Fostering Self-Efficacy in Spanish Immersion Teachers through a Community of Practice

by

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ABSTRACT

Learning a second language has been shown to have many benefits, but in the state of Arizona the teaching and learning of second languages has been restricted since the passing of Proposition 203. In the past few years, schools offering Dual Language Immersion programs have emerged, but their teachers do not have much experience, training or resources to teach language through content. Language immersion self-efficacy has been shown to be crucial for the teachers to be more effective in their instruction and for them to embrace the challenges they face.

The purpose of this action research study was to increase Spanish immersion teachers' self-efficacy through a community of practice, in which teachers performed peer observations and offered feedback, collaboratively drew from a pool of resources that were available online for all to use, and supported each other in the areas they felt could be improved.

Quantitative data included pre- and post- intervention self-efficacy surveys, as well as a retrospective survey. Qualitative data included audio recordings and field notes from the community of practice sessions, teacher observations, peer observations, and feedback meetings, as well as interviews.

Results from the analysis of data showed an increase of teachers' self-efficacy because of the close collaboration and resource sharing that took place during the implementation of the community of practice. Teachers also reported positive changes in practice due to peer observations and collegial conversations during meetings, where teachers could acknowledge their own successes and use ideas from others to improve their practice. Finally, despite all the positive outcomes from this action research study, it

was evident there were some systemic issues the community of practice could not change, such as the lack of resources and appropriate curriculum for Spanish immersion teachers.

Many parents and educators have agreed our students should have the opportunity of becoming bilingual to face global competition more effectively. Because of that, Spanish immersion schools have been growing in popularity in Arizona. Moreover, it has become clear that as we have more schools and teachers willing to adopt these programs, more resources must be made available to support immersion teachers and their instruction.

DEDICATION

To my beloved husband, Juan, who has always supported my adventures and encouraged me to follow my dreams.

To my beautiful daughters, Rebeca and Regina, who have sacrificed "mommy time" so I can become a doctor, and have been patient for me to finish.

To my parents, who have always believed in me, even when I have doubted. To my mom, for being an example of strength and hard work.

To my grandparents, who have also been my parents. Papife, you are in heaven now, and when I started this journey your Alzheimer's did not allow you to understand what I was doing. I hope you are proud of me from high above.

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CHAPTER 1

CONTEXT AND THE PROBLEM OF PRACTICE

Speaking more than one language has been the norm in most first-world countries. Approximately 6,000 languages were spoken around the globe and there were more bilingual or multilingual people than monolingual (Grimes, 1999). Despite the fact that so many languages were spoken around the world and the fact that it has been common to find multilingual people, only 25% of the countries recognized two or more official languages (Tucker, 1999).

The United States has been one of the few first-world countries where students have not been required to speak at least two languages. Although the founding fathers respected linguistic diversity, the history of the United States has been full of episodes where English has been used as a form of social control: from the enslaved Africans who were prohibited to speak their native tongues out of fear of rebellion, to Native American children in boarding schools where teachers ripped away native language and identity, to thousands of Spanish speaking children who were being denied the opportunity to be instructed in their native language (Wiley & Wright, 2004). Although the world's tendency is for education to include the acquisition of a second, or even third language, a group of influential people in the United States started an English Only movement in the 1970s (Wiley & Wright, 2004).

In 2000, voters approved Proposition 203 in Arizona and it became an Englishonly state (Wright, 2008). This law replaced bilingual education with a one-year program of Structured English Immersion (SEI) in which English Language Learners (ELLs) were supposed to become proficient in English and exit the program (Combs, Evans, Fletcher, Parra, & Jimenez, 2005). The implementation of Proposition 203 in Arizona eradicated most forms of bilingual education; however, a small number have survived, and new ones have begun to emerge (Wright, 2008).

Little by little schools with Dual Language Immersion (DLI) programs have been established in Arizona. It has been very difficult for students considered ELL to be part of dual language programs because of the English-only law, which required all children whose native language was different than English to be taught in English only (Wright, 2008). These programs have also been called Foreign Language Immersion (FLI), or in some cases Two-way Immersion (TWI) because they received students who spoke English as their native language as well as students who natively spoke the second language. This allowed student to model to each other and it became a real immersion. Since the approval of Proposition 203 in Arizona there have been no Two-way immersion programs, although research have shown this was the best way for ELL students to acquire English and close the achievement gap (Collier & Thomas, n.d.).

One of the FLI programs that emerged in the last few years is Spanish Urban School, which is located in the central Phoenix area as part of the Urban District, a Title I school district with K-8 schools. Spanish Urban School's (SUS) demographics differed greatly from the district since it adopted the FLI program. SUS demographics were more balanced with respect to ethnic make-up. See Table 1. Before the adoption, the demographics had been very similar across the district's schools.

¹ The school and school district names are pseudonyms.

Table 1.

Demographics of Urban District and Spanish Urban School.

	Urban District	Spanish Urban School
Hispanic students	84%	48%
Caucasian students	7%	43%
African American students	5%	5%
Native American students	3%	2%
Asian students	1%	2%
Free and reduced lunch	91%	68%

SUS had a different name before it adopted a FLI program, but the schoolboard approved a name change to ensure the new program in this school was evident to parents and the community. Generally, there have been two kinds of immersion programs, the first one is known as the 90:10, in which 90% of instruction in the primary grades was in the partner language and 10% in English and it gradually increases until it became 50% and 50% in the upper grades (Howard, Sugarman, & Christian, 2007). The second type of immersion program, which was the one SUS used, has been a 50/50 program with the same amount of instruction in Spanish and English (Howard et al., 2007). At SUS students learned science and mathematics in Spanish, and English Language Arts (ELA) and social studies in English from kindergarten onward.

Before SUS became a FLI school, it had such low student enrollment, with only one small group per grade level, that it was in danger of being closed. Many children who lived in the school boundaries primarily attended charter and private schools that were

located close by. After SUS became a FLI school, enrollment increased dramatically and the demographics have changed as well. At the time of the study, only 31% of students attending SUS lived within SUS school boundaries; 27% lived within the district boundaries; and 42% were from outside of the district. SUS received an A rating from the Department of Education, being the only school in the district with this label (Arizona Department of Education, 2014).

Statewide there has been shortage of teachers. Similarly, the district had been facing high teacher attrition in the past few years, which has been a huge concern to administrators and parents. Urban District paid less to its employees than other districts surrounding it and had a longer school day than most districts. In the past two years SUS lost 24% and 19.5% of its teachers, respectively. Each summer, principals struggled to fill their positions with highly qualified and certified teachers and it has been especially difficult to hire teachers who deliver the Spanish portion of the FLI at SUS. From the 2013-2014 to 2014-2105 school years only two of its eight teachers stayed, which means it lost 75% of the Spanish immersion teachers. Most of them obtained positions at other FLI programs in neighboring districts that offered better pay and shorter school days.

In 2014, SUS hired a new principal, who had started working for the district in the assessment office the previous school year. This principal was able to keep all Spanish immersion teachers for the following school year with no attrition compared to 75% from the previous year. Another great challenge the new principal found when he took the position had to do with parents not being content with their children's Spanish proficiency. The district hired a well-known expert in dual language programs in Arizona and she was able to provide more structure and clarity to the process of acquiring a

second language for parents and teachers, so parents knew what to expect from their children in terms of language production. SUS had not adopted a Spanish curriculum or formal assessments to test students' proficiency, but the previous principal bought a curriculum just before she left, so it was implemented during the 2014-2015 school year. Moreover, the school also evaluated its children in the third grade and higher using a Spanish proficiency standardized test.

Most of the teachers who have experienced teaching a second language have been prepared to teach English as a Second Language to students living in the United States. These teachers have been trained to follow the Sheltered Instruction Observation Protocol (SIOP), which was an approach to sheltered instruction for ELL students who were expected to master academic content material as they acquired English proficiency (Howard, Sugarman, & Coburn, 2006). There was little research on how the model worked in Dual Language Immersion (DLI) classrooms and what kinds of adaptations were needed for these settings in which "goals are bilingualism, biliteracy, and crosscultural competence" (Howard et al., 2006).

Successful FLI programs have required well-trained teachers who demonstrated cultural competence and subject-matter knowledge (Tucker, 1999). To complicate matters in our FLI program, there was little research on teachers' experiences or the need of specific professional development for them in this unique environment, which made it difficult to know the types of activities that would prepare teachers to work effectively in FLI programs (Howard & Loeb, 1998). FLI teachers have been required to include language objectives when teaching content knowledge as they made content comprehensible for non-native speakers (Howard & Loeb, 1998).

All new teachers in the district received professional development on district policies and processes, as well as in ELA and mathematics instruction. SUS was the only school in the district with a FLI program, so last year Spanish teachers for SUS received four hours of professional development (PD) to teach the Spanish portion before the school year began. This PD focused on explaining how to evaluate a child's proficiency and how to use the American Council of Foreign Languages (ACTFL) standards for teaching. The training took place in English despite the fact that it has been shown to be more successful to train teachers in the language in which they were to deliver instruction (Howard et al., 2007).

During the summer of 2015 all returning Spanish immersion teachers for SUS were able to attend a two-week training provided by Mesa Community College through a grant called TLC3 focused on teaching content in a second language; however, there was no training for the two new Spanish teachers. After the professional development opportunity SUS applied for a grant with TLC3 and the school was accepted. This grant has provided scholarships for several teachers to attend Second Language Acquisition conferences in San Diego and San Francisco, CA., along with teachers from other dual language programs in Arizona.

Through informal conversations with my coworkers, the other Spanish teachers, I have noticed most of them were frustrated about teaching Spanish. This frustration came from the inability of our students to produce or even understand Spanish; the pressure we received from parents; the lack of specific training on second language acquisition strategies and pedagogy; and the limited availability of resources for teaching. One of the teachers once said it was much easier to teach ELL students because at least they

understood and could communicate at a basic level, whereas our children did not even understand what we said (personal communication, November 2014). Howard and Loeb (1998) interviewed Spanish teachers in TWI programs about the challenges they faced. One of the teachers responded, "You cannot throw a teacher into a classroom and tell her to teach the curriculum if she doesn't have the techniques or knowledge." This was exactly how some of our teachers felt. Moreover, even when we taught mathematics in Spanish, the assessments were conducted in English through Common Formative Assessments provided by the district. Pre-tests, benchmarks tests, and post-tests were provided by Assessment Technology Incorporated (ATI), a company that has created assessments and analyzed the results for educators to use as formative assessments to guide instruction, as well as state standardized tests that were delivered in English. We all agreed that skills transferred from one language to another, but there are some concepts students needed to learn in English to do well on an assessment given in English. When we asked the leadership what to do about this; their answer was to continue instruction in Spanish.

It was clear that the district and the school were very concerned about the high percentage of teacher turnover, which they attributed primarily to the lower pay and longer school day. After talking to my peers and experiencing insufficient specific professional development for teaching Spanish, I believed there might be another reason for leaving: frustration. Teachers felt they were not able to perform the duties they were expected to do with the resources they had. In other words, their sense of self-efficacy was low.

The purpose of this action research study was to increase Spanish immersion teachers' self-efficacy through the use of a community of practice, in which teachers performed peer observations and provided feedback. Additionally they collaborated and supported each other in the areas in which they felt they needed refinement. Ultimately, of course, it was anticipated that if teachers' self-efficacy increased, instruction would improve, and their students' academic performance would increase as well (Bandura, 1977).

The theoretical framework employed in the study was Bandura's social cognitive theory (Bandura, 1999; Bandura, Davidson, & Davidson, 2003), Bandura's concept of self-efficacy (Bandura, 1977, 1993, 1999; Bandura et al., 2003), and the framework of community of practice (Wenger, 1998; Lave & Wenger, 1991; Wenger, McDermott, & Snyder, 2002).

The following research questions, which were based on the theoretical frameworks, guided the study:

In what ways does the implementation of a community of practice for Spanish immersion teachers influence their self-efficacy?

In what ways does the collaboration derived from implementing a community of practice for Spanish teachers shape their practice?

CHAPTER 2

THEORETICAL FRAMEWORKS AND LITERATURE INFLUENCING THE STUDY

In this chapter I discuss the theoretical frameworks that supported this action research project and related literature that shaped it. The foundational theories of this action research are social cognitive theory (Bandura, 1977, 1999; Bandura et al., 2003), self-efficacy (Bandura, 1977, 1993, 1999) and communities of practice (Lave & Wenger, 1991; Wenger, 1998; Wenger et al., 2002). In this chapter I also present related literature focused on professional development in the form of communities of practice, as well as balance required in immersion teachers' practices.

Social Cognitive Theory

Social cognitive theory has explained human behavior in terms of a causal model that Bandura (1999) called "triadic reciprocal causation." In other words, this model suggests there are three reciprocal factors that influence learning: cognitive, affective, and environmental (Bandura, 1999).

In social cognitive theory, modeling and subsequent observational learning play an important role in learning. Bandura (1999) stated that humans develop the capacity of learning through higher-level observation of models. For these models to be effective, four basic conditions must be met. First, people have to pay attention to what they are observing and assimilate the significant aspects (attention). Second, observers have to translate what they see into something they can remember (retention). Third, the observer converts the conception into action (reproduction). Finally, there has to be motivation to put into practice what was just learned (Bandura et al., 2003). Proponents of social cognitive theory do not view the person as a spectator receiving knowledge through

observation or experience only; but as an active cognitive participant who develops competencies and regulates her action through cognitive processes and transformation (Bandura, 1999).

Self-Efficacy

Self efficacy has been defined as people's beliefs in their ability to produce desired results by their own actions (Bandura et al., 2003; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). It is important to clarify the difference between self-efficacy, which focuses on a person's capability, and self-esteem, which focuses on a person's self worth (Bandura et al., 2003). Self-efficacy plays a very important role because it influences people's actions, especially through goal setting, where it provides a cognitive mechanism of motivation (Bandura, 1993; Tschannen-Moran & McMaster, 2009). Moreover, teachers' self-efficacy beliefs have been shown to influence the kind of learning environment they create and the level of their students' academic progress (Bandura, 1993; Swanson, 2012; Tschannen-Moran & McMaster, 2009).

Bandura (1977, 2003) explained that self-efficacy can be developed through mastery experiences, vicarious experiences, social modeling, social persuasion, and physical and emotional states. He also stated people can regulate their human functioning through four processes, on which self-efficacy has an effect (Bandura et al., 2003; Bandura, 1993). These four processes are cognitive, motivational, emotional, and decisional. A more complete explanation on these processes follows the explanation on developing self-efficacy.

Developing Self-Efficacy

With the necessary skills and adequate incentives, efficacy has been shown to be the prime influencer of people's choice of activities, how much effort they put into them, and how resilient persons are in adverse situations (Bandura, 1977). There are four major ways of developing a strong sense of efficacy: (a) mastery or performance accomplishments; (b) social modeling or vicarious experience; (c) social or verbal persuasion; and (d) physical and emotional states (Bandura et al., 2003; Bandura, 1977).

Mastery or performance accomplishments (Bandura, 1977; Bandura et al., 2003) has been the most effective way of building success beliefs in individuals. Mastery requires overcoming obstacles that are challenging enough for effort to be expended, but not impossible to accomplish. To build resilient efficacy, Bandura (1977; Bandura et al., 2003) suggested a person must manage failure so it is informative rather than demoralizing. Once a person overcomes those obstacles, this feeling of success will transfer to other aspects of her life (Bandura, 1977).

Self-efficacy is especially important in the teaching profession. "Teacher self-efficacy is a dynamic construct that is cyclical in nature" (Tschannen-Moran & McMaster, 2009, p. 230). Once the teacher has become proficient in a specific skill, that mastery experience serves as a new source of self-efficacy (Tschannen-Moran & Mcmaster, 2009). Mastery can be attained through hands-on professional development and through teacher collaboration. For example, a study of the conditions necessary to change reading instructional practice showed that when teachers applied new teaching methods and observed unanticipated positive change in students, teachers' self-efficacy

beliefs increased (Tschannen-Moran & McMaster, 2009). In other words, individuals can learn by actively participating in whatever activity they sought to master.

The second way of developing self-efficacy is through observation of social modeling, also called vicarious experience. Bandura (1977) explained that social modeling is a great way to translate "behavioral conceptions to appropriate actions" and to make "corrective refinements toward the perfection of skills" (p. 196). Social modeling (Bandura et al., 2003) or vicarious experience (Bandura, 1977) occur when an individual observes others perform challenging activities without negative consequences, and creates a feeling of capability with respect to the same endeavor while expending some effort. The greater the similarity between the teacher who is modeling and the individual who is observing, the stronger will be the thought of being able to manage similar situations (Tschannen-Moran & McMaster, 2009). There are several models that provide these kinds of experiences through videos, but when these activities were limited to observing the presenter, they were not powerful enough to increase teaching skills (Tschannen-Moran & McMaster).

Social persuasion (Bandura et al., 2003) or verbal persuasion (Bandura, 1977) occur when people are convinced verbally to believe they can succeed in some situation. According to Bandura (1977), efficacy expectations derived from verbal persuasion are the weakest because they do not come from the person's own experience; however, effective persuaders usually avoid placing individuals in situations where they will fail (Bandura et al., 2003). In schools, it is common for teachers to receive verbal persuasion through professional development workshops or through supervisors' feedback. Although persuasion alone may not be very powerful, in conjunction with other sources it can

empower teachers sufficiently to increase their perceived self-efficacy (Tschannen-Moran & McMaster, 2009).

Physical and emotional states (Bandura et al., 2003) or emotional arousal (Bandura, 1977) has to do with the ability of each person to evaluate his or her own physical and emotional state and capitalize on it. Because high arousal debilitates performance, it will be more likely for individuals to expect success when their physical or emotional states are positive.

Effects on Self-Efficacy Beliefs

Perceived self-efficacy influences individuals through four major processes: cognitive, motivational, emotional, and decisional (Bandura, 1993; Bandura et al., 2003). In terms of cognitive process, the "stronger the perceived self-efficacy, the higher the goal challenges people set for themselves and the firmer is their commitment to them" (Bandura, 1993, p. 118). Most people will have thoughts about the future and those who think optimistically will have a better chance to succeed than those who think pessimistically (Bandura, 1993; Bandura et al., 2003).

The motivational process illustrates how efficacy beliefs affect people's motivation, the challenges they set for themselves, and their commitment to them (Bandura et al., 2003). The emotional process highlights how challenging it can be to overcome emotional stress and depression in difficult situations and how belief in one's ability to cope with the stressors of everyday life enables one to manage them (Bandura et al., 2003).

The decisional or selection process shows how efficacy beliefs affect the choices people make and how these affect the courses of their lives (Bandura et al., 2003). In

other words, individuals tend to avoid activities in which they do not feel capable, but they will undertake any enterprise about which they feel confident in being successful (Bandura, 1993). A great example of the power of decisional process is career choice; the more self-efficacy a person possesses the more career options the individual will consider to determine his or her life course (Bandura, 1993).

Communities of Practice

Communities of Practice (CoP) are groups of people with common interests who work together to deepen their knowledge and expertise by interacting on an ongoing basis (Wenger et al., 2002). Wenger (1998) conceptualized a CoP as capitalizing on social aspects of learning that focuses on participants who actively participate in social communities and construction of identities in relation to these communities.

A basic tenet of a CoP in an organization is that it cannot be imposed; a CoP can only be coordinated, facilitated, and cultivated (Wenger et al., 2002). Organizations can create environments in which CoPs can prosper by valuing them, providing time and resources for them to work, and encouraging participation so they can achieve their full potential (Cheng & Lee, 2014; Wenger et al., 2002).

CoPs should have three essential, concurrent elements for them to be effective in facilitating the construction of knowledge. These elements are mutual engagement, a joint enterprise, and a shared repertoire (Wenger, 1998). The first element, mutual engagement, refers to the connections among the participants that defined the community. According to Wenger (1998, p. 73), "practice does not exist in the abstract; it exists because people are engaged in actions whose meanings they negotiate with one another." Mutual engagement can be fostered through informal interactions, voluntary

and unstructured, such as talking on the phone or exchanging emails that will connect participants through their shared experiences (Wenger et al., 2002). In the case of SUS, mutual engagement among the Spanish immersion teachers was already in place, because they would get together to discuss their shared struggles and successes outside of the rigid structure of the organization. These actions made them a unique group of teachers who were connected beyond their required interactions. Further, mutual engagement has been used to support interactions and relationships based on mutual respect and trust where members willingly shared their ideas, admitted their ignorance, and asked difficult questions (Cheng & Lee, 2014).

Joint enterprise is the element that holds each person accountable in a CoP. It is the way members' understanding about the essence of the community binds them together (Wenger, 1999). The joint enterprise should not be mandated from the outside, but it should be negotiated by the CoP's members, who create a communal response to a situation (Wenger, 1998). In the case of the Spanish Immersion teachers at SUS, their joint enterprise included all the challenges they faced to deliver content instruction in a second language and all the difficulties derived from those challenges. Joint enterprise can only be fully understood by the members of the CoP.

The third and final element of a CoP is the shared repertoire, which refers to the resources participants use to create meaning, including language, symbols, stories, actions or concepts the community has adopted as part of its practice (Wenger, 1998). These resources have two characteristics for the negotiation of meaning: they reflect a history of mutual engagement and they remain inherently ambiguous (Wenger, 1998, p. 83). In the case of the Spanish immersion teachers, the most salient repertoire was

language. SUS's Spanish Immersion teacher team was already an informal CoP because it shared the three essential elements of CoPs. This action research project facilitated its formalization to maximize collaboration and learning among its members.

Lave and Wenger (1991) introduced the concept of "legitimate peripheral participation" in communities of practice, which describes member's initial participation. In CoPs newcomers act as peripheral participants until they gain sufficient confidence and knowledge to move toward the core group of participants. When newcomers become old-timers they guide the newest members. These changes in participation are seen as part of the members' learning trajectories, developing identities, and membership formation (Lave & Wenger, 1991). Thus, legitimate peripheral participation will enable the CoP at SUS to continue functioning even when group members change, because peripheral participants will be ready to move into a more intense role. As Lave and Wenger (1991, p. 36) state, "peripherality is an empowering position" because it prepares participants to move toward a more-intensive participation role.

Related Literature

Professional Development in the Form of a Community of Practice

Guskey (2000) defined professional development as "those processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they in turn, improve the learning of students" (p.16). Unfortunately the reality in many schools is that professional development is district mandated, top-down, and often unrelated to what teachers really need, so educators view these sessions as a waste of time instead of seeing them as opportunities to improve their practice (Guskey).

In a review of effective professional development, Guskey (2003) found the most frequently cited characteristics were the enhancement of teachers' knowledge and the pedagogical knowledge. Another well-noted characteristic was collegiality and collaborative exchange. Professional development programs that include teacher collaboration better support their growth because it gives educators an opportunity to voice their needs and expectations to peers who share their own experiences (Murugaiah, Azman, Ming Thang, & Krish, 2012).

Attainment of these characteristics can be readily accomplished through a CoP. Murugaiah et al. (2012) conducted a study that examined whether a CoP could support teacher learning using an online setting in Malaysia. Results showed that facilitation was critical to support teacher collaboration by providing teachers a clear understanding of community participation and guiding teachers toward higher levels of thinking (Murugaiah et al.).

Facilitation has been demonstrated as making things easier by bringing out the best in the members of an organization (Cheng & Lee, 2014). Facilitation strategies can focus on either the process or the content for knowledge sharing (Cheng & Lee, 2014). Content facilitation focuses on the "content of the facilitation being shared, analyzing the data, and identifying relevant issues" (Cheng & Lee, 2014, p. 754). By comparison, process facilitation "provides both structural and general support to the CoP members" during their knowledge sharing (Cheng & Lee, 2014, p. 754).

Howard et al. (2007) claimed effective professional development for immersion teachers should include various components. These authors maintain these components are language education pedagogy and curriculum, materials and resources, assessment,

development of professional language skills in the partner language, education equity, dual language theory and models, and second language acquisition and biliteracy development.

The issue with Spanish teachers in immersion settings is generally that most of them are not originally trained to be second language teachers, but general classroom teachers (Howard et al., 2007). The existing preparation programs for general classroom teachers do not prepare immersion teachers to understand the critical connection between language and content, so professional development for them needs to develop skills for teachers to (a) find the language they need to teach, (b) know when and how to focus on it during instruction, and (c) determine how to assess it (Cammarata & Tedick, 2012). It is also important to consider the need to provide professional development in the target language to help the teachers know how to deliver instruction so that students can achieve higher levels of language proficiency (Howard et al., 2007).

Prior to this study, the professional development SUS teachers received had been delivered in English and had not targeted their everyday skills for balancing content and language. In a pilot study that took place at SUS in the fall of 2014, teachers who were interviewed agreed they would obtain more meaningful information and better develop their practices through peer observation and teacher collaboration. They also suggested their own level of Spanish proficiency got in the way of their ability to develop students' language. All of the professional development offered to Spanish immersion teachers has been delivered in English, which does not support the teachers' Spanish proficiency growth. The CoP supported teachers' development by collectively co-constructing

understandings of meaning and purpose (Takahashi, 2011) as well as Spanish growth through shared accountability (Fraga-Canadas, 2011).

Immersion Teachers' Balance

Two-way immersion, dual language immersion, or foreign language immersion are some of the interchangeable names for models where students are instructed in content in a second language. For the purposes of this study Foreign Language Immersion (FLI) will be used. The majority of these programs in Arizona use Spanish as their second language. For a program to be labeled as "immersion" it has to have demonstrated several characteristics: instructional uses of the immersion language for at least 50% of the time; promotion of biculturalism or bilingual literacy; employment of teachers who are fully proficient in the target language; language support; and clear separation of teacher use of one language versus another for a period of time (Cammarata & Tedick, 2012).

One of the greatest challenges of FLI schools is that because most of them are elementary schools, teachers are required to be certified as elementary or early childhood teachers so their self-perception is as content teachers, and not immersion teachers. Very commonly immersion teaches fail to provide systematic attention to language development during content teaching, and teachers feel they are always teaching language (Cammarata & Tedick, 2012). For students to become proficient in a second language it is imperative that language acquisition is supported by intentional instruction and supportive language structures, and not only through content (Cammarata & Tedick, 2012). Content and sequencing for teaching language has been pretty standard in the past, where teachers focused on vocabulary and expanded from there, even if these new

concepts were not related to their content classes (Snow, Met, & Genesee, 1989). In dual language programs, the language curriculum is altered so that language objectives and content objectives are compatible and taught concurrently (Snow et al., 1989).

According to Cammaranta & Tedick (2012) there is a journey that most immersion teachers have to go through: (a) "identity transformation", where teachers revisit their identity as content teachers and see themselves as content and language teachers; (b) "external challenges", related to the difficulty of balancing teaching content and language due to lack of curriculum, planning and instructional time, and lack of resources; (c) "on my own", it is common because of having no collegial support; (d) "awakening", occurs through increased awareness of the interdependence between language and content; and (e) "a stab in the dark" refers to the difficulty of identifying the language on which to focus, how and when to integrate the language in the content curriculum, and how to follow up with language through assessment strategies.

For immersion teachers to be able to balance content and language instruction, three conditions must be met. First, there is a need for a change in the immersion belief system to include awareness that in order for students to acquire a second language, the language has to be taught by itself and not only through content. Second, to have a pedagogical reality where there is a balance between content and language, there needs to be more program support for teachers such as expert language coordinators, increased planning time, development of mentorships, and collaboration. Finally and most importantly, there needs to be teacher preparation and PD opportunities for immersion teachers, because the generic certification programs in which elementary teachers are

trained do not prepare them for the specific demands that immersion teachers face when instructing content and language (Cammarata & Tedick, 2012).

Prior to this study, SUS' administrators had been very supportive of the Spanish immersion teachers, but the professional development that had been provided had not been collaborative in nature. Spanish immersion teachers' issues have shown to be different from those who taught the English portion of the program, because immersion teachers need to find the balance between teaching the required content at the same time they support the second language acquisition. Thus, professional development for immersion teachers would benefit from being more collaborative, where teachers shared their knowledge, resources, and struggles as a group so they could grow together.

CHAPTER 3

METHODOLOGY

In this chapter I explained the method and design used in this research study to answer the research questions posed in Chapter 1. This included the participants in this study, data collection instruments, innovation that was implemented, data analysis, and the threats to validity that possibly affected the interpretation of data.

Setting and Participants

This action research study took place in a K-8 elementary school located in urban Phoenix. This particular school has a Foreign Language Immersion program (FLI) where students take 50% of their classes in English and 50% in Spanish. The Spanish immersion teachers delivered content for mathematics, science, and Spanish in their target language. The target language was the language that a non-native speaker was learning, so for our purposes it was always Spanish. When I began data collection, this program was operating in kindergarten through grad 6 because the first class that started receiving Spanish immersion instruction had progressed to sixth grade, and will then continue in the program until they finish eighth grade in 2018. Although the majority of the students in the district were low SES and Hispanic, in this particular school only 68% of the students were considered low SES and 48% were Hispanic at the time of the data collection.

One of the biggest challenges for this school district has been teacher retention, especially the retention of Spanish immersion teachers. For the 2014-2015 school year, there was a 19.5% turnover rate district wide; however, for Spanish immersion teachers the rate was 75%. Last school year, SUS hired six out of eight Spanish immersion

teachers for various reasons, primarily because a neighboring district opened a dual language immersion school and offered better salaries to Spanish immersion teachers, so some of SUS' teachers left to work with them. The same school year, 2014-2015, SUS hired a new principal, and for the 2015-2016 year SUS was able to retain all of the Spanish teachers from the previous year. Informal conversations with teachers have suggested that the new principal has been a big factor in them continuing to work at this school.

SUS had ten Spanish immersion teachers at the time of the data collection, including myself, and we all participated in the community of practice that was facilitated as an innovation for this study. To protect anonymity of the participants, limited information on them will be disclosed. Eight teachers were native Spanish speakers, but only two attended school in a Spanish speaking country. All teachers held elementary teaching certificates but only two teachers were endorsed for Bilingual Education. At the time of the data collection only five teachers had more than two years of experience teaching in a dual language immersion setting. Two teachers were new to SUS that school year, six teachers were in their second year teaching at SUS, and two had been working there for more than two years.

Innovation

The innovation for this mixed-methods action research study was to facilitate the implementation of a community of practice (CoP) for the Spanish immersion teachers at SUS, with the objective being to increase teachers' self-efficacy and improve their practices through peer observation, critical dialogue and analysis, and shared knowledge and resources. During a pilot study that took place in the fall of 2014 teachers expressed

through interviews that they felt that if they improved their Spanish proficiency they would be better immersion teachers. Research results have shown that it was important that all forms of professional development for immersion teachers be delivered in the target language to help teachers know how to deliver instruction in ways that will help students develop higher levels of language proficiency (Howard et al., 2007). As a result, all the communication during the CoPs for Spanish immersion teachers was in Spanish.

During the innovation, the researcher took on the roles of CoP facilitator, researcher, and member of the community. The innovation included several components: one or two opportunities for each participant to observe another Spanish teacher and have follow-up meetings for discussion, and six meetings with the members of the CoP where there were opportunities to share resources and discuss good practices observed during our peer-observations.

Originally another component was to create a Dropbox account, which was to serve as a file hosting service that offered cloud storage and file synchronization allowing users to share files or pictures and recover them from Dropbox website or app, with the objective of sharing all the resources that the members have found to be useful for their instruction. The district started using Google docs this school year and the Spanish coordinator created a Google doc for Spanish Immersion teachers so there was no need for a Dropbox account as we have been using our Google doc to share our resources.

Topics discussed during the CoP meetings were drawn from open-ended questions teachers answered in a survey at the beginning of the study, as well as from conversations of teachers' needs during the meetings. All teachers knew what the agenda for the following meeting would be before the sessions began.

The first component of this innovation was teachers' peer observations. The researcher had planned to have teachers perform two peer observations during the data collection but most teachers were only able to do one peer observation. In this component the Spanish immersion teachers observed other Spanish immersion teachers. Peer observations were encouraged for all Spanish immersion teachers but the researcher only collected data on five teachers. The researcher participated in these five teachers' discussion meetings, but was not able to accompany them to their observations due to scheduling issues. The observing teacher had to go into the classroom with a specific area on which to focus, depending on her perceived need. The teachers took notes about what they had observed. The researcher did not provide a specific observation protocol, because she wanted teachers to focus on their own needs and be open to learn as much as they could from the classroom environment and lesson. After the peer observation took place, the two teachers (the observed teacher and the observing teacher) met for discussion.

The second component consisted of six weekly half-hour sessions during teacher professional development time. In addition, we were able to use time allocated for "professional learning communities" district wide, so one of our six meetings lasted 2 hours rather than one-half hour. The purpose of these sessions was to have professional dialogue on issues concerning immersion teachers' practices. During these sessions members were able to create small presentations of their own practices and conferences they had attended that supported other teachers' instruction. These sessions varied depending on the teachers' needs, but an agenda was always created in advance of the meeting by the facilitator based on the members' suggestions and needs. Details about the

content of the sessions, the duration, and so on have been provided in Table 2. See Table 2.

Table 2.

Dates, duration, and topics from the CoP meetings.

Date	Duration of CoP	Topics Addressed
	Meeting	
09/23/2015	30 minutes	- Set dates and explain expectations for peer observations, brainstorm topics for following sessions, share concerns.
10/21/2015	30 minutes	- Shared ideas and resources to create centers for mathematics, Spanish, and science.
10/28/2015	2 hours	 Can do statements and Spanish proficiency Standards. Students' data for writing. Effective communication with parents. Students' maturity and readiness Grammar to support Spanish acquisition. Activities we already have to support our Spanish instruction. TlC3 Grant approval
11/4/2015	30 minutes	 Focus on culture to support Spanish acquisition. Planning for cultural presentation to parents. Feedback of "Dia de los Muertos" celebration. Planning for "Las Posadas" for our students as a cultural activity.
11/18/2015	30 minutes	- Share what we have learned from peer observations.
12/2/2015	30 minutes	- Teachers shared what they learned from anguage acquisition conference in San Diego.

During a pilot study conducted in a previous semester, all the Spanish immersion teachers who were interviewed mentioned one of the greatest difficulties they had was the lack of instructional resource materials being available in Spanish. They all stated they lost a lot of time creating or translating materials that were originally written in English. Through the contributions of participants, the Google doc now has plenty of available resources in areas such as mathematics, Spanish language arts, science, and cultural activities related to Spanish speaking countries that will continue to grow with time so teachers can reduce their planning time.

Research Design and Timetable

This study used a mixed methods approach due to the complexity and the social nature of this study, which allowed for attaining more insights from the combination of both qualitative and quantitative research (Creswell, 2009). This mixed methods approach used a concurrent triangulation strategy, where the researcher collected quantitative and qualitative data concurrently and then compared them (Creswell, 2009).

The two research questions that guided this study were: In what ways does a community of practice influence Spanish immersion teachers' self-efficacy? And, in what ways does a community of practice shape the Spanish immersion teachers' practices?

The data collected to answer the research questions included data from self-efficacy surveys, observations from CoP sessions, peer observation feedback sessions, and interviews. The data collection has been discussed in more detail in the following section. The following table illustrates which mixed methods data collection approaches were used to answer each research question.

Research Questions	Research Components	
In what ways does a community of	- Pre/post/retrospective self-efficacy	
practice influence Spanish immersion	surveys (all teachers)	
teachers' self-efficacy?	- Audio recordings and field notes of	
	communities of practice session	
	observations (all teachers).	
	- Audio recordings and field notes of peer	
	observation discussion meetings (five	
	teachers)	
	- Audio recordings of interviews	
In what ways does a community of	- Open ended questions from	
practice shape the Spanish immersion	pre/post/retrospective self-efficacy surveys	
teachers' practices?	(all teachers)	
	- Audio recordings of interviews	
	- Audio recordings and field notes of peer	
	observation discussion meetings (five	
	teachers)	

All the quantitative and qualitative data were collected during the first semester of the 2015-2016 school year. The IRB approval letter can be seen in Appendix C. See Appendix C. The following timetable represents the dates when data were collected.

Date	Action
Sept 2015	Pre-test assessment of self-efficacy survey
Sept-Dec 2015	Community of practice meeting observations on Wednesdays.
Oct-Nov 2015	Peer observations and discussion meetings
Dec 2-9, 2015	Post-test assessment of self-efficacy survey
Dec 2015	Post interviews
Dec 14-23, 2015	Retrospective pre-test assessment of self-efficacy survey

Data Collection Instruments

In this section, I have provided in-depth descriptions of the data collection components discussed in the previous section. There was one quantitative and four qualitative components. The quantitative measure was a self-efficacy survey. For the qualitative portion of the study, the researcher wrote field notes and collected audio recordings of peer observation feedback sessions and community of practice sessions. The researcher also collected qualitative data from open-ended questions teachers answered on all three self-efficacy surveys. Finally, the researcher conducted audio-recorded interviews with all the teachers.

Quantitative Component

Self-Efficacy Surveys. The researcher conducted three self-efficacy surveys for all Spanish immersion teachers working at SUS. Seven out of nine teachers answered them all. The self-reported instrument that was used to measure self-efficacy was an adaptation of the "Teachers' Sense of Efficacy Scale" (Tchannen-Moran & Woolfolk Hoy, 2001). This survey had a series of 31 questions on which participants responded on

a 4-point Likert-type scale with 1 corresponding to "nothing" and 4 to "a great deal." Examples of the items included: "To what extent can you use science lessons to develop Spanish?," and "How much can you do to motivate students who show low interest in school work?." The complete survey has been provided in Appendix A. See Appendix A. The questions addressed four different constructs: classroom management, student engagement, instructional strategies, and Spanish instruction. It also included four open ended questions intended to gather information about teachers' feelings and thoughts about what would be beneficial for them to refine or improve their practice.

Self- report instruments, such as self-efficacy surveys, have demonstrated the risk of confounding results due to response-shift bias. Response-shift bias occurred when a "subject's internal frame of reference is altered under the influence of a training program" (Goedhart & Hoogstraten, 1992, p. 699). In this study, the CoP was the intervention and as teachers learned more, they re-calibrated their ratings based on their new understandings, which changed how they evaluated their efficacy and it could be misleading to compare the pre-test and post-test scores (Howard, Schmeck, & Bray, 1979). To reduce the response-shift bias, Howard et al. (1979) recommended a retrospective pre-test-post-test design, which included two instruments after the intervention: one on how they perceived themselves at present, i.e., the traditional post-test, and then a second in which they were asked to think back to before the intervention took place and rate their perceptions, i.e., the retrospective, pre-test assessment.

Due to the risk of response-shift bias the researcher gave three self-efficacy surveys to all nine Spanish immersion teachers, but only seven answered all three instruments. The first self-efficacy survey, the pre-test assessment, was given the last

week of September. The researcher had planned to give it in August, during the first two weeks of class, but Urban District took longer to approve the study than the researcher had anticipated, so the dates had to be adjusted. The second survey, the post-test assessment, was given during the first two weeks in December to be able to compare self-efficacy in teachers before and after the innovation. The third self-efficacy, retrospective, pre-test survey assessment, was conducted during the third week of December. The researcher used the same instrument and items for pre-test, post-test, and retrospective, pre-test survey, but the directions and the open-ended questions on the latter instrument were slightly different.

Qualitative Components

Community of practice session observations. Six community of practice sessions were held on Wednesdays. Five of the meetings lasted 30 minutes from 1:30-2:00, and one lasted two hours from 1:30-3:30, because the district had scheduled professional learning communities and allowed us to use the time working in our own CoP. These sessions were audio recorded with the objective of analyzing teachers' attitudes, questions, and input. The researcher was the facilitator so there was little opportunity for her to take field notes, however she took notes whenever possible. The handwritten field notes taken during the CoP sessions were used as support during the logging process. These notes were able to provide context for some of the comments recorded, as well as describe body language from the participants that could not be captured by listening to the recordings. After each CoP session, the researcher carefully listened to the recordings and created logs from them, entailing listening to the whole audio recording once, and then listening to it again in five minute "chunks." The

researcher would stop after each five-minute increment to write a summary of the most relevant information during that increment (Derry et al., 2010). The objective of these observations was to determine whether the community of practice was helping the teachers develop greater self-efficacy and better teaching practices and whether these changes were reflected in their conversations and attitudes.

Peer observations feedback. During the innovation teachers were able to perform 12 peer observations in total. All of the teachers observed at least one other Spanish teacher, and three of them had the opportunity of observing two different teachers during the data collection. All of the observations were followed by a feedback session. After the teachers concluded their peer observations, the researcher took part in the feedback discussions of five teachers for whom their schedule allowed. The role of the researcher was to guide reflective dialogue between the observed teacher and the observer teacher on their practices. The researcher took handwritten field notes on these sessions and audio recorded them as well. The audio recordings were logged in the same manner as the recordings of the CoP sessions. The raw field notes were used during the logging process to clarify ideas from the recordings.

Interviews. The researcher conducted one semi-structured interview with each of the nine Spanish immersion teachers at the end of the semester. Unlike the CoP meetings, which were performed in Spanish to promote the use and development of the participants' Spanish proficiency, the interviews were done in English. The rationale for the interviews done in English was that teachers needed to feel as comfortable as possible and that they needed to be able to expand their answers during their interviews. The interview had eight open ended questions that prompted the teachers about their previous

experiences with and perceptions of teaching a second language as well as their expectations at the beginning of the semester. Examples of questions from the interview were: "How has the community of practice affected your teaching?," and "How would you feel if you were asked to mentor a new Spanish immersion teacher today and what would your main recommendation for this person be?" The entire set of interview questions has been provided in Appendix B. See Appendix B. Additionally, interview responses were used to explore whether teachers' perceptions and practices had changed, if the change was positive or negative, and if it was derived from the communities of practice and coaching provided during the intervention. All interviews were recorded and transcribed for further analysis.

Data Analysis

Quantitative Analysis

The self-efficacy surveys included four constructs: classroom management, instructional strategies, student engagement, and Spanish instruction. As explained further in Chapter 4, the researcher conducted comparisons by construct using descriptive statistics for the pre-test, post-test, and retrospective pre-test survey. Due to the sample size, the information gathered from these surveys was not analyzed using inferential procedures. The researcher also examined the reliability of the constructs.

Qualitative Analysis

All the qualitative data collected through CoP session observations, interviews, and teacher observation feedback was audio recorded and uploaded to a computer and stored in a hard drive and on a Dropbox account to which only the researcher had access. The researcher used a specific file for qualitative data where each audio recording was

labeled with the date on which it took place. Once it was appropriately stored, the researcher used a logging process for CoP sessions and teacher observation feedback sessions. Then the researcher transcribed all teacher interviews and saved the files separately. Finally, the researcher stored the open-ended question answers from the surveys on the same Dropbox account in a different file.

After logging, transcribing, and copying answers from CoP session observations, teacher interviews, peer observation discussion meetings, and answers to open-ended questions in the surveys, the data were analyzed through thematic analysis. This method provided for identifying, analyzing, and reporting patterns or themes within data (Flick, 2014). The researcher organized and described the data set in rich detail and interpreted various aspects of the research topic (Flick, 2014). The researcher did not establish codes beforehand, but codes emerged as the researcher analyzed the data. There were two three coding cycles.

During the first coding cycle the researcher created four large files with all the qualitative data. The first file contained the transcripts for all nine interviews, the second one contained the logging from all CoP meetings, the third file contained the logging from the five peer observation feedback meetings the researcher attended, and the last one contained the answers to the open ended questions from all three self-efficacy surveys. The researcher uploaded them to HyperRESEARCH for the first round of coding. The researcher did open coding and ended up with a total of 33 codes. Examples of these codes are "Spanish variations", "Professional Development", and "Academic Challenges".

During the second cycle the researcher looked for similarities between the codes and grouped them into broader topics. By the end of this cycle the researcher had collapsed the codes into 22 topics. One example of how the researcher merged these codes is when she merged "Academic Challenges" and "Program Challenges" into one topic.

During the third cycle the researcher realized that some of the codes were not organized to answer the research questions. With the research questions in mind, the researcher re-categorized some of the codes. Once those new themes answered the research questions, assertions could be made.

Role of Researcher

The researcher's role in this mixed methods action research study was as a participant and as a researcher. As a participant she was part of the community of teachers and acted as a peer, as well as the facilitator for the community of practice and implementer of the innovation. The researcher did not hold a position of power over the participants in this study, which for analysis purposes positioned her in a unique place to understand the teachers' struggles as an insider because she was a Spanish immersion teacher herself.

As a researcher, the role was to design, create, and deliver all the data collection methods as well as to analyze and find results relevant to the research questions. The fact that the researcher was an insider affected the innovation, data collection, and analysis because of the deep understanding of the participants' situations.

Threats to Validity

The researcher identified threats to validity including: testing, Hawthorne effect, and novelty effect. Testing effects referred to the practice of the first test influencing the score on the second, even when the treatment did not have an effect (Smith & Glass, 1987). In this study, testing could have affected the data from the self-efficacy surveys. The researcher reduced this risk by including a retrospective pre-test survey.

The Hawthorne effect has occurred when subjects improved due to being singled out for special attention (Smith & Glass, 1987). In the current study, when teachers received attention they might have behaved differently during class observations and answered interviews and self-efficacy surveys with what they considered the researcher expected. This threat was minimized by the researcher through a careful analysis of the CoP sessions, where teachers spoke more spontaneously and with less risk of posing. This allowed "gathering information pertaining to the same phenomenon through more than one method, primarily in order to determine if there is a convergence and hence, increased validity in research findings" (Kopinak, 1999).

The novelty effect as been shown to be a threat to validity focused on the differences found before and after the treatment due to the enthusiasm and high morale that accompanies new programs (Smith & Glass, 1987). The Spanish immersion teachers felt they had not had targeted professional development or many resources to do a better job. The fact that they had their own program to support their practices and increase self-development could have increased their motivation and push them into improving their self-efficacy, based on novelty rather than the innovation.

The researcher was as objective as possible when analyzing data and triangulating quantitative with qualitative to reduce the threats to validity and ensure the study was biased to the smallest extent possible.

CHAPTER 4

DATA ANALYSIS AND RESULTS

Results from the study have been presented in two sections. In the first section, quantitative data were presented. In the second section, qualtiativative data have been presented.

Results for Quantitative Data

Prior to presenting quantitative data on the results from the repeated measureses analysis of variance (ANOVA), information on the reliabilities of the efficacy measures is presented.

Reliability of the Self-Efficacy Assessments Constructs

The researcher used an adaptation of the Teachers' Sense of Efficacy Scale (Tchannen-Moran & Woolfolk Hoy, 2001) to examine teachers'self-efficacy. The original instrument included three constructs and the researcher added a fourth to examine teachers' efficacy for providing instruction using Spanish in this particular context. The four constructs that assessed efficacy were: (a) student engagement, (b) classroom management, (c) instructional strategies, and (d) Spanish instruction. The same survey was used for pre-test, post-test, and retrospective pre-test assessments. Cronbach's α was computed for each construct using SPSS to determine the reliability for these constructs on pre-test, post-test, and retrospective pre-test. The minimally acceptable level of reliability has been established as .70, and only one scale fell below .70, with all others ranging between .71 and .96. The construct that fell below .70 was Spanish instruction in the post-test assessment. In general, this construct showed lower reliabilities because it included more heterogeneous items, such as different areas of

classroom management, teacher collaboration, developing Spanish proficiency, etc.

Despite the more heterogenous nature of the items, reliabilities of .71 on the pre-test, and .82 in the retrospective pre-test were obtained. Table 3 showed the reliability results that were obtained.

Table 3

Reliabilities for vaious self-efficacy constructs by three times of testing

Construct	Retrospective	Pre-test	Post-test
	Pre-test		
Student Engagement	.91	.89	.89
Classroom Management	.93	.95	.96
Instructional Strategies	.91	.95	.90
Spanish Instruction	.82	.71	.64

Repeated Measures ANOVA Results

Results from the repeated measures ANOVA showed there were no differences in scores on the constructs across the three times of assessment. The repeated measures ANOVA for efficacy scores for student engagement was not significant, F(2, 12) = 0.05 p < .96. Similarly, the repeated measures ANOVA for efficacy scores for classroom management was not significant, F(2, 12) = 0.98, p < .41. Likewise, the repeated measures ANOVA for efficacy scores for instructional strategies was not significant, F(2, 12) = 1.12, p < .36. Finally, the repeated measures ANOVA for efficacy scores for instruction in Spanish was not significant, F(2, 12) = 0.67, p < .54. Descriptive statistics

including the means and standard deviations for the various efficacy scores across the three times of testing have been presented in Table 4.

Table 4

Means* and Standard Deviation for various self-efficacy constructs by three times of testing

	Retrospect	ive Pre-test	Pre-	-test	Post	t-test
Construct	M	SD	M	SD	M	SD
Student Engagement	3.30	0.49	3.30	0.49	3.25	0.58
Classroom Management	3.34	0.47	3.11	0.61	3.14	0.67
Instructional Strategies	3.27	0.58	3. 04	0.51	3.27	0.52
Spanish Instruction	3.45	0.47	3.27	0.45	3.27	0.36

^{*}Means are based on a 4-point scale.

Results for Qualitative Data

Qualitative data are presented in Table 5, which presented themes, theme-related components, and the assertions that emerged after the analysis. Following the table, there is a more detailed explanation of each assertion and themes.

Table 5

Themes, Theme-Related Components, and Assertions

Theme-Related Components	Themes	Assertions
 Support system Shared resources Appreciation, recognition, and understanding Collaboration around 	Collaboration and Resource Sharing	1. Collaboration and resource sharing increased self-efficacy among Spanish Immersion teachers.

parent involvement		
Content and Spanish instructionPeer Observation learning	Practice	2. Teachers reported that their practices had changed as a result of the CoP meetings and peer observations.
 Parents lack of understanding Resources/curriculum 	Barriers to increase self-efficacy	3. Some barriers to increased self-efficacy cannot be completely overcome through peer collaboration.

Collaboration and Resource Sharing

Assertion 1 – Collaboration and resource sharing increased self-efficacy among Spanish Immersion teachers. Before the CoP intervention, some Spanish immersion teachers collaborated informally, but mostly they worked in isolation. During the summer, the researcher purposefully invited all Spanish immersion teachers to have breakfast at her house, and introduced the idea of the innovation to them, asking for feedback about what could work best for all. Seven out of nine teachers attended that breakfast and they all agreed they would enjoy working more collaboratively than we had in the past year. That was the beginning of a new relationship between all Spanish immersion teachers, in which we would become a "close-knit community" or a "support system," as some teachers later referred to us. This assertion has four theme-related components: (a) community of practice as a support system; (b) shared resources; (c) appreciation, recognition, and understanding; and (d) collaboration around parent involvement.

Community of practice as a support system. All nine teachers who participated in the intervention commented during the meetings, survey open questions, and interviews that the community of practice had increased their self-efficacy because we were all sharing the same struggles. This made them realize they were actually doing a good job, and we were all willing to support each other to overcome daily challenges. Most of the Spanish immersion teachers started working at SUS one year ago in 2014. During a pilot study that took place in the fall of the 2014 school year, teachers commented about the difficulties of complying with all the requirements of being Spanish immersion teachers. They also explained they felt they were not doing a good job, stating they would like to do a better job, but in some cases they were embarrassed to ask for help. After the implementation of the CoP the general feeling changed. In an interview Gaby (all names are pseudonyms) articulated, "The community of practice gives me a support system which I can turn to when feeling I need some encouragement or confused over anything regarding my Spanish, math, science or reading instruction." She then continued, "I have the support I didn't have in my other teaching experiences. I can ask and see where I can get tools from and advice from when I'm struggling as a teacher." These statements represented how most Spanish immersion teachers felt more confident that they could ask for support from anyone in the group without being judged.

During the meetings, we discussed many ideas of how to create centers in Spanish and mathematics, how to improve students' Spanish production, and how to have balance between teaching content and language. The meetings became a safe place were we could openly share celebrations and frustrations. During her interview, Victoria stated, "I feel more confident in knowing that what I'm doing in the classroom goes along with what

everyone else in the FLI program is doing as well," and then she went on by explaining that we now have a very close-knit community. The close-knit community that Victoria referred to was mentioned during our meetings several times by different teachers. They expressed how it made it easier to work along with peers who have become close to each other, even beyond the workplace setting.

During the interview, Sofia, who was in her second year teaching at SUS, explained that her first year had been difficult. She maintained, "Teachers come in with one expectation or with another mindset, but when they're actually in it, it's a whole different story," referring to the specific challenges that she encountered when teaching content in Spanish. During the 2014 pilot study last year, Sofia even stated she doubted she would come back this year due to the hardships she had faced. She then explained, "Now I feel way more confident. I think talking to you guys has helped." This statement, especially coming from Sofia was powerful because she recognized how working in a close community has made her consider she was a better teacher.

Isabel who had been working at SUS for a few years now also stated she really enjoyed the discussions we had during our meetings. She said

I think our community has become stronger and closer. I feel that this year we are more comfortable and feel freer to ask for help with our other teachers and see

how they do things in their classrooms. This makes me feel good about my job.

Isabel explained during the meetings that before we had this community she worked alone and it had been very difficult. Now she was one of the teachers with more experience in this program and had benefited from working in collaboration with other teachers.

Shared resources. One of the biggest challenges Spanish immersion teachers faced was the lack of resources such as instructional materials and an adequate Spanish language arts curriculum. During the CoP meetings we shared ideas and resources, and we agreed to upload everything to a shared Google doc so we could all access the materials and use them. By the end of the semester we had a large pool of materials. Having readily available activities, worksheets, and ideas for instruction has cut our planning time and made us focus more on actual instruction than investing time in creating all from scratch. As a result, teachers had increased self-efficacy, as they reflected and improved on their work.

During one of the CoP meetings, when we were discussing how to better teach Spanish and complement the curriculum, Isabel claimed, "We can get resources on Google docs, if we can make our own curriculum based on whatever our counterparts are teaching in the language portion of the subject, then we can kind of model the same things in our own language, in Spanish." Some of the other teachers discussed how they have adapted their Spanish lessons to mirror the ELA teachers' themes to make them more meaningful and easier for students to understand as they transfer the big concepts from English to Spanish.

In the following meeting Victoria suggested, "We could create a scope and sequence for Spanish so we don't all teach the same thing over and over." This idea came out because Victoria had just gone to a conference for second language teaching and she had brought an example of how a "scope and sequence" would help us align Spanish from kindergarten to middle school and have some consistency. The scope and sequence included mostly cultural topics and grammar. Then we all collaborated and worked on

creating a vertically aligned curriculum based on the sample Victoria provided. Although the scope and sequence was not very detailed and we did not have time to finish it, it gave teachers a sense of accomplishment and guided us on what our students should be taught at each grade level. We could all do a better job now. Isabel expressed how teachers felt when she said,

Our program has become more organized and as a result, the students will be learning more. Now that we are communicating and we know what each grade level will be teaching, then it will be easier for me to be able to prepare my students for the next year.

Dulce also stated during her interview, "Resource sharing has helped create a stronger foundation for the program." At one time or another, most teachers said having more resources helped us to plan in less time, and have more aligned and engaging activities for our students.

Appreciation, recognition, and understanding. Spanish immersion teachers were able to comprehend how much work and effort their colleagues put into what they did as they shared the same responsibilities and challenges. Because there were very few immersion programs in Arizona, there were also few educators who understood the challenges immersion teachers faced when teaching language and content at the same time. Our students were only exposed to the target language while they were in our classes, so the language acquisition process was slightly different than the process of acquiring English in the United States, where students have been immersed in the target language most of the time. During the intervention, the researcher found evidence that the

appreciation, recognition, and understanding among Spanish immersion teachers supported teachers' increased self-efficacy.

When Lupita was asked how the CoP had affected her teaching, she explained that having her peers' appreciation had increased her feelings of self-efficacy when she acknowledged,

When we have another teacher form our community that comes to see us, they really... well, they have made me feel appreciated. They have made me feel like the work that I do is not just centers. I'm bridging lessons. It's made me feel better about my teaching.

Most members of the CoP mentioned during our meetings that sometimes outsiders, or people who did not teach the Spanish immersion program, did not really understand how some of the lessons or activities had a double purpose: to teach language and content, which was not easy. Because the members of the community had a better understanding of the struggles through which we go, we better appreciated and valued what our peers were doing in their practice, which made us feel valued.

Gaby agreed that the members of the CoP understood and appreciated each other's work better when she declared, "You do a lot in your class for your students and when someone comes in to observe you, like an administrator, they don't always see that. They don't always appreciate that because they have their own rubrics, their own guidelines." Sofia expressed the same thought in her survey when she wrote, "People need to understand the job and level of difficulty teaching content in Spanish, a foreign language, involves," because she felt that only her peers knew what it entailed.

The fact that the innovation allowed us to go to other teachers' classrooms and witness the great things they were doing and that we recognized them openly in our meetings increased the feelings of self-efficacy in teachers.

Collaboration around parent involvement. At SUS we have been fortunate to have very engaged parents who consider their children's education a priority. Although having involved parents has been what many educators hoped to have, sometimes it has been difficult for teachers to work with them because they tended to be very demanding due to their passion for their children to have the best education possible. During one of our CoP meetings we focused on how to address parents and we agreed that we had very active and engaged parents who were willing to support their teachers in this difficult endeavor, but we also had some parents who do not fully understand what it takes for their children to be part of a dual language program and to become bilingual. In this subsection I have focused on how collaboration during our meetings and informal conversations have helped teachers feel better about their ability to work with parents.

Some of the teachers had experienced difficulties understanding and satisfying parents' requests. During the CoP meeting when we discussed how to address parents and their concerns Lupita commented, "A veces solo quieren sentarse y que tu los escuches." (Sometimes they just want to sit down for you to listen to them). She was explaining that sometimes parenthood was difficult; especially when at school we were teaching a foreign language they did not speak. She explained in her experience parents were sometimes happy just by being listened to and acknowledged by the teachers. Sometimes it was not about doing more, but it was about assuring parents we were there for them and their children. After some discussion, we realized sometimes we just needed to listen to

parents and it was not always about what we were doing right or wrong, but about parents feeling supported by us.

The CoP also provided a forum to discuss how parents support the process of language acquisition. We discussed how challenging and frustrating this process could be as Estrella explained,

La mayoría de los papas tienen a sus hijos en este programa porque quieren que sus hijos sean bilingües, y es muy frustrante cuando tu hijo habla otro idioma y tu no entiendes. No puedes medir si va bien y quieres hacer algo.

(Most parents enroll their children in this program so they can become bilingual, and it is very frustrating when your child speaks another language and you don't understand. You can't know if he is doing well and you want to do something.)

We all talked about what resources we could offer parents so they felt better equipped to support their children's language acquisition. We shared ideas, activities, and websites for parents. We also talked about how we should make sure to address the process of language acquisition during our parent-teacher conferences so they all understood the process and had clear expectations about their children's progress.

Gaby and Isabel communicated that parents wanted to support their children's teachers. Gaby said, "Muchos padres de familia estan dispuestos a ayudarnos si nosotros se los pedimos." (Many parents are willing to help if we ask). Gaby explained that there have been many parents who have offered to either come into her classroom to help, go on fieldtrips, support with material resources, or by creating materials we need. She suggested that we reach out to them for help and we would get it. She explained how supported and appreciated she feels when parents act like that, but she also stated that she

has created that relationship with them through open communication. This shows how she Gaby and Isabel advised other CoP members on how to avoid issues with parents through open lines of communication.

During our conversations, we talked about all the good things that come with parental engagement. Then Isabel voiced "Tengo papas que quieren donar dinero para el programa de español." (I have parents who want to donate money to the Spanish program). We all commented how fortunate we were to have parents who have the means and were willing to support us with resources. We all knew that many teachers in schools with low SES students did not get that kind of support. We were privileged that our Parent Teacher Organization (PTO) has been very active and also provided us with money for our classes. We all felt we were doing a good job when parents approached us to help and appreciated what we did. We discussed how important it was for us as teachers to remind ourselves that parents only want what is best for their children and we wanted exactly the same thing. We commented we needed to understand parents with coping mechanisms.

Gaby shared with us that one of her student's parents told her, "We're very happy because they were having a yard sale and there were some people that had come and they only spoke Spanish and the daughter just stepped in and started talking to them." After discussing for a long time, we all agreed that if we had open communication with parents and acknowledged their concerns we would have more positive experiences with parents, which will support the parent-teacher teams we wanted for students' academic success. We also talked about how important it was to address difficult issues with parents in

conjunction with our partners or a member from the administration, so we can support each other in those conversations.

The CoP meetings provided a space where teachers were able to explain how they sometimes felt overwhelmed with demanding parents, but it also became a great forum for us to give advice and share ideas about what we are all doing to maintain a healthy relationship with our families and collaborate for the academic and language development of our students.

Practice

Assertion 2 - Teachers reported that their practices had changed as a result of the community of practice meetings and peer observations. Five of the ten Spanish immersion teachers started working at SUS last school year (2014), three have been there several more years, and two were new this school year. None of the teachers had done peer-observations before the implementation of the CoP. During and after the implementation of the innovation, teachers have modified their practice as a result of peer observations and collegial conversations in the CoP meetings. This assertion focused on self-reported changes in practice by addressing two theme-related components: (a) content and Spanish instruction and (b) peer observation learning.

Content and Spanish instruction. One of the most difficult aspects of teaching in a dual language program was finding balance between content and target language instruction. All the teachers at SUS were certified as elementary teachers. Only a few had bilingual endorsements, and even they were not well prepared for the challenges they encountered when teaching content in a second language. The collaboration and sharing that resulted from the innovation supported self-reflection and changes in teaching

practices in all teachers. This conclusion was based on what teachers suggested in their comments and in interviews.

One of the teachers who had worked at SUS longer than other teachers, Isabel, shared during her interview, "I have implemented some of the ideas that have been discussed in the meetings and it has made a difference in my class." Most of her focus was to assure that students speak Spanish not only to her but also among each other. She was applying some of the strategies other teachers were using for language production.

Sofia who was in her second year at SUS explained,

The CoP has helped tremendously because you listen to a lot of teachers going through the same issues that you might be going through, but their approaches help you in your own classroom. It actually has made me focus in different ways to maneuver my classroom.

Sofia's comment was very important because she had been struggling with some of her students' behaviors and language production. Collaboration helped her reflect on her practice and refocus on different strategies for teaching, which could impact student learning.

Gaby also addressed how her practices towards parents shifted when she affirmed, An example I can think of is how to talk to parents when they don't realize that the Spanish component is key to their learning. Knowing how to have that communication with the parent, which is basically the support that you need to make sure that Spanish is being practiced at home, that has actually been helpful because you know how to talk to a parent and how to address the issue.

Gaby was in her second year teaching at SUS, and her previous experience was in a school where parents were not as engaged as they are at SUS. She had struggled with how to address their concerns in a proactive way. Because we have had several discussions on parents during our meetings, she has changed her practices toward them, utilizing some of the other teachers suggestions and strategies, which will payoff as she collaborated better with parents for students' success.

Peer observations. Originally the researcher had planned for each teacher to observe two peers during the semester. Most teachers were only able to observe one peer due to time constraints. Even with this limited observation time, all of them reported benefits from it and changes in their practice afterwards. In their observations, they were asked to observe and focus on one specific thing with which they felt they could use help. Some teachers did not approach the observation with an issue in mind, but picked up ideas they adopted for use in their own classrooms.

Paola had been a teacher for a long time, but the year of the innovation was her first year at a dual language school, so making sure students produced Spanish had been challenging. She reported, "Through my peer observations I could use some of their experience, their expertise, and their techniques to get the kids speaking (Spanish)."

Isabel had commented during the meetings that she would like to implement centers so she could work closely with those who needed additional support while the rest of the class was working independently, but she had never known how to organize them. Isabel stated,

I didn't know how to implement the centers in my classroom. I had a totally different idea, and I think I was making it more complicated than what it really

was. Observing other teachers helped me organize my time better and be able to facilitate my students in what their needs were more individually.

After she observed another teacher during her center time, she felt ready to do it and she started to organize them to implement them. She stated several times she felt more confident in her teaching, which has helped her to implement changes to benefit students' academic success.

Sofia agreed with her peers when she maintained, "Getting ideas from you guys has helped with how to teach another language. I've taken strategies from you guys."

Sofia was one of the teachers who stated during the pilot study that she felt frustrated and did not know how to speak only Spanish to her students. After the innovation her attitude and feelings toward teaching changed positively. All teachers commented on their experiences with peer observations and agreed it was a positive outcome.

Barriers to Increased Self-Efficacy

Assertion 3 - Some barriers to increased self-efficacy cannot be completely overcome through peer collaboration. The first two assertions focused on the positive changes in teachers' self-efficacy and practice. Despite these gains, there were certain barriers that prevented teachers from increasing their self-efficacy even more, and these are systemic or structural aspects that that the collaboration resulting from the CoP cannot completely overcome. This assertion's theme-related components were: (a) parents and (b) resources/curriculum.

Parents' lack of understanding. As stated above, parents at SUS were very involved and the fact that our dual language program was fairly new, made it difficult for parents to develop realistic expectations about being in the FLI program and the time it

took for a children to fully develop a second language. Frequently, parents have been frustrated about their children's language acquisition process and demanded their children become proficient at a young age, which is not developmentally possible. Most teachers mentioned how difficult it was for them to deal with some parents' requests or demands. We devoted a large portion of one of our CoP meetings to share ideas on how to work with parents and we shared resources for parents so they could better understand and support their children with language acquisition at home. We also remembered administrators had offered many times to be present in difficult conversations, as well as to try to share those difficult conversations with our English teaching counterparts. Even with these conversations and ideas, some teachers felt threatened by parents and had a feeling of being scrutinized for what they did. These negative feelings may have prevented teachers from further increasing their self-efficacy.

In one of our meetings, Isabel confirmed, "It is very hard to stick to only Spanish at the lower grades, and they are going to take a long time to produce, but parents want them to speak immediately, they don't understand there is a silent period." It was especially difficult for novice teachers to create a full immersion environment and then have parents question why their children were not "fluent."

Many parents have come to the school staff and teachers saying that their children would not speak Spanish to them. Parents did not necessarily understand the timeline for language acquisition and teachers sometimes had difficulties explaining to parents how the process would take place. Parents had to be explained that it was going to take a while before their children could establish and maintain a real-life conversation in the target language. Gaby suggested, "Parents need to support their children's Spanish instead of

asking, why can't my child speak Spanish." Parents could provide support by ensuring their children were exposed to the language as much as possible through movies, music, reading books, talking to native Spanish speakers, traveling, etc. Most of our students were only exposed to Spanish during our instruction, which was three hours a day. Administration knew about this issue and brought an expert to talk to parents about proficiency attainment levels and timeframes during the 2014-2015 school year, but new parents or parents who were not able to attend that conference continued to grow frustrated at their students' levels of Spanish proficiency.

When we discussed issues with parents during our CoP meetings, we all agreed that it would be very beneficial for parents to be given a handbook explaining the expectations of the FLI program when they enrolled their children. Lupita explained, "We need to set standards and tell parents: this is how it is. Parents need to be accepting that it's going to be difficult." Teachers commented that a good idea would be to give parents a handbook where we explained the expectations of being in a FLI program.

During our CoP sessions, we focused on talking about how to address concerned parents, and some ideas and strategies were shared that helped teachers feel better.

Nonetheless, it is very draining for teachers to have parents questioning their practices regarding Spanish acquisition constantly, and very frustrating for parents to not have a clear understanding of what to expect from a FLI program. Since these kinds of programs are fairly new in Arizona, there are structural issues that collaborating teachers cannot overcome, so the school administration could make sure parents understand that being in a FLI program will have some academic challenges for their students and that acquiring a second language is a process that will not happen overnight.

Resource/curriculum. All teachers stressed the lack of resources during interviews, surveys, and CoP meetings. During the meetings we shared ideas and websites, and we created a Google Doc folder where we all uploaded activities we had to provide more resources in Spanish from which to teach. Even with active sharing, teachers felt we needed an adequate curriculum and access to activities to enrich our lessons in Spanish. Very limited resources were available in Spanish, which meant teachers had to invest huge amounts of time creating their own. The creation of the shared Google Doc folder where we all uploaded what we found or used helped a little, but not entirely, because we cannot use the same activities and worksheets for different grade levels. Further, we had a science curriculum that seemed to be too difficult for students in the higher grades. This year we started using Engage New York, which was a mathematics curriculum that was also translated into Spanish; and we have a Spanish curriculum that seemed insufficient for the levels of Spanish our students were achieving.

Our science curriculum seemed adequate for younger children, but when we commented on it, Miriam, who taught upper elementary school explained, "We have a science book that is very high lexile for them (students). It's good for vocabulary, but it is really challenging. I would definitely like another book." She explained that she had to plan her science lessons as if she did not have curriculum because the book was so difficult students could not read it independently and they got frustrated. Science planning became a lot more complicated because the text was too difficult.

During our meetings we also discussed how Engage New York had helped us this school year because it was based on the Common Core State Standards translated into Spanish. Nevertheless, it was challenging for students who were on the borderline with

respect to their understanding of mathematics. Miriam commented, "My kids don't always do the best with the math program. I have to find alternative activities and it is hard to find in Spanish. They've got a lot of English things." Although we had the curriculum in Spanish, when it came to supplementing or complementing it to ensure students' success, we still needed to create activities. During the community of practice meetings we shared ideas on how to adapt the mathematics curriculum and we uploaded additional activities to Google Docs, but teachers still ended up spending time or money creating new activities or buying them from websites.

The other challenge we faced was our Spanish curriculum did not support the level of Spanish instruction we were supposed to deliver. Again, it was a good program for the younger grades, but it was very repetitive and did not for provide higher levels of proficiency development. We were all aware that it would be difficult to get a new curriculum with the district's limited budget. This frustrated teachers because we knew how many resources there were available for free in English, but we could not find them in Spanish. A common comment among the teachers was how much investment there needs to be put into dual language programs in terms of time and money to have the same amount of complementary activities English teachers have. Victoria stated, "We're a great program but we don't have the resources. I feel like we're underfunded." This comment was a reflection of how frustrated we all felt about the lack of teaching materials, despite the CoP sharing and support.

In summary, the findings from this action research study suggested Spanish immersion teachers' self-efficacy increased due to their collaboration through CoP meetings, peer observations, and informal interactions. Teachers reported their practices

had positively changed as well. By the end of the study, teachers decided they wanted to continue with the CoP meetings and continued using our shared resource Google docs folder, which had provided strong support to our practice. Moreover, teachers made comments stating how fortunate we were to have such a great community and that we now trusted each other enough to ask for help when we needed it. Some of the participants mentioned they would not like to leave SUS and work at a different school because of the culture and environment we have created at SUS. Nevertheless, there were still barriers that inhibited further increases in our self-efficacy that were beyond the reach of collaboration, because they were more systemic in nature.

CHAPTER 5

DISCUSSION

The purpose of this action research study was to increase Spanish immersion teachers' self-efficacy through an innovation that consisted of facilitating a community of practice (CoP). This CoP included weekly meetings to collaborate and support each other, peer observations, and feedback after the observations. The research questions addressed by this action research study are: (a) In what ways does the implementation of a community of practice for Spanish immersion teachers influence their self-efficacy? and (b) In what ways does the collaboration derived from implementing a community of practice for Spanish teachers shape their practice?

Complementarity of the Quantitative and Qualitative Data

According to Greene (2007), complementarity between quantitative and qualitative data in a mixed methods study helps the researcher develop a "broader, deeper, and more comprehensive social understanding by using methods that tap into different facets or dimensions of the same complex phenomenon" (p.101). In the ideal situation, quantitative and qualitative data point to the same conclusion or direction and support each other and hence, complementarity is attained. However, this is not the case in the present study.

In this study, the results with respect to efficacy are not consistent. The quantitative results do not show an increase in efficacy for each of the four measures on the survey (student engagement, instructional strategies, classroom management, Spanish instruction). The means remain fairly constant from pre-test to post-test. Nevertheless, when the qualitative data are examined, data indicate teachers feel more efficacious; in

particular they speak about their confidence in teaching, discuss how they use information from the CoP meetings to improve instruction, describe how the incorporate shared resources to improve teaching, and appear to feel better about their practices.

After careful analysis, the quantitative data may not show change because a four-point scale is what was used in the survey. In teachers' formal observations and evaluations, administrators also use a four-point scale, where 1 = ineffective, 2 = developing, 3 = effective, and 4 = highly effective. Teachers have a deeply developed bias that if they are rated below 3 they are not effective teachers, which leads them to assess themselves above 2 most of the time, even when they feel less certain about their practice. In addition to teachers' perception of four-point scales, a small scale also restricts the scores too much, because teachers need to chose between (1) having no influence to (4) having a great deal of influence, leaving little room for variation in the scores.

We also need to consider that the timeframe of the study was fairly short (10 weeks) so it is possible that changes in attitude may be occurring before changes in efficacy, resulting in self-efficacy scores that do not show significant increases.

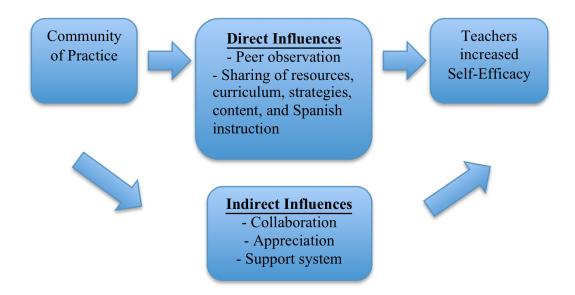
Lessons Learned

The research questions that guide this study focus on how the implementation of a community of practice for Spanish immersion teachers influences their self-efficacy, and on how collaboration that derives from implementing a community of practice for Spanish teachers shapes their practice. Results show there are direct influences on self-efficacy after the implementation and also indirect influences that positively affect teachers' self-efficacy. For example, direct influences include peer observation, sharing

of resources, and so on. By comparison, indirect influences are such things as collaboration, appreciation, and so on. See Figure 1. Moreover, teachers report that peer observations and collaboration lead to positive changes in practice.

Figure 1

Direct and indirect influences on teachers' self-efficacy through the implementation of a Community of Practice



Community of Practice Direct Influences on Self-efficacy

The creation of the community of practice has direct influences on teachers' self-efficacy. The factors influencing self-efficacy are peer observation and the sharing of resources, curriculum, teaching strategies, content, and Spanish instruction. Teachers feel that by acquiring new ideas and sharing knowledge, they become better equipped to face the many challenges of teaching content and language at the same time in FLI classrooms.

According to Bandura (1977, 2003), self-efficacy can develop through mastery experiences, vicarious learning from models, social persuasion, and physical or emotional states. Mastery experiences occur when teachers use new approaches or materials successfully in their classroom, which can result from their work on Spanish instruction and using shared materials effectively. Vicarious learning from models takes place during the peer observations.

There is an increase in self-efficacy as evidenced by teachers' comments. They indicate they feel more confident in what they do now. They also appreciate collaboration because it helps to provide a pool of resources, which they can use. Through our CoP, we work toward being consistent on Spanish instruction and students' expectations, so our students have better Spanish proficiency, which makes teachers feel more successful in their practice.

Community of Practice Indirect Influence on Self-efficacy

The CoP's indirect influences are also beneficial and include collaboration, appreciation, and having a support system. During interviews, meetings, and feedback sessions, all the teachers express how close they feel to the other Spanish immersion teachers due to the collaboration and appreciation that has been developing during the intervention. For example, we created an informal chat through the use of Whatsapp where we share work-related experiences and also personal activities. We constantly post pictures, jokes, frustrations, and successes through this app. It was originally created to maintain communication during break, but it has become a great bonding resource. We have become a lot closer than being mere co-workers. The use of Whatsapp for these informal posting clearly demonstrate we have a vibrant CoP. Additionally, teacher

collaboration, which is another indirect influence based in our CoP meetings, may build social persuasion (Tchannen-Moran & Woolfolk Hoy, 2001),

We all agree that teaching Spanish as a second language along with content is a very difficult task. Some of the teachers are not trained to be language teachers, but elementary school teachers. Finding a balance between teaching content and language is difficult (Cammarata & Tedick, 2012). This is a struggle we all understand very well and these shared struggles make us a stronger and more supportive community.

Cammarata & Tedick (2012) explain that, for immersion teachers to balance content and language instruction, there need to be three conditions: first, an awareness that, for students to acquire a second language, the language has to be taught explicitly as part of the program and not only through content. Second, there needs to be more program support for teachers such as language coordinators, increased planning time, development of mentorships and collaboration. Third, there needs to be teacher preparation and PD opportunities for immersion teachers, because the generic certification programs that elementary teachers go through do not prepare them for the specific demands that immersion teachers face when instructing content and language.

SUS' administrators understood the first condition a few years ago when they adapted the schedule so that all students had 45 minutes a day of Spanish instruction and bought a curriculum intended for it. Unfortunately, the curriculum is not ideal for a Spanish immersion school, so teachers still need to support their instruction with other resources. The implementation of the CoP provides for the mentorship and collaboration that the second condition specifies, but we are still struggling with limited planning time. Although administrators support ways to provide Spanish immersion teachers more

professional development, all teachers claim during the interviews that they would like more PD targeting our specific context, which is the third condition for a successful FLI program.

At the last CoP meeting, the researcher informs the members that the study has come to an end, but she suggests that the CoP meetings continue. All teachers indicate they want to continue with our meetings because the meetings provide a sense of community and a support system where we can openly admit our struggles, share our resources, and learn from each other. We continue to have meetings after the end of the study that have been very useful. For example ,we continue to discuss how to align grammar from kindergarten to sixth grade. We decide to organize a FLI showcase for parents to see their children producing Spanish through singing or dancing traditional Hispanic music. All of these ideas and projects support us as teachers and support our students' language development.

Our efforts are consistent with Cheng and Lee's (2014) work on the CoP. These authors state that mutual engagement supports interactions and relationships based on mutual respect and trust when members are willing to share their ideas, admit their ignorance, and ask difficult questions. That is exactly what is happening at SUS because of the implementation of the CoP.

The outcomes from the CoP are also consistent with Wenger's (1998) work on CoP. Wenger establishes 14 criteria for successful CoP including "sustained mutual relationships; shared ways of engaging in doing things together; the rapid flow of information and propagation of innovation; absence of introductory preambles; very quickly setup of a problem to be discussed; substantial overlap in participants'

descriptions of who belongs; knowing what others know, can do, and how they can contribute to an enterprise; mutually defining identities; the ability to assess the appropriateness of actions and products; specific tools, representations, and other artifacts; local lore, shared stories, inside jokes; jargon and shortcuts to communication; certain styles recognized as displaying membership; and a shared discourse reflecting a certain perspective on the world" (p. 125-126).

It is clear that our CoP at SUS includes all of the criteria Wenger mentions. It is interesting how we immediately switch to Spanish when we talk among each other. There have been times when we have to remind ourselves to go back to English because there are other people present who cannot speak the language. It is also common to joke about each other's strengths and weaknesses, and sometimes these jokes can only be understood by the members of the CoP because of how well we know each other, and because of the cultural background that most of us share. As one of the teachers said, "we have become family".

Limitations

The most important limitation of this action research study is time. The researcher planned that the study would take place over 16 weeks; however, due to unforeseen circumstances, the study and data collection were reduced to ten weeks.

The time limitation affects the CoP implementation primarily because some teachers only participated in one peer observation and feedback session rather than two sessions that had been planned originally. Teachers had to do their peer observations during their planning times and adjust their schedules so that they could match another

Spanish teacher's class. It became very difficult for them to accomplish the researcher's original goal, and six of the nine teachers could only engage in one peer observation.

The fact that the data collection was performed in such a short time span also might have affected the results in the self-efficacy assessment survey. Changes in self-efficacy perceptions can take some time, and these changes might be more visible after a longer period of time. Longer time of collaboration might have strengthened teachers' self-efficacy feelings and the way they report them.

Another limitation is the sample size and the very specific context in which the action research study took place. The results drawn from the data collection and analysis are tied to that contextual setting, which makes it difficult to be transferable identically to another setting. However, this is true for all action research studies, which do not intend to create generalizable knowledge but to address local phenomena. The results can be transferable and generalizable in that the theoretical notions generated from this study can be applicable to a similar context.

Implications

The implementation of the Proposition 203 in 2000 made Arizona an Englishonly state. The implications for that act are significant because bilingual schools were
disenfranchised in the legislation. Little by little some foreign language schools (FLI)
have re-emerged, but academic resources for these programs are scarce. There are very
few curriculum resources made specifically for FLI schools. Further, there is little
professional development available for immersion teachers' specific needs and little
understanding of how difficult it can be to teach content and language to students who are
not immersed full-time in the target language.

This action research study shows that when teachers feel valued, appreciated, and part of a community, or as they call it, a support system, they feel better about their practice and increase their self-efficacy. The community of practice meetings were very productive, considering we only met for one-half hour a week, but teachers were eager to work in collaboration with colleagues to maximize outcomes. It was rewarding to see teachers shared similar struggles and brainstormed solutions for our shared issues.

Teachers indicated they feel better just by knowing they are part of a larger group of people working toward the same goal. Before the CoP, most collaboration occurred among teachers who teach the English portion of the program. They do not share many of the most difficult aspects of FLI programs related to balancing content and language, a lack of resources, and supporting parents' understanding of the processes of language acquisition and proficiency.

During interviews, CoP meetings, and observations with feedback, all teachers agreed they need to have access to more academic resources for teaching in Spanish, as well as a Spanish language curriculum that is better aligned to the FLI program. The CoP could not solve all the problems, but the creation of Google docs, where we shared activities and resources was a substantial aid. We also began to create a scope and sequence that will include what students should know for Spanish at each grade level, so we can establish standards, which will provide students with a natural progression in terms of language development.

Teachers commented that the main difference between teaching ESL and Spanish as a second language is that ELL students already have a command of daily language so ESL teachers only need to focus on academic language. With Spanish as a second

language, we need to make sure students are able to produce language at a basic level, because they often learn academic words but not everyday words. It is important for teachers who decide to work in immersion programs to understand that, even when we can use many of the techniques used with ELL students, there are many differences when teaching a second language to a student whose main source of language will be the teacher because many of them will not have exposure to the language outside of the class.

Administrators in FLI programs need to understand the difficulties of teaching a second language along with content, provide multiple opportunities for teachers to develop their own language proficiency, help teachers to access appropriate and meaningful professional development, ensure time for collaboration with other teachers and peer observation, and support them with resources so they can focus on teaching.

There are additional considerations, not directly tied to the findings, which are important: Spanish proficiency and teaching culture. The fact that many teachers are not fully proficient in standard written and verbal Spanish was deducted from the researcher's observation, which was supported by occasional teachers' comments. This possible lack of standard Spanish proficiency did not adversely affect self-efficacy based on the data collected in the study. In other words, teachers did not often explicitly express a lack of confidence related to their language use within the context of their professional duties. For this reason, Spanish-language proficiency is not discussed in Chapter 4, among the other findings. Nevertheless, it is important to acknowledge this issue. Most of the teachers in this study are native Spanish speakers, but only a few had studied Spanish, possibly affecting their academic language. Teachers in foreign language programs and dual language programs in general need to invest time in developing their own language,

and administrators need to support their efforts by providing opportunities for them to acquire more academic language through professional development and practice. It is crucial that professional development for Spanish teachers is in their target language because it will foster more academic language and its use. It will also provide opportunities to practice the language among other teachers. The CoP meetings in this study are conducted in Spanish only.

The second additional consideration is teaching culture. It is important for all stakeholders (teachers, students, parents, staff, and administrators) to know that we cannot teach language without culture. Immersion programs should have a strong cultural component where students are exposed to the culture of the people who speak the target language natively. The implementation of cultural activities at SUS has been successful in general, but we need to make sure that parent and staff are part of these learning process as well, so we can create a "culture of learning."

Conclusion

There are many studies that address the facilitation of communities of practice and/or increase in teachers' self-efficacy. This study's uniqueness lies in its context. The action research study took place in a hostile climate for bilingualism, trying to fill gaps for the lack of structural attention and resources. The success of this CoP is clear after analyzing the qualitative data that proves how the participants increased their self-efficacy because of the shared resources; appreciation, recognition, and understanding that derived from the CoP; collaborated around issues such as parental involvement; and ended up with what teachers called a support system.

Teachers also reported how their practice improved due to collegial conversations that took place during our meetings, and during our peer observations and feedback sessions. Unfortunately, even with the strong CoP and the positive results in terms of practice, teachers still feel there are some barriers that the collaboration among each other cannot overcome because of their systemic nature. These barriers are the lack of resources and curriculums available specifically for FLI programs and the lack of understanding towards the program itself.

After careful analysis of the data, my next steps will be to continue to foster CoPs among Spanish immersion teachers, due to the success of this particular study. I would love to have a larger CoP were all Spanish immersion teachers in Arizona could collaborate and become a stronger voice that could drive the creation of new resources and changes in state policies in regards to bilingualism and Spanish teaching in particular.

Ideally, we would have ELL students and Spanish language learners in the same classroom where they could model language to each other; we would have as many resources as the English language teachers; and students who speak more than one language would be valued, and not seen as if they had a deficit.

I trust that the actual educational policies will be modified to support bilingualism for all students, not only English native speakers, in order to have more equitable global minded students who are able to compete with other first world countries in language and culture. The more support the system provides, the better the dual language programs will become and the ultimate benefits will go to our children. We owe it to our future generations.

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APPENDIX A TEACHERS' SENSE OF EFFICACY SCALE

Teachers' Sense of Self Efficacy Scale

Dear teacher,

Thank you for your interest in participating in this survey. The intention of this questionnaire is to assess the self-efficacy in elementary school teachers working in dual-language programs. It should take you approximately 10 minutes to answer it.

My name is Raquel Salas and I am conducting this survey as part of the data collection in an action research project focused on Spanish immersion teachers' self-efficacy in dual-language settings.

The findings of this study may be used in reports, presentations, or publications. Your confidentiality is assured; no identifying information will be requested or captured during the survey.

Your participation in this study is completely voluntary. Your responses to the survey indicate your consent to participate.

If you have any questions concerning the research study, please contact Raquel Salas at rhuertaa@asu.edu.

This survey was adapted from the "Teachers' Sense of Efficacy Scale" (Tchannen-Moran & Woolfolk Hoy, 2001).

In all of your questions you can chose an answer 1-4. One corresponds to "nothing", 2 to "very little", 3 to "quite a bit", and 4 to "a great deal".

- 1. How much can you do to get through to the most difficult students?
- 2. How well can you establish routines to keep students motivated to speak Spanish consistently?

- 3. How much can you do to help your students think critically?
- 4. How much can you do to control disruptive behavior in the classroom?
- 5. How much can you do to motivate students who show low interest in school work?
- 6. How well can you collaborate with your English speaking counterpart to set common expectations for students?
- 7. To what extent can you make your expectations clear about student behavior?
- 8. How much can you do to get students to believe they can do well in school work?
- 9. How well can you respond to difficult questions from your students?
- 10. How well can you establish routines to keep activities running smoothly?
- 11. How much can you do to help your students' value learning?
- 12. To what extent can you use the science lessons to develop Spanish?
- 13. How much can you gauge student comprehension of what you have taught?
- 14. To what extent can you craft good questions for your students?
- 15. How much can you do to foster student creativity?
- 16. How much can you do to get children to follow classroom rules?
- 17. How much can you do to improve the understanding of a student who is failing?
- 18. How much can you do to calm a student who is disruptive or noisy?
- 19. How well can you establish a classroom management system with each group of students?
- 20. To what extent can you craft a good reading lesson in Spanish embedding grammar?
- 21. How much can you do to adjust your lessons to the proper level of individual students?
- 22. How much can you use a variety of assessment strategies?

- 23. How well can you keep a few problem students from ruining an entire lesson?
- 24. To what extent can you provide an alternative explanation or example when students are confused?
- 25. To what extent does your own Spanish proficiency support your language instruction?
- 26. How well can you respond to defiant students?
- 27. How well can you communicate the Spanish expectations to families?
- 28. How much can you assist families in helping their children do well in school?
- 29. How well can you implement alternative strategies in your classroom?
- 30. How well can you assess your students' Spanish language proficiency?
- 31. How well can you provide appropriate challenges for very capable students? Please answer the following open-ended questions the best you can.
- 32. How do you think you could improve your Spanish instruction?
- 33. How can the school administration support you to better your Spanish teaching practices?
- 34. How can your peers support you to better your Spanish teaching practices?
- 35. What topics would you like for the Communities of Practice that will start this semester address? Why?

Demographic questions:

How many years have you been teaching?

How many years have you taught a foreign language?

Do you hold an endorsement for bilingual education or English as a Second language teaching?

APPENDIX B TEACHERS INTERVIEW

Semi – structured Interview Questions

- 1. Talk to me about your teaching experiences and studies/endorsements.
- 2. How do you feel about your Spanish instruction today compared to how you felt at the beginning of the semester? Why?
- 3. How do you think you could improve your Spanish instruction?
- 4. Do you see yourself continuing to teach Spanish immersion in the future? Why?
- 5. How has the Community of Practice affected your teaching?
- 6. What would you change if you could change something in the FLI program?
- 7. How would you feel if you were asked to mentor a new Spanish immersion teacher today and what would your main recommendations for this person would be?
- 8. Talk to me about your experience with teaching Spanish immersion at SUS (celebrations, challenges, responsibilities)

APPENDIX C

IRB Approval Letter



EXEMPTION GRANTED

Melanie Bertrand Division of Educational Leadership and Innovation - West

Melanie.Bertrand@asu.edu

Dear Melanie Bertrand:

On 7/31/2015 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Increasing Self-Efficacy in Spanish Immersion
	Teachers through Communities of Practice
Investigator:	Melanie Bertrand
IRB ID:	STUDY00002952
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	HRP for Raquel Salas, Category: IRB Protocol;
	• Consent Form, Category: Consent Form;
	• Self-Efficacy Survey, Category: Measures (Survey
	questions/Interview questions /interview guides/focus
	group questions);
	• Interview Questions, Category: Measures (Survey
	questions/Interview questions /interview guides/focus
	group questions);

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 7/31/2015.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

Raquel Salas Raquel Salas cc: