about Andy since he was in the 5th grade. I always thought that an IEP meant my son would be getting the help he needed to understand and pass his classes. That is not what happened when he was in the middle school co-taught classes. He failed! I had to go to school and intervene. Things were better for a while, but then he started failing again. We were told to have our son take Ritalin. That was not the answer we wanted to hear. This school year has been a good one for him. He is passing. He has found his comfort zone. He finally received the help he needed.”

Martha did not like the co-teaching arrangement at the middle school because she felt individual special services were not offered and that was what her son needed. She was pleased with the high school arrangement. She expected Andy to do well in math
since that was an area of strength, but she knew he would struggle in English since that
was his weak area. After talking with Andy’s teachers, Martha added, “They told me he
will pass. I have looked at his schedule for next year and I know he will do well, too. The
problem with English this year was more of a personality clash with the teacher. That will
not happen next year because he knows the new teacher and feels comfortable with her.
He will be fine.”

Overall, Martha liked the current arrangement of classes and was pleased with the
grades were son earned; although, she was somewhat disappointed with the personality
clash with the teacher. Martha also felt Andy was convinced that he could and should do
the work. “The last few months I have noticed a change in him. He is learning to be
confident,” Martha stated. Finally, Martha expressed her opinion that having more than
one tutoring period might be a good approach. “I just want to know there is a system in
place that he can go to for help,” Martha concluded.

Liz. An interview with Liz, the mother of a 10th grader, was held at the school.
Overall, Liz was very pleased with the special education services her son was receiving.
Moreover, Liz felt her son benefited from the individualized instruction and that she
thought his grades reflected his progress in all classes. Liz said, “I am very appreciative
of all the special help Brent receives. He is doing great in his classes and his grades are
good. Brent has made high grades and he does his work. All the extra communication
that is sent home is great. I know he is in good hands with all of you. I am for whatever
works as long as Brent’s needs are being met. I trust all of you.”

Rebecca. Rebecca was the mother of two high school girls who have IEP’s. The
older daughter was a senior at the vocational school. The younger was a 9th grader. In
general, Rebecca was pleased with her daughter’s grades, which was how she rated her daughter’s performance. She believed things should stay the same. During the telephone interview Rebecca said, “Beth is on the A/B honor roll and has been all year. That is how I rate her progress. Beth is happy, hard-working, and puts in the effort. I am happy with how things are. She is succeeding!”

Ruth. Annie got her upbeat attitude from her mother. During the telephone interview Annie’s mother praised the school for helping her daughter have a great 9th grade year. She said, “This year is 110% better than last year. Annie has more interest and a better attitude. There were health problems and moving issues we had to deal with during her 8th grade year. Annie missed some school. But, that was last year and this is this year. She is getting great grades and I am proud of her.”

Ruth added, “I rate her progress by grades. She tells me she understands all the material and if she does not, then she knows how to get answers and figure things out. My recommendation for the school is to continue to meet the needs of the students. You met Annie’s needs this year. It makes sense that you do the same thing again. Students will succeed if you meet their needs. Therefore, I say that you add co-teaching and pull-out as it fits each student. That ought to work!”

Brenda. Two telephone interviews were conducted with Brenda, the mother of two high school daughters who have disabilities. Overall, Brenda was pleased with the services her children received, and that she believed that services should be based on the individual needs of the student. Brenda rated progress by grades and had sharp statements to share when her younger daughter failed a class.
Brenda said, “My girls have been in all the different types of classes the special education program offers. My older daughter only needed tutoring, but my younger daughter needed extra help in science along with her tutoring. I like tutoring because it has worked for both girls. I measure progress by grades. Last year I was not pleased when my younger daughter failed a general education science class. I went to school well before she failed and asked the special education teacher to put my younger daughter in a pull-out class where she could get more help because at that time things were just too hard for her. The teacher did not pull her and I was very upset about this. My daughter had to repeat the class. I never want that to happen again. In fact, at the beginning of this school year I went to one of the special education teachers to work out a plan for success. My girls will do their work and they will not fail.”

Brenda also added that she thought all the services were good, but that she preferred tutoring because her daughters needed to know how to work independently. “Tutoring offers support by allowing the girls to figure things out. College and work are like that, so it would be nice to learn that now.” Brenda added she liked the idea of having more than one tutoring period, especially in the upper grades. “That would help them the most, I think, because that it would help students learn how to be on their own while being in a safe location.”

*Analysis of Parent Interviews.* Parents wanted communication. They wanted to know who was in charge of their child for each class and what strategies could be implemented if the student was not successful. Perhaps an increase in communication in co-teaching settings could add to the comfort level for parents and students. In that manner, students could still be exposed to grade-level indicators with their typical peers.
and special education teachers could continue to help all students through differentiated instruction. How can time be made in the school day to include this service?

All eight parents rated their child’s progress by grades earned on progress reports and grade cards. Those interviewed did not believe that co-teaching impacted friendships, self-image, behavior, extracurricular activities, or attendance (see Table Q). Parents wanted needs to be met and they wanted their voice heard. Two parents (25%) were frustrated concerning their helplessness of watching children fail and not being able to make the school understand that something different needed to be done. Also, two parents (25%) responded that co-teaching did not seem to be helping their children with their grades as the students’ grades decreased. Overall, parents wanted services that met individual needs (50%) while allowing their children to learn to be independent and successful. Three parents (38%) praised tutoring, 50% were pleased with progress, and 13% related good grades to high self-concept. Additionally, parents wanted a solid connection to an educator. That is, they wanted someone they could trust to look out for their child.

Observations

The co-teaching math classes were observed eight times for a total of three hours. Plus, an invitation was extended to observe a co-taught math class at the 8th grade level and to participate in a meeting with the middle and high school special education departments.

Math Co-Taught 9

The Math 9 class was observed on four different occasions. During each observation the general education mathematics teacher was in the front of the room
instructing at the white board, using the overhead projector and modeling problems, or at her desk overseeing the classroom. The special education teacher sat in the middle of the back row working on math problems. No students went to the special education teacher and she did not go to any students. The general education teacher did all the planning, teaching, and grading, while the special education teacher stated she would help students with reading or test administration. During these observations there was no co-teaching, co-planning, co-instructing, or conversation between the two teachers. When asked about shared roles, the special education teacher responded, “This is not my class. I am learning the subject.” During one observation I witness three students who volunteered to go to a different location to take a test with the special education teacher.

These students left quickly and quietly. Interestingly, behavior and procedures were identical in both locations. In the general education room, students rearranged their seating to create a space between seats. Students used calculators and worked throughout the period. When finished, students took their tests to the teacher and then worked on other assignments. In the special education classroom, three females, two of whom had IEP’s, sat in separate rows in the classroom and used calculators. When the girls were asked as to why they wished to come to a separate location, they replied they enjoyed a smaller, quieter room.

Overall, there was no teaching, no co-teaching, and no instruction during this testing period. Students knew what to do and they did it. No one asked for assistance and all worked quietly and efficiently.
Math Co-Taught 10

This class was observed four times. During each visit the general education teacher conducted the class using his plans, notes, handouts, and tests, while the special education teacher and aide worked with students with IEP’s who were seated throughout the room. Therefore, the special education teacher and aide walked to each student answering questions, offering assistance, and checking work. At times, the special education teacher removed students with IEP’s to go to a separate classroom which had tables. Students were grouped around different tables based on their level of understanding. Lessons were retaught and problems were modeled in order for students to complete work. Generally, the lesson in the general education classroom moved at a faster pace and the students talked more. The students with IEP’s moved at a slower pace, became easily distracted, and found it difficult to maintain concentration throughout the lesson. A snapshot of one lesson contrasts the two classrooms.

Math 10 was observed in two different locations for a total of 45 minutes. Eighteen students began in the general education room where the general education math teacher offered review pointers for the unit test. Several students asked questions, including one student with a disability. Since students with IEP’s were placed throughout the room the special education aide and the special education teacher began the class on opposite sides of the room. The general education teacher instructed from the front of the room, gave illustrations on the white board, and explained procedures. It was clear that the general education teacher was in charge of the room and that the special education teacher and aide were support staff. When it was time to distribute the tests, the special education teacher, aide, and students exited the classroom to go to the special education
resource classroom. One special education student remained in the general education classroom by choice.

The observer split time between the two classrooms watching students with disabilities in the special education resource room and the general education students, along with one special education student, in the general education classroom. The behaviors, procedures, and instruction differed in each setting.

The general education classroom was a hive of activity, noise, motion, questions, and comments; whereas, the special education resource room was quiet, orderly, peaceful, and soothing. In the general education classroom one student talked out loud while taking the test, two boys joked with each other throughout the test, and two girls worked diligently to get the teacher’s undivided attention. In fact, the teacher spent nearly all period on one side of the room, which was where the two loudest girls were seated. There were constant comments, interruptions, and commotion while the students worked.

One student gave a running commentary as he was taking the test. He said, “This is bull crap. I don’t understand. No, wait a minute. I’ve got it.” There was gum chewing, feet dangling on chairs, pens dropping on floor, calculators flipping into the air, and throat clearing. The special education student who remained in the classroom talked quietly with a seatmate several times throughout the test, while two boys in the back of the room joked around with each other and kept each other entertained.

The special education resource room was quiet and focused. Each student took a seat, got their test and supplies, and started the test. Students worked quietly and efficiently. The special education teacher quietly pounced on a student who was ready to distract the group and he got right to work. She said, “I won’t have that.” He listened.
The special education teacher worked from one student to the next so each student had support. In fact, she lapped the tables several times. While helping one student she said, “Tell me your first step. Now, what did you do next? Correct. That’s right. Since you know that part, you’ll know what comes next. Tell me what it is. Yes, that’s it. Now, what’s next?” She pulled the student through the problem by having him tell her what he knew and what he should do. While this was going on the special education aide brought a three-dimensional cube to a student and used it as a manipulative to answer the question. She had him hold the cube, connect the sections to the problem, and then answer questions. When the student understood the step, he said, “Ah!” Students used calculators, notes, and homework on the tests, which were the same accommodations the general education students were allowed.

All students received instruction and their skills were reinforced. One student quietly sighed and slumped quietly at his seat. Within 10 seconds the teacher was by his side helping him understand where he was breaking down. Once he had the idea and began to work independently, she moved to the next student. While the students were taking the test, a student from the general education classroom came to the room to correct a number on the test. When he left, one student who worked independently asked, “Is this the very same test they are taking?” The teacher replied in the affirmative, he nodded, and went back to work. Overall, the class was quiet, well-ordered, focused, and peaceful. Students worked the entire period.

Math Co-Taught 8

An opportunity to observe an 8th grade co-taught math class was extended for one 45-minute period. Nearly 25 students were present that day, with students divided four to
a group. The general education math teacher took charge of instruction with the special education teacher sitting off to a table giving help to students who came to the table. Three students sought help. One aide was assigned to a student who was recovering from a motorcycle accident. The aide assisted all students while moving from table to table to check on work and offer assistance.

The students knew the class procedure which was to review the daily class goal statements that aligned to the grade-level standards. Students checked and completed homework and then placed it in a central location. Once finished the general education teacher reviewed work on the white board. Then, the special education teacher added to the lesson by giving extra examples and helpful tips. The special education teacher asked students for responses and tried to get students involved.

Special education students were not identified, nor were levels of performance indicated. In other words, it was unknown which students with disabilities had a disability in math since all students with a learning disability were in co-taught math classes. Students did desk work and book work for the entire period. It was also unknown how students performed with this assignment dealing with angles. All staff moved from table to table. It appeared to be the students’ job to leave their seat and go to the round table to seek further instruction if the student did not know what to do.

Combined Meeting of Special Education Staff

A joint meeting was called by the principal to begin a dialogue between the middle and high school special education departments. This 30-minute after school meeting was attended by every special education staff member with the exception of a university teaching fellow and an aide, both assigned to the middle school. The
department heads from both buildings gave descriptions of how the programs were set up and implemented. Other staff members were asked to share.

The department head from the high school explained the teaching positions and highly qualified status of each member. This was followed by the middle school department head explaining their co-teaching program. Five issues emerged. First, the high school special education department assigned students to classes based on individual needs. Second, the middle school special education department assigned students to classes based on labels. Students with learning disabilities were placed in co-taught classes and students with cognitive delays were placed in pull-out classes. Third, the middle school staff did not offer co-teaching or pull-out classes for science or social studies because these areas were not tested on the state’s achievement test. However, this will be addressed in the future because those subjects have been added to the test. Fourth, special education students were failing classes, both pull-out and co-taught. The co-taught math 10 teacher stated that none of her students failed because all grades were modified. The principal boldly stated that no special education student would fail any class provided the student worked. Finally, the district did not have a coordinated plan for services so each building did what they wished.

Analysis of Observations

Procedures and roles were the same during formal and informal observations in both co-taught math classes (see Table I). In the 9th grade class the general education teacher taught a group of polite, well-mannered, and attentive students, few of whom had a math disability or needed assistance. In fact, the special education co-teacher was more of an observer. The co-taught math 10 class was organized by the general education
teacher with the special educator and aide used as support staff. The 9th grade class was well-ordered and the 10th grade class thrived on a more relaxed atmosphere. Both general education teachers planned, taught, graded, and facilitated the lessons. In the 10th grade class the special educator worked individually with the students with IEP’s. In fact, these students were often removed to a quieter location. Another major difference was that the 10th grade special education teacher retaught lessons or helped with homework during a tutoring period for the majority of the students. This did not happen with the 9th graders. Overall, the 9th grade students with IEP’s spoke favorably about co-teaching; whereas, the 10th graders did not.

The 8th grade co-taught math class had three adults in the classroom for 90 minutes. The general education teacher gave instruction while the special education teacher gave examples and illustrations of what was taught. An aide moved about the room assisting all students. During this observation, all students who needed assistance were encouraged to go to the round table where the special educator gave specialized instruction. Special education students were not identified, nor was it known which special education students actually had a disability in math.

On the whole, there were more dissimilarities than similarities with the three co-taught programs. First, the setting of the 8th grade program focused on collaborative grouping with “table buddies”. As a result, there was quiet chatter throughout the period. The 9th grade class was highly structured according to the general education teacher’s arrangement, whereas the 10th grade class was semi-structured also due to the general education teacher’s arrangement. The high school classes lasted 45 minutes and the 8th grade class last 90 minutes. Support with reading was offered in the 9th grade, lessons
were retaught during tutoring if necessary for the 10th grade, and the 8th grade used a balance of the 90 minute period for support. As a consequence, the 9th graders had no reteaching, but the 8th and 10th graders did. This impacted the 10th graders as they needed to find another time during the school day to try to get assistance with other assignments and needs.

All three classes relied on the general education teacher to organize and conduct the class. Neither the 9th or 10th grade special education teachers joined in the assignment, but the 8th grade special education teacher did. The 10th grade special education teacher went directly to each student to offer support. The 8th grade special education teacher asked any student who needed help to come see him at a particular table. The 9th grade special educator sat in the back of the room and at times asked students if assistance was needed for reading. The 8th grade teacher helped any student, but the 10th grade special educator assisted only students with IEP’s. Grades were not modified in grades 8 or 9, but they were in grade 10. The main difference dealt with placement. In the 8th grade all students with learning disabilities were placed in co-taught math with the special educator assisting any student with the general curriculum. The 9th graders did not need a co-teacher as their skills were strong. However, the 10th graders struggled the entire year even with four teachers being present. It was apparent that the 10th graders were exposed to the material, but few were able to master the concepts.

Summary

With approval from the Institutional Review Board and the university, permission was granted by the administrators of a rural school district for a three-month research study of students with disabilities, their parents, and selected staff members involved with
the high school’s co-teaching math classes for grades 9 and 10. Extensive files for 17 students with disabilities were analyzed. Further, interviews were conducted with 12 students, eight parents, and 12 faculty, with other staff members assisting with archival materials. Further, formal and informal observations were conducted in five classrooms.

Results revealed that all students, parents, and teachers rated progress of co-teaching classes by student grades and progress reports; whereas, most administrators rated progress by student exposure to grade-level indicators and results of high stakes testing programs, such as state Achievement Tests and state Graduation Tests. Co-teaching did not appear to impact attendance, behavior, self-concept, friendships, or participation in extracurricular activities as rated by students, parents, and staff. However, at some grade levels, co-teaching negatively affected grades not only in co-taught classes, but in other core subjects that offered limited support services.

Tracking accurate data through IEP’s proved problematic for a variety of reasons. Different IEP forms were used, sections were left blank, levels of performance did not align with goals and objectives, and terms such as co-teaching and inclusion were used interchangeably. Moreover, the district did not follow a consistent standard of service delivery model for Pre-K through 12. Consequently, it was difficult to follow the logic and sequence of placement options. In particular, it was apparent that the programming of the middle and high schools special education departments collided and that transition from the 8th grade into the 9th was not easy for students or teachers. For example, students’ grades in core subject areas shifted significantly throughout grades 6-10.

There were few similarities between the 9th and 10th co-taught math classes. The majority of students with IEP’s in grade 9 did not have a disability in math. However, the
students with IEP’s in grade 10 had major difficulties. The four teachers needed training. One special education teacher observed and one special education teacher removed students to her room because of distractions. The students who had strong math skills liked the arrangement and the students who had weak math scores did not. Parents wanted their children to be successful and wanted school employees to hear their voices when things were not working. Overall, parents wanted services that met individual needs while allowing their children to discover how to be independent and successful learners. Towards that end, parents and students relied on grades to rate progress not only in co-teaching classes but in all classes.

Comments and Questions

This section offers my interpretation of the data in specific areas. This includes the issue of credibility, how role variation influenced responses, strengths and weaknesses of co-teaching, the role of grades as the standard for progress, noteworthy similarities and differences across different types of data, the accuracy of perceptions of interviews, and the notion of standards as placement.

Credibility

I did not realize it at the time; however, the shortest parental interview was actually the most profound. Liz was the mother of a cognitively delayed 10th grade male, a student I taught for two years. She politely listened to my interview questions, nodded her head, smiled, and then said, “I know he is in good hands with all of you. All the extra communication that is sent home is great. I am for whatever works as long as Brent’s needs are being met. I trust all of you.” Later, during the analyses of the data, I realized
what she actually said. It was, “I trust you with my son. You will do what is right for him now and for the future. And, you will keep me updated.”

It really was not the issue of “teaching” in a co-teaching class that was problematic to special educators. Truly. Special educators were trained to have extra strategies, tools, ideas, plans, and agendas to help students learn. Therefore, it was not the teaching role that created the confusion and difficulty. It was the addition of this new responsibility to the other roles a special educator carried for each child with an IEP. As with each stakeholder, perspectives varied according to roles and responsibilities.

In this district, special educators were responsible for a “class list” of students. Ordinarily, the class list was generated by grade level. The special educator for co-taught math 10 will be used as an example. This special educator monitored attendance, grades, behavior, credits, transition plans, high-stakes testing, and health concerns for 28 10th graders. Additionally, she taught pull-out math and social studies for students in grades 9, 10, and 11. In fact, her schedule included two tutoring periods for 10th graders and a total of four periods of instruction for social studies and mathematics. If co-teaching was all this special educator needed to supervise and organize, then that assignment would be manageable. However, it was not.

This teacher needed to write and implement lessons plans, interim reports, and progress reports related to IEP’s for three classes, oversee high-stakes testing for 10th graders, keep a keen credit check on all students, especially those wishing to attend the vocational school, design independent study classes for students to make up a math credit so they could attend the vocational school, write progress reports, assist with transition plans and community service projects, write a minimum of 28 IEP’s, have 28 annual
reviews, complete daily lunch and hall duty assignments, and oversee daily assignments, homework, tests, and quizzes for students in general education classes and in her pull-out classes.

Co-teaching demands extra time, energy, and resources. What are special educators supposed to give up in order to add co-teaching? What I have witnessed through the archival records and heard through the voices was that communication to all stakeholders, and strategies to meet specialized needs of students were sacrificed. In essence, some gave up accountability. It appeared to be that once accountability was gone, so was credibility. Liz said she trusted us to do what was right for her son and to keep her informed. Another parent, Martha, concurred when she said, “I just want to know there is a system in place that my son can go to for help.” Parents and students trusted us to have an established system which kept everyone accountable. This seemed reasonable.

The principal may have assisted the situation by asking the staff what was needed for co-teaching to be successful. Conversely, the teachers could have asked the principal for additional assistance. Both groups, and ultimately the students, would have benefited from this communication. Also, the veteran 9th grade special educator lost credibility with the math department, especially with the beginning teacher, when she became an observer and not a co-teaching. A budding relationship between a veteran and a rookie could have developed.

The veteran special educator in co-taught math 10 sacrificed teaching time trying to teach around what some students with disabilities perceived as an uncomfortable atmosphere in the general education classroom. Furthermore, the 10th grade general
education math teacher lost time attempting to design multiple lesson plan formats for the wide range of student ability. He also felt he lost the respect of the special educator because he was not able to conduct the classroom to his liking. The middle school special education department lost credibility with the high school special education department by placing students who had attendance problems, instead of math disabilities, in the co-taught math 9 class. However, the high school special education department lost credibility with the middle school special education department when functional math assignments were taught to the 9th graders instead of the appropriate grade-level indicators.

Finally, credibility with co-teaching was lost with parents who felt the placement was not right for their child and asked for a change. Two mothers spoke with hurt and grief as they retold experiences of helplessly watching their children fail and feeling that no one took their voices seriously. One parent was told to place her son on medication and another mother was told that a schedule change could not be made. Obviously, there was not much communication.

This loss of credibility might better be explained through two separate events that happened during scheduling, right after interviews. The parent of one 9th grader refused to allow her child to be in general education classes because of lack of trust. The parent said she trusted someone to assist her daughter and that did not happen. Consequently, she was not going to make her daughter go through that again. After several telephone calls, the parents agreed to allow their daughter to start a general education class as long as the school provided a letter that their daughter would be looked after by a special educator and that the parents could have their daughter transferred to a pull-out if needed.
The letter was written, signed, and delivered to all parties. Secondly, at scheduling time the parents of two students, one an incoming 9th grader and the other an incoming 10th grader, refused to allow their children to be placed in certain classrooms because they did not trust the environment. A high school special educator’s job is taxing enough without adding anything new. The addition of co-teaching equals the subtraction of other services. How can communication and credibility be restored?

Everyone wanted all students to succeed. The difference was the administrators and supervisors were looking at the larger picture, while the teachers were looking at the day-to-day issues. Administrators and supervisors saw students receiving exposure to grade-level indicators and assistance from the special education staff as a win-win situation. Special education teachers wondered how much more could be added to their load and where they could find extra time in the school day to provide these services. All felt pressure to help students make progress towards competency; however, no one communicated to any of the parties to gain a history, a sense of purpose or a clear vision. Administrators could not have known anything was amiss unless teachers, students, and parents talked. Each seemed to understand personal perspectives based on assigned roles.

*Roles and Perspectives*

Roles were heavily influenced by performance. In this instance the administrators were very much aware of results of the state’s Graduation Test and wanted to do all in their power to expose all students to the general education curriculum. Administrators wanted an efficient and fundamentally correct service delivery model that would meet the needs of the IEP while introducing the general education curriculum to the students.
The special education teachers did not want a one-size-fits-all, efficient, and fundamentally correct service delivery model. These teachers wanted services that met individual needs of each IEP student. Parents did not care what the model was called, who taught it, or where it was conducted. They simply wanted their children to be successful, earn credits, complete requirements, and graduate on time. Also, parents wanted someone accountable for their child. Students wanted a teacher they trusted and a safe environment.

Co-teaching sounded so easy. And, it might have been if the number of students with IEP’s was small. However, in this district’s case, numbers continued to increase. Also, the high school special education department had a history of co-teaching experience. In fact, the high school used co-teaching before any of the other grade levels. As a result, the teachers knew the advantages and disadvantages of the model. Consequently, they were surprised to revisit the strategy again.

Added to this was the vast experience of the high school special education staff. Some had personal involvement of actual court cases where parents sued because IEP’s were not followed correctly. Others were involved with state-wide special education organizations which focused on transition issues. These educators understood the seriousness of meeting individual needs of each child for promoting the most realistic post-secondary option for each child. Consequently, none of the high school special educators were eagerly awaiting this model. Since there was no planning, all involved hung on to their perceived roles of what co-teaching meant to the professional. Therefore, everyone involved had different ideas, roles, responsibilities, duties, guidelines, rules, and procedures.
Everyone had different roles which affected personal perspective. Administrators and supervisors felt the pressure for meeting district standards for high-stakes testing with limited staff and resources. Counselors were caught in the middle trying to balance classes to meet the needs of the students. High school teachers were working for all students to gain competency and become proficient while being mindful of graduation requirements. Parents and students wanted a comfortable environment that ensured student success and credits towards graduation. All wanted students to be successful; however, each group rightfully had perspectives that matched responsibilities of their roles. Is it any wonder that groups measured progress differently?

*Strengths and Weaknesses of Co-Teaching*

What was there not to like about co-teaching? After all, every parent wanted to know their child could succeed with their typical peers in the general curriculum with appropriate grade-level indicators. To me the greatest strength of the program was just what it was intended to do. That is, to expose students to the general curriculum, to provide support, to help build mastery skills, and to immerse students with their typical peers. However, the weaknesses appear to outnumber the strengths, at least in this rural area. These challenges include too many students with IEP’s, too few special education teachers, not enough periods in the day, too many students with vast emotional and academic needs, too much poverty, too many gaps in performance levels, limited background knowledge, no planning, and different personal philosophies concerning overcoming obstacles.

One 10th grader had many obstacles to overcome. He was born two months premature to a young teenage mother. This child had vision and fine motor skill problems
at birth. Then, poverty, questionable pre-natal and early childhood care and nutrition, and a marriage and quick divorce from the child’s father were included. In this student’s case, there were certain physical limitations that came from being two months premature. Although working hard and staying focused were admirable goals, they were not enough to alter specific physical limitations. Consequently, he needed strategies and tools to help bridge gaps between background knowledge and new material so he could better understand grade-level indicators.

Special educators were trained to help students manage a disability by bridging gaps from one level to the next. Without the connections, students can not move to a higher level simply because it is there. Once the student gains the skill, then it would be appropriate to move to a higher level. Finding time in a co-taught environment to make these connections can be difficult. Therefore, in general, having procedures, guidelines, schedules, processes, and standards in pace before any program is added can only increase success rates for all.

*Grades*

Parents, students, and all teachers agreed that grades were the measure of progress in co-taught settings. This should not come as a surprise because there appeared to be a rating scale for most student performance. There were two issues concerning grades in co-teaching. First, in the 10th grade co-taught math class grades were modified according to IEP goals in order for students to be successful in the class. Did students know this? Did parents know this? Also, what were the ethics involved in not informing students and parents? Second, how can grades be the unit of measurement if a consistent set of standards for all settings throughout the district was not used?
Noteworthy Similarities and Differences

The organization and implementation of the co-taught math classes in grades 8, 9, and 10 proved to be most insightful in terms of the few similarities and the many differences. The one consistent feature in all three grade levels was that the general education teacher was the teacher of record and the one in charge of planning and grading. With that exception, every part of the co-taught classes from the number of teachers, disabilities of students, performance level of students, setting, period, roles, responsibilities, duties, and paperwork were different.

Classes were highly-structured, semi-structured, or involved collaborative grouping. Periods ranged from 45 to 90 minutes with no support time or some support time built in. At some levels, grades were modified and in some they were not. In one instance the co-teacher observed and in another the special educator co-teacher sat a table and invited students to come for help. Each class had its own dynamic including the number and types of disabilities. Not surprising, the class that had the students with the most types of disabilities had the most frustrating experience.

The placement of students in the co-taught classes seemed illogical at times. Why would a financially-strapped district provide services to students who did not have a disability in that area? Or, when did failing to abide by the school’s attendance policy become a disability? Finally, why were students who scored in the limited range placed in the co-taught math class instead of those who scored in the higher basic range? Again, a solid policy for a consistent district-wide program would appear to be helpful.
Accuracy of Perceptions of Interviews

I believe all school personnel gave honest and accurate interviews. In other words, administrators were sincere when they spoke of the successes of co-teaching. Conversely, teachers who felt that co-teaching was ethically wrong stated so with a passion. Everyone said what they believed and backed it with their own view of supporting evidence. On the other hand, most parents did not care about the placement as long as the child was successful and that the parents knew a professional was accountable. However, two parents spoke with conviction on more than one occasion about their personal disappointment with the school.

In both cases, the service delivery model was not working for their children. Both parents had older children who had IEP’s. Therefore, these were knowledgeable parents who knew solutions. Neither was happy that their child seemed was in a group situation and was “making progress in the general education curriculum”. Both wanted their children to receive individualized instruction to meet specific needs and that did not happen. Neither parent cared how their child was “performing in a group”. A suggestion given to one parent was to put her child on medication. That did not go over well.

The most frustrating part to this mother was that she knew other approaches that would help her child and the school would not consider these options. Her point that her older son was receiving the requested services in the same district made a small enough impact that a slight change was made for the younger son. However, after a short while things returned to their former pattern and the parent was furious. She only wanted help for her child, and in her eyes, the school would not do that.
The students were wonderfully honest. Most of the 9th graders smiled, shook their head, and stated their disbelief that a co-teacher was needed for them because math was their strong subject. On the other hand, the 10th graders wanted out of the co-teaching setting just as fast as was physically possible. All the students knew their strengths and weaknesses and were amused that the educators did not!

Standards for Placements

Earlier I mentioned establishing clear guidelines and procedures for placement into co-teaching settings. Setting these could only help students have more successful academic experiences. For example, only two 10th graders felt comfortable in the co-teaching setting. The remainder felt frustrated, aggravated, and weakened by the experience. Why did we do this to them? The majority of 9th graders felt they could succeed with only the general education math teacher. Should we have provided this?

An established standard should include a critical evaluation of each child considered for placement in a co-taught setting. The guiding principles should be based on the child’s levels of performance, work ethic, determination, reading levels, self-advocacy skills, attendance patterns, anxiety levels, behavior, scores on the state’s Achievement Test, health issues, proposed career plans, and skill levels and background knowledge in the content. Gathering this data for group consideration is the first step in meeting the standard.

Next, the child’s specific learning problem and how it manifests itself needs to be detailed. In other words, does this problem appear on tests, class work, short assignments, long-term assignments, or reports? What strategies does the child use to address the problem? Can these work in the general classroom? If not, then in what setting does this
work? How often? Can a classmate or the teacher provide assistance? Does this require a special educator to be present? If so, how often?

Does the child need assistive technology? Can this come into the classroom? If not, where can it go? When can the child use it? What is the child’s work ethic? Does the child give up after a first attempt or does the child rebound and persevere? What are the performance scores on high stakes testing? What does that data say about the child’s ability level and background knowledge? Based on that, could the child meet with success in the general education setting? What is the child’s reading level? Does this class require extensive reading? If so, can the child manage?

What is the child’s anxiety level? For instance, will this child prohibit others from learning by making inappropriate demands? Does this child attend school on a regular basis? If not, why? Are there health concerns that might cause long breaks in learning? If so, what has been done in the past? Can the child manage this load? When will the child complete out of class work? Will the child need help? If so, who will supply it?

Working through these standards can help determine if the child is a good match for the program? Co-teaching requires the student to develop self-advocacy skills by accepting responsibility for the content. It also requires a professional to provide support and direction because not only are the students learning new content, but in many instances, students are learning new coping strategies, too.

Analysis

Co-teaching done correctly is hard work that required dedication, determination, and discipline from all involved. Every part of the process was hard and often times
needed to be repeated daily. There was nothing easy, efficient, or quick about the model. In fact, just the opposite was true. To me, the weakness was that the co-teaching design made it difficult to meet the individual needs of the child. After all, there was a reason why this legal binding document was called an Individual Education Program. It was designed to be individualized.

Grounded Theory Tradition

Overview

The systematic format for data analysis for grounded theory involves a standard format consisting of open coding, axial coding, and selective coding (Creswell, 1998). Categories, including properties, were found in open coding. During axial coding central phenomenon conditions were identified, casual conditions explored, strategies were specified and context and intervening conditions were identified. Next, consequences were delineated. Finally, a proposition or hypotheses connecting the axial coding was established.

The root of this study was to determine how progress in co-teaching classes was measured. Participants included all stakeholders in the co-math 9 and 10 classes. These were administrators, supervisors, guidance counselors, general education teachers, special education teachers, educational aide, students, and parents. Categories in open coding were testing results, grades earned on report cards, and other relevant factors suggested in the literature. These included attendance patterns, stigma of special education label, participation in extracurricular activities, self-concept, discipline referrals, and behavior patterns. Testing results sorted into scores on high-stakes tests, such as the state Achievement Test and the state Graduation Test. Another area was scores earned on
standardized test such as the Woodcock-Johnson Psychoeducational Battery. The purpose of the first grouping of tests was to determine how a student is progressing in the general education curriculum. The purpose of the second group helped determine individual performance and ability levels. Although the tests were grouped in the same category, they had different purposes.

The second category was report cards. This category was identified by three properties. The first dealt with scores earned in co-taught math class. The second dealt with scores earned in core subjects and the third dealt with scores earned in non-core subjects. The areas have different meanings as core subjects were assessed on high-stakes testing, while non-core subjects were not. However, the same grading procedures apply. For instance, students were scored on class projects, assignments, homework, tests, and quizzes. Another level included the setting of the core subjects, which included pull-out and general education. The last category in open coding identified other relevant issues that might have impacted student performance.

Axial coding explored causal conditions that influenced the phenomenon. In this study there were four. The first was the administrators’ desire for all students to gain exposure to the general education curriculum. The second was the hope that students would gain skills to be competent within the curriculum. The third involved increased grades on class assignments and the fourth involved increased self-esteem through success with the general education curriculum. Overall, the main focus was on the general education curriculum.

The phenomena resulting from these conditions were that students gained exposure to the grade-level indicators per grade level, which resulted in some students
gaining skills and some not. This related to both an increase and decrease in self-esteem and grades. Finally, grades became an issue because some grades needed to be modified to ensure passing rates and earned credits.

The context and intervening conditions that influenced the phenomena included pressure and unclear purpose, vision, roles, and expectations. Pressure was felt by all stakeholders for students to become competent and proficient, as well as to meet all graduation requirements. The intervening condition was that there were no guidelines or standards for assessing progress in co-teaching settings. Consequently, strategies such as adjusting grades, schedules, and daily plans were specified as methods of assistance. The consequences, or outcomes of the strategies, were realizations that more communication and planning developing standards and procedures for grading would have been helpful. In fact, there was the realization that the district would benefit from a consistent service-delivery model.

Selective coding identified the various roles and responsibilities of the groups, as well as the comfort level of the students and parents. The resulting proposition was that all stakeholders have the best interest of the student at heart. With that being said, all politics are local. Administrators think of the district and many teachers think of the class. Moreover, parents think of the school, while students think of the class.

This qualitative study investigated perceptions of progress in co-teaching classes through interviews with 12 school employees, 12 students, and eight parents and extensive record review including transcripts, grade cards, IEP’s, attendance records, progress reports, and behavior referrals. Thirty-four complete student files and up to 15 questions per individual were analyzed. A theoretical model was developed describing (a)
causal conditions detailing how progress was measured in co-teaching settings, (b) phenomena that arose from those causal conditions, (c) context that influenced strategy development, (d) intervening conditions that influenced strategy development, (e) actual strategies used to implement co-teaching, and (f) consequences of those strategies. Subcategories of each component of the theoretical model were identified and illustrated by narrative data.

**Causal Conditions for Measuring Progress**

School personnel disagreed as to how progress was evaluated in co-teaching. Three of four administrators stressed exposure to grade-level indicators by a properly licensed and credential content-based professional left no doubt that all students were being exposed to appropriate content. Further, it was hoped that this exposure would lead to more competency and higher skills not only in the classroom, but also on the district’s high-stakes test. Ultimately, it was hoped this exposure would translate into more students achieving competency levels.

Teachers, parents, and students suggested that progress was measured by the actual report card grades students earned in the class through class assignments, homework, participation, quizzes, and tests. One guidance counselor measured progress by the actual scores earned in the classroom; whereas, the other guidance counselor did not know how grades were measured. The school psychologists that the middle and high schools rated progress differently. For instance, at the middle school level she felt progress was measured by scores earned with class content. However, she felt that the high school related the IEP’s goals to the class content. All teachers involved in the co-teaching experience agreed progress was measured by the scores earned through class
assignments, but that at the 10th grade level, scores were modified by the general and special education teachers to ensure student passing rates and earned credit towards graduation requirements.

All involved wanted students to be successful in their daily work and on high-stakes testing. In fact, all had the students’ best interest in mind. Representatives from each group wanted students to have an increased self-awareness and to gain confidence by success with the general education curriculum. An administrator and a parent spoke to their wish to remove the stigma of the special education label as a measure of progress. Overall, all wanted students to be successful.

Evidence supporting these conditions came from parents, staff, and students. For instance, the principal added, “I believe in removing the label from both special education students and teachers. Having a second teacher in the classroom can assist all students, especially those students who are not identified as special education, but struggle academically nonetheless.” The assistant principal added, “We need to help students find the best fit in the real world. Now is the time to help students learn to be independent workers so they will be successful in life.” A student stated, “I believe we need to help all people learn to live in their natural habitat so they can make it on their own. If we protect people all the time, they will not learn to live independently. But you have to know when is the right time to let someone be independent.” A parent stated, “It is always better if the kids learn to blend in. It is nice to remove the stigma of special education a bit.” Further, another staff member and a parent of a child with a disability stated, “I wonder what it is like in a large school. Here everyone knows everything about
everyone. For instance, everyone knows who has special education classes. Special education at our school is not viewed as a dumping ground.”

The curriculum director offered, “I believe co-teaching can expose all students to the general education curriculum. However, I believe that special education should be at the core of co-teaching so that individual needs of students with disabilities were regularly addressed and evaluated.” An assistant principal added, “I believe co-teaching can exposure all students to the curriculum and to meet grade-level indicators.”

Interestingly, the four teachers involved with co-teaching stated there was not any discussion as to how to measure progress, but that each worked out a workable system.

Another staff member questioned if students felt they were making progress. She said, “When the middle school students enter the 9th grade they lack self-esteem and I think it is directly related to the failing grades they receive at the middle school. I have noticed an increase in failures. They fail and then they are sent on to the next grade. This is teaching students that failure does not have any consequences.” She also stressed that students sometimes face a rude awakening when they fail a 9th grade core subject and realize they need to repeat the class for credit. “In my opinion, failure and poor self-esteem greatly interfere with a student’s ability to be successful.”

Overall, two trends emerged. First, administrators felt progress was measured by exposure to grade-level indicators with the hope students would learn competency skills for proficiency. Second, teachers, parents, and students felt progress was measured by the actual scores students earned in the classroom. Consequently, two groups surfaced with two different outcomes.
Phenomena Resulting from Causal Conditions

Causal conditions resulted in five categories as reported by participants. First, all students gained exposure to grade-level indicators. Second, some students increased competency levels and some did not. Third, some students increased their scores in class and some did not. Fourth, self-esteem increased and decreased based on scores earned in the classroom. Finally, it was necessary to modify grades for the 10th graders to ensure a passing percentage and earned credit.

Educators and students provided supporting evidence for the first claim. One of the special educators had nothing but praise for the general mathematics teacher. She said, “Amy, the general education teacher, runs a straight-structured class. Consequently, none of the students have behavior issues. They know what to do and get to it.” Also, the special educator felt the students selected for the class had the proper readiness skills to understand material. She said, “I believe that those students with disabilities who were placed in this class were placed because of their higher ability levels and good behavior.” A 10th grader felt he was ready for exposure, too. Mitchell said, “I like how the teacher organizes the class. If I were in charge I would keep things as they are. I am getting A’s in the class and I know the material. I want to try Pre-Algebra next year.” However, not all students felt this way.

Grant, a 10th grader, said, “This class has impacted me because I am more frustrated. We seem to start on one thing, switch to another, without any time in the middle to understand what was learned. I am always lost.” Grant added that his self-confidence was lower because of his frustration. He added, “Because I am more
frustrated, my self-confidence is lower, which makes everything more frustrating. I do not think I can apply anything I have learned.”

Students and teachers connected self-esteem to scores earned in class. For instance, when scores went up, so did self-confidence. Conversely, when scores dropped, so did self-confidence. Beth, a 9th grader said, “I am doing good in class. In fact, I have made the A/B honor roll! I rate my progress by my grades. I am doing good and I feel prepared for the state Graduation Test.” A sophomore backed this claim. Sam said, “I am doing pretty good in class because I know what is going on. I feel successful.”

Tom, a sophomore, had a different perspective when he said, “If the grades are good, I think it is awesome. If they are not good, I say something else! However, to be fair, grades do not equal self-confidence to me.” Nick, another sophomore, added, “I understood the work better when the class was smaller and moved slower. It was quiet. There are too many kids screwing around and I do not like that. This is a hard class. I think I am getting a B or C.” Jim, a 10th grader, added that his self-confidence was lowered because of having an ex-girlfriend in the class. He said, “It really is not the subject, it is my social arrangement. But, I think I would have understood math better in pull-out.”

The final point in this category is the need to alter scores in class to ensure success rates and earned credit. Vivian, the special education teacher assigned to grade 10, said, “The grades are modified. The general education teacher and I work together to modify the grades so students will receive passing grades. The general education teacher is concerned whether students are learning, too.” Her counterpart, Wesley, voiced his concern over the wide ability ranges in the class. He said, “I am between a rock and a
hard place. If I move at a slower pace, I lose the higher functioning students. But, if I move at a faster pace, I lose the lower functioning students. I continue to search for plans that might work. I have not found one.”

*Context Influencing Progress*

Pressure to produce proficiency appears to be the name of the game. Educators feel pressure from the state for increased high-stakes testing scores and from the district to meet local district report card standards. High school special educators feel pressure to meet the terms of the IEP, including transition requirements. Plus, all participants feel pressure for students to graduate on time by meeting all graduation requirements.

The curriculum director had the most to say concerning pressure and placement. Cindy felt that co-teaching would give students the best of both worlds by having a content-based teacher matched with a learning specialist. Plus, she felt this arrangement would ensure there would be no holes in the curriculum, allowing students to make progress in the general education curriculum. Overall, she felt this arrangement would assist students and teachers to learn to work cooperatively, which would only help them in the real world. She added, “When students are out in the real world, there are no exclusions. Therefore, it is good for students to learn to get along with a variety of personalities now.” Moreover, Cindy stressed the need for all teachers to get involved. Cindy said, “Providing successful education is the responsibility of all teachers to make students feel they belong. Students should not be identified as only special education or only general education. We need to remember that.”

Kent, a high school administrator, also felt the pressure for having all students learn to achieve and to learn to live independently post-graduation. He said, “We need to
help students find the best fit in the real world. Now is the time to help students learn to be independent workers so they will be successful in life. We need to find a workable plan so each child is successful.” The high school principal, Len, felt the pressure of finding successful strategies for all students to succeed. Len said, “Ultimately, both teachers are responsible for all students in a co-teaching arrangement. Having a second teacher in the classroom can assist all students, especially those students who are not identified as special education, but struggle nonetheless.” Len feels that having a special education teacher in the classroom can only be beneficial. He added, “After all, everyone learns in a different way, so it is good to have different strategies presented so all students can be successful.”

Another administrator voiced her concern over the difficulty in producing a schedule that meets the needs of everyone. Jan said, “Right now I am trying to find a way to work more support for science and social studies into our schedule. We need to do this, but it is tough to do.” She also voiced her frustration in trying to combine various models. She added, “In my opinion, it is hard to try to do both pull-out and co-teaching at the same time because one or the other will suffer.” Furthermore, she stressed the problem of using only one program by saying, “Co-teaching is only going to help the special education staff if more students are placed in the general education settings. If they are not, then the staff gets spread too thin and it is tough to schedule.”

The school psychologist stated her view of the pressures with co-teaching by saying, “Co-teaching is full of pressure because there are a wide variety of needs. It is hard. It can be stressful. When more support is needed, then there is less opportunity to
provide specific skills for students. Therefore, it can be easy to dilute the special 
educator’s role.”

Both guidance counselors spoke to the pressure of meeting individual needs of 
students. Rachel said, “I believe student need drives a program and that a program should 
be designed to fit those needs.” Stephanie added, “It is really hard for me to get my head 
around the philosophy of compromising skill mastery for an experience. Students need to 
learn how to function independently. We need to be careful that our students are gaining 
mastery, and not just exposure.”

All educators involved with co-teaching felt the pressure of adding co-teaching to 
their schedule. Vivian, a special educator, said, “I need answer to how things are 
supposed to be. I feel it would be best if individual student needs and testing results are 
looked at for placement.” Barb, the educational aide, added, “Everyone needs to know 
that a disability is not going to go away and that students need to learn coping skills. We 
need to place students in classes where they will learn necessary skills for all areas of 
life.” Amy, a general educator, spoke of least restrictive environments when stating, 
“This co-taught class is now more restrictive for students without IEP’s. Therefore, I 
believe we need to consider that fact.”

Parents felt the pressure of having students be successful in class, pass the high-
stakes testing, and graduate on time. Matthew, father of Sam, said, “The state Graduation 
Test scores will be out soon so we can see how he performed. Sam reported that the CD 
version of the test slowed him down, which prevented him from rushing. Great! We’ll 
see how he did.” Leah, mother of 10th grader Tom, questioned his lower grades in the co-
teaching class. She said, “I noted his grades are lower and that concerns me.” Martha,
mother of 10th grader Andy, expressed her pleasure that he would pass his classes. She added, “They told me he will pass. He will be fine. I do not want him to have to repeat classes.” Brenda, another mother, felt the pressure of her daughter earning credits. She said, “I never want my daughter to have to repeat a class again. My girl will do her work and not fail.”

*Intervening Conditions Influencing Strategies for Progress*

In addition to context, there were also intervening conditions that influenced participants’ choices of strategies. Intervening conditions included (a) lack of preparation, (b) unclear purpose, vision, roles, and expectations, and (c) lack of communication.

Students, parents, and staff members provided supporting evidence for these claims. According to one special educator, “I felt unprepared for this year. In order for this program to work I needed answers to how things are supposed to be. Everyone involved with co-teaching at the high school was uninformed. It was not fair, especially to the general education teachers.” Another staff member added, “I believe we did not do a good job with placement of students. There are some students in the general education class who should be in pull-out, some in pull-out who might be able to manage in co-taught and some in co-taught who should be back in pull-out. This is probably due to the fact that we did not know the purpose of the program at the very beginning. It would have helped to know what was expected of us at the beginning because staff was frustrated, too.” Another teacher responded, “No guidance. We were given no guidance as to how to co-teach. I do not know what co-teaching model we are supposed to be using, the purpose of it, how the program is evaluated, who evaluates it, or what the results of the evaluation are.” Another teacher summarized it best by stating, “Co-teaching is not happening.”
The majority of the 9th grade students did not know why they were in a co-taught math class. Andy says, “I do not have a need for support in math, but I do need help in English.” Chris added, “I earned in the A range, but I slide back a bit. I am good in math. In fact, it is a strong area for me. I have never been in a pull-out math class before.” Beth stated, “I made the A/B honor roll. Being in this class does not impact me. I am doing good. I feel prepared for the state Graduation Test in math because math is a strong area for me.” Annie reported, “I do not really need the special educator in the class because I feel strong about my abilities and I know I would pass with only one teacher.”

On the other hand, the majority of the 10th graders was frustrated and wanted to return to pull-out. Tom added, “I really like pull-out classes. I like the individual help and the pace is great. In co-taught we have about two days to learn something and then we move on. My grades in pull-out were a lot better. Sometimes in co-taught my grades fall because we go so fast.” Grant added, “This class has impacted me because I am more frustrated. We seem to start on one thing, switch to another, without any time in the middle to understand what you have learned. I am always lost in the class.” Also, Grant added, “Because I am more frustrated, my self-confidence is lower, which makes everything more frustrating. I do not think I can apply anything I have learned. Next year I am back in a pull-out math class and that is fine by me. I will do better.” Jim explained, “I like to leave the room to go to a smaller place where we can have material presented to us at a slower pace. Things go too fast in the general education class.” Nick added, “This is a hard class. There are too many distractions. Students should be quiet and focus on their work. Kids are screwing around and I do not like it.”
One parent remarked, “Being in a loud setting with kids who are distracting others is restrictive to Sam. That is not good for him. Therefore, I believe the quieter the setting, the better.” Another parent added, “I am not seeing much progress in the co-taught class. In fact, Tom’s grade has actually dropped.” Another parent stated, “Andy does well in math. We know that is an area of strength for him. It is English that is his weak area. In earlier years I had to go to school to intervene. I thought an IEP meant my son would be getting the help he needed to understand and pass his classes. That is not what happened. He failed!”

The purpose of co-teaching was not defined for the high school staff; however, the curriculum director did not believe the district had a policy in place. In fact, Cindy said, “I wonder if the staff knows the purpose. If they feel that grades will improve, they are wrong.” An administrator, a guidance counselor, one special educator, and the school psychologists all spoke to the need of producing a district-wide service delivery model so all stakeholders knew what was expected and have standards in place. Jan said, “It would be helpful and nice if our district followed the same plan. Right now it is inconsistent. I believe a consistent play would work best for meeting the needs of the students.”

The school psychologist added, “I believe it would be ideal if our district was consistent with programming from Pre-K through 12th grade so students would not need to change to meet the demands of a different structure.” Of course, having a constant evaluation and measurable data was included in Lisa’s interview. The middle school guidance counselor added, “Our plan is different from the elementary and the high school. I believe it would be best if there was a district plan and that everyone follows a
consistent plan.” Vivian, a special educator, added, “There should be hard and fast rules about placement.”

Communication was another intervening condition to co-teaching. Sue, a special educator, stated, “No guidance. We were given no guidance as to how to co-teach.” All educators involved were unclear about the purpose, how the program would be evaluated, who evaluated the program, or what the results might be. Vivian, a special educator, suggested that adequate training be provided, the purpose be defined, and that placement guidelines should be established. Barb, the educational aide, stressed the need to define teacher roles and responsibilities. Sue also agreed with the above suggestions, but included establishing an open communication line. Rachel, a guidance counselor, stressed the need to provide communication and collaboration skills. The stakeholders did attempt some strategies to assist with these conditions.

Strategies for Measuring Progress

In the presence of the context and intervening conditions described above, the phenomena led to the development of core strategies for adjusting to co-teaching. Participants managed by assuming specific roles, adjusting student schedules, adjusting grades, bringing in additional help, absorbing duties in other classes, and adjusting daily plans.

The teachers involved in co-teaching adapted their roles. In the math 9 co-taught class, the special educator did not know the math and took on the role of observer. She sat in the back of the classroom, learned the material from the teacher, and would walk around the class asking if anyone needed help reading. The general education teacher said, “There was no co-teaching. The special educator did not feel comfortable and did
not know the material. I wrote all the lesson plans, the tests, the short cycle assessments, and did all the grading.” In co-taught math 10 the general education teacher stated how the class would be set up and what the responsibilities of the special educator would be. Wesley said, “Once I was told I had to do this I went to the middle school and followed their model. I taught, graded, and made the tests. The special education staff works with all the students on IEP’s. That is helpful.”

It was necessary to adjust some schedules at the beginning of the school year. Sue added, “We did need to switch some schedules around at the beginning of the year because a few students with disabilities were very lost.” Barb added, “I still do not think we did a good job placing students. We did the best we could but it was not a good fit. It would have been very helpful to have known the purpose so we could have made a better fit.” Vivian added, “It was necessary to move some students into pull-out and then to move students from a higher level math class to the co-taught. Even with these changes, I do not feel this was the best placement for some students.” Barb stated, “It was humiliating to watch some of the students in the class. They were frustrated and we were frustrated. I believe they gave up after the state test.”

Grades were adjusted in the co-taught math 10 class, but not in the co-taught math 9 class. The reason for the adjustment was for the students to pass and earn credit. With the exception of administrators, all participants rated progress in co-teaching by grades and progress reports. A parent said, “I measure progress by grades. Last year I was not pleased when my younger daughter failed a general education science class. I went to school well before she failed and asked to have my daughter placed in the pull-out class. That did not happen. My daughter failed and had to repeat the class. That will not happen
again. My daughter will do her work and she will not fail.” Another parent offered, “I rate my daughter’s progress by her grades and she is doing great. My recommendation is for the school to continue to meet the needs of students. Students will succeed if you meet their needs.” A mother explained, “My daughter is on the A/B honor roll. I measure her success by her grades.”

A mother of a 9th grader stated, “My son failed at the middle school and I am not happy about that. I had to go there several times. They told me things would change and they did for a short while, but then things went right back the way they were. I rate my son’s progress on his grade cards and his progress reports. He is doing fine now. As a parent I want to know that his needs are being met and that there is a system in place that he can go to for help.” A mother of a 10th grader said, “My son’s grades are lower than when he was in pull-out. That concerns me. Somewhere I would like the school to come up with a plan so that my son will be in with a larger group of students, still keep his grades up, and slowly move away from one-on-one.”

One administrator said, “If people feel that grades will improve with co-teaching, they are wrong. Students must learn strategies in order for skill levels to increase. I believe that students with disabilities should experience the core curriculum, but should have extra services to build skills. For example, if a student with disabilities had 45 minutes of a co-taught class, then I believe that student should have an additional 45 minutes of tutoring. That would level the playing field. It would be great if one period of tutoring could be for pre-teaching. That would be pro-active, rather than re-active.”

Since the majority of 9th graders did not have a weakness in math, it was not necessary to seek additional support. However, that was not the case in grade 10. In
addition to the general education teacher, there was also the special education teacher, an aide, and a student teacher or a university student serving in a field placement. The class had 18 total students. According to a selected student, this was not enough help. Tom said, “It was beneficial to have two teachers because I received additional support and individual attention. However, I think it would be great if we had even more help in co-taught.” Also, Jim said, “During the fall we had four adults for 18 students. That was great. I did way better in there then. All I had to do was ask for help and it was right there. It was easier to get individual help.” Jim added, “If we are going to do this co-teaching class, we need more than two teachers in that classroom. We had as many as four teachers and that was great. Whenever I needed help, someone was right there to offered assistance. More help is needed.”

Many of the students in the co-taught math classes were scheduled for an additional period of tutoring. The purpose was to use this period as a means to stay on top of all assignments in the general education setting, present material in a different manner, and give guided practice and individual help. Due to co-teaching, the tutoring period was often used to have a second period of math which resulted in students not getting assistance in other areas. Consequently, this led to special educators trying to absorb responsibilities and duties in other settings.

A parent explained, “I do not think co-teaching has impacted my son. I do know that he is getting more tutoring help which I believe is great. Not only did he have one period of math class, he also had a period where he can get extra help. I think I like the tutoring class the best because students get the help they need.” Another parent added, “Having more than one tutoring period might be a good approach. I just want to know
there is a system in place where my son can go and receive help.” Another mother stated, “Tutoring offers support by allowing my daughter to figure things out. I think tutoring helps them the most because students learn how to be on their own while being in a safe location.”

One teacher spoke of the frustration of being placed in a class that did not need her. She said, “I am not really needed in this co-taught class. What I would really like to do is to split my current pull-out math class that has one section. The numbers are high. I believe a better use of time would be for me to be removed from this class and teach two periods of math. That way the numbers in the class would be more manageable and I could provide more assistance to the students.” Along those lines, another special education teacher spoke of having to make daily adjustments to plans. Since the teachers did not have the same planning period and all have lunch duties, there was no time to plan together. Consequently, decisions were made on a daily basis which resulted in reactive situations. Some days the special education teacher simply removed students from the co-taught class. “Students needed a quiet setting to concentrate and attend to the assignment. I pulled students to come back to a more comforting setting to do work. There is never enough time,” said the veteran teacher.

Consequences of Measuring Progress

The strategies used by participants were not without consequences. As with many new programs, it was easy to assume that someone else knew an answer. As it turned out, questioning did lead to several answers and directions. First, it was realized that regular communication was needed to help regain trust and establish direction, purpose, and goals for any new programming. Next, it was realized there were two groups of thought
concerning how progress was measured. One group looked at the larger issue of high-stakes testing, while another group looked at the day-to-day assignments within the classroom. Having a consistent district service-delivery plan was another consequence of the study. The plan should include policies and procedures for placement and grading. Finally, it was revealed that the district did not have a tool to gauge what a district needs to incorporate co-teaching.

**Proposition for Measuring Progress**

All politics was local. Therefore, stakeholders thought differently. Students wished to be comfortable in class, earn good scores, receive credits, and meet graduation requirements. In other words, students were thinking of the class. Parents wanted their children to be comfortable, earn good scores, receive credits, meet graduation requirements, and be competent and proficient. Parents were thinking of school and beyond. Teachers wanted students to earn good scores, receive credits, meet graduation requirements, be competent and proficient, and make progress on high-stakes tests. Teachers were thinking of class, school, beyond, and the district. Administrators and supervisors wanted students to earn good scores, receive credits, meet graduation requirements, be competent and proficient, pass high-stakes tests, and score high enough to meet all indicators on the district report card. Administrators and supervisors were thinking of class, school, beyond, the district, funding, and keeping the school solvent. Stakeholders’ roles addressed needs of each group. All politics were local.

**Summary**

There was not a coordinated, detailed action plan for measuring progress in co-taught classes. Consequently, everyone involved had an opinion; however, no one
seemed to share a direction. Since there was no formal planning, the two co-taught classes became quite different. Further, since there were no guidelines, some student placement seemed questionable. Nonetheless, most of those involved tried to make the best of the situation because all wanted to provide the best services for students in general, but also wanted students to be amply prepared for the state’s Graduation Test.

Those involved assumed specific roles, altered student schedules, adjusted grades, brought in extra help, absorbed duties in other classes, and made constant daily adjustments. Scores earned through daily assignments were the common denominator spoken by the majority of participants. It became clear that these scores were the measure most used to gauge progress in co-teaching classes. One issue became how to juggle all the responsibilities so that students succeeded in all classes, not just in the co-taught class.

In conclusion, these findings revealed daily scores on class assignments were used by students, teachers, and parents as the measure of progress in co-teaching classes; whereas, most administrators measured progress by exposure to general education curriculum and scoring on the state’s Graduation Test.
CHAPTER FIVE

Conclusions, Implications, Recommendations, and Summary

Introduction

This chapter presents conclusions and implications from the research question: How is the progress of a co-taught class measured by students, teachers, parents, and administrators? Sections are organized according to emerging themes. It is hopeful these findings begin a foundation addressing progress in co-teaching settings, a topic not currently addressed in the literature.

Conclusions

Progress Measured by Roles

Wunder and Lindsey (1994) provided evidence of the difficulty in measuring progress in co-teaching classes. They were correct. Although this research provided a response, there were many layers within the answer that need further study. Administrators and supervisors measured progress by student performance on high-stakes testing; whereas, students, parents, and teachers measured progress by scores earned through class assignments. To summarize, one could state that performance outcomes were the measure of success in co-taught settings; however, stakeholders held different outcome beliefs based on roles and responsibilities. In this instance, program development was impacted by how progress was measured by stakeholders.

For example, administrators and supervisors felt pressure from the state and district for students to meet proficiency standards on the state Graduation Test. Students without disabilities must meet this standard in order to graduate. Students with disabilities do not need to meet the standard, but do need to make progress on the high-
stakes test (NASOSE, 2002). However, all scores are tallied in the district report card, which means that administrators and supervisors wish for all students to be familiar with grade-level indicators. Placement in co-taught classes reassured administrators and supervisors that students were gaining familiarity with content. Generally, administrators and supervisors are responsible for seeing a more encompassing role of education than teachers. Consequently, their perspective was based on that view. Therefore, it was not surprising that administrators and supervisors used exposure to grade-level indicators as their measure of success since their performance outcome was improvement on high-stakes test.

Teachers measured progress in co-taught classes by scores earned through performance on daily assignments, which included tests, quizzes, homework, participation, and reports. Teachers in this study were required to align weekly lesson plans to grade-level indicators. As a result, teachers felt students were being exposed to appropriate content. Consequently, teachers were more concerned with day-to-day activities of the class and the progress students were making with individual assignments. Additionally, teachers were concerned students were meeting attendance and behavior policies, as well as completing assignments with passing scores as these factors combined for earning credits for graduation. Although the ultimate outcome of the class was for students to become proficient in the subject, there were also graduation requirements to consider. As a result, teachers became more involved with day-to-day activities of the classroom, as opposed to seeing the much larger picture of scores on high-stakes testing. Consequently, because of their roles and responsibilities, teachers’ perspectives of progress were different than administrators and supervisors.
Parents and students measured progress in co-taught classes by scores earned through class assignments and the scores listed on report cards. Accordingly, parents and students used tests, quizzes, homework, participation, and projects as their rating scale. Additionally, both parents and students followed interim reports and teacher comments. Parents and students knew about graduation requirements and high-stakes testing; however, they trusted the school to have a workable plan to ensure success. Parents and students trusted administrators, supervisors, and teachers to teach their children what was needed in order to meet proficiency and to graduate on time. After all, even though graduation requirements have changed over the years, parents expected school personnel to keep current of the status and to ensure their child met the requirements (ODE, 2006a). As a result, parents were not overwhelmed by the larger educational picture of funding, high-stakes testing, or state-mandates. Parents left these to school personnel and concerned themselves with the day-to-day progress of their child. In view of that, parents and students measured progress in co-taught classes in the same manner in which they rated other classes, which was scores earned through class assignments recorded on report cards.

Two sets of scores emerged from the data. The first were scores earned on high-stakes testing and the second were scores earned on class assignments. High-stakes testing scores were standardized, but scores on class assignments were not. This added another layer to the issue as it related to services students with IEP’s received.

Students with disabilities were permitted accommodations that met individual disabilities for high-stakes testing (ODE, 2006c). These accommodations were carefully prepared and supervised by testing directors. Furthermore, any test accommodations must
be written into a student’s IEP and used throughout the school year, not just at the time of the test (ODE, 2006c). Special education teachers were permitted to oversee these accommodations for these standardized tests. However, these tests do not allow modifications of any kind. In other words, special education teachers were not allowed to reduce the number of multiple choice responses or paraphrase passages on standardized tests. Nevertheless, modifying assignments and grades appeared to be a common practice used in day-to-day teaching activities (Plainfield, 2006; Salend, 2005; Salend & Garrick Dunhaney, 2002). In fact, grades were modified in the co-taught math 10 class of this study. As a result, stakeholders were left to wonder what these scores actually represented.

The district did not have a set policy on grading in co-taught classes, which would have been helpful (Salend & Garrick Duhaney, 2002). Although grades in the co-taught math 10 classes were modified, none were modified in the co-taught math 9 class because these students had higher skills and were succeeding in the class on their own merit. Moreover, the grades earned in some of the previous co-taught math classes were low. In fact, several students failed, which was different from Haseldon’s (2004) finding that co-teaching did not affect passing rates. Although students in this research study did not fail math 9 or 10, these same students had a history of failures in previous co-taught classes. Fifty percent failed co-taught language arts. Since the staff was spread so thin, some students were placed in core general education classes with minimal support. Therefore, it was not surprising that 89% of the 9th grade group failed social studies at an earlier grade level.
In this study, grades were lower in co-taught classes than they were in pull-out classes; however, these can not be compared since the district did not have a consistent grading standard for co-taught classes. Grades earned in pull-out, co-taught, and general education math classes for grades 6-10 were averaged. Pull-out grades were highest (82%), followed by co-taught (76%), and then general education (74%). However, this pattern did not hold true for co-taught language arts. In pull-out the average was 85%, followed by general education at 78%, and then in co-taught at 66%. Lawton (1999) reported that some students scored lower on tests and quizzes. In this study few students in the co-taught 10 class would have passed the course had the teachers not worked out a system to modify grades in a similar fashion to what students previously earned. On the other hand, there was not a set, logical, or ordered system as to how grades were modified.

**Standardized Testing Related to Progress**

Belmarez (1998), Dieker (2005), Knudson (2005), Gale (2005); Hazelden, 2004, and Murawski (2006) stated there was no evidence that co-teaching impacted standardized assessments. In this study, administrators and supervisors were hoping that was the case; however, there was not a detailed, formal analysis that provided that link. Scores on high-stakes testing had increased overall; however, the district had attempted a number of strategies. Therefore, there was not a clear link between co-teaching and results of high-stakes testing. Clearly, Zigmond and Magiera’s (2001) claim that gathering this type of research is complex because of the difficulty of finding matched samples of students and teachers holds true. There was research that addressed lowered scores on tests and quizzes through classroom activities (McMasters & Fuchs, 2005);
however, these were not standardized assessments. As a result, that data did not relate to this study.

As mentioned in the above paragraph, this district implemented a number of strategies for all teachers and students at every grade levels. Therefore, it was not just the teachers involved in the co-teaching arrangement that were making adjustments. A few of these strategies included Write Track, a program focused on training teachers to be more effective through writing activities, and Baldrige Training, a systems perspective for improved performance management. As a result, all teachers learned new tools and strategies. Further, these were implemented throughout the school district at every grade level. Perhaps it was the combination of services that caused an increase in scores on high-stakes testing.

**Self-Esteem Related to Progress**

A few students and teachers provided evidence that self-esteem was connected to improved scores; however, the connection between improved scores or actual learning was not made. According to some students and teachers, improved scores equaled improved confidence. Conversely, declining scores equaled a decline in confidence. Interestingly, it was uncertain if students were gaining confidence because of becoming more proficient, or simply because their grades improved. According to Dancy (2005) and Bunch and Valeo (2004), parents and students favored placement in the general education setting for social needs and building self-esteem. In fact, meeting social needs was seen as a priority for students in inclusive settings (Blanda-Holtzberg, 2004; Moore, 2003). This research study did not reveal that finding. The 12 students interviewed believed their social needs were fine. However, both teachers and students spoke of lower
self-confidence when grades dropped and higher self-confidence when grades improved. Therefore, since students felt fine socially, scores earned through class assignments played more of an impact with self-esteem issues.

All students in the high school co-taught math class passed, received credit, and were allowed to continue to the next math level. As a result, it was assumed that students’ self-esteem was good.

Training and Communication Related to Progress

Although teachers spoke of the lack of co-teaching preparation, I did not find a link between student perception of progress and teacher training. Nonetheless, teachers did feel unprepared. For that reason, teachers might have perceived that training and preparation would have helped them prepare more fluent lessons that would have positively impacted student performance. At any rate, teachers did what needed to be done so students would gain knowledge and skills.

Extensive, focused, and on-going training (Detres, 2005) were highly recommended for inclusion. In addition, planning (Hazlett, 2001; Mousel, 2004), consulting (Hill, 2000), and evaluating (Stout, 2000) were suggested. Moreover, Martin (2004) and Robinson (2004) highlighted the need for administrative support and direction. In this study, teachers had administrative support, but did not feel they had adequate direction (Hill, 2000).

A partial explanation of this could have been due to district structure of administrators. The principal implemented co-teaching, but the teachers sought guidance from the curriculum director. Although the curriculum director was helpful with texts, samples, and overviews, the teachers did not feel they had a clear vision of
responsibilities and duties and did not know if they were to go to the principal, assistant principals, or curriculum director. Consequently, a clearer vision of the plan would have been helpful (Lapka, 2005; Martin, 2004; Robinson, 2004).

Attendance Related to Progress

Progress was impacted by attendance (Gump, 2005; Roby, 2004). With the exception of medical conditions, students who continually exceeded the school’s attendance policy had lower grades as compared to peers who abided by the policy. Attendance was not impacted by placement in co-teaching settings which supports Gale’s (2005) claim. Students who had a previous record of exceeding the school’s attendance problems in other districts, at other grade levels, and in non-special education placements, continued to have difficulty attending school. Conversely, the opposite was true. Students who had good attendance in the past continued to meet the school’s attendance policy. Hence, placement was not impacted by attendance, but progress was.

Student Comfort Related to Progress

There was no evidence in the literature that feeling comfortable in the co-taught classroom impacted progress. However, some 10th graders perceived that it did. All of the interviewed 9th grade students felt comfortable with co-teaching; whereas, four of six interviewed 10th graders (66%) did not feel comfortable. The main complaints of the 10th graders were that instruction was too fast, there were too many topics covered, there was not enough time to master the content, and there were too many distractions in the general education setting. These students appreciated returning to the special education resource room to have specialized instruction and a quieter environment in order to learn the material. Moreover, the 10th graders felt their special educator knew the material and
was prepared to assist them regardless of setting, which backed Dozier’s (2005) claim reporting that students felt their teachers were prepared to teach and that there was plenty of work to do.

**Implications**

Findings from this study present several implications concerning establishing a grading policy for all settings, researching the connection between co-taught settings and results on high-stakes tests, discovering a link between improved self-concept related to learning or grades, and establishing a consistent service-delivery model for the district.

Parents, students, and teachers considered grades the measure of progress in co-teaching settings. An area of further study would be for the district to develop consistent grading criteria for all students in all settings. Additionally, it would be helpful for all stakeholders to have access to the plan.

Also, the district would benefit by having a detailed study with control and experimental groups to determine if there is a connection between students with disabilities in co-taught classes and improved scores on high-stakes tests. Further, determining if improved self-esteem relates to learning or to actual scores received on assignments would be another area that warrants review.

All stakeholders would have benefited if the district had a consistent service-delivery model that detailed roles, rules, policies, procedures, expectations, guidelines, and directions. In this manner, stakeholders would have an action plan which should benefit all.
Recommendations

One emerging theme was for the district to have a consistent service-delivery plan. There are several considerations and suggestions. First, the district needs to determine if there are enough personnel to meet the needs of students with IEP’s. Starting with grades 7-12, the Highly Qualified status of all special education teachers needs to be established thereby determining what subjects teachers are allowed to teach. Next, the district needs to create a philosophy and detailed roles. For example, Plainfield (2006) suggests that the general education teacher will receive a class list of special needs students; levels of performance for each student stipulating what the child can do; profiles of each student including credits, deficiencies, behavior, work ethic, self-advocacy skills, anxiety levels, proposed career plans, and attendance; an analysis of results on state Achievement Test or Graduation Test; allowable accommodations per student; allowable modifications per student; and student groupings by period and class. Others include a consultation schedule with special educator; a weekly overview sheets for adjusting curriculum; monitoring sheets for student progress and problem areas; a request for annual review input; and progress reports.

Roles for the special education teacher could include maintaining IEP’s; writing goals and objectives; communicating with staff, students, parents, agency representatives, and administrators; servicing students in general education classroom through co-teaching, as appropriate; working with students individually or in small groups, as appropriate; and arranging special equipment. The special education teacher could assume responsibility for making curriculum modifications; making curriculum accommodations; observing and monitoring progress of special education students in the
classroom; coordinating university tutors; attending meetings pertaining to special education students; attending department meetings; providing inservices regarding differentiated instruction; and meeting with staff regularly to collaborate support services.

According to Plainfield (2006), the general education teacher will accept and include differences in students; be aware of goals and objectives for special education students; provide opportunities for students to develop skills; communicate with special education teacher, students, and parents; and provide specific information on classroom activities to the special education teacher. Additionally, the general education teacher could accommodate curriculum modifications, use modified material when needed with special education students, and provide feedback on progress of student progress.

Together, the general education teacher and the special education teacher could meet regularly to discuss upcoming instructional plans; identify curriculum concepts to be covered and/or modified; and coordinate plans to provide services for special education students. Also, these professionals could work together to assign grade for students, if needed; co-plan for successful co-teaching lessons; and coordinate recommendations for future course selection.

The district needs to develop a co-teaching description. Plainfield (2006) suggests that co-teaching be provided so that students can successfully receive services in the least restrictive environment, that is, with their peers. In this environment students are heterogeneously grouped, and the general education and special education teachers work side-by-side in general classrooms on a flexible scheduling basis. While the general education teacher has primary responsibility for course content and grading, the special education teacher ensures that IEP’s are followed, and applies specialized instructional
and behavior management techniques. Both teachers concern themselves with all of the students, with or without IEP’s.

After establishing a description, the district can research models. Plainfield (2006) suggests that co-teaching models will look very different in various classrooms, depending on the make-up of the class and the personal strengths and interests of the teachers who are involved. No one model is used exclusively in any particular classroom, rather, teachers shift models based on the changing needs of the students. Four of the most common co-teaching models are:

1. The special and general education teachers teach simultaneously to the whole class. For example, one may be placing information on the board/overhead or demonstrating, while the other presents information verbally. On other occasions, teachers may provide role-playing, thinking aloud, shared lecturing or “tag team” style lessons.

2. The special and general education teachers teach together usually, but may separate to other rooms, such as the Media Center, for special group projects.

3. The teachers will shift back and forth between roles in the classroom in a one teach/one drift manner. One will assist and monitor while the other presents, and visa versa.

4. The special education teacher works with small groups of students within the classroom, while the general education teacher works with the larger group, and visa versa. The small group can focus on reteaching, parallel curriculum involvement, or expansion of content/concepts.
After the district has researched models, the district can establish the building purpose. For instance, at the high school level the goal is to have students complete graduation requirements, make progress in the state Graduation Test, graduate, decide on a transition plan, complete prerequisites for this plan, develop self-advocacy skills, and increase the number of general education classes with the hope of placement in all general education classes for the senior year. Building needs will vary. However, once a purpose is established, a plan needs to be formulated.

A first step would be to arrive at an implementation schedule for programming. For instance, if co-teaching will be added in all core subjects, work out a reasonable cycle for the addition of the program and communicate with all stakeholders. Survey the staff to determine appropriate training and determine the number of needed years. Set benchmarks and target dates. Have constant evaluation and communication with staff, students, and parents.

Next, determine the academic needs of each student by grade level. As a group, discuss the levels of performance of each student per core subject level. Ordinarily, if a student has a severe disability in reading, that same disability might emerge in social studies. Also, if a student has a disability in math, that weakness may also emerge in science since many of the concepts are similar. Looking at past grades, results of standardized tests and high-stakes testing, attendance patterns, work ethic such as determination, and self-advocacy skills, teachers can rate this student according to placement in co-taught, pull-out, or general education classes.

Further, if general education if selected, profile of this student can be prepared for the general education teacher. The student will be described in terms of academic
strengths and weaknesses. Also included would be suggestions for accommodations the
teacher can incorporate in daily work, long-term assignments, tests, quizzes, and other
reports. Also, results of high stakes testing listing competencies students have already
achieved and specific scores earned with other competencies can be listed. In other
words, a description of what this child is able to do in the general curriculum would be
most helpful. Moreover, arranging a system of communication with the general education
teacher is recommended so the special education teacher is on top of the student’s
performance.

Additionally, if pull-out is selected, the number of students for that class can be
tallied to determine if classes can be combined. In other words, if language arts 9 and 10
have low numbers, consider combining these to form one class with the special educator
responsible for differentiating between grade-level indicators. If the numbers are high,
the classes could be kept separate, but consider grouping students by ability. In that
manner the pace of instruction might better match the needs of the group. Depending on
the ability levels, try to limit the size of the pull-out class to below 10 students because
too many students with too wide of ability ranges and personal needs make it difficult to
meet individualized needs.

If co-taught is selected, tally the number of students for that class and determine if
all students can be scheduled in one class period as this would be most efficient for
special educators. Also, work with the guidance counselor to arrange for other struggling
students to be included in this class. Therefore, other students can benefit from
differentiated instruction. (Warning: be cautious that “bubble students” are not permitted
accommodations on high-stakes testing.)
Next, tally all numbers by grade-level for pull-out, general education, and co-taught. Determine the number of courses needed for each. Then, consider if the department has enough special education faculty to cover these positions. If not, brainstorm ideas such as consolidating classes and checking overall enrollment in a particular general education setting. For example, if a general education class has a small enrollment, perhaps the general education teacher would be able to make more modifications and accommodations for a few more students. Also, determine if a paraprofessional could be added to a select period as a paraprofessional for assistance because a paraprofessional might be more financially feasible for a district.

Discuss options with administrators and supervisors. In this district all grade levels are housed on one campus. Perhaps a teaching load is less at another grade level. Therefore, perhaps a teacher from a different grade level could assist one or more periods. Another option would be to hire a reading specialist or another special education teacher. A reading specialist could assist all students and not have the responsibility of writing IEP’s or incorporating transition plans. Moreover, if a special educator was given an assignment focusing on teaching only, then that educator could teach more students because the teacher would not need to be concerned with writing IEP’s, administering transition plans, checking credits, tracking attendance, or writing and administering behavior plans.

Once the actual number of needed periods is settled, special education classes can be blocked into the master schedule to align with traditional core classes. For instance, students with IEP’s could easily transfer from co-taught math class to a traditional class if
offered during the same period. The same would be true for pull-out and co-taught. Students could be moved to less restrictive environments when making progress.

Next, establish procedures and policies to meet monthly to evaluate student performance, rate concerns or issues in each setting, determine if students need to be placed, and constantly reflect on the purpose of co-teaching, general education, and pull-out. In other words, are the purposes of each program being met? Also, is the department receiving maximum production for the input?

Further, institute an evaluation program that is constant, reflective, and purposeful. Evaluate these results once each grading period with the results analyzed and reported to all stakeholders. Determine next steps based on program evaluation. Work with an educational research group to design an instrument to correlate placement of students with IEP’s and testing results of the state’s Achievement Tests and Graduation Tests.

Next, send administrators and professionals involved in co-teaching to trainings. Arrange collaboration time within the school day and week for co-teachers. Hire substitutes for released time for collaboration. Results can be shared with the employees, community, and Board of Education. Critically evaluate student performance and perspective at the end of the each school year. Further, arrange meetings with special education faculty to discuss incoming students. Provide relevant data for each student in order to determine progress made that school year, the plans for the new year, and career plans post-graduation. Arrange a schedule to meet individual needs. Throughout the school year prepare a listing of topics, concerns, and issues pertaining to co-teaching that
need addressed. Arrange inservices to meet these. Provide constant training, reflection, rethinking, and regrouping.

These steps can serve as a starting point for all stakeholders. Careful considerations and attention to each step can assist each student to gain independent skills and competencies for school and beyond.

Summary

In this study, progress in co-teaching classes was measured by performance outcomes according to stakeholders’ roles. Administrators and supervisors measured progress by class placement for maximum exposure to grade-level indicators. Teachers rated progress by scores earned through day-to-day classroom activities which were aligned to grade-level indicators. Parents and students rated progress by scores earned through class assignments represented by grades. Stakeholders felt the pressure of improved performance on high-stakes testing, and, based on roles, engineered appropriate settings to ensure student and district success.
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Appendix A

Interview with Educators

Person and position: _______________________________________________________

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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</thead>
<tbody>
<tr>
<td>What co-teaching model is used at the high school?</td>
<td></td>
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<tr>
<td>What is the purpose of this model?</td>
<td></td>
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<tr>
<td>How is the program evaluated?</td>
<td></td>
</tr>
<tr>
<td>Who evaluates the program?</td>
<td></td>
</tr>
<tr>
<td>What are the results of the evaluation?</td>
<td></td>
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<tr>
<td>How are you measuring student progress of students with disabilities?</td>
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<tr>
<td>How is the attendance of students with disabilities?</td>
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<tr>
<td>How is the behavior of students with disabilities?</td>
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<tr>
<td>Have you seen a change in confidence of students with disabilities?</td>
<td></td>
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<tr>
<td>Have you seen a difference in self-image with students with disabilities?</td>
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<tr>
<td>The middle and high school use two different types of programs. How does this impact students with disabilities?</td>
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</table>
Table B1

*Attendance Records for Ninth Graders*

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<th>9th grade</th>
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*Note.* Highest number of absences was the 8th grade with 18.2.
Table B2

*Attendance Records for Tenth Graders*

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<th>10th grade</th>
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*Note.* Highest number of absences was in the 6th grade with 12.
## Appendix C

### Table C1

**Disciplinary Referrals for Ninth Graders**

<table>
<thead>
<tr>
<th>Student</th>
<th>Placement</th>
<th>Infraction</th>
<th>Violation</th>
<th>Grade</th>
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</thead>
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<td>Minor</td>
<td>Detentions</td>
<td>6th</td>
</tr>
<tr>
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<td>Pull-Out Class</td>
<td>Minor</td>
<td>Detentions</td>
<td>6th</td>
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<td>Ben</td>
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<td>Minor</td>
<td>Detentions</td>
<td>6th</td>
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<tr>
<td></td>
<td>Pull-Out Class</td>
<td>Minor</td>
<td>Detentions</td>
<td>6th</td>
</tr>
<tr>
<td></td>
<td>General Class</td>
<td>Major</td>
<td>Court-ordered to attend school</td>
<td>7th</td>
</tr>
<tr>
<td></td>
<td>Co-Taught Class</td>
<td>Major</td>
<td>Court-ordered to attend school</td>
<td>7th</td>
</tr>
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<td>Brent</td>
<td>General Class</td>
<td>Major</td>
<td>Court-ordered to attend school</td>
<td>7th</td>
</tr>
<tr>
<td></td>
<td>Co-Taught Class</td>
<td>Major</td>
<td>Court-ordered to attend school</td>
<td>7th</td>
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<tr>
<td></td>
<td>Pull-Out Class</td>
<td>Major</td>
<td>Court-ordered to attend school</td>
<td>7th</td>
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</table>

*Note. There were no disciplinary referrals for remaining six students.*
Appendix C: continued

Table C2

*Disciplinary Referrals for Tenth Graders*

<table>
<thead>
<tr>
<th>Student</th>
<th>Placement</th>
<th>Infraction</th>
<th>Violation</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitchell</td>
<td>General Class</td>
<td>Major</td>
<td>Threatened to blow up school</td>
<td>8th</td>
</tr>
<tr>
<td></td>
<td>Co-Taught Class</td>
<td>Major</td>
<td>Threatened to blow up school</td>
<td>8&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Tom</td>
<td>General Class</td>
<td>Minor</td>
<td>Detentions</td>
<td>6&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>General Class</td>
<td>Major</td>
<td>Confrontation with student</td>
<td>9th</td>
</tr>
<tr>
<td></td>
<td>Pull-Out Class</td>
<td>Major</td>
<td>Confrontation with student</td>
<td>9&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>General Class</td>
<td>Major</td>
<td>Brought weapon to dance</td>
<td>10&lt;sup&gt;th&lt;/sup&gt;</td>
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<tr>
<td></td>
<td>Co-Taught Class</td>
<td>Major</td>
<td>Brought weapon to dance</td>
<td>10&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Pull-Out Class</td>
<td>Major</td>
<td>Brought weapon to dance</td>
<td>10&lt;sup&gt;th&lt;/sup&gt;</td>
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</table>

*Note.* There were no disciplinary referrals for remaining six students.
Appendix D

Table D1

*Scores on Eighth Grade State Achievement Tests for Ninth Graders*

<table>
<thead>
<tr>
<th>Student</th>
<th>Reading Score and Level</th>
<th>Math Score and Level</th>
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<tbody>
<tr>
<td>Andy</td>
<td>372 Limited</td>
<td>391 Basic</td>
</tr>
<tr>
<td>Annie</td>
<td>411 Proficient</td>
<td>384 Basic</td>
</tr>
<tr>
<td>Beth</td>
<td>396 Basic</td>
<td>405 Proficient</td>
</tr>
<tr>
<td>Ben</td>
<td>401 Proficient</td>
<td>388 Basic</td>
</tr>
<tr>
<td>Brent</td>
<td>411 Proficient</td>
<td>394 Basic</td>
</tr>
<tr>
<td>Chris</td>
<td>389 Basic</td>
<td>373 Limited</td>
</tr>
<tr>
<td>Clinton</td>
<td>416 Proficient</td>
<td>405 Proficient</td>
</tr>
<tr>
<td>Denny</td>
<td>422 Proficient</td>
<td>307 Basic</td>
</tr>
<tr>
<td>Ellie</td>
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<td>Not Tested</td>
</tr>
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</table>

*Note.* Seventy-five percent of the students were either proficient in reading or math.
Appendix D: continued

Table D2

*Scores on Eighth Grade State Achievement Tests for Tenth Graders*

<table>
<thead>
<tr>
<th>Student</th>
<th>Reading Score and Level</th>
<th>Math Score and Level</th>
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</thead>
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<td>Grant</td>
<td>375 Limited</td>
<td>364 Limited</td>
</tr>
<tr>
<td>Jim</td>
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<td>379 Basic</td>
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<tr>
<td>Mitchell</td>
<td>410 Proficient</td>
<td>421 Proficient</td>
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<tr>
<td>Nick</td>
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<td>364 Limited</td>
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<tr>
<td>Sarah</td>
<td>368 Limited</td>
<td>364 Limited</td>
</tr>
<tr>
<td>Sam</td>
<td>382 Basic</td>
<td>364 Limited</td>
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<td>Tom</td>
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</tr>
<tr>
<td>Wendy</td>
<td>368 Limited</td>
<td>374 Limited</td>
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</table>

*Note.* Twelve percent of the students were either proficient in reading or math.
Table E1

Grades Earned in Core Subjects for 9th Graders

Grades Earned in General Education, Co-Taught, and Pull-Out Classes

<table>
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<th>PO</th>
<th>GE</th>
<th>CT</th>
<th>PO</th>
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<th>PO</th>
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<tbody>
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Table E2
Grades Earned in Core Subjects for 10th Graders

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<thead>
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</table>
### Failures in Core Subjects for Ninth Graders

#### Failures of Ninth Graders by Placement and Grade in Core Subjects Grades 6-9

<table>
<thead>
<tr>
<th>Student</th>
<th>English</th>
<th>Math</th>
<th>Social Studies</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andy</td>
<td>Co-Taught 7</td>
<td>General Class 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annie</td>
<td>General Class 7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ben</td>
<td>Co-Taught 7</td>
<td>General Class 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Co-Taught 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brent</td>
<td>Co-Taught 7</td>
<td>Co-Taught 7</td>
<td>General Class 7</td>
<td>General Class 7</td>
</tr>
<tr>
<td>Chris</td>
<td>Co-Taught 7</td>
<td>General Class 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Co-Taught 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinton</td>
<td>General Class 6</td>
<td>General Class 6</td>
<td>General Class 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Co-Taught 7</td>
<td>General Class 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Co-Taught 8</td>
<td>General Class 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denny</td>
<td>Co-Taught 7</td>
<td>General Class 7</td>
<td>General Class 7</td>
<td></td>
</tr>
<tr>
<td>Ellie</td>
<td></td>
<td>General Class 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Co-Taught 8</td>
<td>General Class 8</td>
<td>General Class 8</td>
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</table>

*Note. Only one student successfully completed core subjects in grades 6-9*
Appendix F: continued

Table F2

*Failures in Core Subjects for Tenth Graders*

<table>
<thead>
<tr>
<th>Student</th>
<th>English</th>
<th>Math</th>
<th>Social Studies</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jim</td>
<td>Co-Taught 8</td>
<td></td>
<td>General Class 6</td>
<td>General Class 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>General Class 7</td>
<td>General Class 8</td>
</tr>
<tr>
<td>Mitchell</td>
<td>Co-Taught 8</td>
<td></td>
<td>General Class 8</td>
<td>General Class 8</td>
</tr>
<tr>
<td>Sarah</td>
<td>Co-Taught 8</td>
<td></td>
<td></td>
<td>General Class 9</td>
</tr>
<tr>
<td>Tom</td>
<td>Co-Taught 7</td>
<td></td>
<td>General Class 7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Co-Taught 8</td>
<td></td>
<td>General Class 8</td>
<td>General Class 8</td>
</tr>
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</table>

*Note.* Three students successfully passed all core subjects. One student did not have grades reported for grade 6.
### Table G

**Socialization**

**Extracurricular Participation for Ninth and Tenth Graders**

<table>
<thead>
<tr>
<th>Student</th>
<th>Class Projects</th>
<th>Personal Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andy</td>
<td>Community Service</td>
<td>School Club</td>
</tr>
<tr>
<td>Annie</td>
<td>Community Service</td>
<td></td>
</tr>
<tr>
<td>Beth</td>
<td>Community Service</td>
<td></td>
</tr>
<tr>
<td>Ben</td>
<td>Community Service</td>
<td></td>
</tr>
<tr>
<td>Brent</td>
<td>Community Service</td>
<td>Athletics</td>
</tr>
<tr>
<td>Chris</td>
<td>Community Service</td>
<td>Band</td>
</tr>
<tr>
<td>Clinton</td>
<td>Community Service</td>
<td></td>
</tr>
<tr>
<td>Denny</td>
<td>Community Service</td>
<td></td>
</tr>
<tr>
<td>Ellie</td>
<td>Community Service</td>
<td></td>
</tr>
<tr>
<td>Grant</td>
<td>Community Service</td>
<td>Athletics</td>
</tr>
<tr>
<td>Jim</td>
<td>Community Service</td>
<td></td>
</tr>
<tr>
<td>Mitchell</td>
<td>Community Service</td>
<td></td>
</tr>
<tr>
<td>Nick</td>
<td>Community Service</td>
<td>Athletics</td>
</tr>
<tr>
<td>Sarah</td>
<td>Community Service</td>
<td></td>
</tr>
<tr>
<td>Sam</td>
<td>Community Service</td>
<td>Theater, Band, and Choir</td>
</tr>
<tr>
<td>Tom</td>
<td>Community Service</td>
<td></td>
</tr>
<tr>
<td>Wendy</td>
<td>Community Service</td>
<td>Athletics</td>
</tr>
</tbody>
</table>

*Note.* One hundred percent of the students were involved in various community service projects including the Bloodmobile, Special Olympics, Thanksgiving Meal, Landscaping Project, athletics, music, or band.
Appendix H

Interview with Administrators, Counselors, and Psychologist

Person and position: _______________________________________________________

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What co-teaching model is used at the middle school?</td>
<td></td>
</tr>
<tr>
<td>What is the purpose of this model?</td>
<td></td>
</tr>
<tr>
<td>How is the program evaluated?</td>
<td></td>
</tr>
<tr>
<td>Who evaluates the program?</td>
<td></td>
</tr>
<tr>
<td>What are the results of the evaluation?</td>
<td></td>
</tr>
<tr>
<td>What co-teaching model is used at the high school?</td>
<td></td>
</tr>
<tr>
<td>What is the purpose of this model?</td>
<td></td>
</tr>
<tr>
<td>How is the program evaluated?</td>
<td></td>
</tr>
<tr>
<td>Who evaluates the program?</td>
<td></td>
</tr>
<tr>
<td>What are the results of the evaluation?</td>
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</table>
Appendix I

Table I

Observation

Comparison of Co-Taught Classes

<table>
<thead>
<tr>
<th>Class</th>
<th>Setting</th>
<th>Period</th>
<th>System</th>
<th>Consequences</th>
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</thead>
<tbody>
<tr>
<td>Math 9</td>
<td>Highly structured</td>
<td>45 minutes</td>
<td>General educator taught, organized class, was in charge</td>
<td>No co-teaching</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Special educator observed and read tests</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No reteaching</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Students needing help took concern to tutoring teacher</td>
<td></td>
</tr>
<tr>
<td>Math 10</td>
<td>Semi-structured</td>
<td>45 minutes</td>
<td>General educator taught, organized class, was in charge</td>
<td>No co-teaching</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Special educator, aide, and student teacher</td>
<td>Retaught lesson</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>retaught all lessons to students with IEP’s</td>
<td>in tutoring class</td>
</tr>
<tr>
<td>Math 8</td>
<td>Collaborative</td>
<td>90 minutes</td>
<td>General educator organized class</td>
<td>Both teachers taught</td>
</tr>
<tr>
<td>“Table Buddies”</td>
<td></td>
<td></td>
<td>Special educator and aide assisted all students</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Support time built into 90-minute block</td>
<td></td>
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</tbody>
</table>

*Note.* General education teachers were teacher of record in all classes. They prepared lesson plans, graded, and organized the class.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How are you doing in the co-taught class?</td>
<td></td>
</tr>
<tr>
<td>How can you tell if you are making progress in this class?</td>
<td></td>
</tr>
<tr>
<td>What do you use to rate your progress in this class?</td>
<td></td>
</tr>
<tr>
<td>How do you feel the co-teaching arrangement has impacted you?</td>
<td></td>
</tr>
<tr>
<td>How do you feel the co-teaching arrangement has impacted your academics?</td>
<td></td>
</tr>
<tr>
<td>How do you feel the co-teaching arrangement has impacted your friendships?</td>
<td></td>
</tr>
<tr>
<td>How do you feel the co-teaching arrangement has impacted your self-confidence?</td>
<td></td>
</tr>
<tr>
<td>How do you feel the co-teaching arrangement has impacted you outside school?</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>In what ways has your participation in school events or community service projects changed since you started in a co-taught class?</td>
<td></td>
</tr>
<tr>
<td>How do quiz, exam, and grade card scores compare to scores you received in pull-out classes?</td>
<td></td>
</tr>
<tr>
<td>What is your goal for placement in this class?</td>
<td></td>
</tr>
<tr>
<td>What suggestions do you have for improving the co-teaching arrangement?</td>
<td></td>
</tr>
<tr>
<td>Tell me how you feel about what you have learned in the co-taught class in relation to the OGT.</td>
<td></td>
</tr>
<tr>
<td>If you were in charge of program options, such as pull-out classes and co-taught classes, how would you arrange them?</td>
<td></td>
</tr>
<tr>
<td>What else can you share about placement and progress in a co-taught class?</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>How can you tell if your child is making progress in the co-taught math class?</td>
<td></td>
</tr>
<tr>
<td>What do you use to rate your child’s progress in the co-taught math class?</td>
<td></td>
</tr>
<tr>
<td>How do you feel your child perceives his/her progress in the co-taught math class?</td>
<td></td>
</tr>
<tr>
<td>How do you feel the co-taught arrangement has impacted your child’s academics?</td>
<td></td>
</tr>
<tr>
<td>How do you feel the co-taught arrangement has impacted your child’s self-confidence?</td>
<td></td>
</tr>
<tr>
<td>How do you feel the co-taught arrangement has impacted your child’s friendships?</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Response</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>How do you feel the co-taught arrangement has impacted your child outside of school?</td>
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</tr>
<tr>
<td>In what ways has your child’s participation in school events or community service projects changed since he/she started in a co-taught class?</td>
<td></td>
</tr>
<tr>
<td>How do quiz, exam, and grade card scores compare to scores your child received in a pull-out class?</td>
<td></td>
</tr>
<tr>
<td>What is your goal for your child’s placement in this co-taught class?</td>
<td></td>
</tr>
<tr>
<td>What suggestions do you have for improving the co-teaching arrangement?</td>
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</table>
Appendix L

Table L

*School Personnel*

<table>
<thead>
<tr>
<th>Position</th>
<th>Years in Field</th>
<th>License</th>
<th>Degrees</th>
<th>Co-Teaching Experience</th>
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<tbody>
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<td>Administrator</td>
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<td>Administrator</td>
<td>Masters</td>
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<tr>
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<tr>
<td>Supervisor</td>
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<td>Masters</td>
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<tr>
<td>Educator</td>
<td>16</td>
<td>Aide</td>
<td>Paraprofessional</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Note.* All employees were properly licensed and met highly qualified status.
Appendix M

IRB Form

The following research study has been approved by the Institutional Review Board at Ohio University for the period listed below. This review was conducted through an expedited review procedure as defined in the federal regulations as Category(ies):

7

Project Title: A Measure of Progress: Voices of Rural Students with Disabilities in Co-Taught Settings

Researcher(s): Lois Harkins

Faculty Advisor (if applicable): Stephen Safran

Department: Teacher Education

Jeff Vancouver, Ph.D., Chair
Institutional Review Board

3/2/07 Approval Date
3/1/08 Expiration Date

This approval is valid until expiration date listed above. If you wish to continue beyond expiration date, you must submit a periodic review application and obtain approval prior to continuation.

Adverse events must be reported to the IRB promptly, within 5 working days of the occurrence.

The approval remains in effect provided the study is conducted exactly as described in your application for review. Any additions or modifications to the project must be approved by the IRB (as an amendment) prior to implementation.
Appendix N
Grounded Theory Tradition Matrix

Causal Conditions
- Gaining exposure to general curriculum
- Gaining competency skills with general curriculum
- Improved grades with class assignments
- Increased self-esteem through success with general curriculum

Phenomena Resulting from Causal Conditions
- Students gained exposure
- Some students gained competency and skill
- Some students did not gain competency and skill
- Increase of self-esteem
- Decreases of self-esteem
- Modified grades to ensure passing

Context Influencing Progress
- Pressure from state to increase high-stakes testing scores
- Pressure from district to meet standards
- Pressure from district to meet graduation requirements

Intervening Conditions
- Lack of planning
- Unclear purpose, vision, roles, and expectations
- Lack of communication

Strategies for Measuring Progress
- Adjusted grades
- Adjusted schedules
- Adjusted plans

Addition of reteaching

Consequences
- All stakeholders were student-centered
- Communication needed
- Clear vision, purpose, goals, and objective needed
- Increased planning
- Helpful to have consistent service-delivery model for district
### Co-Teaching Purpose and Evaluation

<table>
<thead>
<tr>
<th>Employee</th>
<th>Purpose</th>
<th>Evaluation</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator</td>
<td>Exposure to general curriculum</td>
<td>State Test</td>
<td>Scores are up</td>
</tr>
<tr>
<td>Administrator</td>
<td>Remove stigma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrator</td>
<td>Learn to achieve in real world</td>
<td>Informal</td>
<td>Unknown</td>
</tr>
<tr>
<td>Administrator</td>
<td>Exposure to general curriculum</td>
<td>State Test</td>
<td>Unknown</td>
</tr>
<tr>
<td>Administrator</td>
<td>Exposure to general curriculum</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Administrator</td>
<td>Experience cooperative learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor</td>
<td>Competency with general curriculum</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Counselor</td>
<td>Least Restrictive Environment</td>
<td>Unknown</td>
<td>Failing grades</td>
</tr>
<tr>
<td>Counselor</td>
<td>Support general education staff</td>
<td>Unknown</td>
<td>Students felt exposed</td>
</tr>
<tr>
<td>Educator</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Frustration</td>
</tr>
<tr>
<td>Educator</td>
<td>Least Restrictive Environment</td>
<td>Unknown</td>
<td>Frustration</td>
</tr>
<tr>
<td>Educator</td>
<td>Support staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educator</td>
<td>Help with discipline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educator</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educator</td>
<td>Achieve academic success</td>
<td></td>
<td>Self-esteem affected by grades</td>
</tr>
<tr>
<td>Educator</td>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. All administrators felt the purpose of co-taught classes was to expose students with IEP’s to general education curriculum.
Appendix O: continued

Table O2

*Insights from School Personnel-Progress*

<table>
<thead>
<tr>
<th>Employee</th>
<th>Measurement of Progress</th>
<th>Impact of Co-Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor</td>
<td>Class content at Middle School</td>
<td>Program sells well to parents</td>
</tr>
<tr>
<td></td>
<td>IEP goals at High School</td>
<td></td>
</tr>
<tr>
<td>Counselor</td>
<td>Grades earned in classes</td>
<td>Benefits some students</td>
</tr>
<tr>
<td>Counselor</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Educator</td>
<td>Grades</td>
<td>Two students felt positive</td>
</tr>
<tr>
<td>Educator</td>
<td>Grades</td>
<td>Support general educators</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Witnessed wrong role models</td>
</tr>
<tr>
<td>Educator</td>
<td>Grades</td>
<td>Drop in self-esteem</td>
</tr>
<tr>
<td>Educator</td>
<td>Grades</td>
<td>Class is more restrictive for</td>
</tr>
<tr>
<td></td>
<td></td>
<td>non-IEP students</td>
</tr>
<tr>
<td>Educator</td>
<td>Grades</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

*Note.* Seventy-five percent of employees measured progress in co-taught classes by grades.
Appendix O: continued

Table O3

*Insights from School Personnel-Transformations*

<table>
<thead>
<tr>
<th>Employee</th>
<th>Attendance</th>
<th>Behavior</th>
<th>Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor</td>
<td>None</td>
<td>On-task behavior might be positively impacted</td>
<td>None</td>
</tr>
<tr>
<td>Counselor</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Counselor</td>
<td>None</td>
<td>Students not on task</td>
<td>None</td>
</tr>
<tr>
<td>Educator</td>
<td>None</td>
<td>Learned inappropriate behaviors</td>
<td>None</td>
</tr>
<tr>
<td>Educator</td>
<td>None</td>
<td>Learned poor work habits</td>
<td>None</td>
</tr>
<tr>
<td>Educator</td>
<td>None</td>
<td>Learned inappropriate behaviors</td>
<td>None</td>
</tr>
<tr>
<td>Educator</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Educator</td>
<td>None</td>
<td>Change noted in 1 student</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note.* Seventy-five percent of employees noted a change in behavior in co-taught placements.
Appendix O: continued

Table O3

*Insights from School Personnel-Transformations*

<table>
<thead>
<tr>
<th>Employee</th>
<th>Self-Esteem</th>
<th>Friendships</th>
<th>Extracurricular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Counselor</td>
<td>Dropped in 1 case</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Counselor</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Educator</td>
<td>Dropped</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Educator</td>
<td>Lower</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Educator</td>
<td>Increased in 2 cases</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Educator</td>
<td>Affected by grades</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Educator</td>
<td>Frustrated</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note.* Seventy-five percent of employees noted a change in self-esteem due to co-teaching placement.
### Table P

**Insights from Students-Progress**

#### Co-Teaching Progress and Impact

<table>
<thead>
<tr>
<th>Student</th>
<th>Measurement of Progress</th>
<th>Impact of Co-Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andy</td>
<td>Grades, Progress Reports, Teacher Comments</td>
<td>Prepared for State Test</td>
</tr>
<tr>
<td>Chris</td>
<td>Grades, Tests, Homework</td>
<td>None</td>
</tr>
<tr>
<td>Beth</td>
<td>Grades, Homework</td>
<td>None</td>
</tr>
<tr>
<td>Annie</td>
<td>Grades</td>
<td>Prepared for State Test</td>
</tr>
<tr>
<td>Clinton</td>
<td>Grades, Progress Reports, Tests, Homework</td>
<td>Prepared for State Test</td>
</tr>
<tr>
<td>Ben</td>
<td>Grades, Tests, Quizzes</td>
<td>Prefer pull-out class</td>
</tr>
<tr>
<td>Mitchell</td>
<td>Grades, Progress Reports, Homework</td>
<td>Prefer general class</td>
</tr>
<tr>
<td>Tom</td>
<td>Grades, Progress Reports</td>
<td>Prefer pull-out class</td>
</tr>
<tr>
<td>Sam</td>
<td>Grades, Progress Reports, Teacher Comments</td>
<td>Learn new strategies</td>
</tr>
<tr>
<td>Nick</td>
<td>Grades</td>
<td>Prefer pull-out class</td>
</tr>
<tr>
<td>Grant</td>
<td>Grades</td>
<td>Prefer pull-out class</td>
</tr>
</tbody>
</table>

**Jim**  Grades, Tests, Quizzes, Homework  Too fast and too loud

*Note.* One-hundred percent of students rated progress by grades.
### Appendix Q

#### Table Q

**Insights from Parents-Progress**

<table>
<thead>
<tr>
<th>Parent</th>
<th>Measurement of Progress</th>
<th>Impact of Co-Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matthew</td>
<td>Grades, Progress Reports, Teacher Comments</td>
<td>Nice to remove stigma</td>
</tr>
<tr>
<td>Leah</td>
<td>Grades</td>
<td>Grades have dropped</td>
</tr>
<tr>
<td>Helen</td>
<td>Grades</td>
<td>Self-esteem impacted</td>
</tr>
<tr>
<td>Martha</td>
<td>Grades</td>
<td>Should not fail</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frustration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No accountability</td>
</tr>
<tr>
<td>Liz</td>
<td>Grades, Homework</td>
<td>Must communicate</td>
</tr>
<tr>
<td>Rebecca</td>
<td>Grades</td>
<td>Grades are good</td>
</tr>
<tr>
<td>Ruth</td>
<td>Grades</td>
<td>Meet individual needs</td>
</tr>
<tr>
<td>Brenda</td>
<td>Grades</td>
<td>Meet individual needs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frustration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Should not fail</td>
</tr>
</tbody>
</table>

*Note.* One hundred percent of parents measured progress in co-taught settings by grades.