

Synergistic Team Teaching for Professional Development: A Case Study Approach

Enseñanza sinérgica en equipos para desarrollo profesional: un estudio de caso

Natalia Ramírez Casalvolone ¹

Fecha de recepción: 13-01-2020

Fecha de aceptación: 24-08-2020

Resumen

Este estudio propone un enfoque innovador para profesores que argumentan no tener tiempo para involucrarse en actividades de desarrollo profesional; o para aquellos que alegan que estas por lo general son descontextualizadas y de alto costo. Por medio de un estudio de casos desarrollado entre Enero y Septiembre de 2018, esta investigación busca responder a la pregunta: ¿Cómo puede la enseñanza en equipos generar desarrollo profesional en profesores universitarios experimentados en la enseñanza del inglés? Específicamente los participantes enseñaron en equipo un curso de nivelación para estudiantes recién admitidos a la Carrera de la enseñanza del inglés. Pare efectos de este estudio, enseñanza en equipos se entiende como una metodología en sinergia donde dos profesores comparten el espacio del aula, planeamientos y sus prácticas de enseñanza. Los datos para entender el aprendizaje de los estudiantes fueron recolectados por medio de entrevistas semi-estructuradas. El análisis de los mismo se dio por medio del método propuesto por Creswell y Poth (2018) llamado *Data Analysis Spiral*. Los datos se codificaron a la luz de las definiciones de desarrollo profesional hechas por Guskey (2002), Sparks (2002), y Johnson (2006). De este modo, la investigadora buscó momentos en donde se pudieran interpretar que los participantes habían cambiado sus actitudes y creencias, demostrando así un mejoramiento continuo del aprendizaje, la enseñanza y que el conocimiento teórico de los profesores se trasladara a la práctica. En este estudio se puede observar cómo la enseñanza en equipos le ofrece a los profesores una comunidad de practica (COP) donde los participantes comparten, discuten e implementan nuevas enseñanzas. Además, por medio de la enseñanza en equipos, los beneficios que reciben los docentes son inmediatos, contextualizados y auténticos.

Palabras Clave: enseñanza en equipo, desarrollo profesional, educación universitaria, actitudes y creencias

Abstract

This study proposes an innovative approach for English professors who lack the time to engage in professional development (PD) programs, believe such programs are conducted in a decontextualized manner, or regard them as too expensive. Based on a qualitative case study performed from January to September 2018, this study addresses the following question: How can team teaching promote PD for mid-career English as a foreign language university professors? It investigates the types of PD that emerged when two English professors at the University of Costa Rica engaged in synergistic team teaching. The participants team taught a course for students newly admitted into the English-teaching major. In this study, synergistic team teaching is understood as a method in which two professors share classroom space and teaching practices and engage in planning discussions together. To understand what the participants learned when practicing team teaching, data were collected through semi-structured interviews and coded following Creswell and Poth's (2018) data analysis spiral. The coding was developed in light of the conceptualization of PD

¹ Magíster en la Enseñanza del Inglés como Lengua Extranjera por la Universidad de Costa Rica, Costa Rica. Doctoranda en Literacy, Culture, and Language Education en Indiana University, Bloomington, Estados Unidos. Correo electrónico: neramire@iu.edu

developed by Guskey (2002), Sparks (2002), and Johnson (2006). Accordingly, this study identifies instances (during the interview or during the classroom observation) that can be interpreted as change of the classroom practices, change in the attitudes and beliefs of the professors (Guskey, 2002), continuous improvement of teaching and learning (Sparks, 2002), and teacher's knowledge transformed into practice (Johnson, 2006). This study shows how team teaching offers professors a community of practice in which they can share, discuss, and implement new teaching knowledge. Through team teaching, teachers receive PD benefits that match their classroom context perfectly, enabling them to engage in authentic, fully contextualized learning opportunities.

Keywords: team teaching, professional development, higher education, attitudes, beliefs.

I. Introduction

As an English professor at the University of Costa Rica (UCR) for six years, I have had few opportunities to engage in professional development (PD) activities. Most often, such engagement is prevented by the multiple responsibilities I already have as a professor. My job requires me to perform teaching and research and to offer extension activities to the community; thus, when it comes to voluntarily attending workshops or other formal PD occasions, I usually lack the time, energy, and/or money to do so. When I have had the opportunity to attend workshops, I have found that they lack connections to real-life contexts of practice; thus, I typically prefer to invest time in research, because this will directly affect my professional profile and salary. Similarly, Radloff (2008) demonstrated that academic workload is intense and faculty have to use their time wisely, specifying that academic faculty “may be encouraged, especially early in their academic careers, to focus their energies on research which can bring professional recognition and reward, rather than on learning and teaching which may not do so” (p. 5). It is relevant to bring to the table these issues that hinder PD. Teachers need to undergo processes that can keep them updated, that offer new learning experiences and processes that promote personal satisfaction and professional fulfillment. Sandholtz (2000) states that school systems should recognize that collaboration among teachers is part of what gives these professionals enjoyment of their work and what offers most improvement of teaching practices.

This study examines how team teaching can promote PD and new teaching knowledge. Team teaching is understood as a collaboration activity among teachers.

Furthermore, this research shows how team teaching can become a more attractive, fruitful, and motivating style of PD than other, more traditional PD programs. In this study, PD is defined as a process undertaken by mid-career professors to gain new teaching knowledge than can be applied in their professional activities (Guskey, 2002; Johnson, 2006; Sparks, 2002).

The scope of this study was limited to two professors who had engaged in team teaching at least once at the university level. Both professors are faculty at UCR, which is the largest institution of higher education in Costa Rica and among the best in Latin America. Both of the study participants have over five years of experience in higher education. They are non-native speakers of English. They are English-language professors, and they team taught a single course, UCR's English Leveling course. This course is intended for students newly admitted into the English-teaching major at UCR. It was designed and implemented in 2015 by the author and a colleague. One of the course's main goals is to endow students with basic skills and knowledge pertaining to the English language. Team teaching in this course is important because the students' English-language skills are at a beginners' or below-beginners' level, and they thus require personalized attention most of the time.

II. Literature Review

Over the years, the term *PD* has been used in many fields to refer to a variety of strategies, tools, activities, and workshops that can be used to improve professionals' knowledge and practice. This case study focuses on PD for teachers, specifically the PD that team teaching can offer English-language teachers. What follows is a review of

various definitions of PD; in this study, PD is understood according to the definitions proposed by Guskey (2002), Sparks (2002), and Johnson (2006). Additionally, a review of definitions given by different authors about team teaching is offered.

2.1 Professional Development

PD is an integral part of teacher education (Borko, 2004) and it has been defined from numerous perspectives (Desimone, 2009). Guskey (2002) defined PD as a “change in teachers’ attitudes, beliefs and perceptions” (p. 382). According to Guskey (2002), PD should aim to change the way teachers put their knowledge into practice in the classroom, how they conceptualize teaching or conduct themselves in the classroom, and how students learn. He also argued that teachers can change their “beliefs and attitudes” in response to observable improvements in student learning brought about by their teaching practices (Guskey, 2002, p. 382). In this sense, Guskey (2002) argues that PD requires change, teachers who venture into PD opportunities should incur in some change in their professional practice and their students’ academic outcomes, contrary to this PD does not happen. Most PD programs aim to convince teachers of the value of certain teaching philosophies or methods; however, many teachers change their “beliefs and attitudes” when it becomes clear that a teaching method actually helps students learn (Guskey, 2002). In other words, teachers implement improved strategies and teaching methodologies only when they have good evidence that they will work.

PD experiences can take many forms. As Desimone (2009) noted, “these experiences can range from formal, structured topic-specific seminars given on in-service days, to everyday, informal ‘hallway’ discussions with other teachers about instruction techniques, embedded in teachers’ everyday work lives” (p. 182). According to Desimone, PD does not need a specific objective or a formal environment for it to take place, it can be ongoing, informal and multipurpose.

Moreover, according to Sparks (2002), effective teaching does not happen randomly. PD is essential to quality education; nevertheless, traditional PD opportunities are

often unavailable to teachers. According to Sparks (2002), “the most powerful forms of professional development engage teachers in the continuous improvement of their teaching and expand the repertoire of instructional approaches they use to teach that content” (p. 98). This author maintained that PD should be ongoing, dynamic, and a part of teachers’ daily interactions with other teachers and administrative support staff (Sparks, 2002). “There is a variety of methods for improving the effectiveness of teaching. Collaboration between instructors is one such method because it can provide ongoing, efficient ways to improve teaching and learning in the classroom (Sparks, 2002). By collaborating with others and learning from their experiences, teachers can encounter more ideas about how to improve classroom teaching and how to address students’ needs because there is a strong relationship between teachers’ knowledge and students’ learning outcomes (Sparks, 2002).

According to Freeman and Johnson (1998), teachers’ knowledge is constructed through their experience with others in the learning community. They stated that effective teaching is learned over time and requires complex mental processes that develop when the professional interacts with others and participates actively in the teaching and learning community. Furthermore, Johnson (2006) argued that teachers’ learning is socially constructed and that it improves as they interact with the society around them, noting that teachers enhance their social awareness as they get involved in social events. To understand how teachers learn, it is necessary to observe the kinds of events they participate in (Johnson, 2006). These events can be PD programs, interactions with administrators and other teachers, or engaging with students in the classroom (Johnson, 2006). Along these lines, Johnson (2006) claims that teachers’ learning should include a combination of theory and practice. Learning theories may not be enough to support teachers’ professional growth; they also learn as they practice in the classroom. Johnson (2006) described praxis as a combination of theory and practice: “[Praxis] has a great deal of experiential knowledge in it, but it is organized around and transformed through theoretical knowledge” (p. 240).

This section offered a summary of definitions and descriptions of what PD ideally may look like in light of Guskey (2000), Sparks (2000), and Johnson's (2006) ideas. These authors agree that PD In the next section, team teaching will be described as it has been used in different studies.

2.2 Team Teaching

In many ways, team teaching has proved to be one of the collaborative practices that enable educators to engage in PD, acquire new teaching knowledge, and become better teachers. According to Rhodes and Beneicke (2002), collaboration can improve teachers' performance because it allows them to encounter new information, ask questions, and voice ideas that clarify thoughts and beliefs. In a case study of team teaching, Bowles (1994) concluded that the collaboration promoted by team teaching helped improve the pedagogy used by the professors; moreover, the educators became more conscious of their practices. Consequently, they engaged in reflection and self-assessment for improvement.

Being observed by a teaching teammate seems to increase the motivation (and the pressure) to use the best teaching practices and a carefully considered pedagogy (Bowles, 1994). Furthermore, because team teaching requires the collaborators to plan, teach, and assess together, these actions have an immediate effect on new learning for both parties (Bowles, 1994) as they communicate each other's ideas, methodologies and perspectives in regards to teaching.

Sparks (2002), Desimone (2009), and Johnson (2006) pointed out that the professional growth of teachers can be effectively achieved in school environments as instructors work with the broader school community, especially by collaborating with other teachers. Sandholtz (2000) also viewed collaboration as a significant element of PD for teachers. He demonstrated that collaboration enables educators to participate in ongoing feedback, observation, and reflection with other teachers and that it can therefore provide teachers with opportunities for professional growth and the creation of professional learning networks (Sandholtz, 2000).

Wadkins, Wozniak, and Miller (2004) argued that team teaching can serve as a form of teacher collaboration. They claimed that collaboration between two or more instructors can bring together different experiences, theories, and techniques, which can provide a basis for improved teaching and learning. Correspondingly, Buckley (2000) defined team teaching as follows: "Team teaching involves a group of teachers working purposefully, regularly and cooperatively to help a group of students of age learn" (p. 4). Wadkins, Wozniak, and Miller (2004) and Buckley (2000) offered many concrete approaches to team teaching. It falls outside the scope of this study to review these approaches; instead, this study investigates and describes the way the case study participants engaged in team teaching.

Previous pilot studies conducted by the author showed that the participant professors lacked previous training on team teaching and embarked on the practice empirically—hence the present study's focus is on how they have implemented the team teaching practice and what types of PD they have acquired from it.

Even though team teaching has only recently been discussed as an alternative collaboration method for improving teachers' PD, it is not a new trend (Buckley, 2000; Wadkins, Wozniak, & Miller, 2004). As an alternative teaching method, team teaching has frequently been a part of the education system in all levels (Buckley, 2000; Wadkins, Wozniak, & Miller, 2004). However, team teaching is not commonly implemented in educational environments, mostly due to a lack of understanding regarding the benefits of using team teaching as a form of collaboration (Buckley, 2000).

A central trend in research on team teaching is collaboration between content-area and English as a second language (ESL) teachers (Dove & Honigfeld, 2010; Davison, 2006; Arkoudis, 2006). Davison (2006) conducted a qualitative discourse-analysis study in an English as a medium of instruction elementary school in Asia in order to understand the collaborative relationship between content-area and ESL teachers. The study concluded that "one of the implications for PD is that collaborating teachers may benefit from more action

orientated teacher research with built-in opportunities for critical reflection and discussion of different views and perceptions of the nature of teaching and learning” (p. 472). In essence, this finding focused on the high quality knowledge teachers gain from collaborating as each can share their different proficiencies and skills in real time.

Another important trend in education research is team teaching between experienced and novice teachers. For instance, based on a five-year-long empirical study of collaboration between student teachers and experienced interdisciplinary teachers at the University of California–Riverside, Sandholdtz (2000) concluded that team teaching facilitates PD for both students and experienced teachers because it provides ongoing feedback and support. This trend is also evident in research on ESL education. In their three-year-long, federally funded pseudonym project (Collaboration Centers Project), Musanti and Pence (2010) trained 14 experienced teachers from six schools as cofacilitators. After finishing their training programs, the cofacilitators met with novice ESL teachers to enhance their PD. At the end of the study, Musanti and Pence (2010) underlined the important role of collaboration in teachers’ PD: “Professional development needs to be conceived as a collaborative enterprise, where a space for learning through mutual exchange, dialogue, and constant challenge is created” (p. 87).

Another common focus of such studies is collaboration between native and non-native English-language teachers in second-language learning. Tajino and Tajino (2000) and Jeon (2010) observed that team teaching by non-native and native English instructors has been widely used in Korean and Japanese language education systems. Based on a careful review of the literature on second-language learning in Japan, Tajino and Tajino (2000) argued that because native and non-native teachers have different backgrounds and different language-learning and teaching experiences, they can learn from each other while engaging in collaborative instruction.

Other studies have argued that team teaching offers college professors an opportunity for professional growth (George & Davis, 2000; McKee & Day, 1992). In their qualitative study, George and Davis (2000) investigated

their own practice as college professors who team teach a clinical graduate research course to determine whether team teaching is a viable alternative for instruction in higher education. Their study concluded with two separate reflections; both authors pointed out that the students in their classrooms found team teaching helpful. George and Davis (2000) discussed the process of team teaching, that is, how it works in practice and how it can be done in a more effective way. Ware, Gardener, and Murphy (1978) pointed out that “although [team teaching] would make them (the participants) very busy teaching for shorter periods of time, [they] anticipated being freer for longer periods of time for scholarly activity and research” (p. 127).

2.3 Team Teaching at the University of Costa Rica

The literature review has described studies of team teaching by novice and experienced teachers conducted in countries including the United States, Korea, Taiwan, and Japan. In the cases examined by these studies, the experienced teacher acted as a mentor, providing the new teacher with examples of effective pedagogy. Other studies have shown how content-area and language teachers, as well as non-native and native English teachers, can help instructors share their experiences, ideas, and techniques. Therefore, they can improve their professional practice on the basis of classroom experience. Nevertheless, it is important to point out that studies of team teaching undertaken by experienced, non-native, higher-education English instructors are uncommon, especially in the Costa Rican context. Furthermore, although some of the studies were performed in higher-education contexts, none investigated English-language professors at this level. The present study addresses team teaching as defined by Austin and Baldwin (1992, cited in Bettencourt and Weldon, 2010), who described an interactive team as “a model for team teaching in which both instructors are in the classroom simultaneously. Specifically, both instructors work, sit, and interact with the students and with each other in the classroom” (p. 129). Studies using this model are less common than those in which teachers coplan, coprepare, coassess, and coevaluate but do not teach together. In contrast to the extant literature, this

study examines how team teaching can promote PD when two experienced, non-native, higher-education English-language professors engage in this collaboration practice.

III. Theoretical Framework

The study takes a sociocultural theoretical perspective, specifically that of the theory of situated cognition. Vygotsky's sociocultural theory proposes that learning happens through experience, communication, contact, and interaction with others. The situated cognition theory proposes that learners should be exposed to authentic, real-life educational environments where they can meaningfully put into practice what they have learned (Krishner & Whitson, 1997). Such an environment was central to this case study; that is, the participants underwent a learning process by engaging in real-life situations associated with the practice of team teaching.

Additionally, through an interpretivist perspective, the author constructed meanings for the terms *PD* and *teaching knowledge* based on their characterization by extant formal theory, her prior understanding of them, her personal views, and her own experience as a non-native English teacher who has done team teaching and found it a viable alternative for PD and a route for acquiring new teaching knowledge. Thus, the author developed connections between her ideas and those of other studies. In this way, the present study adopted what Butin (2010) called "an interpretivist perspective [that] assumes that the world is not simply 'out there' to be discovered, but an ongoing story told and refashioned by the particular individuals, groups, and cultures involved" (p. 60). He argued that "an interpretivist researcher is, for better or worse, already part of the story about the truth because she is the one examining it and describing it" (p. 60). Accordingly, the author became part of the meaning-making process as she conducted the study, combining her perspective on the phenomenon under investigation with the stories told by the participants.

Based on the important conceptualizations of PD developed by Guskey (2002), Sparks (2002), and Johnson (2006), the author accurately identified the types of teacher learning that emerged from team teaching. Following the central

concepts of these studies, the author extracted three core features of effective PD. First, as determined by Guskey (2002), PD must encourage and provoke change "in the learning outcomes of students," "change of the classroom practices," and "change in the attitudes and beliefs" of professors. Second, PD should promote "continuous improvement of teaching and learning (Sparks, 2002), and third, it should enable the transformation of teachers' knowledge into praxis. As Johnson (2006) maintained, teachers' knowledge will transform into praxis "when teachers have multiple opportunities to connect their ways of knowing to theory, both emic and etic [inside the classroom with the students and outside the classroom with other teachers], through modes of engagement that lead to praxis and, more importantly, when they are deeply embedded in communities of practice" (p. 242).

Hence, this study sought to understand whether teachers who engage in team teaching change their classroom practices to improve students' learning outcomes and consequently change their attitudes and beliefs when they become aware of their students' progress (Guskey, 2002). The author investigated whether team teaching, as a collaborative activity, could serve as a means for constant improvement of teaching and learning, because it is usually applied over relatively long periods of time (weeks, months, semesters) and directly in the educators' professional contexts. Thus, this study is sympathetic to Sparks' (2002) claim that "one of the most obvious and direct ways to improve teaching is to have teachers continuously work with others to improve the quality of their lessons and examine student work to determine whether those lessons are assisting all students to achieve high levels" (p. 99).

It was also important to determine whether team teaching can act as a bridge between theory and practice and whether it conforms to the defining characteristics of communities of practice (COPs). Discussing Wegner's (1991, cited in Johnson 2006) concept of COPs, Johnson (2006) stated that "the knowledge of the individual is constructed through the knowledge of the communities of practice within which the individual participates" (p. 237). It is the author's belief that team teaching reflects major characteristics of COP. For example, Bauer, Beaulieu, and

Wobbe (2017) noted that in COPs, “there is a group of people who have a common interest in something they do” (p. 22); in team teaching, this characteristic becomes visible when teachers plan together based on common objectives and a shared desire for the success and effective learning of students. The same authors identified as a central characteristic of COPs “the formation of a community—those with the common interest get together regularly, either formally or informally, and collaboratively discuss and share information” (Bauer, Beaulieu, & Wobbe, p. 22). Such practices are also undertaken in team teaching, with the goal of guaranteeing that the teachers involved acquire new knowledge, perspectives, and classroom practices from each other; moreover, such information can be immediately put into practice in the classroom, which enhances this element of COPs. Finally, Bauer, Beaulieu, and Wobbe (2017) noted that the most important characteristic of COPs is that “the sharing of information results in improved practice by the individuals in the community and the development of common resources” (p. 22). Team teaching provides these benefits as well. According to Buckley (2000), “team teaching improves quality of scholarship and teaching as various experts in the same field or different field approach the same topic from different angles and areas of expertise” (p. 11). Team teaching incorporates many characteristics of COPs; thus, team teaching can be a means of transforming teaching knowledge into praxis (Johnson, 2006).

The author also believes that the experiences that arise in the classroom setting are best understood by those who participate in it. As Darling-Hammond, Wei, Andree, Richardson, and Orphanos (2009, cited by Morrell, 2017) put it, “The best professional learning opportunities for teachers are ongoing, are teacher-led, and connect directly to classroom practice” (p. 459). Precisely team teaching is able to incorporate these elements to accomplish effective PD, as this study intended to show.

On this basis, this study investigated which types of PD proposed by Guskey (2002), Sparks (2002), and Johnson (2006) emerge when team teaching is undertaken. The author believes that team teaching embeds teachers in a social community characterized by multiple opportunities to share teaching-related ideas, visions, theories, and strategies.

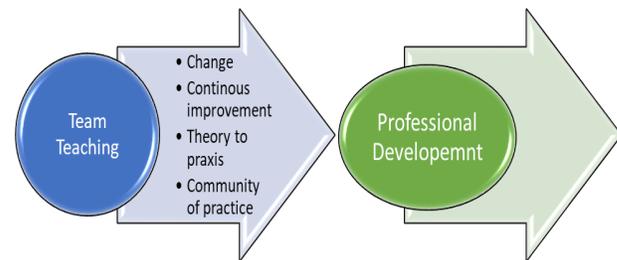


Figure 1: Theoretical Framework

IV. Method

This study’s guiding question is how does team teaching promote PD for mid-career English as a foreign language university professors?

To answer this question, a qualitative case study was performed from January to September 2018. The case study methodology was chosen because the study focused on the teaching practices of two professors and because it sought to describe how the participants engaged in team teaching and the PD they gained from it. According to Creswell and Poth (2018), a case study is “a qualitative approach in which the investigator explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information” (p. 96).

This study explored how the participants practiced team teaching using two data collection methods, namely semi-structured interviews and classroom observations. Using two data collection methods “ensures that the issue is not explored through one lens, but rather a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood” (Baxter & Jack, 2008, p. 544).

4.1 Participants

Arturo and Miguel (pseudonyms) were the study’s participants. The two of them are university English-language professors who are non-native speakers of English. The participants had team taught UCR’s English Leveling course for students newly admitted to the English-teaching major. The professors are faculty in the English-teaching major at the University of Costa Rica,

West Branch, in the Department of Arts and Sciences, and they each have more than five years of teaching experience. There is a strong connection between the author and the institution where the case study took place. She is currently a faculty member at this university and has worked with the participants. Furthermore, the author and one of the study participants initially created and implemented the English Leveling course and they too engaged in team teaching to teach it.

4.2 Data Collection

Data were collected by interviewing each participant online following a semi-structured interview protocol (Appendix A). Additionally, one classroom observation was performed online following an observation checklist (Appendix B).

The lesson observed was video recorded. This offered the author the opportunity not only to fill in the checklist but also to review different parts of the recording at will and cross-check it against the notes she took during the class.

Each interview was audio recorded and transcribed. Each transcription was sent to the participants so they could check it, verify it, and add information if necessary.

4.3 Data Analysis

The data were analyzed following Creswell and Poth's (2018) data analysis spiral. Creswell and Poth (2018) recommended *reading and memoing emergent ideas*, so the author took notes consistently and read the interview transcripts multiple times. She viewed the video recording of the class three times, each time noting additional emergent ideas. Creswell and Poth (2018) advised *describing and classifying codes into themes*, which they described as the essence of qualitative analysis. For this step, the author composed a thick description of the class, which was inspired by the codes and themes identified in the previous step, and interpreted the data based on her own perspectives and those of extant studies (Creswell & Poth, 2018).

Coding was performed in light of the conceptualizations of PD proposed by Guskey (2002), Sparks (2002), and Johnson (1998, 2006). Accordingly, the author looked for instances (during the interview or during the classroom observation) that could be coded as *change of the classroom practices*, *change in the learning outcomes of students*, and *change in the attitudes and beliefs of the professors* (Guskey, 2002). Statements by the participants that indicated that *continuous improvement of teaching and learning* (Sparks, 2002) had occurred and that *teachers engaged in praxis* (Johnson, 2006) were highlighted. Additionally, classroom observation was used to observe additional instances that aligned with the codes.

According to Stake (1995), this type of coding is appropriate to case study research. He termed it *direct interpretation* and defined it as the moments when the researcher looks for specific instances to code and draw meanings from. In other words, the author did not wait for a series of similar occurrences to happen in order to make meaning from them; rather, one instance was sufficient.

After coding, the next step was *developing and assessing interpretations*. To complete this stage, a colleague familiar with the coding system, study, and context was asked for feedback. Based on the ensuing discussion, unclear coding was either discarded or reinterpreted.

The last step in the spiral is *representing and visualizing the data*. This step was performed by describing how each theme was evidenced by the participants' interview responses regarding their classroom practices. For credibility purposes, direct quotes were used to highlight the author's thinking process and her arrival at the interpretations.

V. Results

To answer the research question about how team teaching promotes PD, the researcher created a list of four themes that reflect her beliefs on what PD should aim for or provoke in educators when immersed in PD practices. These themes, which also reflect Guskey's (2002), Sparks'

(2002), and Johnson's (2006) concepts of PD, were as follows: change in classroom practices and in students' learning outcomes, change in professors' attitudes and beliefs, continuous improvement of teaching and learning, and teachers' knowledge transformed into praxis. The following section presents how the analysis of interviews and classroom observation align in different ways with the theory presented in the literature section.

5.1 Change in Classroom Practices and Students' Learning Outcomes

Both participants stated that they changed their classroom practices based on what their partner did or the feedback given by their partner during class time or during meetings. But more importantly, they changed because they could evidence impact on students' outcomes. This aligns with Guskey's (2002) suggestion on professional development being successful when it can guarantee teacher's will achieve one of their most relevant goals, i.e teachers make changes if they can observe positive student outcomes. Arturo explained his initial frustration regarding the slow pace of the class when Miguel (his partner) was leading. Arturo was used to teaching advanced students, and Miguel had more experience with beginners. Arturo reported:

I knew I had to change to get through to the students. Miguel was of great help because we talked about it and during class, when I was leading, he would do signals with his hand telling me to slow down, after a while I caught up and I saw more acceptance from the students.

5.2 Change in Attitudes and Beliefs

Arturo said that he noticed his fast pace caused students to ask Miguel questions about things he had just explained. When Miguel was leading, the opposite happened; students actually understood the content and were able to do the follow-up exercises. Miguel stated:

Seeing someone else teach in a way that I had not thought about and realizing how well it worked, and on the contrary, having someone in front

of you doing something you regularly did and realizing it was not effective was truly enriching and eye opening, it made you want to change immediately. And this happened every day at some point or the other.

Guskey (2006) states that high quality teachers arise from instances of transformative change. These changes go beyond the learning of new knowledge and skills, but the idea is to go deeper and achieve change in the assumptions and beliefs teachers may have carried along for years. It could be Miguel would not go through a transformative change had he not been able to reflect on the outcomes of his teaching and Arturo's. Team teaching offers this type of showcase that allows for superior professional development.

5.3 Continuous Improvement of Teaching and Learning

Both participants explained that they created checklists to assess each lesson, the students' performance, and their colleague's performance. Every day, either before or after the class, they conducted what they called "calibration sessions." Using a checklist of their creation, they assessed the strengths and weaknesses of the class in terms of students' outcomes, teachers' performance, and use of materials. Arturo states:

Normally, when you are on your own you don't have much time to think about what you did in the class, you have to check papers, you have to plan lessons, to plan exams. So, I know it's not the ideal situation, but you don't even get 5 minutes to reflect on what you did. But with this experience, we used to have what Miguel started calling "calibration sessions." So we met for about 5- 10 minutes and then we analyzed what we did. These short meeting were really, really enriching. So, compared to lessons where I am the only one teaching, team teaching is much more valuable. In the calibration sessions, we would assess each other's performance when teaching, the materials we used, and students' participation and engagement. We then could

decide what we could keep using because it worked well, what we couldn't repeat or what we could improve.

5.4 Teachers' Knowledge Transformed into Praxis

Various elements of teaching practice, such as calibration sessions, the sharing of classroom space (evidenced in the classroom observation), sharing feedback, and engaging in spontaneous conversations to make on-the-fly decisions, showed how team teaching incorporates the benefits of COPs. For example, during the classroom observation, Arturo and Miguel were having a conversation while Miguel held a paper in his hand. When asked about this, they explained that because the class would soon come to an end, they were assessing whether it was better for students to complete the next exercise at home. Additionally, they stated that making decisions was significantly easier when they could do so collaboratively, especially with someone who was equally involved in the situation. They highlighted shared decision-making as one of the most valuable benefits of team teaching. Finally, when asked to compare their experience teaching alone and team teaching they agreed the immediate feedback they got from their colleague was enriching and made them reflect on their practice; and this did not happen when teaching alone, since there was no other teacher in the classroom to offer other ideas and/ or suggestions.

VI. Limitations

Additional case studies of team teachers should be conducted to complement this study. Studies of teachers who have conducted team teaching in a variety of settings would enlarge the knowledge and reach of this study. However, as the extant literature suggests, such contexts may not be available for study. It seems that team teaching is an uncommon practice; nevertheless, more exploration of this practice is necessary; meaning that, it is possible others are doing team teaching and not reporting on their experiences and the benefits and challenges they obtain from it.

Another limitation within this study is that the author did the codification process alone. Although she consulted with a colleague familiar with the codification process and the study, this person was not fully trained in these specific codes to validate the author's interpretations.

VII. Conclusions and Implications

This study explored how two UCR English professors engaged in PD opportunities while team teaching UCR's English Leveling course. To explore this phenomenon, the researcher interviewed each participant and observed one of their classes. The data were analyzed in light of the PD conceptualizations proposed by Sparks (2002), Guskey (2002), and Johnson (2006).

According to Guskey (2002), teachers who change their classroom practices do so because they are convinced the change will improve students' learning outcomes. When such changes have the anticipated effects, this causes a change in teachers' attitudes and beliefs. Through team teaching, the study participants implemented new and/ or modified classroom practices that changed students' outcomes and consequently changed the participants' attitudes and beliefs.

Furthermore, the participants felt that their learning through team teaching was ongoing, because they met every day after class to debrief and plan. They were able to take advantage of all the benefits associated with COPs as they engaged in team teaching. Additionally, they shared information that resulted in improved practice, the most important characteristic of COPs (Bauer, Beaulieu, & Wobbe, 2017). According to Johnson (2006), teachers need to turn their theoretical knowledge into praxis. She maintained that this can be achieved most effectively through COPs. In these communities, teachers have a variety of opportunities to make connections between theory and their teaching practices. As a COP, team teaching incorporates these practices, and this was evidenced by the participants' practices.

According to Sparks (2002), instead of occasionally attending PD programs, teachers should engage in continuous observation, feedback, and reflection to

enhance their professional growth. This practice aligns with the idea that teacher improvement happens when teachers work together to examine each other's work and their students' learning on a daily basis (Sparks, 2002). During the interview, the participants described their daily preparation for each class. They explained that after each class, they typically shared a one-hour ride home, during which they discussed their plans and lessons. They also explained that they used WhatsApp daily to share ideas and ask each other questions. They pursued these activities in addition to their regular formal meetings before or after each class.

When asked to describe their experience of team teaching as a whole, the participants used words like *innovative*, because they were unfamiliar with this form of teaching. They described team teaching as *enriching*, because they learned every day from each other, the students, and their own experiences. They used the word *repeatable*, because they looked forward to team teaching again. The participants asked the author to present her findings to the *vicerectoria* (the university section in charge of implementing and approving curricular changes) as a means of encouraging more team teaching at the university. This again confirms the value of team teaching, because it is well known that motivation promotes learning. Lastly, the participants recognized that team teaching is not easy. Creating an environment that reflects the principles of respect, professionalism, humility, tolerance, acceptance, and earnest engagement in work is a necessity of team teaching. To ensure this, they recommended setting rules and holding calibration sessions in which teachers put these principles into practice. Furthermore, it is necessary to establish rules that ensure openness to constructive criticism, honesty and straightforwardness with one's colleague, and loyalty to one's colleague in the face of criticism from students. Although team teaching is not a new practice, it has been underused and underestimated. This study addresses this gap by providing evidence of how professionals implement the practice and the assets they gain from it.

Finally, through team teaching, professors can engage in PD and, as a result, acquire new teaching knowledge in a contextualized setting. They can do so without sacrificing time to traditional PD programs, because team teaching can be incorporated into their existing teaching duties.

Ideally, the findings of this study will serve as a foundation for future research on team teaching as a source of PD as well as on potential forms of training for team teaching. Moreover, by studying how professors understand the role of team teaching in their professional growth, curriculum developers, teacher educators, researchers, in-service teachers, and other professionals interested in the field can start to integrate this practice into their programs of study, classroom lessons, and fields of research.

This study could be used as a foundational effort to promote team teaching in higher-education classrooms as a means of enhancing professional growth. The author believes that if teachers are trained in team teaching from the time of their undergraduate teaching programs, they can apply the strategy throughout their professional lives and thus obtain the proven benefits of this practice (Buckley, 2000; Sandholdtz, 2000).

The author intends to continue interviewing teachers who practice team teaching. More information about the benefits and drawbacks that team teachers have encountered in their practice is necessary. It would be desirable to understand how teachers collaborate in a variety of national contexts. It is important to determine whether cultural factors play a role in the success of team teaching. Other lines of research that are relevant to this topic would address the many techniques teachers use to plan, evaluate, and teach together. Finally, understanding students' perspectives on having two teachers in the classroom could play a major role in expanding the benefits of team teaching.

University professors have expressed that they lack sufficient opportunities to engage in PD. This study has shown how regular involvement in team teaching can enable educators to expand their knowledge and improve their practice. Team teaching offers professors a COP context in which they can share, discuss, and implement teaching knowledge. Finally, this teaching strategy offers an opportunity for highly contextualized professional growth, without the need to invest extra time in traditional PD programs.

VII. References

- Arkoudis, S. (2006). Negotiating the rough ground between ESL and mainstream teachers. *International Journal of Bilingual Education and Bilingualism*, 9(4), 415-433. <https://doi.org/10.2167/beb337.0>
- Bauer, D., Beaulieu, E., & Wobbe, K. (2017). Local strategies: creating and nurturing collaborative communities of practice. *Change: The Magazine of Higher Learning*, 49(4), 20-25. <https://doi.org/10.1080/00091383.2017.1357092>
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The qualitative report*, 13(4), 544-559. <https://nsuworks.nova.edu/tqr/vol13/iss4/2>
- Bettencourt, M. L., & Weldon, A. A. (2011). Team teaching: Are two better than one? *Journal On Excellence in College Teaching*, 21(4), 123-150.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15. <https://doi.org/10.3102/0013189X033008003>
- Bowles, P. D. (1994). The Collaboration of two professors from two disparate disciplines: What it has taught us. In *Symposium collaboration pays off: an advance program for at-risk- college freshmen teaches a few lessons to the students, faculty and institution*. San Diego, CA. <https://eric.ed.gov/?id=ED386744>
- Buckley, F. J. (2000). *Team teaching: What, why and how*. Thousand Oaks, CA; Sage.
- Butin, D. W. (2010). *The education dissertation: A guide for practitioner scholars*. Thousand Oaks, CA, Corwin. ISBN: 9781473969797
- Creswell, J. W., & Poth, C.N. (2018). *Qualitative inquiry & research: choosing among five approaches (4th ed.)*. Thousand Oaks, CA: Sage.
- Davison, C. (2006). Collaboration between ESL and content teachers: How do we know when we are doing it right? *International Journal of Bilingual Education and Bilingualism*, 9(4), 454-475. <https://doi.org/10.2167/beb339.0>
- Desimone, L. (2009). Improving impact studies of teacher's professional development: Toward better conceptualizations and measure. *Educational Researcher*, 38(3), 181-199. <https://doi.org/10.3102/0013189X08331140>
- Dove, M., & Honigsfeld, A. (2010). ESL coteaching and collaboration: Opportunities to develop teacher leadership and enhance student learning. *TESOL journal*, 1(1), 3-22. <https://doi.org/10.5054/tj.2010.214879>
- Freeman, A & Johnson, K. (1998). Reconceptualizing the knowledge base of language teacher education. *TESOL Quarterly*, (3), 397. <https://doi.org/10.2307/3588114>
- Johnson, K. E. (2006). The sociocultural turn and its challenges for second language teacher education. *TESOL Quarterly*, 40(1), 235-257. <https://doi.org/10.2307/40264518>
- Jeon, In-Jae. (2010). Exploring the co-teaching practice of native and non-native English teachers in Korea. *English Teaching*, 65(3), 43-67.
- George, M. & Davis, P. (2000). Team Teaching a Graduate Course. Case study: a Clinical Research Study. *College Teaching* 48 (2).

- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and teaching*, 8(3), 381-391. <https://doi.org/10.1080/135406002100000512>
- Kirshner, D., & Whitson, J. A. (Eds.). (1997). *Situated cognition: Social, semiotic, and psychological perspectives*. Psychology Press.
- McKee, S & Day, A. (1992). The social studies methods course: A collaborative approach. *Social Education*, 56, 183-4.
- Morrell, E. (2017). Toward Equity and Diversity in Literacy Research, Policy, and Practice: A Critical, Global Approach. *Journal of Literacy Research*, 49(3), 454-463.
- Musanti, S. I., & Pence, L. (2010). Collaboration and teacher development: Unpacking resistance, constructing knowledge, and navigating identities. *Teacher Education Quarterly*, 37(1), 73-89. <https://www.jstor.org/stable/23479299>
- Radloff, A. (2008). Engaging staff in quality learning and teaching: What's a pro vice chancellor to do? Proceedings of the 31st HERDSA 2008 Annual Conference Papers. Rotorua, New Zealand, 1-4 July 2008. Retrieved from <http://www.herdsa.org.au/?page id=273>.
- Rhodes, C., & Beneicke, S. (2002). Coaching, mentoring and peer-networking: Challenges for the management of teacher professional development in schools. *Journal of in-service education*, 28(2), 297-310. doi: 10.1080/13674580200200184
- Sandholtz, J. H. (2000). Interdisciplinary team teaching as a form of professional development. *Teacher Education Quarterly*, 39-54.
- Sparks, D. (2002). *Designing powerful professional development for teachers and principals*. Oxford, OH: National Staff Development Council.
- Stake, R.E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Tajino, A., & Tajino, Y. (2000). Native and non-native: What can they offer? Lessons from team-teaching in Japan. *ELT Journal*, 54(1), 3-11. <https://doi.org/10.1093/elt/54.1.3>
- Wadkins, T., Wozniak, W., & Miller, R. L. (2004). *Team teaching models*. UNK/CTE, 77.
- Ware, M. E., Gardner, L. E., & Murphy, D. P. (1978). Team teaching introductory psychology as pedagogy and for faculty development. *Teaching of Psychology*, 5(3), 127-130.

Appendix A

Semi- structured Interview Protocol

Interview Procedure

TOPIC DOMAIN #1: Teacher Reflection

Initial General Questions to get some information about the Professor and the Course.

1. Can you briefly describe what this course is about and how you became one of the teachers?

Lead off questions

1. Tell me what a typical class is like?

Back up question:

1. Can you tell me about some memorable moments while teaching last summer?

2. In a few words, how was your experience teaching the leveling course last summer?

3. How did you feel about going to teach every morning? Or what were your thoughts about the day you had ahead?

Covert Categories: Positive feelings, frustrations, challenges, teacher identity, reflection, making changes to improve

Follow up questions

1. Can you describe a difficult, challenging moment you had in class?

2. If you could change anything about the course what would it be?

3. Can you think of a way you could have solved this situation in a better way?

4. How are your classes in this course different from when you teach other courses?

5. If you could make a list of adjectives to describe this course, what words would you use?

6. What are some things that happened that let you know students were or not enjoying/ learning in the course?

7. How do you think you are a better/ or not teacher after being part of this course?

8. How do you think you are a better/ or not person after being part of this course?

9. In one or two sentences, what would you say to future teachers of this course?

TOPIC DOMAIN #2: Team Teaching

Lead off questions

I understand you met with Arturo every afternoon after teaching the course to plan and prepare for the next day, could you tell me how these meetings usually developed. Did you follow any specific agenda?

Back up questions

Can you tell me how you planned the one class you previously described as memorable? Do you think it was the planning or the teaching that made it memorable?

Covert categories: Teacher Identity, power issues (who takes the lead, when, why), peer feedback, flexibility towards others' opinions, suggestions, ideas, openness towards criticism from peer and towards peer, coplanning; procedures, advantages, disadvantages.

Follow up questions

1. How was it like to plan as a team?
2. Can you describe a moment when you did not agree with an idea proposed by your colleague? How did you communicate with him at this time?
3. What would you do when a student didn't understand your instructions or was not following instructions properly?
4. Can you describe a time that you found particularly difficult to share classroom space?
5. Can you think of a time when Arturo helped you in any way to improve as a teacher? Maybe not directly, but by something he did differently, that you now think about doing in your classes also.
6. Did Arturo ever tell you about something you did, that he liked and would try out in his classes?
7. What would you do when a student didn't understand your colleague's instructions or was not following instructions properly?
8. If you could plan each class individually would you do it? How would you then share your planning with the other teacher?
9. If you could teach any of the classes differently, what would you do?
10. Have you ever done team teaching before this time? How was that experience?
11. What recommendations would you give to teachers that engage in team teaching?

Appendix B

Observation Checklist

The observation is done for a one -hour class video recording. Because it is recorded the researcher will have the chance to pause the video, describe and interpret what is happening and transcribe specific instances that highlight the observed situations. The observer will focus on the following:

Instances	Comments	
Teachers' Roles	Miguel	Arturo
Teaching skills (movement around the class, tone of voice, asking and responding questions, addressing students)		
Content knowledge (proficiency about the content being taught)		
Interactions among each other		
Level of participation (who is in charge or is teaching time shared), interest		
Power relations (decision making, answering questions, helping students)		
Problem Solving (comfortable to address student problems)		
Instances of collaboration		
Attitude towards colleague (interruptions, addresses him, includes him in the lesson, etc)		
Classroom environment Engagement and energy level among the professors.		
Classroom rules		