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# Effect of Professional Development on Inclusive Practices in a West Tennessee School District

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# EFFECT OF PROFESSIONAL DEVELOPMENT ON INCLUSIVE PRACTICES IN A WEST TENNESSEE SCHOOL DISTRICT

By

Millicent A. Mackonya

# A Thesis

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Master of Science

Major: Instruction and Curriculum Leadership

The University of Memphis

December, 2010

# **Dedication**

I dedicate this to my husband, my daughter and my parents, for their continual support during my school years.

Millicent A. Mackonya

# Acknowledgement

I wish to acknowledge Dr. Sandra Cooley-Nichols, my mentor, for allowing me to carry out this research. I also acknowledge the Center for Research and Education Policy who gave me training on carrying out classroom observations. Without them, this research would not have been possible.

#### **Abstract**

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Introduction of No Child Left Behind (NCLB) has placed demands on school districts and teachers. Teachers have always been required to improve students' academic achievement at all costs. To meet the demands of NCLB of improving education achievement for children with disabilities, school districts have introduced inclusive settings in their educational systems, thus, the need for professional development. The participants in this study were special education and a few general education teachers from a West Tennessee School District. All the participants were female. The purpose of this study was to find out if the teachers had gained knowledge on effective inclusive practices during the professional development period and if they were implementing them. The measures used to carry out the research were focus groups and questionnaires. The findings proved the hypothesis that inclusive practices in schools improved students' academic achievement; however, professional development should be done for all teachers.

*Keywords:* inclusion, co-teaching, special education teacher, general education teacher, general education setting.

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#### Chapter 1

#### Introduction

From the late 20th century, there has been an evolution of education placement for children with disabilities. This evolution has entitled all children to receive a free and appropriate education (Turnbull, Turnbull, Erwin, & Soodak, 2006). One of the major laws that caused the change in the rights for children with disabilities was Section 504 of the Rehabilitation Act of 1973. The Rehabilitation Act enacted a law that would protect and ensure the education of children with disabilities in public institutions that receive federal funds (Osborne & Russo, 2006).

Two other major laws that brought a great shift in educating children with disabilities were the Individuals with Disabilities Education Act (IDEA), enacted in 1997, and the No Child Left Behind Act, 2001 (NCLB.) One major principle of IDEA was that students with disabilities were to be taught in the least restrictive environment (LRE). LRE was designed to change the laws that had earlier on segregated students with disabilities from their peers. It gave children with disabilities the right to be educated with their typical peers if appropriate documentation identifying that they needed to be placed in that kind of an environment was provided (Gargiulo & Kilgo, 2004; Turnbull et al., 2006).

A group of researchers insisted that for the demands of NCLB and IDEA to be met, there had to be standard-based reforms accompanied by high stakes demands on all the schools districts, the teachers and the students (Taylor, Smiley, & Richards, 2009). Therefore, schools have been faced with the challenge of meeting the requirement of providing highly qualified teachers, supporting students' academic achievement and

maintaining accountability for all students. To meet the above demands, many school districts are now implementing inclusion to close the achievement gap between students who are privileged and those who are disadvantaged (Salend, 2005).

Due to the fact that inclusion is now being integrated in most schools there is a need for teachers to be educated on effective inclusive teaching practices, gain knowledge in curriculum modification and acquire teaching practices that would support and aid diverse groups of students (Fisher, Sax, & Grove, 2000).

This study related to other studies that reported inclusion to be effective for both students with disabilities and their typical peers. One of the studies is by Pugach and Wesson (1995) found that inclusion was effective in enhancing academic achievement, promoting self esteem and improving social relationships for students with and without disabilities. The current study extended the above study by finding out the effects of teaching teachers to practice effective inclusive practices.

An inclusive practice in the classroom is known as co-teaching. Even though co-teaching is being practiced, teachers are not fully equipped to implement effective co-teaching strategies in their classrooms. In most cases, inclusion is the teachers have used their general knowledge of what inclusion should look like to implement this practice, but ended up mainstreaming special education students. Mainstreaming is the idea that special education students should be taught with their typically developing peers during certain times and depending on their needs (Friend & Bursuck, 2009). Several authors have cited the following factors as contributing to ineffectiveness of inclusion:

- 1. The general education teachers visualizing themselves as the content expert and reducing the special education teachers to mere teaching assistants (Tobin, 2005).
- 2. Lack of knowledge on the part of teachers, parents, and school administrators on how to make inclusion work.
- 3. Lack of administrative support.
- 4. Lack of instructional support.
- 5. Planning time.
- Teaching strategies that enhance effective intervention (Tobin, 2005;
   Gerber, & Popp, 2000; Stanovich & Jordan, 1998).

Because of the above, there is a need for professional development on inclusive practices to improve effective teacher behavior in heterogeneous classrooms (Stanovich & Jordan, 1998).

The purpose of this study was to investigate the effect of professional development on inclusive practices. This portion of the study was completed after a series of professional development courses on co-teaching strategies that enhance a student's academic, social and behavioral performance was facilitated. In this study, I used qualitative research design appropriate for evaluating educational data from teacher questionnaires and focus groups. The research addressed the following questions:

- 1. Did the special education teacher and the general education teacher implement the different co-teaching strategies learned at the professional development in their classrooms?
- 2. Was co-teaching a success in these schools?

- 3. Which co-teaching strategy worked better for the two teachers?
- 4. What are the teacher's views on the success or failure of implementing effective co-teaching strategies in their schools?
- 5. Which co-teaching strategy was the most preferred?

In this study, I hypothesized that professional development on inclusive practices enhances collaboration between the special education teacher and the general education teacher in the general education classroom and helped improve student's academic achievement.

# Chapter 2

#### Literature review

In the past years, there has been a shift in teaching and accommodating students with disabilities in schools. Various laws, education mandates, parents and educators concerned with equality in education helped in making this change (Berry, 2006). Because NCLB mandated the use of research-based strategies in providing instruction in our classrooms today, students with disabilities have reaped some benefits in their education. As a result of this, the term *inclusion* was coined in the 1980s to take care of all students needs in classrooms (Turnbull et al., 2006).

#### **Evolution of Inclusion**

Inclusion is the total placement of children with and without disabilities within and out of the general education classroom (Berry, 2006; Friend & Bursuck, 2009; Hanushek, Kain, & Rivkin, 2000) with a realization that all students can benefit from a meaningful and appropriate curriculum. The curriculum should address all students' individual needs including testing and evaluation (Salend, 2005). Inclusion recognizes that all learners have unique needs and strengths (Salend, 2005); therefore, there is a need for educators to provide:

- A supportive, nurturing environment for students to learn (Friend & Bursuck, 2009).
- Accommodation depending on each student's needs (Tobin, 2005).
- Collaboration among educators, other professionals, students and the community at large (Friend & Cook, 2003; Mastropieri et al., 2005; Salend, 2005; Tobin, 2005).

Before 1975, when Congress passed public law (P.L. 94-142) that was initially termed as Education for All Handicapped Children Act, the federal government did not require states to provide special educational services to students with disabilities (Osborne & Russo, 2006). During that time, few states were providing services to students with disabilities but most schools excluded those students from public education (Friend & Bursuck, 2009). Because of segregation of students with disabilities, many advocates of these children and their families of students with disabilities began to go public and to describe the needs and the gifts that their children had and fought for equal rights in education for all children (Berry, 2006; Osborne & Russo, 2006; Turnbull, Stowe, & Huerta, 2007). Apart from the parent's movements, Presidents John Kennedy and Lyndon Johnson created new rights and programs for people with disabilities (Salend, 2005; Turnbull et al., 2007). Kennedy emphasized protection of civil rights for all, fulfillment of public schooling, special education, structuring of schools, classification and categorization of students (Salend, 2005).

Some of the preceding laws that paved the way for inclusion for all students in the general education classroom are the following: (1) Brown vs. Board of Education in 1954 that fought against the state and the local education agencies legally segregating students by race (Friend & Bursuck, 2009; Turnbull et al., 2007). (2) Pennsylvania Association for Retarded Children (PARC) vs. Commonwealth of Pennsylvania in 1972 that filed a case on behalf of children who had intellectual disabilities between the ages of six to 21 who were excluded from public schools (Osborne & Russo, 2006; Salend, 2005). The law passed that no child with intellectual disability would be excluded from special education program without procedural due process (Osborne & Russo, 2006 &

Turnbull et al., 2007). Procedural due process is an IDEA principle that makes schools and parents accountable to each other concerning any disagreements in regards to the child with disabilities' rights (Turnbull et al., 2010).

Another law that led to the evolution of inclusion was Mills v. Board of Education of the District of Columbia in 1972. Seven parents of exceptional children filed a class action suit on behalf of children with disabilities because they were not receiving specialized education (Osborne & Russo, 2006; Skrtic, Harris, & Shriner, 2005). The above court case led to the adoption of Section 504 of the Rehabilitation Act of 1973 (Osborne & Russo, 2006).

The Rehabilitation Act was created to provide rehabilitation services for military veterans of World War I and resulted in a law protecting people with diverse disabilities. This law stated that individuals with disabilities were not to be denied any services because of their disability (Turnbull et al., 2007) or be excluded from participating in any activity funded by the federal government (Osborne & Russo, 2006; Skrtic et al., 2005). As a result of this case, the court ordered the school board to provide education to all students with disabilities.

The most important law that that helped shape special education and inclusion in general is the Education for All Handicapped Children of 1975. This law was later amended and renamed Individuals with Disabilities Education Act (IDEA) in 1990 (Osborne & Russo, 2006; Skrtic et al., 2005). IDEA mandated that all students with disabilities should receive a free and appropriate education regardless of the nature or severity of their disability (Friend & Bursuck, 2009; Osborne & Russo, 2006). IDEA is governed by six principles namely: zero reject, nondiscriminatory evaluation, free and

appropriate education, least restrictive environment (Turnbull, Turnbull, & Wehmeyer, 2010), the procedural due process and family and student's participation (Friend & Bursuck, 2009).

The principle of zero reject emphasizes that no students should be exempted from public education, and it commands the states through education agencies to identify locate and evaluate students with disabilities (Hanushek et al., 2000; Osborne & Russo, 2006; Tobin, 2005) and place them in schools. In the LRE, students with disabilities were to be taught in an environment that best suited them (Stanovich & Jordan, 1998) depending on their educational needs. The LRE preferred that students with disabilities attend schools close to their homes and with the other students from their neighborhood (Friend & Bursuck, 2009; Salend, 2005). Through the concept of LRE, a student would only move to a more segregated classroom only when he/she would not benefit from the general classroom.

IDEA's principle of nondiscriminatory evolution helps to determine if a student has a disability and the right for further evaluation related to special education without any discrimination (Turnbull et al., 2010). IDEA's also mandates schools to ensure that children with disabilities receive free and appropriate education that is beneficial to them. Appropriate education is provided by implementing and IEP goals that meets the student's current needs (Salend, 2005). Parent and student participation as an accountability technique where parents need to know their rights and act upon it (e.g., the right to being a member of the IEP team, participate in the decision making process and access to the child's school records (Turnbull et al., 2010).

The cause for inclusion has also been shaped by the NCLB. According to Skrtic et al. (2005) NCLB mandates school districts to make an adequate yearly progress on state tests for all their students, thereby making schools accountable for educating all learners. NCLB has helped in the evolution of inclusion in that no student with disability is segregated based on his/her performance on standardized tests, thus creating inclusive setting.

Since its revolution, inclusion has proved that all students regardless of disabilities can be taught with their peers in the general education classroom (Friend & Cook, 2003; Hanushek et al., 2000; Stanovich & Jordan, 1998; Tobin, 2005). Nevertheless, Mastropieri et al. (2005) found that including children with disabilities in the general education classroom may have had mostly positive effects on the student's learning. For example, there are some types of disabilities (e.g., severe cerebral palsy) that solely require students with disabilities to be taught in the LRE. The term inclusion developed from the concept of mainstreaming (Salend, 2005) which meant that students with disabilities could be partially or fully taught in the general education classroom depending on their capability of performance in such an educational setting (Friend & Bursuck, 2009). Another concept that helped coin inclusion was the least restrictive environment. Even though inclusion is the way forward in this century, there is still a need for special education teachers to be highly qualified in specific content areas at the secondary school level. The need for special education teachers to be highly qualified does not mean passing the Praxis Standardized Test according to the state of Tennessee licensure laws (U.S. Department of Education, 2001) but mastering the content area. On the other hand, regular education teachers need professional development or instruction

on teaching in an inclusive setting and also learn more about students with disabilities (Mastropieri et al., 2005). With the creation and enactment of the special education laws, the country has been gearing towards the right direction for educating students with disabilities.

Full inclusion has been a subject of debate since it was proposed in the middle of the last century. Full inclusion is a belief that all children with disabilities regardless of their ability should be taught exclusively in a general education classroom which they would have attended if they did not have any disability (Garguilo & Kilgo, 2004; Murphy, 1996). Proponents and opponents of full inclusion have always disagreed on this subject leaving educators, parents, and administrators misinformed about the best practices of the inclusive system (Fisher et al., 2000) and its ramification to all students (Murphy, 1996). Opponents do not believe that children with disabilities can be taught in the same classroom with typically developing children because they would not be able to learn. Moreover, they contend that the general education teachers are not qualified to teach students with disabilities (Garguilo & Kilgo, 2004). They also claim that, the issue of collaboration among teachers in the same classroom has never been easily achieved (Damer, 2001). However, Friend and Cook (2003) opposed these views by stating that integration of different programs in special education such as co-teaching and inclusion have enhanced literacy skills, social skills and adaptive skills for children with disabilities.

Although inclusion existed in some form much earlier, most scholars point to the passage of NCLB and amendments made to IDEA as the mitigating factors of inclusive practices in public schools today (Schutte, Villwock, Whichard, & Stallings, 2001;

Zigmond & Baker, 1996). Further, the amendment of IDEA to the Individuals with Disabilities Improvement Act (IDEIA) of 2004 paved the way for inclusion to be implemented in most schools. IDEIA's main focus was for children with disabilities to receive assistance in their learning while in the classroom (Taylor et al., 2009)

Shevin concurred that full inclusion is allowing children with disabilities to participate as full-time members in the general education classroom, while participating in each and every activity that all children would participate in with necessary support (Shevin, 1996). In the full inclusion system, the special education teacher and the regular classroom teacher work collaboratively in planning their lessons, training and working with paraprofessionals while teaching in their classrooms to achieve a common goal (Damer, 2001; Giangreco & Dolye, 2007; Pugach & Wesson, 1995).

Wong's (1993) study on choice schools for children with disabilities affirmed that the legal requirement for all states and school districts was to provide education to children with disabilities where applicable. She affirmed that children with disabilities should be taught in the classroom with typically developing children depending on their capability. Wong's views in educating children with disabilities is consistent with the views of Garguilo and Kilgo (2004) who stated that even if a child who can only participate with the other typical children in one activity (e.g., sorting like items), then the child should be included with these children that particular activity

## **Co-teaching Strategies**

One of the major components of full inclusion is co-teaching or team-teaching.

Tobin describes co-teaching as a teaching procedure in which two or more educators provide classroom instruction to a diverse group of students in the general education

classroom (Tobin, 2005). This means that the two professionals jointly deliver instruction to a diverse group of students in a shared classroom on a specific content (Friend & Cook, 2003). The general education teacher in this case is referred to as 'content expert' while the special education teacher 'strategy expert' the (Murawski, 2001). One case study concluded that there was no consensus on the specific features required for 'coteaching' and the way to measure the effectiveness of co-teaching (Mastropieri et al., 2005). However, there have been studies that have found co-teaching to be effective and beneficial to students with disabilities (Tobin, 2005, Salend, 2007). The major coteaching methods being used today are the team teaching, station teaching, parallel teaching, alternative teaching, one-teach one-assist, and one-teach one observe teaching methods (Friend & Cook, 2003).

Team teaching involves both teachers alternately planning, delivering instruction and monitoring students together. Researchers indicated that team teaching enhanced student's participation and makes them innovative (Friend & Bursuck, 2009). The advantage of this co-teaching strategy is that it proves to the students that both teachers have equal teaching status (Tobin, 2005). However, the two teachers teaching styles may be different, thereby affecting the flow of the lesson.

In station teaching, a classroom is divided into heterogeneous groups in different work stations and the teachers switch position depending on how they prefer (Friend & Cook, 2003). Station teaching requires teachers to put students in three stations and divide teaching content between them while in one of the stations the students work independently (Tobin, 2005). In his study on *Co-teaching students Language Arts*, Tobin (2005) found station teaching to be beneficial because teachers work with small groups of

students, and that they cover more materials over a short period of time. The major pitfall he found was that it required a large amount of time for planning and the group without the teacher was not being engaged during class time.

Parallel teaching is another co-teaching strategy used in classrooms today. In this strategy, the teachers plan for the lesson jointly, divides the students into two groups, but each delivers the lesson to a part of the class (Tobin, 2005). A major concern arising in parallel teaching is that the special education teacher may not be knowledgeable on the content of the subject being taught and may feel like a teacher's assistant (Friend & Brusuck, 2009).

In alternative teaching, one teacher works with a large group of students while the other teacher gives individualized attention to a small group of students (Cook & Friend, 1995). Tobin in his research stated that the purpose of alternative teaching is to review a lesson; re-teach a lesson or to teach students various learning strategies such as cooperative learning or peer tutoring (Tobin, 2005). Alternative teaching is beneficial because students get quality instruction in small groups and the teachers share equal roles in teaching (Friend & Cook, 2003). However, separating students in groups may cause stigmatization; consequently, Dieker and Murawski (2005) suggested that the same students should not be selected for the same group in each lesson.

In the one-teach one-assist method, one teacher teaches while the other teacher gives support during instruction (Dieker & Murawski, 2003; Tobin, 2005). Each teacher is given equal chance to either teach or assist and they exchange instruction depending on who is more comfortable with the content of the lesson (Friend & Cook, 2003). It has been found that this co-teaching strategy provides support to learners of different abilities

in the general education classroom (Friend & Bursuck, 2009). Its shortcoming is that one of the teachers, usually the general education teacher, is left with the role of providing classroom instruction while the special education teacher acts as the assistant (Tobin, 2005).

According to Friend and Cook in 2003, the co-teaching approach known as one teach one observe, involves one teacher taking care of the instruction part of the lesson while the other teacher moves around the classroom assisting other students. The advantage of this co-teaching method is that both teachers do not have to plan together (Tobin, 2005).

In 2005, Tobin investigated a 6<sup>th</sup>-grade language arts classroom to explore how students are supported in the classroom using different co-teaching strategies. He found that when co-teaching was introduced, the teachers tended to use the one-teach one-assist technique. However, as the teachers continued to collaborate and familiarize themselves with each other, they implemented the other co-teaching methods such as team teaching. In this study, he found that teachers' lack of enough planning time and administrative support was a major hindrance to effective co-teaching strategies.

#### Collaboration

Although many educators have proposed that special education would be enhanced if there was collaboration between the special education teachers and the teachers in the general education classroom, there are other serious issues that needs to be considered if full inclusion would be adopted fully as a method that would benefit all children.

One major factor that supports inclusion is collaboration between the teachers, parents and educational administrators (Friend & Cook, 2003; Salend, 2005). IDEA also mandates the collaboration among the multidisciplinary team members working with students (U.S. Department of Education, 2001). Teachers' collaboration in an inclusive classroom means that there should be a shared responsibility and participation in all decision making processes, lesson planning and giving of instruction (Friend & Brunsuck, 2009). Collaboration enhances professional trust (Turnbull et al., 2006), encourages sharing educational resources and promotes accountability of outcomes for all students (Friend & Cook, 2003).

Gerber and Popp (2000) recommended that school administrators should provide a collaborative environment to the teachers. According to study, reform service delivery for students with mild and moderate disabilities meant providing adequate planning time for team teachers.

In a study by Fisher et al. (2000) followed a school that had been practicing inclusion for three years. They found that teachers responded to changes as needed to have effective inclusive classrooms. They also found that inclusive practices flourished in that school due to effective collaboration between the school administration, teachers, parents and paraprofessionals. However, the teachers complained that lack of enough resources was still a hindrance in effecting inclusive practices

## **Proven Instructional Strategies**

Effective teaching strategies are important in the success of inclusion. It has been found that knowing each learner's abilities through universal design (Dalton & Gordon, 2007), using differentiated instruction (Friend & Bursuck, 2009) responses to

intervention, (Fuchs & Fuchs, 2005) and direct instruction help students benefit from instruction.

Universal Design (UD) originated from the field of engineering and architecture. In this field, experts designed products that could be used by a diverse group of people (Morra & Reynolds, 2010). Today, UD is used in the field of education to enhance learning and classroom instruction. UD is modifying instruction so that all students may benefit by building support and accommodation during classroom instruction (McLeskey, Rosenberg & Westling, 2010). UD enables the teacher to learn how the brain processes information and then applying those learning principles to help the student master a concept. McLeskey et al. (2010) define the principles of learning using the UD as:

"Providing varied methods of instructions so that the learners can have various ways of acquiring information and knowledge, offering students alternatives for developing skills and demonstrating what they know and providing multiple options for engagement in order to help learners get interested and challenged in learning".

The use of UD has been found to be beneficial to students with disabilities; this is because it provides a more flexible individualized approach to accommodation (Dolan, Hall, Banerjee, Chun, & Stangman, 2005). In their study, Dolan et al. (2005) compared the effect of technology- enhanced assessment by providing a computer based read-aloud test and a paper based test for students with disabilities. The results indicated that there was a significant increase in scores on the computer-based test compared to the paper based test. Also, the students preferred to use the computer for assessment than using the traditional paper and pencil mode of assessment.

Another strategy for teaching an inclusive classroom is differentiated instruction (DL). Differentiated instruction takes into account each student's needs, and has been found to boost the performance of students with disabilities in inclusive classrooms (Taylor et al., 2009). Differentiated instruction is the use of various teaching and learning strategies (Friend & Bursuck, 2009) and the adjustment of content, instruction, and assessment (Geisler, Hessler, Gardner III, & Lovelace, 2009), to meet the needs of diverse students in a classroom. Geisler et al. (2009) performed a study on the effect of DI. The purpose of the study was to learn the effects of self counting and a synonym list on the number of total words written and the number of different words written by high-achieving first graders. In this study, they provided each child with individualized differentiated instructions at different times to see if there was going to be a behavior change after each instruction. The results showed that all the five students performed differently in the aspects they were taught. This study demonstrated that each student responded differently to specific instructional strategies.

Another teaching strategy being used today is response to intervention (RTI). In the RTI module, students are identified according to their needs and instruction is based on three tiers (Bursuck & Blanks, 2010). RTI was introduced as a strategy because many educators believed that effective instruction was to be offered to students before they could be referred for special education services or to help struggling students to improve in their academic performance (McLeskey et al., 2010).

In the first tier, students are screened to determine if they have difficulty in any of the academic area (Fuchs & Fuchs, 2005). If it's a student with disabilities, screening would involve the use of a multidisciplinary team. After screening, classroom instruction

is implemented in tier one. Here, students receive instruction in the general education classroom. During this time, the teacher monitors the students for responsiveness by assessing them every week for eight weeks. If the students do not improve in tier one, they are moved to tier two (McLeskey, 2010).

In the second tier, they receive supplementary instruction (Fuchs & Fuchs, 2005) in very small groups. During this period, progress monitoring is done to check if the students are responding to intervention.

In the last tier, students who did not respond to intervention during the 2<sup>nd</sup> tier are given a comprehensive evaluation according to IDEA's policy for special education eligibility (Fuchs & Fuchs, 2005; McLeskey, 2010). Comprehensive evaluation in tier three helps to identify students who will receive special education services.

Direct instruction is another strategy cited as beneficial for increasing students understanding (Cook & Friend, 2003; Salend, 2005; Stockard, 2010; Taylor et al, 2009; Tobin, 2005). It is the traditional teaching method that involves the teacher reviewing what was previously covered, introduces new materials to the classroom and checks for students understanding as the lesson proceeds. Direct instruction involves interaction between the teacher and the students with the key as modeling, reinforcement and feedback (Magliaro, Lockee, & Burton, 2005). This is because it enables the teacher to underlay order of knowledge and provide the basis for accelerated cognitive growth" (Stockard, 2010).

In his study on examining changes in student achievement in reading from first to fifth grade, Stockard found that students whose curriculum involved direct instruction improved in reading compared to students whose curriculum involved other teaching

methods. At the same time, direct instruction helped students from low income families not lag behind in their academics.

#### **Benefits of Inclusion**

Full inclusion has been beneficial for students with and without disabilities and their teachers. According to Friend and Cook (2003), students with disabilities have improved test scores to be motivated to learn and to have positive attitudes towards schooling (Jorgenssen, 2007). It has also been found that including students in the general education classroom improves the students' social and interpersonal skills and makes them feel socially accepted in the society (Salend, 2005). Students with disabilities also get more exposure to learning when given the same contexts similar to their typical peers and they develop ways to ask questions (Tobin, 2005).

Students without disabilities who attend inclusive classrooms have been found to perform even better academically compared to those in segregated classrooms (Cook & Friend, 2003; Mastopieri, 2001). They understand more about individual differences and have developed tolerance of their peers with disabilities. Most of them tend to assist their peers with disabilities in learning (Gargiulo & Kilgo, 2004).

In a study about teachers' and students' perspectives on inclusion in a school that practiced inclusion, researchers found that the students with disabilities admitted that the school was a positive experience for them and motivated them to work hard. In this school, the typically developing students did not notice the labels given to students with disabilities and did admit that inclusion encouraged them to practice cooperative learning. On the other hand, the teachers admitted that they were confident in meeting all the student's needs in an inclusive classroom (Pugach & Wesson, 1995).

Other goals associated with inclusion in general are more social and ethical in nature, these include:

- The effort to model higher level thinking for students with disabilities.
- A natural environment for peer tutoring.
- Opportunities for collaborative learning (specifically groupings not based on ability.
- The removal of the stigma attached to learning disabilities that have historically been linked to the 'resource' room (Mastropieri, 2001).

## **Professional Development**

In the past years, education policy makers and the government have established laws and regulations on how children should be taught (Garet, Porter, Desimone, Birman, & Yoon, 2001). One of the provisions in the NCLB is that each state had to ensure that each teacher meets a highly qualified status and high-quality professional development in all academic subjects and at all grade levels. Due to various changes in education and research on teaching strategies also provided for by the NCLB, there is always a need for in-service courses to refresh or bring new ideas to the table on the current research-based teaching/instructional strategies and how children learn. Such policies have been geared to improve teachers practice resulting into increased students' academic achievement (Hill, 2004). Moreover, The Teaching Commission in 2004 argued that for students to succeed, teachers need to be assisted to succeed through professional development so that they can meet the ever increasing high teaching standards (Borko, 2004).

Professional development has been known to have positive effects on classroom knowledge and teaching skills. Garet et al. (2001) stated that effective teaching and active

learning for students is professional development in the form of activities carried out. They contend that collective participation of teachers from the same school or grade/subject in professional development and the duration of the professional development increase the teachers' knowledge on subject matter and proven strategies that are effective in solving unfamiliar problems (Borko, 2004; Franke, Carpenter, Levi, & Fennema, 2001). There is a need for the teachers to be knowledgeable in various teaching strategies and teacher collaborative measures for student achievement to be increased. A group of researchers documented that because of the multiple roles of teachers in an educational setting, teachers require reforms in their teaching practices so that teaching and learning can be effective (Franke et al., 2001). Therefore, professional development should focus on teachers as learners, and also focuses on the teacher's social learning environment such us the community and their classrooms (Borko, 2004; Franke et al., 2001). Although teachers are knowledgeable about their subject areas (Borko, 2004) and the various teaching strategies, they need to continue to add to the knowledge that they have already acquired to increase students' academic achievement. Franke et al. calls the notion of teachers as learners "teachers as continuous learners." According to their article, continuous learners should learn with understanding; this entails learning an isolated skill that can be used to solve problems and also learning structured knowledge that can be incorporated into existing knowledge (Franke et al., 2001).

According to Hill (2004), teachers respond to professional development under conditions such as enough time to learn. Time to learn mainly focuses on the content knowledge, enough practice of what is learned and continuous assessment on what is learned. Professional development standards and practices in elementary school in

mathematics compared the typical professional development standards to recently established professional development standards. Her objective was to find out if professional development standards that scored high were more successful in improving teaching practices compared to those that scored low. She observed seven professional developments providers. She found that almost all of the professional development adhered to the state policy. However, when basing professional development on given standards, some providers appeared to lack content whereas others met a few professional development standards that provided opportunities for teachers to teach (Hill, 2004). Borko (2004) contended that most professional development programs are inadequate and do not take in to account how teachers learn despite funding from the federal and state government.

Borko (2004) examined what professional development entailed and how it affected the teachers' learning. She affirms that for professional development to be successful there has to be a facilitator, *teachers as learners*, a professional development program and the context for the professional development. The issue of the context is consistent with Hills study that noticed that most professional development programs lacked content (Hill, 2004).

Other researchers have affirmed that for professional development to be successful, the program should be defined in its academic tasks for the teachers, instructional materials, descriptions of teaching and the teacher's outcome measures (Abma, Fischetti, & Larson, 1999). Professional development facilitators are crucial to program success. Apart from being able to understand the goals of the program and how to achieve the goals, they should be able to use a flexible curriculum, consider the

participants responses and consequences, and be able to balance the goals and the participants (Borko, 2004).

It is critical that any school districts implementing full inclusion be aware of the benefits and the methods in which it can be carried out effectively (Friend & Cook, 2003). Effective planning, administrative support and collaboration between teachers, administrators, parents and policy makers are also important in making inclusion a success. Implementation and planning of inclusion involves all stakeholders in researching, discussing and examining the entire educational program and also attending professional development on inclusion (Abma et al., 1999).

## Chapter 3

#### **Methods**

The purpose of this chapter is to describe how this study was conducted. This section will give a description of the appropriateness of the methods and the reliability of the results. This research was done at a West Tennessee School District (WTSD).

According to their website, LCSD holds a belief that all students have the ability to learn and that they should be given the opportunity to succeed in a safe learning environment. This research was made possible as a result of a contract made by the University of Memphis, Center for Research and Educational Policy (CREP), WTSD and the professional development team. As a part of CREP researchers, my main area of interest was the participants' views on the effect of professional development in implementing inclusive strategies in their schools. The data presented were collected in focus group settings.

# **Demographics**

According to the U.S. Census Bureau, WTSD had an estimated population of 38,173 as of 2008. Out of this population, the racial makeup of this county is as follows: 74.1% white, 12.4% Black or African American, 0.8% American Indian and Alaska Native, 433 Asian, and 8.4 of some other races.

The county's main economic activity is agriculture, although there are many other families with white-collar jobs, such teachers, lawyers, doctors, and other professionals. The median household income in 2007 was \$49,000. It is estimated that people with disabilities status who are five years of age and over make up 19.1% of the total population.

WTSD has a total of ten schools. In 2008, 3,561 students were enrolled. These students were being served by a total of 272 teachers [Tennessee Department of Education (TDOE)].

According to the 2007-2008 annual statistical report provided by TDOE, 203 high school students graduated with a regular diploma while four students received special education diplomas. The criteria for achieving a regular diploma was determined by the units of credit and a pass in the Tennessee Proficiency Test (TPT), while students of special education had to complete an Individualized Education Program (IEP) and pass the TPT. The number of students with disabilities ages 3 through 21 years who received special education services in the same year were 519 students (TDOE).

## **Participants**

Participants in the focus groups were regular education teachers and special education teachers who had participated in the professional development program for a period of one year. Insert selection process several teachers representing ten schools from the WTSD participated in the program. The classes that they taught ranged from elementary school level through high school. All the teachers who participated in this program were women. It was expected that the teachers had implemented co-teaching instructional techniques that they had learned during this program. They were also expected to give their views on different topics arising from their experiences from the professional development and their classrooms.

A sample of 16 teachers participated in the focus group interview. A group of eight teachers from the group who had participated in the professional development was picked using the simple random sampling technique without replacement. In the simple

random sample without replacement, all possible participants have a probability of being selected to participate in the research (Hinkle et al., 2003).

# Research Design

This study was done using the qualitative research design in the form of focus group interviews. Qualitative research design is appropriate for evaluating educational data where participants express their views (Creswell, 2005). This method allowed participants to provide detailed perspectives on their experiences. This methodology was selected because interviews give meaning and depth to the participant's observations (Sawyer et al., 1996). It also allowed the researcher to have a better control of the specific questions that needed answering. The advantage of this method is that it allowed interaction with the interviewees and limited the time to collect data (Creswell, 2005). The participants were asked open-ended questions.

### **Procedure**

The Institutional Review Board (IRB) form was filed by professional development team and CREP and accepted by the University of Memphis IRB team. As a part of CREP researchers during the professional development period, I was included in the IRB approval. A simple random sampling technique was used to select participants for the focus groups (Hinkle, Wiersman, & Jurs, 2003). A group of eight participants was selected at random and asked questions. The researcher assured that all responses would be kept confidential. The focus group interviews were done in two phases. The first phase was done one month before the professional development program ended. The second phase was done one month later and on the last day of the professional development.

The interviews were conducted by one of the four individuals of the CREP researchers trained in conducting interviews. In the first focus group, each present teacher was given a piece of paper. Each was requested to write his/her name on the piece of paper. The papers were then folded and collected in a basket. The administrators of the focus group interview mixed up the papers and allowed each to pick up one piece at a time. The first eight people who were picked participated in the first focus group. During the second focus group interview, the same technique as specified above was used; however, the sample that had participated in the first focus group was requested to leave before this procedure was done. Each interview lasted between 60-90 minutes.

The data recording protocol was done informally through note taking. An interview protocol was designed with instructions for the process of the interview and the questions to be asked (see Appendix for the interview protocol). Notes were carefully taken from the teachers' responses. In addition to using the interview protocol, the probes were used to encourage participants to clarify their points and to urge them to elaborate on their ideas (Creswell, 2005).

#### **Treatment of Data**

Collected data was coded by categorizing (Creswell, 2005) the interview feedback into five major points that would answer the research questions.

- Teachers' views on the effect of professional development in implementing coteaching strategies in schools.
- 2. The teachers' views on collaboration in implementing co-teaching strategies.
- Effect of co-teaching strategies to students who have and who do not have disabilities in the general education classroom.

- 4. The level of administrative support in implementation of co-teaching strategies.
- 5. The most preferred/effective co-teaching strategies.

# Chapter 4

## **Results**

The results of this research are based on focus groups' answers from the teachers who participated in professional development and practiced co-teaching strategies in their classrooms. The results are categorized according to the five research questions.

# Research Question 1: Teachers Views on Professional Development.

Almost all the teachers who participated in the professional development on coteaching found professional development to be beneficial to them. They stated that they were able to get new materials that enabled them to implement co-teaching in their classrooms. A few of the teachers stated, "We have been aware of co-teaching and had never been given a chance to practice it in their classrooms". The teachers also stated that they had seen positive improvement on their students' social and academics skills since they started using the co-teaching strategies.

The teachers who attended the professional development commented that the professional development enhanced collaboration with their partners to some extent. However, they pointed out that for collaboration to be more effective, professional development on co-teaching would be more beneficial if "it is offered as an in-service course for all teachers rather a few selected teachers, all the general education teachers should be here". A number of them argued that if professional development was done on a Saturday, most teachers would participate and not lose a whole day of class. On the other hand, some of the teachers thought that meeting on Saturdays would, "take away my weekend and time to do other personal things".

To ensure effective collaboration and successful inclusive practices, all the stakeholders in the classrooms (e.g., teaching pairs, paraprofessionals, education assistants and all other teachers) needed to attend professional development. They observed that most teachers were inconsistent in attending professional development courses which caused a hindrance in effectively implementing co-teaching strategies.

The teachers indicated that the time allocated for the professional development did not give them a chance to have a hands-on experience in practicing co-teaching to gauge whether they had mastered the strategies. One of them said, "yes, professional development is beneficial; however, we need more hands-on experience, allow us to role play the co-teaching strategies so that we can master the strategies". Most of them indicated that hands-on experience after each session would better equip them to carry out effective co-teaching in their classrooms.

Overall, most teachers agreed that professional development equipped them to carry out co-teaching strategies.

# Research Question 2: Teacher's Views on Collaboration.

To answer the question on collaboration between the general education teacher and the special education teacher, most of the teachers said that there was a fair amount of collaboration between them. Those who collaborated indicated that they cooperated with each other, shared their lesson plans and communicated with each other on issues pertinent to the lesson and the students. Although they said that they came from different backgrounds and personalities, they were able to explain a given topic in two different perspectives, which helped to enhance students' understanding.

Although most of the teachers noticed a significant change once they started coteaching, some teachers did not notice any substantial difference in their classes and their students when they practiced co-teaching. Even though they embraced inclusion, they said it was difficult to fully practice due to other issues in schools and in the classroom. One of the teachers commented that "some students do not feel comfortable working with the special education teachers," while the special education teachers felt they were being used as teacher assistants especially in the one-teach-one drift co-teaching strategy. Special education teachers felt a need for the regular education teachers to also attend professional development so that they could learn to work collaboratively, she commented that "they need to be here to learn what we are learning, if they could all come, we would practice co-teaching with much ease". However, one of the special education teachers commented, "I always ask for permission from my colleague because I don't want to take her class away from her." To counter the above statement, one of the regular education teachers said that she was always open to the special education teacher chipping in during the lesson, "We always work together in my class, we plan and each teach a different section of the lesson in satiations"

All the attendees for the focus groups expressed that there was no system in place to assist them to fully implement inclusion in their schools. They needed a scheduled time where both teachers would sit with each other and plan for lessons. Because most schools had only one special education teacher, it was difficult for the special education teacher to plan with all the other different subject teachers at the school. Moreover, some special education teachers were being pulled out of the classrooms for other duties or to teach a resource class hindering them from practicing inclusion. They lamented that,

"how do I plan together with her, where is the time, one time one is needed to co-teach and the next time you are being told to pull-out". They suggested that a system should be put in place for the school district to provide enough personnel for collaboration to be effective.

In an attempt to answer how they felt about students generally in a collaborative setting, teachers stated that co-teaching was effective in teaching new materials, was easy to practice and encouraged individualized instruction because of the two teachers in the classroom.

# Research Question 3: Effect of Co-teaching on Students

In an attempt to hear teachers' views on what effect co-teaching had on their students, the teachers indicated that most of the students had responded to co-teaching and were experiencing success in their academic work. They stated that they had seen the students' with special needs tests scores go up and they were more exposed to the general education curriculum and were prepared for Tennessee Comprehensive Assessment Program (TCAP). But another group of teachers indicated that although co-teaching was somewhat effective, it did not cause any changes academically for students. (They supported their assertion by claiming that they saw students with disabilities being more embarrassed in inclusive settings. Those students got frustrated in the midst of their peers if they failed to reach their goals. One comment made by one of the teachers was, "we have seen some a little bit of improvement, but some or our students are more embarrassed in the general education classroom if they are not able to answer questions the way the others are able to, or if they are not able to complete their assignments".

Another reason they stated for lack of effectiveness of co-teaching in classrooms was that it did not work for students who have severe intellectual disabilities. A teacher from one school said, "Co-teaching does not work in my case most of the time, so of my students need individualized instruction in a resource classroom". They insisted that for those students to improve on their academic performance, they needed to be in Comprehensive Development Classrooms (CDC) and in resource rooms where teachers would implement their IEPs.

The focus groups also addressed the relationship between the students in the general education classroom. They stated that co-teaching allowed all the students to socially interact with each other and that those students who had behavior problems improved in their behaviors. The reason for improvement of behavior was that those students emulated how the other students behaved. It also encouraged them to aim for success. Co-teaching, especially station teaching, allowed students with mixed abilities to work with each other thereby encouraging cooperative learning. The special education teacher who practices station teaching with success said, "We teach our students in three stations. The students in each station have mixed abilities

Most of the teachers contended that co-teaching had made all the students understand the issue of "fairness" and "being equal." This was because the pull-out system made students in the special education program feel as if they were incapable of performing to the level of their typical peers.

The teachers also answered questions on how students perceived them in the general education classroom. In some schools, the students interacted similarly with the special and the general education teachers; however, there were some students who

showed lack of respect for special education teachers. They did not view them as their "real" teacher. On teacher said, "The students just view me as the teacher who teaches special education and not their real teacher".

# **Research Question 4: Administrative Support**

In response to the fourth research question on administrative support in implementing co-teaching strategies in schools, three themes emerged.

- Some principals accepted co-teaching in schools while others did not.
- Lack of personnel (e.g., Special education teachers and paraprofessionals).
- School budget.

Half of the teachers stated that the principals wanted inclusion to be practiced in their schools and were very supportive of it while half of them did not. This made practicing inclusion in those schools very difficult. The school administrators who were not accepting of inclusive practices encouraged their teachers to pull out students to attend the resource classrooms.

The issue of lack of enough personnel was supported by all the teachers. They stated that although most of their principals supported inclusion and wanted to implement it, a shortage on the numbers of teachers of special education and paraprofessional hampered this move. This meant that those teachers had to be pulled from classes either to attend to a resource classroom or move from class to class. One co-teacher lamented that, "as soon as I get into my co-teaching classroom, I get a call to go pull out some students to the resource room". Lack of personnel also hampered collaboration in planning of lessons. It was very difficult for the special education teacher to plan lessons

with all the other general education teachers in the whole school. The administration did not also support them in creating a common time for lesson planning.

All these issues were attributed to limited school budget. Budget cuts in schools affected hiring of enough special education teachers in almost all schools within the district.

# Research Question 5: The Most Frequently Used Co-teaching Strategy.

Four co-teaching strategies learned during the professional development were identified as the most commonly used in their classrooms. These were station teaching, parallel teaching, and one-teach one-drift or one teach-one-assist, and team teaching coteaching methods. Most of the teachers said one-teach one-assist was the most preferred co- teaching in their classrooms. There was no team teaching between the special education teacher and the general education teacher each disseminating 50% of the content of the lesson. They said that, "one-teach one-assist is the one that we can practice easily at this time, we do not need a lot of planning time. I can just talk to my colleague the previous day and find out what she would be teaching today". They claimed that a teacher's failure to deliver lessons equally during a class time was as a result of lack of a common planning time; therefore, the general education teacher ended up delivering the information while the special education teacher drifted around assisting students (especially those in special education). One-teach one-assist required less planning time; however, many times the students were not accepting of the special education teachers because the general education teacher taught the most part of the content. One teacher also commented that, "even though I assist students as the lesson goes on; we find it beneficial to students because each teacher explains the content of the lesson in his/her

own way". They also cited collaboration as a major advantage of the team teaching strategy.

Station teaching was the most successful co-teaching strategy in one school. Students were divided into small ability groups in a station and the teachers rotated from one group to another in a given period of time. The special education teacher and the general education provided multiple explanations for the same concept during the class time. Station teaching allowed multiple standards to be taught at the same time. They also claimed that a lesson that would take two days to complete would be reduced to one day. The regular education teacher said, "We do not experience the problems the teachers are talking about, we work together perfectly, we divide the lesson contents and complete work that was scheduled for two days in a day". The advantage of this method was that the special education teacher and the general education teacher interacted with all the students in the classroom.

The last strategy that was used infrequently was the parallel teaching method.

This method was not used much because of the planning time involved. The teachers also claimed that the students were easily distracted.

## Chapter 5

#### Discussion

The strongest finding on the effect of professional development in implementing co-teaching strategies in schools is that the teachers who attended this course liked co-teaching and implemented it in their schools. Bryant et al. (2000) found out that when teachers participate in learning, it enhanced their knowledge, skills and confidence in providing instructions to students and other low academic achievers

Professional development should be held as an in-service course for all of the teachers in a school to minimize difficultly in sharing information with the rest of the school members. Greenwood (1998) stated that effective professional development should combine in-service courses, weekly meetings and coaching. Although the information presented on co-teaching was not new to some of the teachers, the course was still beneficial and enabled them to be more effective in carrying out co-teaching strategies in their schools. Professional development should be organized in a way that teachers are allowed to have a hands-on experience on what they have learned. This can be practiced at the end of each session. Teachers usually prefer in-class modeling more than what is provided in a professional development course. This is due to the diverse groups of students they deal with and what the strategies would look like in a typical classroom. Bryant et al. (2000) stated that for professional development to be effective there should be peer coaching to help in the implementation of instructional practices learned during professional development. Also, there should be decision making between the professional development's facilitator and the teachers on how to improve professional development. Knapp (2003) suggested that professional development would

promote teacher's application of knowledge and skills in classrooms in the following ways:

- Learning opportunities that are intellectually challenging moves teachers into higher standards of classroom practice.
- 2. Teachers should be engaged in active learning rooted in their content area and how students acquire learning.
- 3. Teachers' learning should be reinforced by interacting with their colleagues so that they can learn from each other.
- 4. Professional development should address specific problems faced by teachers in implementing teaching strategies that would enhance learning.

One of the findings from the focus groups was that the teachers who attended professional development on co-teaching liked co-teaching and adopted it although there was no full collaboration between the teachers. A great amount of evidence indicates that it is difficult to implement co-teaching because it needs full collaboration between the two teachers, the other staff members and school administrators (Friend & Cook, 2003). Friend and Cook (2003) affirmed that it was apparent that collaboration was a major hindrance for co-teaching. As defined earlier, co-teaching requires two or more teachers to provide instruction of the same lesson in a classroom, be willing to change their teaching styles and also share responsibilities. Most teachers are willing to practice co-teaching but are hindered by several factors. Some of the factors brought forth by the focus group are also consistent with Friend and Cook's (2003) discussion on lack of some teachers willingness to be flexible to allow for joint planning, administrative support, special educator caseload, priority for co-teaching, and diversity of students in need. The

above statements are consistent with a special education teacher's view on co-teaching.

According to a personal note from a friend who practices co-teaching effectively at a school in Tennessee,

It's sometimes difficult to implement inclusion effectively as a practitioner because, when I am supposed to be carrying out inclusion, it may be the time for me to attend an Individual Education Plan (IEP) meeting or to meet with a supervisor. (L. Greene personal communication, October 14, 2010)

Team teaching has surfaced to be the most frequently co-teaching strategy and requires more collaboration than most of the other strategies (Friend & Cook, 2003); however, it was not dominant among the teachers. Most of the teachers practiced it in the form of one-teach one-assist or one teach one observe. Moreover, the special education teacher is usually not given an equal status in teaching in schools embracing co-teaching.

Although the teachers had positive remarks about co-teaching, there were issues that hampered implementing co-teaching in schools. Most of the faculty members resisted co-teaching because of lack of enough staff members, planning time and administrative support which are all factors that enhance collaboration. Friend and Cook (2003) suggested that for there to be effective collaboration between teachers, co-teaching relationships have to be exhibited. This would entail sharing responsibility, being flexible, and both teachers sharing their expectation on what co-teaching should look like (Friend & Cook, 2003). Being flexible encompasses the general education teacher learning strategies that would enable him/her to adapt lessons depending on the students' needs while the special education teacher should expand his/her knowledge in delivering content lesson in the general education classroom. According to NCBL,

teachers need to be highly qualified; therefore, special education teachers assigned a coteaching class should be able to learn the content for him/her to be able to assist students. Mastery of content according to Greene has been a major cause of conflict between the special education teacher and the general education teacher. She stated that "At our school, the general education teacher has complained of special education teachers in an inclusive setting who do not know the subject content. Sometimes they teach the student the wrong thing and the general education teacher has to go back and re-teach" (L. Greene, personal communication, October 14, 2010). Therefore, it is imperative the special education teacher should master subject matter so that she delivers the right content to the students and to help avoid complaints about the general education teachers not wanting them in their classroom. By a special education teacher knowing the content, it helps build the trust between both teachers.

Co-teaching has been found have a positive effect on all students regardless of their abilities. Teachers who have worked with children with disabilities in an inclusive setting have found that students' attitudes towards learning in general changed. Students with disabilities became more accepting to learning academic, social and behavioral skills from their peers. Through co-teaching, instructional strategies such as response to intervention (Murawski & Hughes, 2009) and cooperative learning have been made to be more efficient.

Rao (2009) study, a categorical approach in an inclusive setting makes teachers view students according to their instructional needs, thereby, ensuring all students' success. Evidence shows that when students who have mixed abilities are taught using station co-teaching strategy, the students help one another learn through cooperative

learning (Friend & Cook, 2003). Therefore, cooperative learning in an inclusive setting promotes students academic achievement.

The pull-out system made students in the resource class think that they were incapable of performing like their typical peers; however, the teachers found that all students gained when teachers collaborated in an inclusive setting and the test scores had improved compared to when they did not practice co-teaching. Bryant et al. (2000) found co-teaching to benefit students with diverse learning needs (e.g., learning disability, average students and the gifted).

Although co-teaching was found to be beneficial, several drawbacks were found in inclusive practices for children with disabilities. Most students with disabilities felt stigmatized in the general education classroom when they were not able to perform to the level of their typical peers; they tended to feel embarrassed and frustrated if they could not perform as well as their typical peers. It was also not effective for students who were low functioning. These students needed more individualized instructions in a resource classroom for them to be successful in their education.

Administrative support has always played a major role in improvement of any system. Although administrators supported inclusive practices in their schools, they were handicapped by one major factor, namely, the school budget. An inefficient school budget has always been cited as a major cause of poor academic achievement. Because of various deliberations by school boards and other stakeholders, who make decisions on school's spending in the school system, most schools lack enough funding to run their schools (Land, 2002). Moreover, there is a lack of trained personal in the area of special education even though there has been an influx of new special education teachers.

However, the number of new special education teachers is not sufficient to service the new classrooms (Rao, 2009).

Lack of enough personnel to implement teaching was a major issue in practicing inclusion. Staffing of teachers of special education has been an issue interfering with implementation of co-teaching strategies. Augenblick, Myers and Anderson (1997) found a relationship between the school's district resource availability and the school's district wealth to play a major role in the school's budget. This may help explain the issue of lack of enough personnel to assist with the special education caseload. Having only one or two special education teachers in a whole school makes inclusive practices difficult to practice in schools.

Administrators need to attend professional development on teaching and learn to appreciate and reward co-teaching efforts. They can influence schools and the schools district on matters that can make inclusive practices more effective (Friend & Cook, 2003).

According to the results from this study, station co-teaching strategy was the most effective co-teaching method. This is because it was easy to carry out by the two teachers. It involved the two teachers planning together to benefit the students in mixed ability classrooms. The mixed ability grouping allowed for integration of students with disabilities with their typical peers and enhanced cooperative learning. Moreover, there is a low ratio of teacher to student (Friend & Cook, 2003), which enhances more individualized instruction. All the students have an advantage of benefiting from two professionals each with his/her own teaching style.

The other method that was most preferred was one-teach one-drift. According to the study, this method was beneficial for teachers because it did not require a common planning time. However, it was detrimental to the special education teacher because most students did not have a high regard for the special education teacher because often he/she was drifting around assisting students who had difficulty (students in special education). For a special education teacher to always be a drifter undermines his/her credibility before students because they view him/her lacking expertise in content knowledge areas (Friend & Cook, 2003).

Team teaching has been found to be most the most effective strategy because teachers share instruction while alternating roles. It has been proven that it enhances student participation and makes both the teachers have equal status before the students as compared to one-teach one drift (Friend & Cook, 2003). In this study, it was seldom practiced because of lack of joint planning time.

## Limitations

The information received from the participants may have been filtered because the participants might have given answers in reference to what the interviewer would want to hear. This is one of the limitations of using interviews as a data collection measure (Creswell, 2005). There was also a difficulty in taking notes on the participants' views during the focus group because the participants were giving so much information at the same time.

#### Conclusion

Professional development equipped the teachers to apply different co-teaching teaching strategies in their classrooms. Professional development aided the teachers in

implementing co-teaching strategies and assisted them in identifying areas that needed improvement. Teachers who did not attend professional development refused to implement and to listen to what their peers had to say about effective co-teaching strategies. However, the teachers said they benefited by sharing ideas and encouraging collaboration among teachers. Although the information presented in professional development was not new, it encouraged a statewide effort to implement inclusive practices at a school district-wide level. The teachers proposed that professional development should be carried out as an in-service course where all the teachers would be able to attend, training to address each school's individual needs, and allowing teachers who attend to have a hands on experience during these course.

Generally teachers liked the co-teaching strategies and reported that it was more beneficial to students with disabilities rather than taking these children to resource classrooms. By teaching all the students in the regular education classroom, the teachers are able to give explanations from the two teachers' perspectives to the student, motivating students with disabilities to learn and improving social and behavior.

No amount of professional development will aid in improving teaching strategies unless a proper system to implement what the teachers are taught is in place. If factors that hinder effective co-teaching measures in schools (e.g., school budget, lack of personnel, common planning time with co-teaching partners, and receiving lesson plans from the general education teachers) can be addressed at the school district level and consistently implemented, co-teaching would be a better strategy for improving academic achievement for all students.

## Recommendations

The following recommendations would aid in creating effective professional development on inclusive practices:

- 1. A state-wide system to be put in place to aid in implementing inclusive practices in schools.
- 2. Professional development to allow attendees to have a hands-on experience in implementing these strategies during professional development.
- A common planning time for the teachers in a school that has implemented coteaching.
- 4. School districts to address the issue of staffing so that there may be enough personnel to carry out inclusive practices in schools.
- 5. Conducting in-service course for all teachers on inclusive practices rather than having only a few teachers attending professional development.
- 6. All teachers, paraprofessional, teacher assistants, and school administrators should attend professional development courses so that everyone would be on the same page.

# **Suggestion for Further Research**

Some of the areas that need further research so that effective inclusive strategies may be implemented in schools are these:

- The reasons why some students (with and without disabilities) improve in their academic performance in an inclusive classroom setting while others do not.
- Effect of co-teaching on overall student's academic achievement.
- Methods in which student who have limited cognitive ability can be made to achieve academically in an inclusive classroom.

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# **APENDIX**

# Interview Protocol

| Project: Teachers responses on inclusive practices in their schools            |
|--|
| Time of Interview:   |
| Date:  |
| Place:   |
| Interviewer:   |
| Interviewee:   |
| Position of Interviewee:   |
| This is a follow-through of the professional development. The purpose is for   |
| a thesis, the answers will be treated with confidentiality or the interviewee. |
| The interview will take between one to one and half hours.                     |
| 1. Do you fell your administrator has been supportive                          |
| 2. Strengths of co-teaching  |
| 3. Weakness of co teaching   |
| 4. How have your students responded to learning?                               |
| 5. Has PD been beneficial  |
| 6. Do you like co-teaching   |
| 7. Draw backs for co-teaching  |
| 8. How accepting have you been towards co-teaching as a teacher                |
| 9. How effective do you feel co-teaching has met student's individual needs.   |
| 10. Which co-teaching models have been helpful                                 |
| 11. How effective is your co-teaching partner                                  |

| 12. How has your co-teaching partner shared his/her assessment and other          |
|---|
| materials   |
| 13. What are your final thoughts  |
|   |
|   |
|   |
|   |
|   |
|   |
| Thank the participants for their cooperation and participation in the focus group |
| interview. Assure them of confidentiality of their responses.                     |