

Spring 2010

## What Teachers Wish Administrators Knew About Co-Teaching in High Schools

Geraldine M. Nierengarten Ph.D.

gniereng@d.umn.edu

Trudie Hughes

thughes@d.umn.edu

Follow this and additional works at: <http://corescholar.libraries.wright.edu/ejie>

 Part of the [Curriculum and Instruction Commons](#), [Curriculum and Social Inquiry Commons](#), [Disability and Equity in Education Commons](#), [Special Education Administration Commons](#), and the [Special Education and Teaching Commons](#)

---

### Repository Citation

Nierengarten, G. M., & Hughes, T. (2010). What Teachers Wish Administrators Knew About Co-Teaching in High Schools, *Electronic Journal for Inclusive Education*, 2 (6).

This Article is brought to you for free and open access by CORE Scholar. It has been accepted for inclusion in Electronic Journal for Inclusive Education by an authorized administrator of CORE Scholar. For more information, please contact [corescholar@www.libraries.wright.edu](mailto:corescholar@www.libraries.wright.edu).

What Teachers wish Administrators knew  
about Co-teaching in High Schools

Geraldine M. Nierengarten

Trudie Hughes

University of Minnesota Duluth

Abstract

This article presents the results of individual and focus group interviews with the co-teaching partner teachers comprised of general and special educators. In particular, the analysis reveals the teachers' perceptions regarding what principals need to know and understand to support co-teaching in their schools. The co-teaching teams identified the following factors as important for the success of co-teaching in a high school classroom: teacher training, administrator training, compatibility, planning time, student schedules, natural proportions, respect and value for the teaching assignment, administrative support, and professional development. The teams also identified student and teacher benefits from participating in a co-taught classroom.

What Teachers wish Administrators knew about Co-teaching in High Schools

Co-teaching has become a common strategy used by high schools to meet the ever-increasing demands of diverse classrooms. Administrators often assume that co-teaching is simply placing two teachers in the same classroom while hoping this new relationship works well for themselves and the students. Ordinarily, this does not happen. The complexity of relationships, curriculum, and high school structure, among other factors, can be barriers to a successful co-teaching experience. The research presented here is drawn from a larger study of a co-teaching experience in a high school setting. This article presents the results of individual and focus group interviews with the co-teaching partner

teachers comprised of general and special educators. In particular, the analysis reveals the teachers' perceptions regarding what principals need to know and understand to support co-teaching in their schools.

### Literature Review

Responding to the ever-increasing needs and demands of high school students with special needs is complex and difficult. From meeting graduation standards, IEP goals, No Child Left Behind standardized testing requirements and the Individuals with Disabilities Education Improvement Act (IDEA) recommendations for the least restrictive placement, these students present a formidable challenge to the administration and teachers that serve them.

To add to this difficulty is the complexity and rigidity of the high school organization. America's high schools are a structured and regimented system. Adhering to the modernist view of predication and control (Doll, 1993), bells ring and students and teachers respond automatically. Curriculum is constructed with standards and benchmarks established by local, state, and national organizations. Teachers are assigned to classes and students' schedules are printed. This linear, sequential, easily quantifiable ordering system dominates education today (Doll, 1993). It is a familiar routine that has been repeated for many years. Change is difficult when it is deeply entrenched in time and tradition.

High schools exemplify bureaucratic practices with a fixed division of labor with job descriptions and responsibilities, sets of rules and regulations, hierarchy of authority, technical qualifications, isolation and planning (Bolman & Deal, 2003). Resulting in isolation among teachers, this regimented routine offers little opportunity for teacher interaction and collaboration. Professionals have been highly trained to complete a specific task within their classroom. High schools are organized by departments with curriculum determined by national, state, and local bureaucracies. Who and what they teach defines teachers.

Special education also has bureaucratic practices that operate parallel to general education. Although special education is technically a subsystem of general education, Stainback and Stainback (1984) note it is a dual system of education with its own pupils, teachers, supervisory staff and funding system. Over the years there have been attempts to reduce the sharp dichotomy between special and regular education, yet the dual and parallel system basically remains intact. This two-box system of public education leads to various misconceptions about students with disabilities, which often negatively influences the way people relate to individuals with a disability (Choate, 2004) and the professionals that work with them.

Among the misconceptions is the notion that there are just two kinds of students served by the two systems. But there are not two distinct types of students – special and regular. All students differ along continuums of intellectual, physical and psychological characteristics. Individual differences are universal and thus the study of unusual people is really a study of all humankind (Stainback & Stainback, 1984). Longitudinal studies and research findings confirmed the experience of students, parents, and teachers that the separate system was flawed and unequal; this led to many championing a new inclusive design (Stainback, Stainback, & Forest, 1989).

Educational inclusion of students with disabilities has been widely promoted in recent years, resulting in ever-increasing numbers of students with disabilities receiving all or nearly all of their services in general education classrooms (Mastropieri & Scruggs, 2001). In each of the age groups, 6-11, 12-17 and 18-21, the largest proportion of students with disabilities was educated in a regular education classroom for most of the school day; that is, they were outside the regular classroom less than 21 percent of the school day (U.S. Department of Education, 2006). This means that the teachers that serve the students with disabilities, both general and special educators, must collaboratively work to meet the educational and behavioral needs of those students. One model of collaboration that is gaining attention and practice is collaborative teaching or co-teaching (Zigmond & Magiera, 2001).

The development of collaborative skills between general and special education teachers is now emerging. It is through this collaborative sharing of ideas, strategies, and experiences that powerful changes occur inside and outside of the classroom. As the classroom becomes more diverse and high stakes testing increasingly ubiquitous, it is imperative for professionals to collaborate to meet all student needs. Collaborative schools engage in positive partnerships and interactive team activities to achieve a shared goal of promoting effective instruction for all students (Goor, 1994). They embrace a composite of beliefs and practices that support educational improvement through staff harmony, promote mutual respect between teachers and administrators, as well as provide a professional working environment (Goor, 1994). Educational improvements and instructional effectiveness results in a school climate that embraces this new mode of operation.

According to the National Center for Restructuring and Inclusion (Lipsky, 1995), co-teaching is the most common service delivery model for teaching students with disabilities in the general education classroom. The roots for co-teaching as a service delivery model first gained popularity in the 1960s when co-teaching was recommended as a strategy for reorganizing secondary schools in the United States as well as in England (Warwick, 1971). More recently, due to the inclusion of many students with disabilities in the general education classroom, the practice of co-teaching and the various models has gained renewed interest. Administrators, educators and parents are beginning to realize that the collaborative efforts of several experts are needed to meet the diverse needs that are represented in the classroom.

This paper proposes to identify the factors that high school teachers identified for successful co-teaching practice. Within the context of this paper, co-teaching is two or more professionals delivering substantive instruction to a diverse or blended group of students in a single physical space (Cook & Friend, 1995). Team teaching, for example, is considered a form of co-teaching.

## Methods

The analysis of individual and focus group interviews with the teachers is drawn from a larger study of the co-teaching experience. The larger study was conducted on the campus of Main High School located in a northern city in the upper mid-west. This high school had a student population of approximately 1190 students in grades 9 through 12 which was comprised of a diverse ethnic population, significant urban poverty (39%) and sixteen percent required special education services (Minnesota Department of Education, 2006).

The partnering teachers were experienced educators with an average of 13 years of teaching experience among them. They were partnered and placed in a ninth grade general education classroom the previous year, teaching mathematics, English and Social Studies, respectively. Thus, while they were experienced educators, co-teaching was a new to them.

### *Data Collection*

Each teacher participated in two 60-minute individual interviews over the course of two years about their experiences and perceptions regarding co-teaching. An interview protocol was developed and the process of guided conversations rather than structured queries was used (Yin, 2003).

The teachers also participated in three 90-minute focus group interviews occurring the first and second semester of the first year of the project and at the end of the second year. All interviews were audio recorded for later transcription and analysis.

### *Procedures*

The co-teachers selected for the study participated in a two-day professional development workshop offered the spring semester of both years of the study. The workshop focused on developing the co-teaching relationship and co-teaching practices. The workshop was sponsored by the district and conducted by the researcher of this study.

At the end of each school year of the study, 60-minute individual interviews were conducted with each teacher. The interviews probed teachers' experiences of co-teaching including their perceptions of the benefits and barriers to teaming, and what instructional strategies were significant. The interviews were audio taped and transcribed for subsequent analysis and reporting.

### *Data Analysis*

A third party transcribed the tape-recorded interviews and focus groups of the special and general education teachers. The interview transcripts were analyzed following a tiered method of data analysis (Ryan & Bernard, 2000).

### Results/Findings

The purpose of the research presented was to reveal the teachers' perceptions regarding what principals need to know and understand to support co-teaching in their schools. The following themes were derived from the interviews and focus groups with the participants in this study. The themes include: teacher training, administrator training, compatibility, planning time, student schedules/natural proportions, respect for teaching assignment, administrative support, and professional development.

#### *Teacher training*

Every member of the co-teaching teams in the first year attended a two-day training. This training provided them with not only foundational information but also assured congruent preparation for each teacher. All team members heard the same message and were exposed to the same skill set.

The first co-teaching teams (first year of study) volunteered for the assignment and were eager to become more effective in their practice. It was evident during training they were convinced of the usefulness and necessity of the co-teaching concept. Due to a couple of teacher changes and the expansion of the co-teaching offerings the second year of this study, teachers were drafted by the administration to carry on the co-teaching initiative. Training was offered to them as well, yet there was hesitation and resistance due to the lack of voice in the decision to participate.

### *Administrative training*

The district and building administration had no training and consequently, did not have a clear understanding of what would be required to make co-teaching successful for all stakeholders. The idea for co-teaching was established by a group of leaders from Main High School, yet the principal who clearly had the vision for the project moved to another building. Although the position was not left vacant, the new principal did not hold the vision and was working tirelessly to meet the demands of the job. Furthermore, the school district had not taken ownership of this project and felt no obligation to offer anything but verbal support.

### *Compatibility*

Co-teaching is often referred to as a professional marriage requiring all of the components of a traditional marriage to be successful. Both professional and personal characteristics play a part in the compatibility factor (Rice & Zigmond, 2000). The dynamics of compatibility can be complex and sensitive. Good communication skills, flexibility, shared common philosophy and clear definition of roles and responsibilities are essential elements for compatibility (Arguelles, Hughes, & Schumm, 2000, Cook & Friend, 1995, Murata, 2002).

Each team demonstrated compatibility at different levels. Related to compatibility was the amount of time spent planning. One team grabbed what time they could and it paid off greatly in the classroom. The other teams struggled due to lack of planning time and frequent absences. It is difficult to develop a relationship when there is a lack of time and attention to that relationship.

### *Planning time*

Planning time is the number one issue for many educators related to co-teaching (Dieker, 2001; Keefe & Moore, 2004). Time is a scarce commodity at the secondary level. All of the teams would agree that additional designated planning time would have been helpful in their efforts. Although the first hour of each day was student free, the co-teachers found it difficult to meet for this time.



There was varying levels of planning time. One team was able to squeeze minutes here and there to plan for the day. Although it was not ideal, they were able to progress and find success for themselves and the students. The other teams struggled to not only find the time but to use the little time they had efficiently. There were many demands that encroached upon what little time was available and without any accountability it was easily lost.

#### *Student schedules/natural proportions*

At Main High School, a computer program established the class schedules for all students including those with special needs. Clearly, the attention that some of the students schedules needed was not given. This created near deleterious effects in the math classroom. It would not be an exaggeration to claim that 75-80% of the students placed in this class were either on an IEP or were considered at-risk. Quickly, the heterogeneity of the class was diminished. The academic and behavioral needs were too demanding and intense for one classroom even with two teachers. At this point, the co-teachers resorted to the simplest form of co-teaching for the sake of management and sanity – parallel teaching; but not parallel teaching in the truest sense. The special educator took a small group of students with the greatest need to his resource room and worked with them on the math lesson for the day. The general educator then focused on the remaining students who still presented a formidable challenge.

More reasonable ratio of students with special needs was maintained in the other classrooms. That is not to say they did not struggle when ratios were disproportionate. They felt the strain of the class that had more students with learning needs when compared with a similar class. A great deal more effort had to be put forth in order to move the class along at the same pace.

#### *Respect for teaching assignment*

During the two years of this project, there were many times when the special educator would be called out of a co-taught classroom to substitute for another teacher. The teams resented this

tremendously and felt as if their presence in the classroom was a disposable service. Administration needed to see co-teaching as a foundational piece to the general education classroom and not just an add-on that could be manipulated when a need arose.

An interesting phenomenon was revealed during the last focus group. The special educators noted that having a co-teaching assignment was an easy responsibility; contrary to the literature, for it did not require the same amount of preparation as an alternative period, which had students at different academic levels. They felt that administration needed to balance the schedule more effectively between co-taught classes and alternative classes as the alternative classes were more demanding. Several of the special educators saw the co-teaching period as merely attending the co-taught class and helping out, similar to a classroom aide.

#### *Administrative support*

The role that administrative support plays in the success of co-teaching cannot be overstated. Nearly every factor is dependent on an administration that is supportive and invested in this initiative. Initially, the building principal saw the need to provide planning time and monetary support for the co-teaching partners. This soon dwindled due to inattention and other pressing needs.

The teams sought support through funding, incentive, encouragement, affirmation and promotion not only in the school but the district wide. Clearly, administration needs to attend to this type of endeavor at least for the first couple of years until it is established and sustainable.

#### *Professional development*

On-going training and support is essential to any new educational initiative. Although all of the team members were initially trained prior to co-teaching together, they indicated that further training and dialogue would have helped them progress and problem solve. Those team members who had taught for the longest time realized that there was need for an “upgrade” in their teaching practices.

## Discussion

The administration's role in the success of co-teaching is significant and essential. During the course of this research, the teaching teams made it very clear what they wanted the administration to know. For co-teaching to be successful in a high school environment, the following factors need to be considered.

### *Administrative Support*

Support from school administrators is essential before and during the implementation of co-teaching programs (Bauwens, Hourcade, & Friend, 1989).

Co-teaching requires direction from administrators who must be willing to listen and learn, and to help overcome obstacles such as class size, scheduling and personnel allocation (Arguelles, Hughes, & Schumm, 2000). Administrators provide moral, monetary, and evaluative support throughout the extended time needed for these curriculum reforms to make a secure start (Jung, 1998). Since co-teaching requires support and vision for transformation, "the principal strongly influences the likelihood of change" (Murata, 2002, p. 75). Thousand, Villa and Nevin (2006) add that "administrators need to create meaningful incentives for people to take the risk to embark on a co-teaching journey and plan for and take actions designed to get school personnel excited about implementing co-teaching approaches" (p. 3).

Administrative support remained the strongest concern shared by all of the teams throughout the entire co-teaching experience. The co-teaching effort remained alive primarily through the efforts and commitment of the teams. Both district and high school administration supported the co-teaching initiative but there was little effort beyond the verbal encouragement. The Main High School administrator wanted to see the district administration provide monetary support for additional teachers and release time for planning. That support never manifested. Even when the need for additional co-teachers was obvious due to the additional call for service written into students Individual

Education Plans, there was not a district response. At the district level, the co-teaching project at Main High School was highly regarded. The superintendent and the director of special education were excited about this new initiative. However, no additional monetary support was provided.

As another show of support, the co-teaching teams longed to have the administration observe them in the classroom. Their attention and feedback would have conveyed to the teachers value and interest in the project. They were proud of what they were doing and wanted to share the success they were experiencing. They also felt that if the administration saw the advantages of the program they would fiscally invest and promote the success not only at Main High School but also across the district. The teams also wanted the administration to observe first hand the debilitating effect that a large class size and disproportionate number of students with needs had on a classroom.

#### *Training for administration*

Prior to training the co-teaching teams, administrators should have an understanding of the practice of co-teaching ((Magiera, Simmons, Marotta, & Battaglia, 2005; Walther-Thomas, Bryant, & Land, 1996). The administration can then provide vision, support and understanding for the general and special educators implementing the model. Through this training a clear understanding of administrative roles and responsibilities could be communicated, which would provide background knowledge for better decision making in the schools. As it was, the district and building administration had no training and consequently, did not have a clear understanding of what would be required to make co-teaching successful for all stakeholders.

#### *Compatibility*

The co-teaching teams varied greatly in the manifestation of compatibility. During the first year of co-teaching, at least one of the co-teaching partners had either worked with their current partner or had worked with another partner in their classroom. The teams were established on a voluntary basis. The second year of this project, due to at least one member of each team leaving, pairs were assigned

and created by administration. By the end of the second year of this project, administration realized that it would have been better to allow the teams to choose their own partners. The administration also realized that attention needed to be paid to the content knowledge, interest, preference, and strengths of the special education professional.

#### *Natural Proportions/Student Schedules*

For several of the teams the issue of natural proportions was of greatest concern. Since a computer randomly generated student schedules, attention was not paid to student needs, ages or numbers. Math concepts struggled with this issue the most. Not only did they have high numbers and needs, they also were serving a wide age range of students. In order for a student to take the next level of math, they had to successfully pass math concepts. It was not uncommon to have freshmen and seniors in the same classroom.

Administrators can further offer their support by planning and scheduling the co-taught classes (Cook & Friend, 1995). Several factors need to be considered when scheduling programs and configuring co-taught classrooms. Class size, matching student need with teacher strengths, maintaining a degree of heterogeneity, and sensitivity to special educators' content strengths (Aguilar, Morocco, Parker, & Zigmond, 2006). When collaborative classes exist in a school, there is always a temptation to overload these classes with high-risk students. Besides scheduling students with identified learning and behavioral needs, other students who may be at risk and could benefit from this type of program may be placed in this setting (Knackendoffel, 2005). To maintain a balance and prevent the class from becoming a dumping ground or being viewed as a special education class, a rule of thumb is to allow no more than 25-50% of the composition to be learners with special needs, which includes students who are considered at-risk for failing (Knackendoffel, 2005; Nowacek, 1992; Walther-Thomas, Bryant, & Land, 1996; Zigmond & Magiera, 2001). Planning teams cannot rely on the random results

generated by most computerized scheduling programs they should be configured by hand (Walther-Thomas, Bryant, & Land, 1996).

### *Professional Development*

Many of the co-teachers noted the professional growth they experienced from working together. The presence of the special educator with expertise in accommodations and strategies aided the general educator since this area is typically not part of their teacher-training program. Simple accommodations, such as adapting tests, clarification of terms, and modeling note taking were all seen as skills gained by the teacher and advantageous for all the students.

The co-teachers benefited from the opportunity for personal and professional growth, professional satisfaction, and classroom management. Learning continued as one of the teachers dealt with behaviors, attendance, homework and other routine activities of the classroom. The administrator was heartened by the collaboration across discipline areas. She saw the great divide between general and special education narrow as the professionals worked to deliver service. She was also encouraged to see the students exposed to new and innovative ways of learning and perspectives.

### *Respect for assignment*

Another issue that could have impacted the special educators investment in the co-taught classroom was the sense of being valued. Since at any time they could be pulled from that classroom to substitute in another, there may have been hesitation to invest time and effort into preparation. Clearly, the administration did not see them as integral to the functioning of the general education classroom. The message was clear, this was not their classroom and therefore, they could be reassigned. This also speaks to the lack of value they may have felt from the administration. It is difficult to invest in a project if the leadership has not done likewise.

### *Planning Time*

It goes without saying that planning time is vital to the success of co-teaching on many levels. From establishing a collaborative and compatible relationship to lesson preparation, planning time is the factor that cements a team together.

High school schedules and duties present an additional challenge in scheduling common planning time. Many schools require their teachers to assume additional duties, (monitoring lunch and halls, advising student clubs, serving on committees, etc.) which leaves little time to collaborate with a partner on lessons. Therefore, it is essential that common planning time be scheduled into the co-teaching teams day. This allocated time becomes sacred for the sole purpose of relationship building, lesson planning, and problem-solving.

In order to increase the productivity of the planning time, some form of accountability should be present. It becomes too easy to allow the conversation to drift to other topics and find that nothing was accomplished during the allocated time. A lesson plan, summary or notes from the meeting would keep planning on track and document progress and growth.

If the planning time had been arranged and designated from the beginning of the school year and established as part of the schedule, then the burden would not have been on the teachers to make these arrangements. Financial support also needed to be allocated for the purpose of supporting the planning time. Allocating funding for a summer planning option, when teachers are less busy, would help to jump start the school year and provide a foundation on which to build.

### *Teacher training*

As different efforts were attempted at Main High School to meet the demands of a significant portion of the population that is at risk, training and preparation were vitally important. Personnel who are well trained are more effective than those who are not (Goor, 1994). Every member of the co-teaching teams attended a two-day training. This training provided them with not only foundational

information but also assured congruent preparation for each teacher. All team members heard the same message and were exposed to the same skill set.

The maintenance of collaborative programs requires on-going training and support. Teachers need regular inservice programs to teach and reinforce skills (Goor, 1994). The original teams were clearly ready for additional training and development. Had they remained together for a second year, they would have been ready to refine techniques and explore further options. With the change in personnel and administrative leadership, there was a constant period of catching up. Stability in personnel would have made all the difference in the world. It is hard to move forward when there are frequent set backs and disruptions.

#### *Benefits for students and teachers*

In spite of the struggles, there were noteworthy accomplishments and benefits for both the students and the teachers.

Students were the greatest benefactors through the co-teaching experience. Although the intent of this research project was not to measure academic gain, the teams realized that by keeping the students accountable for homework and on-task classroom behavior they could improve their grades. The presence of an additional teacher in these classrooms increased the amount of time, individual attention, and supervision low-achieving students received (Walther-Thomas, 1997).

For many of the co-teaching teams, the greatest success was seen in students social and classroom behaviors. Students who were previously unengaged were now participating because the environment was open and welcoming. One of the special educators noted how greatly improved a particular student's behavior was in the general education classroom as compared to the resource room. Among his peers, he did not want to appear socially different. Managing behavior in the classroom was an area where several general education teachers gained skills. As they watched their



partner deal with and de-escalate behavior, they broadened their own repertoire of behavior management skills.

The students not only had access to two teachers for help and attention, but they had the advantage of another perspective and one other teacher with whom to connect. When a student would exasperate one teacher the other could intervene and handle the situation in a more calm and professional manner. One co-teaching team became comfortable enough with each other that they “moved beyond safe discourse and began to challenge each others practices, perspectives, and assumptions” (Trent, 1998). It is through this type of open and trusting relationship that teachers and students grow.

Effectiveness and benefit can take many forms. All students involved in the co-taught classroom benefited from the small student/teacher ratio, exposure to more teaching strategies, methods and accommodations, and a more positive learning environment. For students with special needs, the co-taught classroom offered an additional service option, which had the potential to improve social skills and peer relationships. The potential for students to go unnoticed in a classroom due to the many academic needs and high numbers was reduced simply because there was another teacher available to attend to the demands.

Many of the co-teachers noted the professional growth they experienced from working together. This partnership can lead to increased morale and decrease the feelings of isolation that often accompany teaching (Goor, 1994). Through problem solving and the opportunity of sharing and testing ideas, the teachers grew not only in knowledge and skills but also in their respect for each other’s expertise. The barriers and misunderstandings that existed between general and special education began to diminish and fade.

By working in the general education classroom, the special educators became more familiar with content (Trent, 1998). This helped to bridge the knowledge gap the special educators felt when

delivering unfamiliar content to the students on their caseload. It also provided for a more productive time in the resource room since the special educator was now familiar with the content and the process used by the general educator. She could now deliver content in a similar fashion as the general educator and avoid confusing the student with different processes.

### Summary

Co-teaching in high school is a promising practice to consider. It also presents another delivery and placement option for students with special needs. But it is a practice that requires attention and investment of time, resources and energy. This study revealed the factors that high school teachers want administrators to know before implementing co-teaching. With consideration to these characteristics of effective co-teaching, students and teachers can benefit from the qualities that co-teaching can bring to a classroom. Not only will students benefit but also teachers will begin to develop collaborative practices that will foster an atmosphere of success for all.

### References

- Aguilar, C. M., Morocco, C. C., Parker, C. E., & Zigmond, N. (2006). Middletown High School: Equal opportunity for academic achievement. *Learning Disabilities Research and Practice, 21*(3), 159-171.
- Arguelles, M. E., Hughes, M. T., & Schumm, J. S. (2000). Co-teaching: A different approach to inclusion. *Principal, 79*(4), 50-51.
- Bauwens, J., Hourcade, J., & Friend, M. (1989). Cooperative teaching: A model for general and special education integration. *Remedial and Special Education, 10*(2), 17-22.
- Bolman, L. G., & Deal, T. E. (2003). *Reframing organizations: Artistry, choice and leadership* (3rd ed.). San Francisco: Jossey-Bass.

- Choate, J. S. (2004). *Successful inclusive teaching: Proven ways to detect and correct special needs* (4th ed.). Boston: Allyn and Bacon.
- Cook, L., & Friend, M. (1995). Co-teaching: Guidelines for creating effective practices. *Focus on Exceptional Children*, 28(3), 1-16.
- Dieker, L. A. (2001). What are the characteristics of 'effective' middle and high school co-taught teams for students with disabilities? *Preventing School Failure* 46(1), 14.
- Doll, W. E. (1993). *A post-modern perspective on curriculum*. New York: Teachers College Press.
- Goor, M. B. (1994). Collaboration enhances education for all students. In *Advances in Special Education* (Vol. 8, pp. 33-51): JAI Press.
- Jung, B. (1998). Mainstreaming and fixing things: Secondary teachers and inclusion. *The Educational Forum*, 62, 131-138.
- Keefe, E. B., & Moore, V. (2004). The challenge of co-teaching in inclusive classrooms at the high school level: What the teachers told us. *American Secondary Education*, 32(3), 77-88.
- Knackendoffel, E. A. (2005). Collaborative teaming in the secondary school. *Focus on Exceptional Children*, 37(5), 1-16.
- Lipsky, D. K. (1995). *National study on inclusion: Overview and summary report* (Collected Works). New York: City University of New York. National Center on Educational Restructuring and Inclusion.
- Magiera, K., Simmons, R. J., Marotta, A., & Battaglia, B. (2005). A co-teaching model: A response to students with disabilities and their performance on NYS assessments. *School Administrators Association of New York State Journal*, 34(2), 1-5.
- Mastropieri, M. A., & Scruggs, T. E. (2001). Promoting inclusion in secondary classrooms. *Learning Disabilities Quarterly*, 24(4), 265-274.

- Minnesota Department of Education. (2007). *School report card*. Retrieved December 11, 2006, from [http://education.state.mn.us/ReportCard2005/schoolDistrictInfo.do?SCHOOL\\_NUM=215&DISTRICT\\_NUM=0709&DISTRICT\\_TYPE=01](http://education.state.mn.us/ReportCard2005/schoolDistrictInfo.do?SCHOOL_NUM=215&DISTRICT_NUM=0709&DISTRICT_TYPE=01)
- Murata, R. (2002). What does team teaching mean? A case study of interdisciplinary teaming. *The Journal of Educational Research, 96*(2), 67-77.
- Nowacek, E. J. (1992). Professionals talk about teaching together: Interviews with five collaborating teachers. *Intervention in School and Clinic, 27*(5), 262-276.
- Rice, D., & Zigmond, N. (2000). Co-teaching in secondary schools: Teacher reports of developments in Australian and American classrooms. *Learning Disabilities Research and Practice 15*(4), 190-197.
- Ryan, G.W. & Bernard, H.R. (2000). Data management and analysis methods. In N.K. Denzin and Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 769-802). Thousand Oaks, Sage.
- Stainback, S., & Stainback, W. (1984). A rationale for the merger of special and regular education. *Exceptional Children, 51*(2), 102-111.
- Stainback, S., Stainback, W., & Forest, M. (1989). *Educating all students in the mainstream of regular education*. Baltimore: Paul H. Brookes Publishing Co.
- Thousand, J., Villa, R. A., & Nevin, A. I. (2006). What special education administrators need to know about co-teaching. *Council of Administrators of Special Education, 47*(6), 1-5.
- Trent, S. C. (1998). False starts and other dilemmas of a secondary general education collaborative teacher: A case study. *Journal of Learning Disabilities, 31*(5), 503-513.
- U.S. Department of Education. (2006). *Twenty-eighth annual report to congress on the implementation of the Individuals with Disabilities Education Act*. Washington, DC: Author.
- Walther-Thomas, C. S. (1997). Co-teaching experiences: The benefits and problems that teachers and principals report over time. *Journal of Learning Disabilities, 30*(4), 395-407.

Walther-Thomas, C. S., Bryant, M., & Land, S. (1996). Planning for effective co-teaching: The key to successful inclusion. *Remedial and Special Education, 17*, 255-265.

Warwick, D. (1971). *Team teaching*. London: University of London Press.

Yin, R.K. (2003). *Case study research: Design and methods* (3rd ed.). Thousands Oaks, CA: Sage.

Zigmond, N., & Magiera, K. (2001). Current practice alerts: A focus on co-teaching: Use with caution. *Alerts(6)*, 1-4.