

Spring 2010

## Co-Teaching Beliefs to Support Inclusive Education: Survey of Relationships between General and Special Educators in Inclusive Classes


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### Repository Citation

Malian, I., & McRae, E. (2010). Co-Teaching Beliefs to Support Inclusive Education: Survey of Relationships between General and Special Educators in Inclusive Classes, *Electronic Journal for Inclusive Education*, 2 (6).

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Co-Teaching Beliefs to Support Inclusive Education: Survey of Relationships between General and Special  
Educators in Inclusive Classes

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Abstract

Co-teaching is a prevalent approach to providing effective instruction in inclusive classes. The purpose of this study was to determine teachers' perceptions of compatibility and discrepancy between their approaches to teaching, personal characteristics and efficacy of co-teaching. Noonan's Co-teacher Relationship Scale was adapted to survey the co-teachers statewide. Results of the statewide survey of Arizona general and special educators teaching in inclusive classes are presented as they relate to their responses. Various aspects of co-teaching relationships and teacher implementation of co-teaching models are discussed. The authors derive attributes of co-teachers in Arizona that indicate compatibility and sustainability of co-teaching arrangements. Implications for research and practice are discussed.

As special education advances into the 21<sup>st</sup> century, educators are confronted with the never-ending challenge of providing for the individual needs of their students. Special and regular education teachers alike are questioning current practices and beliefs regarding effective methods of instruction. Because of recent initiatives and educational reforms, diversity in the general education classroom is steadily increasing. As the trend towards inclusive schooling practices escalates, the need for school-wide collaboration is imperative. Meeting the diverse needs of students requires methods of service delivery that incorporates collaboration between special and regular education teachers. In recent years, collaborative teaching has become a means for providing students a free and appropriate public education in the least restrictive environment (Individuals with Disabilities Education Improvement Act, 2004)

Co-teaching has been described and defined in a variety of ways, but the overall similarities are remarkable. The most commonly accepted definitions of co-teaching proposed in the literature share key elements. According to Cramer et al. (2006), co-teaching takes place in a classroom that is “. . . taught by both general education and special education teachers and is a supplementary aid and service that can be brought to general education to serve the needs of students with (and without) disabilities through IDEIA” (p. 3). Sileo (2003) defines co-teaching as an instructional delivery approach in which general and special educators share responsibility for planning, delivery, and evaluation of instructional techniques for a group of students. Cook and Friend (1996) defined co-teaching as one general educator and one special educator who share physical space, actively instruct a blended group of students, including those with disabilities. Gately and Gately (2001) defined co-teaching as a collaboration between general and special education teachers who are responsible for educating all students assigned to a classroom. Thousand, Villa, and Nevin (2004) defined a co-teaching team as a general and a special educator who teach the general education curriculum to all students and who implement Individual Education Plans (IEPs) for students with disabilities (p. #). Both educators on the co-teaching team are

responsible for instructional planning and delivery, assessment of student achievement, and classroom management.

Most recently Nevin, Villa and Thousand (2009) differentiated four approaches to co-teaching that may also be utilized in inclusive classes. These approaches include supportive co-teaching; parallel co-teaching; complimentary co-teaching and team teaching. Supportive co-teaching exists when one teacher assumes the leadership role for instruction and the other teacher “rotates” to provide support for the students in the class. In parallel co-teaching relationships teachers are actively engaged with groups of students at various locations within the classroom. Within these groups teachers direct their efforts to approach the teaching and learning process from various strategies. For example, one group could have a learning style focus-where instruction one teacher may underscore an auditory instructional style while another teacher employs and auditory approach. Complementary co-teaching allows for the one teacher to provide direct instruction and another to supplement the information with visual representations on the board or verbally add to the lecture in the form of paraphrase. Team teaching can be characterized as the “traditional” approach to teaching where the team of teachers (two or more) typically plan and teach the designed content to the class.

Many researchers and practitioners have studied the effectiveness of co-teaching. From the perspective of administrative support, Walther-Thomas (1995) found that school administrators facilitate teachers in addressing issues, provide staff development, utilize resources, manage classroom size, and balance class rosters. As instructional leaders, effective principals provide the vision, incentive, recognition, and moral support to teachers during challenging stages in the implementation process (Walther-Thomas, Bryant & Land 1996). These authors also studied effective co-teaching from the relationship perspective. They found that five planning themes surfaced among effective co-teachers: trusting the professional skills of co-teacher partners, structuring active learning experiences, valuing each co-teacher’s contributions, sharing roles and efficient routines, experiencing more productive use

of planning time as co-teachers gain experience. Gately and Gately (2001) developed a co-teacher rating scale to assess and monitor relationships between the teachers which included items related to positive interpersonal communication, familiarity with the curriculum, curriculum goals and modifications, instructional planning, instructional presentation, classroom management, assessment. By periodically completing and discussing the items on the scale, the co-teachers can identify essential issues that may otherwise go unaddressed.

The extent to which co-teaching improves student academic progress has been a subject of many studies as well. For example, Walther-Thomas (1995) studied 23 schools, within eight districts, over three years with the following key effects: better attitudes about themselves and others on the part of students with disabilities who also improved in their academic abilities, remained in the general education population, had a greater desire to learn, became less critical, and began to see their own academic and social strengths. Gray (2009) found that students with disabilities in co-teaching classes improved homework completion from 43% to 100% weekly. General education students benefit by receiving individual help and modifications through the collaboration between both teachers. Pugach and Johnson (1995) found an increased tolerance from general education students towards children with cognitive deficits. Gerber and Papp (1999) interviewed students with and without disabilities, and their parents, regarding their perceptions of impact in a co-taught classroom. Students and parents alike reported positive results. Schwab Learning (2003) studied co-teaching in 16 California elementary, middle and high schools, finding decreased referrals to intensive special education services, increased overall student achievement, fewer disruptive problems, less paperwork, increased number of students qualifying for gifted and talented education services, and decreased referrals for behavioral problems. Keefe and Moore (2004) found that co-teaching yielded a positive effect on students with and without disabilities.

Although it is generally agreed that co-teaching is beneficial to students with and without disabilities, there are several barriers that accompany the co-teaching approach. It must be emphasized that these barriers are not excuses to abandon co-teaching. Rather, exposure to these obstacles can be insightful and can provide an opportunity to plan for success. Barriers in co-teaching range from lack of time to shared space, adding more content to an already full curriculum, and lack of adequate training. Both general and special education teachers agree that overcoming the barriers is challenging, worthwhile, and imperative. Barriers seem to be differentiated according to elementary, middle school, and secondary levels.

At the elementary level, concerns about sufficient planning time, administrative support, resources, professional development, and teacher willingness parallel across the board among teachers in all grade levels surfaced in a focus group study of general and special education co-teachers in elementary and high schools verifies these commonalities (Keefe and Moore, 2001). Additionally, co-teaching compatibility is the attribute of greatest consequence for success, regardless of the grade levels. At the elementary level, co-teaching is widely accepted among general and special educators, with an overall agreement that co-taught classrooms are beneficial for all students. Although scheduling becomes difficult, it is the most essential aspect of co-teaching at the elementary grades to meet the needs of all students (Gately & Gately, 2001). Students in the elementary grades are commonly taught by one teacher, but may visit other teachers for specialized classes. At the middle school level, in a meta-analysis by Murawski and Swanson (2001), an overall moderate effect for student progress favored co-teaching which does not substantiate a *strong* support for improving student outcomes. Deiker (2001) recommended that a short resource period be implemented daily to review or preview important information for the students with disabilities. Student engagement, participation, student-teacher interaction, student-student interaction, and positive self image were all indicators of increased student involvement in a study of middle school co-teachers (Magiera, Smith, & Zigmond, 2005). At the

secondary level, co-teaching brings a unique set of challenges. Along with the demanding curriculum, co-teachers face substantial challenges with the increased emphasis on content area knowledge, the need for independent study skills, faster paced instruction, high stakes testing, high school competency exams, less positive attitudes of teachers, and the inconsistent success of strategies that were effective at the elementary level (Mastropieri et al 2005). Although many secondary teachers have mixed or even negative attitudes towards inclusive education, teachers in co-teaching relationships view inclusion favorably (Keefe & Moore, 2004). Teachers report that students with disabilities struggle with the demands of the high school curriculum more than at previous grade levels. Keefe and Moore (2004) noted that teachers also raised concerns about compatibility of co-teachers at the secondary level due to unclear role definitions for general and special education teachers and K found that most co-teaching teams settled into a division of roles where the general education teacher was responsible for the curriculum, planning, and large group instruction. By default, the special education teacher was left helping individual students and designing modifications. This division of labor led to a major challenge for co-teachers; the limited role of the special education teacher. The limited role is not something that co-teachers planned for, although it seemed to be related to the lack of content knowledge on the part of special education teachers.

#### Purpose

The purpose of this study was to determine whether there is a relationship between general and special educators' ratings of their compatibility on a Co-Teacher Relationship Scale (Noonan, 2003). The Co-Teacher Relationship Scale was replicated with a new population of co-teachers in Arizona so as to compare with results from Hawaii and Florida. The results of the statewide study will provide data on the extent of co-teaching practices in Arizona school districts.

### Preliminary inquiry

An informal inquiry was conducted prior to distributing the Co-Teacher Relationship Scale state-wide. Questions posed to principals in five districts in the Phoenix valley addressed school philosophies and attitudes toward co-teaching. The inquiry resulted in an immediate response, indicated high interest, differing definitions and unawareness of district norms. The results of the informal inquiry predicted a high response rate from the state-wide survey.

### Statewide Survey Participants

The participants included co-teachers in the state of Arizona. The Arizona Department of Education sent the survey to principals and directors of special education, to forward to co-teacher pairs within their respective districts. The response consisted of co-teachers responding from 160 Elementary schools, 70 middle schools, 50 High Schools, and 9 Junior High schools. Of the 290 responders, 15 responses were from Charter schools, with the remaining responses from Public schools. The survey was completed anonymously and voluntarily, with the no identifiable information, other than demographics to be reported in aggregate form. Although it is impossible to reveal the location and specific demographics from the various responders, the racial breakdown of the teaching population in the state, according to the Arizona Department of Education is as follows: 83% White (non-Hispanic), 11.2% Hispanic, 2% Native American, 2.3% Black, 1.5% Asian (2008).

## Methods

### Instrumentation

Noonan, McCormick, and Heck (2003) developed and validated a co-teacher relationship scale (CRS) with a small sample of educators in Hawaii and two supervisors (20 co-teachers in early childhood and special education). The CRS focuses on the attitude, beliefs, and personal characteristics of co-teachers and may be helpful in matching or assigning members to co-teaching teams. Noonan et al. (2003) reported an internal consistency coefficients (alpha) of .90. Part I consists of 10 items that focus



on beliefs and approaches to teaching whereas Part II consists of 9 items that focus on the extent to which co-teachers believe they are the same or different in their personal characteristics. Based on these results, Noonan et al. (2003) encouraged systematic replications of the instrument to increase generalizability across other multicultural environments, grade levels, and subject matter expertise. Cramer and Nevin (2006) conducted a mixed method study to systematically replicate and validate the CRS with a convenience sample of elementary and secondary co-teachers in Miami-Dade Public Schools. Their results (an analysis of variance on all survey responses and the demographic variables of training and co-teacher experience) showed that only one survey item was determined to be statistically significant at  $p \leq .05$ . This item, from the Noonan et al. scale, indicated that Florida teachers' rating of their confidence as an educator were significantly related to their years of co-teaching experience (that is, ratings of confidence as an educator were higher for teachers who reported more years of experience). However, the Florida sample rated the items on the scale with similarity to the Hawaii sample: i.e., the highest rated response on the *Co-Teacher Relationship Scale* was "interest in learning new things" with a mean of 4.46 followed by "dedication to teaching" (4.44), and "confidence as an educator," "ability to be supportive to colleagues and other staff," and "beliefs about inclusion," each with a mean of 4.25. Items where teachers themselves rated least similar included "how to structure children's activities" (3.73), "how to adapt and individualize activities" (3.77), and "how to manage inappropriate behavior" (3.83). Thus, Cramer and Nevin (2006) concluded that the CRS had apparently been validated with an ethnically and linguistically different population, which indicated that the CRS has generalizability to other populations.

### Procedures

The Co-Teacher Relationship Scale (CRS) was administered in Arizona through an on-line web-accessible format. Part I of the CRS consists of 10 items focusing on beliefs and approaches to teaching, and Part II consists of 9 items focusing on the extent to which co-teachers believe they are the same or

different in their personal characteristics. One additional question related to perceived effectiveness was also added to the survey. After the Human Subjects Review of the university approved the survey, the CRS was distributed to directors of special education and principals to forward to co-teaching pairs.

### *Data Analysis*

Responses to the survey were immediately entered into a computer assisted data processing program (SPSS, 2006) for analysis, with non-parametric statistics employed for determining statistical significance. The data were aggregated for all respondents with no specific district data disaggregated. Comparisons of general and special education co-teacher reports yielded non-parametric statistics as well as chi-square to test for significance between groups.

### Results

No significant difference was found between general and special educators on their reported beliefs and approaches to teaching and personal characteristics. This is very significant, as past research reported differences in these two types of educators. These results from the 290 respondents may indicate that the gap is shrinking between educators in co-teaching relationships. Moreover, the fact that general and special education teachers have reported minimal variance in their beliefs, approaches to teaching, and personal characteristics shows that effectiveness has a greater potential because they want, and are willing to work for the same things for their students. Although there was such an insignificant difference in the beliefs, there were minimal similarities and variances worth discussion in the two components of the survey namely beliefs and approaches to co-teaching and personal characteristics.

#### Beliefs and Approaches to Co-teaching

##### How to structure children's activities

The question addressing the structure of students' activities represented the highest percentage of reported difference between general and special educators, at approximately 21%. On the surface

this may appear to be a disconnect between the special and general education teachers. However, this disparity may provide diversity in philosophies about structuring class activities. It can also relate to the 'two different worlds' from which general and special educators come in terms of their preparation. Special educators tend to focus on structuring activities to meet differentiated needs whereas general educators tend to focus on whole class instructional activities. The blending of these approaches in a co-teaching venue would then have the potential for an additive positive effect on the classroom.

#### Beliefs about the curriculum

There was an 87% reported similarity in beliefs about the educational curriculum to be delivered in the classroom. This is not surprising in that co-teachers have reported that they have, varying degrees, of time to collaboratively plan units or lesson consistent with the Individualized Education Plans. Further, the curriculum is aligned with state standards so agreement between professional begins with a baseline standard.

#### Beliefs about Inclusion

General and special educators reported similarities in beliefs about inclusion. This, however, may be an artifact of a skewed sample. The general and special educators may already have beliefs grounded in inclusion; hence they are willing participants in this co-teaching relationship. There was no way of determining whether or not the teachers were willing participants in their co-teaching position, or if they have recognized the benefits and have become committed to this method of collaboration.

#### How to adapt and individualize activities

Only 6% of the general and special educators reported an extremely different approach to adaptations and individualization of activities supported in the classroom. Once again, these differences, although slight, may compliment each other in the classroom. Here, the methodologies used by the individual teachers come from their professional training, one in content the other in modifications and accommodations based on individual needs.

### How to manage inappropriate behavior

Behavior management presented a 21% reporting difference between general and special educators. This may indicate different styles of behavioral interventions to correspond to different students. This variation in managing inappropriate behaviors introduces new strategies into the repertoire of the teachers and may add to the effectiveness of managing the class.

### Parent Involvement

Parental involvement represented the highest percentage of similarity (92%), as co-teaching pairs tend to have similar beliefs about the key nature of parent involvement in the education of their students. Co-teachers of students in inclusive classes are keenly aware of the importance of parental interactions with the educational and special education process. This consistency of belief underscores the relevance of an appropriate education for all students in inclusive classes. Personal Characteristics

Overall, there were no significant differences between general and special educators with respect to perspective of personal characteristics related to co-teaching. In essence both general and special educator's reported similar key characteristics necessary for effective co-teaching relationships in inclusive classes.

### Desire to try and learn new things

Both general and special educators agreed that the "desire to try new things" was important to co-teaching relationship. This seems a natural extension of the fact that most teachers who responded were in their first year of a co-teaching relationship. It was presumed that they would not enter a new venture if they were not willing to try new things. By the same token, co-teachers who reported being in co-teaching relationships over 20 years also reported a desire for innovation.

### Confidence and Collegiality

No significant difference was found in the reports of general and special educators in terms of their level of reported confidence and collegiality in co-teaching relationships. Again, an element of risk in involved

in “performing’ with your peers. Confidence in ones ability to collaborate with parity may be in play.

Those that reported a lesser degree of confidence may be novice teachers that are paired with veteran teachers –hence an emerging confidence may have been experienced.

### Educational Planning

General and special education were consistent in their reports of importance of educational planning on co-teaching relationships. Any difference that was evident in their collective reports underscored their differentiated training and active roles on individualization or whole group instruction.

### Flexibility in dealing with unforeseen events

Flexibility emerged as a common personal characteristic that both general and special educators reported as important in co-teaching relationships. Flexibility for scheduling, conferencing, redirecting lessons and differentiating lessons.

### Humor

Humor is subjective yet both general and special educators agreed that humor, however that is define is an important personal characteristic in a co-teaching relationship. The ability to laugh at or with a humorous situation and allow students to also engage in this emotion is clearly a hallmark in a co-teaching environment.

### Ability to be supportive of colleagues and staff

This area had a low and non-significance concurrence of reported importance for general and special educators. There may be a semantic difference between general and special educators regarding the meaning of support. The general educator may define support as dealing with the students with behavioral issues and academic challenges. The special educators may view support as assisting in differentiating instruction and collaborating on response to intervention data collection.

### Dedication

Both general and special educators reported that they perceived their co-teacher as dedicated to education. The key element here is that they perceived each other as dedicated regardless of the personal definition of dedication.

### Effectiveness of co-teaching

The culminating question regarding the perception of effectiveness of co-teaching relationships yielded a correspondence of positive reports regarding its effectiveness. Again, the respondents were in co-teaching relationships anywhere from 1 to 20 years in longevity, and were predisposed to a positive view and/ or had directly experienced the positive benefits of co-teaching for themselves and the students in their charge.

### Discussion

Some findings revealed characteristics conducive to functioning in co-teaching relationships. For instance, perceptions of mutual confidence were high. This report does not necessarily denote that the teachers are overly self-assured, or flawless, but rather, the teachers likely felt confident in using their strengths, while exposing their faults when working together towards a common goal. Some slight differences in ratings on beliefs were noted; however, the respondents reported their overall experience as effective. This indicated that the slight differences in their ideas and beliefs may be a necessary component when working within the range of diversity in inclusive classroom.

One of the most remarkable parallels drawn from the results was the relationship between dedication and effectiveness. It is quite probable that the perception of dedication among co-teaching pairs affects the perception of an effective relationship. Essentially, if they both feel that their partner is equally dedicated to the classroom relationship, they feel effective.

The significance of the results from the Co-teacher Relationship Scale in Arizona was that the lack of difference in the respondents' beliefs and attitudes about their relationship. This may be an

indication of a positive mutual attitudinal shift towards collaboration between general and special educators. Furthermore, the results of this survey should be an encouraging catalyst for promoting co-teaching in various settings.

### Implications

The co-teaching relationship scale was electronically sent statewide to all district Principals and Directors of Special Education, who were then asked to forward the survey to the co-teacher pairs. Because the survey did not involve face to face interviewing, there was no control over how it was filled out. As a result, there is no way of determining whether or not the teacher filling out the survey was indeed in a co-taught classroom. Furthermore, the survey may not have been filled out by a certified teacher, for instance a para-professional may be considered to be participating as a co-teacher.

The survey was sent to principals, and this may have skewed some of the results. First of all, if the teachers felt that their principal would be viewing the completed survey, the teachers may have over or underestimated their responses. Also, as our preliminary research indicated, not all principals are aware of the definition of co-teachers in the inclusive classroom. Furthermore, it is quite probable that a principal or director of special education responded to the survey in lieu of a co-teacher.

As with any survey, it is also possible that teachers felt obligated just to complete survey and did not take the proper time to carefully read and contemplate each question. Furthermore, because of the inability to track participants, there is no way to determine if the survey was completed more than once by the same person, thus causing data to be duplicated in this insistence.

Overall, the results suggest that general and special educators in co-teaching relationships hold more similar perceptions regarding belief and approaches to teaching and also personal characteristics needed to for effect co-teaching relations than dissimilar. This appears to contradict earlier studies that suggest that co teachers differ in their beliefs and dispositions towards co-teaching. Overwhelmingly co-teachers reported that co-teaching inclusive classrooms accessing the general

education curriculum for students with and without disabilities were an effective approach for all students.

As with all research, topics surfaced that inspire the need for further research. There is an overwhelming need for investigating the academic success of students, with and without disabilities in a co-teaching environment. Research also needs to be prepared on quantitative measures of students' test scores or report card grades taken before and after the inclusion experience (Cramer & Nevin, 2006; Austin, 2001). Not only is quantitative research needed in this arena, but qualitative research would deem extremely valuable. Interviews of students in a co-taught setting would be advantageous to determine the students' perceptions as well as teachers' perceptions of self-efficacy.

Many of related services personnel are now required to offer how the specialized services will influence the curriculum and instruction for the children and youth they serve, thus a promising line of research is to replicate the co-teacher relationship scale with co-teachers who collaborate with related services personnel. The replication might reveal some dynamics between differently prepared professionals such as speech-language therapists, school psychologists, guidance counselors, occupational and physical therapists, and school social workers.

With the results in the Arizona study indicating that teachers in co-teaching relationships have analogous beliefs, research needs to be conducted to determine what the indicating factors are in the effectiveness of the relationship. Furthermore, the determining whether or not the perceived effectiveness is a result of a compatible relationship, an inclusive setting, or another factor. Another question worth pursuing is whether or not the number of years dedicated to co-teaching influences the effectiveness of the relationship.

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