Vol. 3, No. 1, Dec 2014, pp. 7-20



Introducing the Co-teaching Model in Teacher Education Clinical Practice Lisa D. Murley, Rebecca R. Stobaugh, and Charles S. Evans *Western Kentucky University*

Abstract

With national and state regulatory changes related to clinical practice within teacher education programs a reality, one university examined the outcomes of co-teaching model trainings required for stakeholders, both higher education faculty and P-12 educators. The training participants indicated the co-teaching model could increase student teacher preparedness while also positively impacting P-12 student learning. Nearly a year after the co-teaching training, one university surveyed student teachers on their co-teaching experience prior to and during student teaching. While there were increase mean scores of all the co-teaching models, results pointed to questions of whether teacher candidates were engaged in lower-level impact co-teaching models, which involved teacher candidates observing and assisting.

Introduction

With national and state regulatory changes related to clinical practice within teacher education programs, it is imperative that higher education and primary through 12th grade (P-12) partners explore opportunities to strengthen clinical aspects of teacher education programs (Kentucky Education Professional Standards Board, 2011; KAR 5:040). One current practice in P-12 settings which shows promise in teacher preparation programs is the co-teaching model (Committee on the Study of Teacher Preparation Programs in the United States and the National Research Council, 2010).

As a model for preparing teacher candidates, co-teaching can be defined in a variety of ways. However defined, co-teaching during the student teaching experience must include collaboration between the student teacher and classroom teacher in the development, delivery, and evaluation of teaching and learning in the student teaching experience. Both individuals are in the classroom throughout the student teaching experience. While the interaction can take different forms, both are integrally involved with students in the learning experiences; therefore, providing tremendous opportunities to enlist the expertise of both professionals to increase student learning. Bacharach, Heck, and Dahlberg (2010) provide a definition of co-teaching that is relevant and adaptable to the use in the co-teaching model in teacher preparation programs which includes the following:

- Two or more individuals working together.
- Conducted in the same classroom at the same time.
- Conducted with heterogeneous groups.
- When both teachers plan for instruction together.
- When both teachers provide substantive instruction together.
- When both teachers assess and evaluate student progress.
- When teachers maximize the benefits of having two teachers in the room by having both teachers actively engaged with students.
- When teachers reflect on the progress and process, offering one another feedback on teaching styles, content, activities, and other items pertinent to improving the teaching situation. (p. 2)

Literature Review

With increased accountability in P-12 education through federal reform initiatives such as the No Child Left Behind Act of 2001 (U.S. Department of Education, 2001) and Race to the Top, a part of the American Recovery and Reinvestment Act of 2009 (U.S. Department of Education, 2009), came greater demand of teacher preparation programs (Wiseman, 2012). It is seemingly impossible to initiate reform in P-12 schools without including a focus on teacher quality and ultimately teacher preparation programs.

Central to this increased focus on teacher preparation programs in recent educational reform is the Report of the Blue Ribbon Panel commissioned by the National Council for Accreditation of Teacher Education (NCATE) titled *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers* (National Council of Accreditation of Colleges, 2010). The Blue Ribbon Panel recommendations include greater linkages between higher education and P-12 educators in teacher preparation experiences that are centered on clinical practices such as development, implementation, and evaluation. These recommendations are aligned with the 2010 National Research Council report that identified

clinical preparation as one of three components of teacher preparation that have the potential for having the greatest impact on P-12 student learning (Committee on the Study of Teacher Preparation Programs in the United States and the National Research Council, 2010).

As a result of recommendations from numerous national agencies and panels focused on reform, one state formed an educational task force to study ways to transform education (Governor's Task Force on Transforming Education in Kentucky, 2011). An action area in the task force report focused on more clinical experiences for teacher candidates to ensure better teacher preparedness for the 21st century classroom. These recommendations led to state regulatory changes including the directive that student teachers will be provided opportunities to "…engage in extended co-teaching experiences with experienced teachers" (Kentucky Education Professional Standards Board, 2011; KAR 5:040).

Much of the current literature on co-teaching is derived from models associated with special educators interacting with general education or content teachers delivering instruction in settings that include students receiving special services with no teacher candidates present in the co-teaching setting (Austin, 2001; Dieker & Murawski, 2003; Magiera & Zigmond, 2005; Mastropieri, Scruggs, Graetz, Norland, Gardizi, & McDuffie, 2005; Murawski & Swanson, 2001). The co-teaching model has also been endorsed by some teacher preparatory institutions to prepare teacher candidates (National Council of Accreditation of Colleges, 2010). In 2004, Roth and Tobin posited that co-teaching could help teachers become more effective and "... provide(s) new opportunities for enhancing student learning and learning to teach" (p. 161). Furthermore, Eick, Ware, and Williams (2003) reported the positive effects of using co-teaching in clinical components of science methods courses. However, there are little data on the impact of co-teaching on the improvement of student learning.

One notable exception is a study reported by Bacharach, Heck, and Dahlberg (2010). The reported data was associated with a Teacher Quality Enhancement initiative at St. Cloud University that involved co-teaching and non co-teaching settings in the St. Cloud area school district. Co-teaching settings included student teachers and cooperating teachers who attended workshops on how to incorporate co-teaching models during student teaching. The study spanned a period of four years. The analysis revealed a statistically significant effect (p < .01) for co-teaching on reading proficiency each of the four years and a statistically significant effect (p < p-05) for co-teaching on math proficiency each of the four years. Additional data analysis was conducted to examine the effect of student teaching on reading and math proficiency. Students in the co-taught student teaching setting attained higher reading and math proficiency than those in the other two groups of classrooms. The differences were significant for all years except 2006-2007 where there were an insufficient number of classrooms that were not co-taught. They also found a statistically significant positive impact on reading and math scores for special education and those students receiving free or reduced lunch. In addition to the findings from the data analysis, students in the co-taught classrooms felt that there were fewer disruptions related to routine classroom tasks and improved student behaviors. These same observations were found in studies focusing on co-taught classroom with general education teachers and special education teachers. The co-taught setting allowed students greater opportunities to receive help and teachers were afforded opportunities to implement strategies and learning experiences that would have been more challenging to implement with just one teacher. Findings from the study supported the use of the co-teaching model and more specifically the use of the model in student teaching situations.

Eick, Ware, and Williams (2005) explored the use of the co-teaching models in early clinical experiences. In this study, the co-teaching model was implemented within the clinical component of a science methods course. Methods students found the experience to be positive and provided opportunities to not only learn from veteran teachers but to also improve their skills related to classroom management, use of inquiry-based strategies, and felt supported when taking the lead in the instructional experiences. Basically, the methods students were learning to teach alongside and with veteran teachers.

Current findings support the use of the co-teaching model in classroom settings. While the evidence from the Bacharach, Heck, and Dahlberg (2010) study provides a solid foundation for implementing the co-teaching model during student teaching, there is potential value in extending the model into coursework prior to student teaching which requires clinical experiences.

The design and implementation of early clinical components of the teacher education programs are critical to preparing teacher candidates for student teaching. Prior to the capstone experiences, teacher candidates spend time in classroom settings observing, assisting, and when possible, leading instructional experiences. As such, some candidates enter the student teacher experience having greater opportunities for developing, implementing, and evaluating learning experiences. Implementing the co-teaching model prior to student teaching would provide teacher candidates with increased clinical experiences that would more than likely prove to be some of the most meaningful and rigorous of their teacher preparation program.

Purpose of the Study

With new state mandates requiring the implementation of the co-teaching model in teacher education clinical practice, one university embraced the challenge of providing co-teaching model training for stakeholders, both higher education faculty and P-12 educators. The purpose of this study was to determine if these introductory training initiatives increased the capacity of participants to develop and implement co-teaching models in teacher education clinical practice. In addition, the institution desired to collect baseline data of co-teaching practices before and during student teaching to assess the current level of engagement of teacher candidates in co-teaching strategies.

Research Questions

This study examined pre- and post-survey data from a statewide co-teaching training in a southeastern state. In addition, data was collected from a southeastern university a year after the training to assess student teacher's engagement in co-teaching experiences. The research questions were as follows:

- 1. To what extent do participants attending a co-teaching training believe co-teaching will increase the student teaching experience?
- 2. To what extent are participants attending a co-teaching training currently utilize co-teaching strategies?
- 3. How effectively did the co-teaching training increase participants' knowledge of the co-teaching principles and belief they could implement the model?
- 4. To what extent were student teachers exposed to the co-teaching strategies during their coursework and field experiences prior to student teaching?
- 5. To what extent were student teachers exposed to the co-teaching strategies during their student teaching experience?

Methodology

The study included data from two sources: (a) a statewide co-teaching training and (b) student survey data from a university.

Co-teaching Training

The participants for this study include faculty and administrators from thirty teacher education institutions across the state who attended a two day co-teaching training. The number of participants invited from each institution was based on the respective program's number of student teachers the previous year. At least two participants from each institution attended with the largest institutions bringing up to six participants. Each teacher education institution was asked to bring a P-12 school administrator or teacher to participate in the training. For the purpose of this study participants of the co-teaching training are defined as higher education faculty and administrators along with P-12 teachers and administrators.

As a part of the training evaluation, participants completed a survey related to coteaching. The survey was administered as a pre-assessment, before the training, and again as a post-assessment after the training.

Student Teacher Survey

In an effort to assess the level of skill related to co-teaching strategies and teacher candidates, one university added items focused on the co-teaching model to a student teacher survey administered to teacher candidates prior to and during the final semester of their undergraduate program. This student teacher survey was given almost a year after the statewide training initiative referenced above. During this year, those trained at the statewide co-teaching training subsequently led professional development in one university for the majority of all teacher education faculty and cooperating teachers who support the student teachers in the schools. In total over 1,000 faculty and cooperating teachers attended the co-teaching professional development. Student teachers were also trained on the co-teaching strategies in an orientation meeting prior to student teaching.

To determine the baseline level of implementation, the new items for the survey served to assess what type of co-teaching strategies student teachers engaged in before and during student teaching. The co-teaching strategies were identified based on the co-teaching strategy definitions by Bacharach, Heck, and Dahlberg (2010). The teacher candidates represented 252 elementary education, middle grades education, secondary education, special education, interdisciplinary early childhood education, P-12 and 5-12 education majors.

For the purpose of the student teacher survey, the co-teaching strategies were defined as: <u>One Teach, One Observe</u>: One teacher has the primary responsibility while the other gathers specific observational information on students or the instructing teacher. The key to this strategy is to have a focus for observation.

<u>One Teach, One Assist</u>: One teacher has primary instructional responsibility, while the other assists students with their work, monitors behaviors, or corrects assignments. <u>Station Teaching</u>: The co-teaching pair divides the instructional content into parts and the students into groups. Groups spend a designated amount of time at each station. <u>Parallel Teaching</u>: Each teacher instructs half the students, addressing the same instructional materials and presents the material using the same teaching strategy. <u>Supplemental Teaching</u>: One teacher works with students at their expected grade level while the other teacher works with those students who need the information and/or materials re-taught, extended, or remediated.

<u>Alternative or Differentiated Teaching</u>: Provides students with different approaches to learning the same information.

<u>Team Teaching</u>: Well-planned, team-taught lessons with no prescribed division of authority. (School of Teacher Education, 2013)

The student teachers were instructed to answer the survey items based on the leveled response descriptors (a) extensive exposure - very comfortable with the model and my ability to use it; (b) moderate exposure – somewhat comfortable with the model and ready to use it during student teaching; (c) minimal exposure – not comfortable with the model and would not use it during student teaching; (d) none at all – limited or no exposure to the model.

Results and Findings

The data analysis resulted in these findings for each research question.

Research Question One

On the co-teaching training survey, participants indicated on a four point scale (1= not at all; 4= to a great extent) whether co-teaching would (a) improve the learning experience of student teachers, (b) provide a better instructional experience during students teaching for P-12 students, and (c) better prepare new teachers for the classroom. Means for P-12 educators ranged from 3.45 to 3.55 on the pre-assessment. The mean scores on the post-assessment increased slightly, ranging between 3.81 and 3.86. Mean scores for higher education faculty were slightly lower that P-12 educators on the pre-assessment, ranging from 3.26 to 3.33. The mean scores increased slightly to ranges between 3.37 and 3.4 on the post-assessment. Total mean scores on the post-assessment were higher on these three items than all other survey questions.

Survey Question	P-12 Pre n= 30	P-12 Post n= 37	Higher Ed Pre n= 29	Higher Ed Post n=41	Total Mean Pre N= 59	Total Mean Post N=78
Co-teaching will improve the learning experience of student teachers.	3.47	3.81	3.33	3.82	3.39	3.81
Co-teaching will provide a better instructional experience during student teaching for P-12 students.	3.55	3.86	3.26	3.79	3.4	3.83
Co-teaching will better prepare new teachers for the classroom.	3.45	3.83	3.29	3.81	3.37	3.82

Table 1. Benefits of the Co-teaching Model

Research Question Two

Using the same four point scale, two questions on the survey measured participant experience with co-teaching: "I have been involved in a co-teaching experience," and "A

Total

Mean

Post

3.68

3.87

3.71

3.68

3.74

N = 67

majority of people in my workplace use co-teaching strategies." When participants were asked if they had been involved in a co-teaching experience initially the scores were low (M_{P-12}) Educators=1.97; $M_{\text{Higher Education}}$ =1.76). However, after training there were slightly higher mean scores ($M_{P-12 \text{ Educators}}=2.54$; $M_{\text{Higher Education}}=2.53$). On the item, "A majority of people in my workplace use co-teaching strategies," participants indicated low ratings across all groups on the pre- and post-assessment. Total mean scores for all participants on the post-assessment was 1.74, the lowest scoring item on the post-assessment.

Survey Question	P-12 Pre n= 30	P-12 Post n= 37	Higher Ed Pre n= 29	Higher Ed Post n=41	Total Mean Pre N= 59	Total Mean Post N=67
I have been involved in a co- teaching experience.	1.97	2.54	1.76	2.53	1.86	2.54
A majority of people in my workplace use co-teaching strategies.	1.63	1.67	1.32	1.79	1.47	1.74

Table 2. Experience with Co-teaching

Research Ouestion Three

Participants were assessed on their understanding of the co-teaching model and the strategies within the model. On a four point scale, participants rated their knowledge of the following: (a) theoretical base of co-teaching, (b) specific strategies of co-teaching, and (c) the co-planning process. Both higher education faculty and P-12 educators scored the items with a low mean score (ranging from 1.3-1.91) on the pre-assessment. However, on the postassessment the means for these items were all above 3.60 for both higher education faculty and P-12 educators. Total mean post-assessment scores increased from the pre-assessment by almost two points for each survey question.

Survey Question P-12 P-12 Higher Higher Total Pre Post Ed Pre Ed Post Mean n= 30 n= 37 n= 29 n=41 Pre N= 59 Theoretical base of co-1.86 3.68 1.91 3.69 1.86 teaching Seven strategies of co-1.3 3.86 1.44 3.87 1.38 teaching The co-planning process 1.83 3.78 3.64 1.73 1.65 Co-teaching demonstrations 1.73 3.78 1.5 3.6 1.61

1.63

Table 3. Knowledge of Co-Teaching

Specific co-teaching

classroom

strategies to use in the

Participants were also assessed on their understanding of the six co-teaching strategies:

1.65

3.69

1.64

3.81

(a) Parallel Teaching, (b) Station Teaching, (c) One Teach, One Observe, (d) One Teach, One Drift, (e) Remedial Teaching, and (f) Team Teaching. Based on pre-assessment data, both higher education faculty and P-12 school practitioners had some knowledge of these approaches to co-teaching with mean scores ranging from 1.86 to 2.62. Post-test data shows higher means for each of the strategies with total mean scores ranging from 3.63 to 3.78. The total mean post-assessment scores increase slightly more than 1.5 points for each of the co-teaching strategies.

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Survey Question	P-12	P-12	Higher Ed	Higher Ed	Total Mean	Total Mean
	Pre	Post	Pre	Post	Pre	Post
	n= 30	n= 37	n= 29	n=41	N= 59	N= 67
Parallel Teaching	1.86	3.76	2.06	3.62	1.97	3.68
Station Teaching	1.9	3.77	2.06	3.64	1.97	3.68
One Teach, One	2.27	3.84	2.32	3.73	1.98	3.7
Observe						
One teach, One	2.2	3.73	2.14	3.56	2.29	3.78
drift						
Remedial Teaching	2.07	3.76	2.32	3.61	2.17	3.63
Team Teaching	2.3	3.78	2.62	3.71	2.2	3.68
Team Teaching	2.3	3.78	2.62	3.71	2.2	3.68

Table 4. Knowledge of the Co-Teaching Strategies

Participant belief in self-efficacy to implement the co-teaching model increased from the pre- to post-assessment. Initially, P-12 participants (M=1.66) and higher education faculty (M=1.67) had low levels of confidence in their ability to utilize the co-teaching strategies. However, in the post-assessment means increased to a total mean score of 3.54 on this item, a 1.87 point increase.

Table 5. Self-Efficacy

Survey Question	P-12 Pre n= 30	P-12 Post n= 37	Higher Ed Pre n= 29	Higher Ed Post n=41	Total Mean Pre N= 59	Total Mean Post N= 59
I feel ready to utilize the co- teaching model.	1.66	3.58	1.67	3.51	1.67	3.54

Research Question Four

Nearly a year after the initial state-wide training, one university surveyed student teachers on their co-teaching experience prior to student teaching. The survey item stated, "To what extent were you were exposed to the co-teaching models during your coursework and field experiences <u>prior</u> to student teaching experience?" Table 6 depicts the results. The state professional licensure groups teacher programs in six areas: Interdisciplinary Early Childhood Education (IECE), Elementary Education (ELED), Middle Grades Education (MGE), Secondary Education (SEC), 5-12 programs (e.g., Agriculture, Business and Marketing, Family and

Consumer Science), and K-12 programs (e.g., Art, German, Chinese, Physical Education), and Exceptional Education or Special Education (SPED). These teacher program areas were used to meaningfully collapse the data into representative groups.

With 256 student teachers responding, two co-teaching strategies with the highest mean scores across all program areas were One Teach, One Observe (M=3.32) and One Teach, One Assist (M=3.16). Special Education (SPED) student teachers reported high levels for Team Teaching (M=3.25), but even so One Teach, One Observe (M=3.40) and One Teach, One Assist (M=3.50) had the highest means. The K-12 program area, which also has larger mean scores for One Teach, One Observe and One Teach, One Assist, had the highest mean score for Station Teaching (M=3.09).

Program Areas	# of Student s	One Teach One Obser ve	One Teac h One Assi st	Station Teachin g	Parallel Teachin g	Supplemen tal Teaching	Alternative or Differentiat ed Teaching	Team Teachin g
IECE	4	3.75	3.5	2.5	2.75	2.75	2.50	2.75
ELED	106	3.34	3.37	2.89	2.13	2.53	2.49	2.21
MGE	41	3.54	3.12	2.59	2.32	2.44	2.54	2.81
SEC	54	2.59	2.37	1.81	1.65	1.69	1.85	1.93
5-12	8	3.25	2.38	1.75	1.50	1.88	2.00	2.00
K-12	23	3.52	3.22	3.09	2.74	2.61	2.78	2.91
SPED	20	3.40	3.50	2.85	2.80	2.75	2.90	3.25
Total	256	3.32	3.16	2.65	2.21	2.40	2.46	2.45

Table 6. Student Teaching Survey Results of Co-Teaching Model Skill Level Prior to	
Student Teaching	

With One Teach, One Observe and One Teach, One Assist, typically it is the teacher candidate doing the observing and the assisting. Both of these strategies provide low-levels of engagement in the teaching process in classrooms. The other five co-teaching strategies involve the teacher candidates leading instruction with small or large group instruction providing more quality experiences preparing teacher candidates for student teaching.

Research Question Five

The second survey item added to the Student Teacher Survey stated, "To what extent were you exposed to the co-teaching models during your student teaching experience?" Table 7 displays the results. Similar to the other student teacher survey item results, the two co-teaching strategies with the highest mean scores across all program areas were One Teach, One Observe (M=3.64) and One Teach, One Assist (M=3.64). Station Teaching also received high rankings from the student teachers (M=3.06). Means for the other co-teaching strategies did increase compared to the other survey item ranking student teacher engagement in the co-teaching strategies before student teaching.

Program Areas	# of Student s	One Teach One Obser ve	One Teac h One Assi	Station Teachin g	Parallel Teachin g	Supplemen tal Teaching	Alternative or Differentiat ed Teaching	Team Teachin g
			st					
IECE	4	3.25	3.75	2.75	3.0	3.0	2.75	3.0
ELED	106	3.71	3.78	3.46	2.57	2.96	2.92	2.75
MGE	41	3.88	3.85	3.12	2.90	3.05	3.10	3.46
SEC	54	2.96	2.80	2.02	1.96	1.98	2.11	2.41
5-12	8	3.75	3.50	1.75	2.13	2.0	2.88	2.75
K-12	23	3.65	3.65	3.04	2.78	2.87	3.04	3.13
SPED	20	3.60	3.60	3.35	3.15	2.80	3.35	3.45
Total	256	3.64	3.64	3.06	2.61	2.78	2.89	2.96

Table 7. Student Teaching Survey Results of Co-Teaching Model Skill Level During Student Teaching

While there were increase mean scores of all the co-teaching strategies on the student teaching item as compared to the prior the student teaching field experiences, both items point to questions of whether teacher candidates are engaging in lower-level impact co-teaching strategies which involve teacher candidates observing and assisting.

Conclusions

University and P-12 educators participating in the training clearly believed that the coteaching model could increase student teacher preparedness while also positively impacting P-12 student learning. After learning about the co-teaching model, some participants realized the coteaching strategies were already a part of the curriculum. However, they believed few of their colleagues were engaged in co-teaching. This training increased participant knowledge of the co-teaching model and the seven strategies while also elevating their confidence in their ability to implement the model. A limitation of the study was the number of participants responding to the survey. A higher number of survey participants could have resulted in a better estimate of the population rather than a potential representative of only those who participated.

As teacher education institutions replicate this training with teacher education faculty and P-12 teachers and administrators, the hope is that through understanding more about the co-teaching model and the seven strategies, educators can more confidently design teaching experiences for teacher candidates to impact P-12 student learning in positive ways. Teacher education institutions must partner with P-12 educators to communicate the vision for co-teaching model. Schools must understand the reason for implementing co-teaching, research supporting the model, and determine how to utilize the co-teaching strategies. This may involve teacher preparatory institutions leading trainings to engage stakeholders in the conversation on implementing the model. As new teachers are hired each year teacher preparation programs must develop ways of providing this training for new teachers who will be welcoming teacher candidates in their classrooms.

The student teacher survey results point to questions about the level of engagement of student teachers. Support of that outcome can be found as Hattie (2012) noted the important elements of the co-teaching model:

Planning can be done in many ways, but the most powerful is when teachers work together to develop plans, develop common understandings of what is worth teaching, collaborate on understanding their belief of challenge and progress, and work together to evaluate the impact of their planning on student outcomes. (p. 37)

Implications

Adopting the co-teaching model will require significant changes within teacher preparation programs. Teacher education faculty must examine coursework prior to student teaching to ensure teacher candidates understand the co-teaching model and have engaged in the models so they are adequately prepared for their student teaching semester. This may require faculty to reexamine course assignments. Institutions can create an intentional plan outlining where teacher candidates will learn about the model and engage in the strategies.

As teacher education faculty work to integrate more co-teaching strategies into clinical work, students can be more prepared for student teaching and it is expected high scores will result on future surveys. Additionally, as student teachers engage in the variety of co-teaching strategies they can further refine their skills and be more prepared to lead their own classroom after graduation. As the institution continues to track data on co-teaching, teacher education faculty can ascertain if there are increases in higher-impact co-teaching strategies.

The co-teaching model implementation may provide opportunity for collaboration with special education preparation programs as the co-teaching has been part of special education classrooms for many years. Another positive benefit for teacher candidates who have engaged in the co-teaching model is that they should be able to co-teach with special education professionals in their own classroom as the teacher candidate will have experience implementing the model in their clinical experience.

Recommendation for Future Study

Future research could replicate Bacharach, Heck, and Dahlberg (2010) study examining the impact of the co-teaching model on student achievement. A teacher preparation institution could determine if implementing co-teaching positively impacted student achievement as well as survey P-12 students and teachers to assess their beliefs on the impact of co-teaching. An additional study would examine the co-teaching models further to clearly identify the types of experience student teachers are experiencing. One Teach, One Observe could be divided into two categories: Solo Teaching and Student Teacher Observes. This would clearly identify who is leading the instruction—the cooperating teacher or the student teacher. In addition, definitions could clearly specify the role of the student teacher and the cooperating teacher (See Table 8). Additionally, teacher preparation institutions could replicate the survey to assess the level of coteaching practices at their university and consider these revised definitions and categories in Table 8.

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Table 8. Co-Teaching Strategies Defined for Future Research

Student Teacher Observes - The Cooperating Teacher is the primary teacher while the Student Teacher gathers specific observational information. (One Teach, One Observe)

Student Teacher Assists – The Cooperating Teacher has primary instructional responsibility of leading instruction while the Student Teacher assists students with work, monitors behavior, or corrects assignments. (One Teach, One Assist)

Station Teaching – The Cooperating Teacher and Student Teacher divide the instructional content into parts. Each teacher instructs one of the groups, and then the groups rotate.

Parallel Teaching – The Cooperating Teacher and Student Teacher instruct half the students. The two teachers are addressing the same instructional material and presenting the material using the same teaching strategies.

Supplemental – The Cooperating Teacher and Student Teacher plan and implement a task/activity where one teacher works with students at their expected grade level, while the other teacher works with those students who need the information and/or materials extended or remediated.

Alternative – The Cooperating Teacher and Student Teacher plan and implement two different approaches to teaching the same information. The learning outcome is the same for all students however the avenue for getting there is different.

Team Teaching – Well planned, team taught lessons, exhibit an invisible flow of instruction with no prescribed division of authority between the Cooperating Teacher and Student Teacher. Using a team teaching strategy, both teachers are actively involved in the lesson. From a student's perspective, there is no clearly defined leader – as both teachers share the instruction, are free to interject information, and available to assist students and answer questions.

As one university seeks to examine the field experiences both before and during student teaching, teacher candidates engaging in a variety of co-teaching strategies provide an opportunity for teachers and teacher candidates to work in a collaborative manner that focuses on the learning of all students, which is the most important outcome of the co-teaching initiative. Hattie (2012) emphasized the importance of the model and says it best with a cautionary note of what may happen if educators work in isolation, "…schools cannot help all students to learn" (p. 62).

References

Austin, V. L. (2001). Teachers' beliefs about co-teaching. Remedial and Special Education,

22(4), 245-255.

Bacharach, N., Heck, T., & Dahlberg, K. (2010). Changing the face of student teaching through

co-teaching. Action in Teacher Education, 32(1), 3-14.

- Committee on the Study of Teacher Preparation Programs in the United States and the National Research Council. (2010). *Preparing teachers: Building evidence for sound policy*. Washington DC: The National Academies Press.
- Dieker, L., & Mujrawski, W. (2003). Co-teaching at the secondary level: Unique issues, current trends, and suggestions. *The High School Journal*, *86*(4), 1-13.
- Eick, C. J., Ware, F. N., & Williams, P. G. (2003). Coteaching in a science methods course: A situated learning model of becoming a teacher. *Journal of Teacher Education*, 54(1), 74-85.

Hattie, J. (2012). Visible learning for teachers. New York: Routledge.

KAR 5:040 Admission, placement, and supervision in student teaching.

- Governor's Task Force on Transforming Education in Kentucky. (2011). Breaking new Ground: Final report of the Governor's Task Force on Transforming Education in Kentucky (TEK). Frankfort, KY: Author.
- Kentucky Education Professional Standards Board. (2011). 16 KAR 5:040. Section 6.(5)(e) 1.). Frankfort, KY: Author.
- Magiera, K., & Zigmond, N. (2005). Co-teaching in middle school classrooms under routine conditions: Does the instructional experience differ for students with disabilities in cotaught and solo-taught classes? *Learning Disabilities Research*, 20(2), 79-85.
- Mastropieri, M.A., Scruggs, T.E., Graetz, J., Norland, J., Gardizi, W., & McDuffie, K. (2005).
 Case studies in co-teaching in the content areas: Successes, failures and challenges.
 Intervention in School and Clinic, 40, 260-270.

- Murawski, W., & Swanson, H. (2001). A meta-analysis of co-teaching research: Where are the data? *Remedial and Special Education*, 22(5), 258-267.
- National Council of Accreditation of Colleges. (2010). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*. Washington DC: Author.
- Roth, W., & Tobin, K. (2004). Co-teaching: From praxis to theory. *Teachers and Teaching*, *10*(2), 161-179.

School of Teacher Education. (2013). *WKU Co-Teaching*. Retrieved from http://www.wku.edu/ste/co-teaching/

United States Department of Education. (2009). *The American recovery and reinvestment Act of 2009: Saving and creating jobs and reforming education*. Washington DC: Author.

United States Department of Education. (2001). Public law 107-110. Washington DC: Author.

Wiseman, D. (2012). The intersection of policy, reform, and teacher education. Journal of

Teacher Education, 63(2), 87-91.