# The Impact of Co-teaching on Pedagogical Approaches and Student Conceptual Understanding in a Graduate, Adolescent Literacy Course

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## Abstract

This hypothesis-generating research study sought to provide further insight into the impact of co-teaching experiences on pedagogical approaches and student conceptual understanding in a graduate, adolescent literacy course. Two professors and 21 students participated in this qualitative study. Collected over the course of a semester, data included student reflections, instructor field notes, and lesson plan rubrics. Four categories emerged from the data analysis: (a) reliability, (b) perspectives, (c) teacher support, and (d) pedagogy. Results indicate co-teaching, coupled with situated learning, solidified student conceptual understanding. It is evidenced that co-teaching is a powerful motivator for acquiring new knowledge when grounded in the theory of situated learning.

## Introduction

Co-teaching is defined as the collaboration between two teachers sharing a space and that involves curriculum planning, instruction, and assessment with the goal of enhancing learning for all students (Bacharach, Heck, & Dahlberg, 2007). Although collaboration is used synonymously with co-teaching, the former involves an interaction, while the latter an activity (Friend & Cook, 1992). According to Kariuki and Jarvis (2017), "Co-teaching is an activity that involves a range of collaborative practices based upon the teachers' instructional approaches, whether formally planned or inadvertent" (p. 202).

In higher education, co-teaching is less commonly used and researched (Kariuki & Jarvis, 2017). Nevertheless, in the existing research, benefits of co-teaching in higher education are well documented. Bacharach et al. (2007) found that "the use of co-teaching in teacher preparation is a promising practice for fostering collaborative skills, increasing student participation, and improving classroom instruction and professional growth for all participants" (p. 19).

In their co-teaching study, Crow and Smith (2003) discovered "Students learn to become co-learners/knowledge builders and practitioner-researchers using co-teaching to role model shared learning and collaborative working within the classroom and highlight the importance of carefully planning co-teaching interaction, including the use of humor, tension, different knowledge bases and styles of debate" (p. 45). Furthermore, the co-teaching model enabled the teachers "to create an active learning environment that facilitated the teaching of collaboration" (p. 45).

## Theoretical Framework

### Situated Learning

Modeling co-teaching for teacher candidates and demonstrating how to learn through collaboration reflects the theory of situated learning. Situated learning theory posits that adults learn experientially, by applying knowledge; learning is embedded in application, accompanied by socially constructive acts (Utley, 2006). Social interaction and collaboration are essential components of situated learning as learners become engaged in a community of practice which embodies certain beliefs and behaviors to be learned (Lave & Wenger, 1991).

Situated cognition theory (Lave, 1996; Lave & Wenger, 1991) and activity theory (Engestrom, 1990) are aligned with Vygotsky (1978) in the belief that knowledge grows through learners' participation in social activities and with Dewey (1938) who claimed learning needs to be connected to experience and to what is relevant if it is to be meaningful. According to Gee (2000), "Knowing is a matter of being able to participate centrally in practice and learning is a matter of changing patterns of participation" (p. 181).

Co-taught teacher education courses have the potential of influencing how teacher candidates teach by implementing elements of situated learning in their instruction. By providing opportunities for future teachers to observe how to collaborate and co-teach in an authentic context and to make sense of content in social interaction, there is a better chance that learning (knowing and doing) will be maximized.

## Methodology

With the intent of adding to the quality of educational practices and student learning, this study provided insight into the impact of co-teaching experiences on both pedagogical approaches and student conceptual understanding. The research design for this qualitative study was hypothesis generating. For purposes of informing personal practice and contributing to the larger field of education, we, the researchers and professors of the course, investigated the following research question: How might a co-teaching model impact pedagogical approaches and student conceptual understanding in a graduate, adolescent literacy course? Student reflections, fieldnotes, and lesson plan rubrics were analyzed and coded based on emerging themes.

## Participants

Participants included 21 students enrolled. Student participants were pre-service teacher candidates who specialized in different content areas (math, social studies, English) and adolescent education.

The instructors of the course have over 40 years combined teaching experience on the elementary and secondary levels. Vicky had taught the course before, whereas Trish was teaching the course for the first time.

## Course EDU506B

EDU506B is a required course for all preservice teachers and provides a foundation in adolescent literacy teaching and learning. Teacher candidates learn how to design literacy-based lessons to teach their content.

## Data Collection and Analysis

Gathered over the course of a semester, data included student reflections, instructor field notes, and lesson plan rubrics.

**Student reflections.** Student reflections were collected during the third week of class and on the last day of the course. The gathering of reflections in the third week was intentional, as students needed time to experience the co-teaching model. The first reflection prompted students to consider how this co-teaching model differs from most other classes with one teacher. The final response concluded with a more general question asking students to reflect on material learned, opinions of co-teaching, and commenting on what might be done differently in subsequent classes. Reflections were anonymous; learners were asked to be honest with feedback and not hindered by concern for expressing opinions.

**Field notes**. Instructors compiled field notes at the end of each lesson to reflect on co-teaching experiences.

**Lesson plan rubrics.** The culminating activity for this course included a collaboratively designed unit plan that included lesson scenarios as well as one fully developed lesson plan, a benchmark assignment for the course. The lesson plan was evaluated based on a rubric that consists of 25 elements assessing dimensions, such as instructional objectives, developmental procedures, instructional strategies, adaptations, and differentiation.

## Results and Discussion

Lesson plan rubrics, student reflections, and instructor field notes provided supportive evidence regarding the benefits of co-teaching on student understandings. Analysis of lesson plan rubrics, student reflections, and instructor field notes generated four categories: (a) reliability, (b) perspectives, (c) teacher support, and (d) pedagogy. **Table 1** presents characteristics of each category. Triangulated data generated the following hypothesis: *When co-teaching is modeled and combined with situated learning, conceptual understandings are solidified.* This finding addresses instructional pedagogy and student learning.

Evaluated on a four-point scale, the mean lesson plan rubric score for the 21 participants was 3.6. (A score of three indicates a student has met expectations; a score of four demonstrates exceeding expectations.) This assignment constituted 25% of the student's final grade. The score of 3.6 reflected teacher candidates' understanding of course content.

**Table 1**

*Co-teaching and situated learning evidenced in unit plans, field notes, and student reflections*

| Categories | Characteristics |
|---|---|
| Reliability | Multiple instructors ensure fair grading, class coverage, and content coverage. |
| Perspectives | Instructors facilitate learning from multiple perspectives. |
| Teacher Support | Co-teaching offers additional teacher support to foster understanding regarding course content. |
| Pedagogy | Professors model appropriate pedagogy, necessary behaviors, and instructional practices for teacher candidates that might be evidenced in an adolescent co-taught classroom. |

### Reliability

The Instructors, along with the teacher candidates, felt secure that the co-teaching model ensured reliability in that content would be covered and support would be provided when necessary. Two instructors vs. one increased the odds of ensuring class would still be held even if one instructor was unable to attend. Both professors met with teacher candidates individually and with their groups to discuss unit plan progress and monitor their understanding.

According to one teacher candidate, having two teachers allows for "more support, more points of view, and less chance of anything being missed." It also meant that different perspectives would enhance student understanding and provide a more complete picture of the curriculum. One teacher candidate stated, "I enjoyed the co-teaching because if one teacher was not available, you always had the other person to go to ask questions about a particular topic. Also, you have two different viewpoints about a particular topic."

Collaboration on course planning and delivery also confirmed what got taught, when, and how. For example, in one of her reflections, Vicky's observations raised important questions that she knew she could share with Trish:

"Students seem to be more settled in their assignments. They seem to know what our expectations are; they are making an effort to understand the course content and apply the material to their discipline-specific contexts. Are we changing certain students' dispositions? Are they buying into these ideas we are trying to promote? Are they understanding how children/people learn and how they can promote learning? I need to discuss all this with Trish…."

Vicky recognized the value of having a co-teacher to share information and concerns about students and the course, discuss pedagogical approaches and outcomes, and plan ahead to ensure expectations are met. Trish's field notes reflected a similar sentiment stating:

"Vicky and I collaborated after class regarding Student A and Student B. If our role is to guide teacher candidates and model appropriate instruction, I feel that the students need to reteach their demonstration lessons. If I was teaching alone, I'm not sure if I would have made this request. I was happy she was in agreement. Co-teaching has helped validate grades, observations, and student needs."

Trish recognized co-teaching verified observations regarding student needs.

"Perhaps the most important finding about reliability was in the grading. The grading process was involved as we both read, commented on, and graded every assignment independently and then came together to compare results. We had in-depth discussions about each assignment and composed narrative feedback that was typed up and sent to students. This labor-intensive process was invaluable, because it ensured inter-rater reliability, consistency in expectations, and helped us in our professional development as educators."

### Perspectives

When asked to reflect on their co-teaching experiences, students reported that instructors facilitated learning by providing multiple perspectives. A teacher candidate commented, "I like this co-teaching model because it brings variety to the classroom. For every lesson, there are two perspectives. This helps make the class move as a discussion rather than a lecture. I think this has helped me stay more engaged."

Another student echoed this sentiment stating, "The co-teaching method differs because you can get the perspectives and experiences of two teachers. The two teachers also build off each other, so it's an interesting way to see scaffolding in the classroom that you'll want to see done in your classroom as the teacher."

Forty-three percent of student responses valued different perspectives and attributed these to facilitating learning. It is important to note, responses were open ended; additional students might have echoed similar sentiments but had not chosen to make this their focus in a response. Moreover, perspectives continued to be an emerging theme when the instructors evaluated the intentional design of student assignments. The collaborative book review, unit plan designs, and co-teaching of unit plan lessons, were all intended to be constructed with peers. Co-creating and co-presenting exemplify foundations of an effective co-teaching partnership.

### Teacher Support

Analysis of student reflections demonstrated the co-teaching model offers instructional support. Student comments revealed the belief that multiple teachers respond to student questions at a more rapid pace than if teaching alone, instructors are able to answer additional questions, and multiple professors are more present in group settings. With an additional teacher, a student discussed the importance of two instructors and their responsiveness in a classroom with 21 learners. A teacher candidate responded, "You have twice the chance of getting an answer to a question answered by the teacher, either in class during discussion or at home by emailing both teachers. Also, if one teacher is out you still have class because the other teacher most likely will be there."

Teacher support continued to be a pattern that presented itself outside of the classroom, as well. We continued to work collaboratively and co-teach. We met with students to discuss unit plans, offered guidance when candidates taught demonstration lessons at local public schools, and collaborated at a professional literacy conference.

The culminating example of co-teaching coupled with situated learning was demonstrated when two adolescent literacy students co-presented unit plans at a regional literacy conference. Following our introduction of the assignment, teacher candidates collaboratively took the lead. Teacher candidates co-constructed their power point and demonstrated a co-teaching model when presenting together. Presentations demonstrated comprehension of course content; understandings were engrained through this situated learning activity. Co-teaching was the catalyst for this trajectory.

## Pedagogy

In 506B, co-teaching was a means to deliver instruction on collaboration and give teacher candidates opportunities to practice these skills with peers from different disciplines. This supported a richer conceptual understanding of collaboration. Collaboration included co-planning, using different co-teaching models, and debriefing and assessing ourselves as well as our students. Instructors tried to model appropriate pedagogy and, in turn, teacher candidates applied the knowledge and skills of collaboration by working with their peers both in the classroom and in the field. A teacher candidate commented, "On top of the material that we are learning this class is serving as a good model for how co-taught classes should be."

In the classroom, two assignments were done collaboratively--the unit plan design/presentations and the collaborative book review--with excellent results. In her fieldnotes during one of the unit plan presentations, Vicky commented on how impressed she was with how poised and confident teacher candidates had become since the first presentation, the book review.

Teacher candidates also elected to co-teach when it was not a requirement. For example, one of the math groups decided to co-teach their lesson plans, so the three teacher candidates were able to hone their co-teaching skills. Upon observing this co-teaching situation, the social studies group also followed suit and commented on how the process made them more comfortable with sharing their learning with one another.

Collaboration on course assignments also meant that additional time and effort would be required, but teacher candidates all reported that the experience was meaningful. One teacher candidate expressed her initial reticence about the class and eventual epiphany:

> "The class was not what I expected at first. I was so overwhelmed and felt defeated. As the semester went on, this class taught me that nothing comes easy and that I would have to put in the extra time. I have never had such a rewarding experience working so hard in a class. I've learned so many new literacy strategies, and how to collaborate with fellow teachers. The unit plan was one of the most useful things I have done…could be a real unit in a school."

## Conclusion

Results indicated that co-teaching as a pedagogical approach increased teacher candidates' conceptual knowledge of collaboration and content. By applying situated learning to the challenge of how teacher candidates understand co-teaching, the course fostered opportunities for authentic practice and experiential learning. It is evident that when co-teaching is modeled and combined with situated learning, conceptual understandings are solidified.

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