Understanding the Implication of Co-teaching in a Post-graduate Classroom

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Abstract

Co-teaching has evolved rapidly as an innovative and potentially effective teaching strategy. Despite considerable enthusiasm expressed on co-teaching as a teaching strategy, the complexity of conceptualizing and studying collaboration at the post-graduate level is still at its infancy. The purpose of this research is to study the implication of co-teaching upon post-graduate students. Twenty-two full-time secondary school teachers who attended a masters' program and the faculty members who taught them responded to surveys about their knowledge and comfort with co-teaching. Data was collected and analyzed qualitatively. The focus was to understand the perceptions of participants on co-teaching at the post-graduate level. These data was collaborated with video recording of the lessons, classroom observation by the researchers and a report written by a neutral observer for the institution. Findings indicate that co-teaching is a useful strategy for the post- graduate level despite the presence of challenges.

Keywords: co-teaching, teaching strategy, perceptions

1. Introduction

The teaching profession has undergone and is still undergoing tremendous changes as a result of technological advancement, higher expectations from parents as well as students themselves. As a result, school systems are significantly changing instructional programs in response to the standards-reform movement (Nolet & McLaughlin, 2000). Cooperative teaching (co-teaching) is among one of the new developments that emerged from this need for changes. Co-teaching is an educational approach where two teachers are assigned to the same classroom requiring them to work together to achieve common goals for students' achievement. In short, co-teaching is a specific service delivery option that is based on collaboration (Friend & Cook, 2003). According to Jang (2006), team teaching involves two or more teachers whose primary concern is the sharing of teaching experiences in the classroom, and co-generative dialoguing with each other and in doing so, they take collective responsibility for maximizing learning to teach, or becoming better at teaching, while providing enhanced opportunities for their students to learn. It is believed that co-teaching is the reality of the 21st century in business, in industry, in healthcare, in science, in social services and emphatically in education (Friend, 2006).

Research on co-teaching is extensive where researchers have discussed a number of related issues such as the benefits, the implications and the challenges (Cook & Friend, 1995; Vaughn, Schumm, & Arguelles, 1997; Murawski & Swanson, 2001). These researches have proven that co-teaching has significant positive effect in the classroom especially in inclusive classroom. In addition, researchers have also examined general and special educators' attitudes with respect to adaptation and interventions used in teaching students in heterogeneous classrooms but very few have investigated these teachers' perception of collaboration (Austin, 2001). There is also insufficient research on the effects of this teaching approach at the post-graduate level. As such, this research aims to study the implication of co-teaching in a post-graduate classroom to add to the literature review in this area.

2. Literature Review

The term co-teaching or collaborative teaching is multi-dimensional and as such there is a variety of operational definitions which are often exchanged and used synonymously (Welch et al., 1995, 1999). Some of the terminologies that have been used by researches are co-teaching (Cook & Friend, 1996; Walther-Thomas et al., 1996; Roth & Tobin, 2001), cooperative teaching (Bauwen & Hourcade, 1995) and team teaching (Welch & Sheridan, 1995; Sandholtz, 2000). It must be noted that co-teaching requires a high level of commitment to a collaborative process that involves open communication and interaction, mutual admiration and compromise (Dieker & Barnett, 1996; S. Gately & F. Gately, 2001).

According to Vaughn et al. (1997), the traditional model of co-teaching involves the general education teacher and the special education teacher teaching using one of the following options:

- • One lead teacher, one teacher teaching on purpose to two groups.
- • Two teachers teach the same content to multiple groups.
- • Two teachers teach/monitor varying contents.

Friend and Cook (2003), on the other hand, identified six approaches to co-teaching as listed below:

- • One teaches while one observes.
- • One teaches while the other assists.
- • Parallel teaching - the teachers are both teaching the same contents simultaneously but students are divided into two groups.
- • Station teaching - teachers divide content and students.
- • Alternative teaching - when students need special attention, they are gathered together in a smaller group and one teacher handles them.
- • Team teaching - both teachers teach at the same time.

There are a lot of researches which have identified the strengths of co-teaching. According to Cramer, Nevin, Salazar, & Landa (2004), it gives a positive impact on student achievement and self-esteem. This is supported by the study conducted by Noeth (2004) in Shelby County, Tennessee high schools where he found that it improved test scores on standardized assessments. The percentage of participating special education students who passed the Gateway English test increased from 20 to 40%. It is also proven that there is evidence of positive impact in terms of discipline where Schwab Learning (2003) reported that there are decreased referrals for behavioral problems. Researches have also proven that teachers reported being happier and not feeling so isolated. Bateman and Bateman (2006) too claim that co-teaching has a number of benefits and among those that they listed are sharing instructional strategies enhances pedagogy of both teachers; having two teachers in a classroom makes individual assistance available to more students which also reduces discipline incidents; marginal students, who do not qualify for special education services, can receive the specialized assistance of a special education teacher; if either teacher is absent, the lesson plan for the day can continue without resorting to substitute lesson plans; special education teachers become more confident with content areas, supporting their work with students during resource time and general education teachers learn more specialized instructional strategies that can be used in other non-co- teaching classes**.**

2.1 Methodology

This study used a qualitative research methodology which comprised of a survey. The researchers designed two survey questionnaires, one for the students and one for the teachers, who were the co-teachers in this study. The research was carried out in a master's classroom in an international school where 22 students were having a class on research methodology under the Masters of Education Program with a UK based university. The co-teachers are both very experienced and are attached to a prestigious university in UK. The choice of class and students was done using a purposive sampling method as the researchers' intention was

to understand the implications of co-teaching at the post-graduate level.

The data was at first collected and coded, then organized into categories. The main data included the two survey questionnaires, videotaped records of the lessons, classroom observations and a report written by a neutral observer for the school who is also a very experienced academician.

Videotaped records of team teaching performances were done to record all details of interaction between the teachers and students. The researchers viewed the video tapes and analysed them to understand how the students perceived the teaching sessions and also to understand the implications of the approach on students' learning. The main purpose of the questionnaires was to understand the students' responses to the team teaching.

2.2 Findings

This section discusses the findings of the research. The data collected from the survey, video recording, classroom observation and the report were analysed. The data collected revealed a rich source of information that helped to identify the respondents' perceptions of co-teaching. Before proceeding to seek detailed data on the respondents' perceptions on the implications of co-teaching as a teaching method, the researchers analysed the respondents' background knowledge on co-teaching. In response to the question as to whether the participants had previous knowledge on co-teaching, the researchers were not surprised that more than 90 % of respondents had some level of knowledge of it. This is in line with the expectation of the researchers that since all the participants were teachers, they should have been exposed to this method either in their undergraduate programs or during their years of teaching. Most of the respondents had the basic understanding as to how co-teaching works. The basic definition identified from their responses is that there are two teachers in one class sharing the delivery of the contents. Some of the responses are quoted below:

> *MS10: Co-teaching occurs when two or more teachers share responsibilities in the teaching and learning process.*

> *MS21: Co-teaching means having more than one teacher teaching in the class.*

These responses show that the respondents were clear as to what co-teaching means. However, the explanations of some of the respondents also indicated that there were some misconceptions about co-teaching. A few of them had it confused with team teaching. The responses are quoted below:

> *MS4: Yes, co-teaching is a strategy wherein teachers will have to collaborate and plan and one teacher will execute what the other teacher planned. Teachers will be working together.*

> *MS 11: Co-teaching is two or more people sharing responsibility for teaching some of the students assigned to a classroom.*

These misconceptions are not new for literature review has shown that there is a fine line of difference between co-teaching and team teaching. It is true that co-teaching involves two or more certified professionals who contract to share instructional responsibility for a single group of students primarily in a single classroom or workspace for specific content or objectives with mutual ownership, pooled resources and joint accountability (Friend & Cook 2000). The main difference this has with team teaching is that the teachers in team teaching are not present in the classroom at the same time and as such the responsibility shared is limited. Table 2 shows the participants' perceptions of the co-teaching experience in their own classrooms.

Table 2. Participants' Perception on Co-Teaching Experience in the Classroom

Criteria	Yes	No
Have you used co-teaching in the classroom?	11	11

Half of the respondents were able to practice co-teaching in the classroom setting while the other half admitted they have just observed others doing it and have not tried this approach on their own.   MS 1 stated that he/she practices it in his/her classroom. He/She added that "Iin PE, but we divide the students. I take half and my co-teacher takes the other. Homeroom is sort of like that". Response from MS8 gave an affirmative response with the explanation that currently he/she is practicing it in his/her class due to some other responsibilities. It's very useful and it trains students to be more independent". On further enquiry (during the interview), he/she stated that the school facilities this method so that students do not lose out when a particular teacher is engaged otherwise. This supports the benefit listed by Bateman and Bateman (2006).

The respondents were also asked to evaluate the effectiveness of co-teaching. Table 3 gives the findings of the respondents' perceptions on the effectiveness of co-teaching.

Table 3. Respondents' Perception on the Effectiveness of Co-teaching

	Yes	No	Maybe	Sometimes	Not sure
No. of respondents	19	0	1	1	1

86% of the respondents asserted that co-teaching is an effective method. The finding is consistent with other researchers who have asserted that co-teachers take collective responsibility for maximizing learning to teach or becoming better at teaching and at the same time providing enhanced opportunities for their students to learn (Tobin et al., 2001; Roth et al., 2002; Roth & Tobin, 2002). The co-teachers were also asked to relate their perception of co-teaching as a teaching strategy. CT 1 claimed that 'it can be a very valuable approach but it often depends on the relationship and styles of the two teachers'. CT 2's response was similar where he/she stated that it is a very important strategy. However, he/she added stating that not

only is the relationship between the co-teachers highly significant, the relationship between the teachers and students is equally important. This positive view given by the co-teachers is parallel with the trends in public education which advocates the use of teaming or collaborative model of teaching (Pugach & Seidl, 1995; Wiggle & Wilcox, 1996; Fishbaugh, 1997). Table 4 shows the respondents views on the level of education where co-teaching is found to be an effective teaching strategy. Since the question allowed the sample to choose more than one option, for clarity purpose, the data was analysed using percentages.

Table 4. Participants' Perception on the Level where Co-Teaching is Effective

Criteria	Early Years	PYP	MYP	DP/ Degree	Post-graduate
What educational level do you think co-teaching is most effective?	56.5%	78.3%	39.1%	39.1%	34.8%

Four of the twenty-two respondents were convinced that co-teaching is effective at all educational levels from post-graduate programme down to the early years programme. MS 2 stated that "I think it is effective for all but then again, proper planning has to take place and there should be no contradictions". Thirteen of them believed that this method is appropriate in the classroom setting for early years as "younger children need more assistance and require rigorous activities that one teacher managing the class ends up less efficient". In the same manner, 18 respondents agreed that the co-teaching approach is most effective for children in the primary years programme. MS 7 reasoned that the learners are young and some really need special attention. On the other hand, 9 responded that co-teaching is best suited to MYP and DP/Degree while 8 said it is highly applicable to post-graduate students. Below are some of the explanations given:

> MS13: Higher level, (upper MYP, DP) because subject contents are more complex and not many teachers come with the ability to tackle every content. E.g. General Science in Grade II requires teacher to be good in Bio, Chem, and Physics. It is difficult to find this kind of teacher.

> MS14: DP and above. And depends on context as students may get confused with 2 points of view.

The co-teachers too were asked specifically whether co-teaching is effective for post-graduate students. CT 1, who has 38 years of teaching experience, claimed that it is indeed effective as the students get two different views and there is a high level of debate. CT 2 who has 26 years teaching experience stated that students at this level can see the different perspectives and analyse them.

The questionnaire also elicited answers from respondents on the advantages of implementing co-teaching in the classroom. In response, the respondents listed a range of benefits. For the purpose of discussion, the most frequently cited benefits are highlighted. The benefits are categorised according to the parties benefitted; teachers and students. The benefits to the teachers that the respondents identified are that co-teaching saves preparation time, decreases teachers' load, enables sharing of expertise and specialization, promotes professional development, enables teachers to learn from one another, enables better classroom management, provides opportunity to identify the weak students, more activities are carried out more effectively as they are monitored by two teachers, provides for collaboration of ideas/ best practices in teaching, pooling of resources and allows for peer support by way of tasks division. The claim by respondents that co-teaching facilitates for more classroom activities to be carried out effectively was collaborated in the observer's report. It was stated in the report that co-teachers employed a wide array of active learning strategies. Among these were personal reflection, pair sharing, group presentations, peer evaluation, role-play as well as question and answer session. On the other hand, the benefits to students include students getting more input, being exposed to more perspectives, topics being taught by specialists and more attention being gained as there is better teacher/ student ratio. An in-depth analysis of the responses from the students shows that co-teaching provides far more benefits to teachers than to students.

When the co-teachers were asked to state the advantages of co-teaching at the post-graduate level, both CT 1 and CT 2 gave advantages which benefitted the students rather than the teachers. With regards to students, CT 1 said that the teaching method exposes students to different perspectives and cultivates the ability to reflect and evaluate. CT 2 stated co-teaching caters for better teacher-student contact. With regards to benefits to the teachers, CT 2 stated that it is less tiring for the teachers while CT 1 stated that the teachers can adopt different kinds of assessments thus enhance the evaluation process. The co-teachers were also asked whether the students enjoyed the lessons more because of this strategy. CT 1 said yes and the reason given was that the students responded positively to the confidence shown by the co-teachers. CT 2's response too was similar but he/she added that it is crucial to offer more variety in the class.

The respondents were also asked to identify the kind of challenges that would be faced by co-teachers/ lecturers. The challenge that was highlighted by more than 50% of the respondents is related to conflicts in opinions and leadership. Some of the responses are listed in Table 5.

Table 5. Responses related to confusion in leadership

	Responses related to confusion in leadership
MS 3	might over power the other party (dominant)
MS 5	input/ ideas clash- disruptive to the class structure
MS 8	relationship between the teachers maybe a little wobbly
MS 9	teacher cooperation
MS 10	if one is superior than the other, the superior one would just delegate
MS 11	different views/ interpretation
MS 13	they may not get along
MS 14	disagreements about things
MS 19	professional issues' i.e. disagreement
MS 17	conflict of opinions
MS 21	who has final say- discipline- good cop/ bad cop?

The co-teachers also conceded that confusion in leadership is a challenge where CT 1 stated that in co-teaching, time is needed to refine and to work out who leads the class but CT 2 did not identify this as a challenge. Besides the challenge faced by co-teachers in terms of leadership conflict and clashes in opinion, the respondents also listed other challenges such as time constraint (MS2), need more time in delivering the lesson (MS 6), use of varied teaching methods that may create confusion in child, say in math practices (MS 12) and different perspectives which may confuse the students (MS 8). The co-teachers also said that they did face some other challenges in adopting this strategy. CT 1 said that the teachers need to ensure explicitness in their pedagogy, cultivate an intense relationship with their teaching partner and there is a need to agree on fine details where timing is crucial. CT 2 stated that challenges would be faced when teachers do not get along, when teachers are not able to read the co-teacher's signals and when co-teachers have different personalities or approaches. The co-teachers were also asked if co-teaching at the post-graduate level poses greater challenges in comparison to the other levels. CT 1 claimed that it is more effective as the students are more matured and have greater exposure (experience) which enables them to respond well in interacting and dialogue with course mates and teachers. CT 2 did not give any comment as he has not done co-teaching at the lower levels.

The respondents were also asked on their perceptions of whether there is a need for co-teachers/ lecturers to have prior working relationship to ensure success in co- teaching. In response, 77.3 % of the respondents stated yes while 23.3% said no. Among the reasons given for the need for a prior working relationship is that a rapport is necessary to create a level of understanding to reduce any feeling of insecurity (MS 3). Further, according to MS 5, a prior

working relationship will promote cohesiveness and a smoother structure in the teaching. This view was supported by MS 6 who said that it will help to ensure smooth delivery of the lesson. MS 7 said that a prior working relationship would ensure there is clarity in understanding between the teachers and this would reduce confusion among students. MS 12 stated that it is necessary as it would be an advantage. She went on to suggest that in the absence of a prior relationship, a common meeting should be conducted in advance to align mission/ vision/ practices. Responses of the two co-teachers who handled the master class, CT 1 and CT 2 were in consensus with the views of students. CT 1 stated that co-teaching is a valuable teaching approach however the success often depends on the relationship and styles of the two teachers. CT 2, confirmed this by stating that the relationship with the co-teacher is highly significant. The ones who declared that prior working relationship is unnecessary justified their stand by saying that the co-teachers only need to have good people skills (MS 12) and some prior planning time. One respondent said that the need for a prior working relationship would depend on the status of the teachers where if the two teachers are of the same status/ level, then prior working relation is not needed (MS 10).

3. Conclusion

To date, research on the effectiveness of co-teaching as a mode of instruction has been scant, and has yielded mixed results. Overall, this study indicates that students generally have a positive response to co-teaching. This is similar to findings from other researches which also found that students were very receptive to co-teaching (Pugach and Wesson, 1995; Whinnery et. al., 1995). The co-teachers too gave a positive view of co-teaching and they claimed that they were encouraged by the students' participation. This is similar to the findings in Austin's (2001) study where majority of the teachers believed co-teaching is positive specifically in the academic development of students. The teachers in this study also gave a very positive view on the effectiveness of co-teaching at the post-graduate level. Thus it can be concluded that there is great potential for co-teaching to be adopted as an instructional method at the post-graduate level. Since the goal of all education is to ensure the future success of their students as they prepare to become responsible and productive citizens, co-teaching, like any other proposed teaching methodology, should be continued if it serves that goal. The most pervasive concern of co-teaching is obtaining sufficient time during the school day to plan and discuss instruction and student progress. Up to date, most inquiry on co-teaching has emphasized on co-teachers' roles and relationships rather than demonstrating its impact on students' academic achievement and other key outcomes. Thus, future research should address these areas as the future of co-teaching may be dependent on increasing the quantity and quality of research on them.

References

Austin, V. L. (2001). Teachers' Beliefs about Co-Teaching. *Remedial and special Education, 2*(4), 245-255.

Bateman, D., & Bateman, C. (2006). *A Principal's s Guide to Special Education* (2nd ed.). Arlington: Council for Exceptional Children.

Bauwen, J., & Hourcade, J. J. (1995). *Cooperative teaching: rebuilding the school house for all students*. Austin: TX, PROED.

Cook, L., & Friend, M. (1995). Co-teaching: Guidelines for effective practices. *Focus on Exceptional Children, 28*(3), 1-16.

Cook, L., & Friend, M. (1996). Co-teaching: guidelines for creating effective practices. In E. L. Meyen, G. A. Vergason, & R. J. Whelan (Eds.). *Strategies for teaching exceptional children in inclusive settings* (pp. 155-182). Denver: Love Publishing Company.

Cramer, E., Nevin, A., Salazar, L., & Landa, K. (2004). *Promoting a promoting co co-teacher team in an urban, multicultural setting: A case study*. Presentation to the Council for Exceptional Children, Baltimore.

Dieker, L. M., & Barnett, C. A. (1996). Effective Co-teaching. *Teaching Exceptional Children, 29*(1), 5-7.

Education, 17(6), 741-762.

Fishbaugh, M. S. E. (1997). *Models of Collaboration. Needham heights*. MA; Allyn and Bacon.

Friend, M. (2006). Thoughts on collaboration for 21st Century School Professionals…..Moving Forward or Lost in Space. *The State Education Resource Center (SERC) website.* Accessed 12 January 2014, from http://ww.ctserc.org/initiatives/ teacherandlearn/mfriend.shtml.

Friend, M., & Cook, L. (2003). *Interactions Collaboration Skills for School Professionals* (4th ed.). California State university: Pearson.

Gately, S., & Gately, F. (2001). Understanding Co-teaching Component. *Teaching Exceptional Children, 33*(4), 40-47.

Jang, S. J. (2006) Research on the effects of team teaching upon two secondary school teachers. *Educational Research, 48*(2), 177-194.

Murawski, W. W., & Swanson, H. L. (2001). A meta-analysis of co-teaching research. *Remedial and Special Education, 22*(5), 258-267.

Noeth, L. C. (2004). Co-teaching system boosts special education test scores in Tennessee district. *Memphis, TN: The Commercial Appeal.* Retrieved 23/5/14 at http://nl.newsbanCommercial newsbank.com/nl k.nl-search/we/Archives

Nolet, V., & McLaughin, M. J. (2000). *Accessing the general curriculum: Including students with disabilities in standard-based reform.* Thousand Oaks, CA: Corwin Press. (Eric Document Reproduction Service No. ED 448 546)

Pugach, M. C., & Seidl, B. L. (1995). From exclusion to inclusion in urban schools: A new case for teacher education reform. *Education and Urban Society, 27*, 379-395.

Pugach, M. C., & Wesson, C. L. (1995). Teachers' and students' views of team teaching of general education and learning-disabled students in two fifth-grade classes. *Elementary School Journal, 95*, 279-295.

Roth, W. M., & Tobin, K. (2001) Learning to teach science as practice, *Teaching and Teacher*
Roth, W. M., & Tobin, K. (2002). *At the elbow of another: learning to teach by co-teaching.* NewYork: PeterLang.

Roth, W. M., Tobin, K., Zimmermann, A., Bryant, N., & Davis, C. (2002). Lessons on and from the dihybrid cross: an activity theoretical study of learning in co-teaching. *Journal of Researching Science Teaching, 39*(3), 253-282.

Sandholtz, J. H. (2000). Interdisciplinary team teaching as a form of professional development,

Schwab Learning. (2003). Collaboratively speaking. A study on effective ways to teach children with learning differences in the general education classroom. *The Special Edge,* 16 (3). Retrieve 13 January, 2014, from: http://www.schwablearning.orghttp://org

Teacher Education Quarterly, 27(3), 39-50.

Tobin, K., Roth, W. M., & Zimmermann, A. (2001). Learning to teach science in urban schools. *Journal of Research in Science Teaching, 38*(8), 941-964.

Vaughn, S., Schumm, J. S., & Arguelles, M. (1997). The ABCDE's of co-teaching. *Teaching Exceptional Children, 32*(2), 5-10.

Walsh, J. M., & Jones, B. (2004). New models of cooperative teaching. *Teaching Exceptional Children, 36*(5), 14-20.

Walther-Thomas, C., Bryant, M., & Land, S. (1996). Planning for effective co-teaching: the key to successful inclusion, *Remedial and Special Education, 17*(4), 255-265.

Welch, M., & Sheridan, S. M. (1995) *Educational partnerships: serving students at risk*. Fort Worth, TX: Harcourt Brace.

Welch, M., Brownell, K., & Sheridan, S. M. (1999). 'What's the score and game plan on teaming in school': a review of the literature on team teaching and school-based problem-solving teams, *Remedial and Special Education, 20*, 36-49.

Whinnery, K. W., King, M., Evans, W. H., & Gable, R. A. (1995). Perceptions of students with learning disabilities: Inclusive versus pull-out services. *Preventing School failure, 40*, 5-9.

Wiggle, S. E., & Wicox, D. J. (1996). Inclusion: Criteria for the preparation of educational personnel. *Remedial and Special Education, 17*, 323-328.

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