Instructional Coaching in Higher Education: Partnering to Infuse ELL Instructional Practices into Social Studies Courses

by

Malissa Thibault

A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Education

Approved April 2017 by the Graduate Supervisory Committee:

Ray R. Buss, Chair
Margarita Jimenez-Silva
Taryl Hansen

ARIZONA STATE UNIVERSITY

May 2017
ABSTRACT

As evidenced in the growing achievement gap between English language learners (ELLs) and their non-ELL counterparts, it is clear future teachers need to be better prepared to work with ELLs. This study examined the influence of infusing ELL strategies into methods courses through instructional coaching. This study was inspired by the larger iTeachELLs project at Mary Lou Fulton Teachers College at Arizona State University.

This action research project drew upon Vygotsky’s (1978) sociocultural theory and Bandura’s (1977) social cognitive theory. Specifically, the study was built on Vygotsky’s socially shared activities and Bandura’s concepts of modeling and providing opportunities to individuals to practice and attain mastery experiences. Knight et al.’s (2015) impact cycle of coaching served as the framework for the intervention in this study. This perspective was grounded in socially shared activities that included a clear model of the new learning and opportunities for instructors to practice implementing the new learning.

University instructors and teacher candidates participated in the study. A mixed method approach was used to gather data from instructors and teacher candidates. Quantitative data came from a survey that assessed three constructs: (a) knowledge, (b) use, and (c) self-efficacy of Stanford’s (2013) six principles for ELL instruction. Qualitative data were gathered in several ways. Instructor interviews focused on the coaching experiences, whereas teacher candidate interviews focused on knowledge and use of ELL principles. Additional qualitative data included reflective conversations with instructors and course assignments from teacher candidates.
Results suggested instructors gained in their knowledge, use, and self-efficacy of the six principles for ELL instruction, which they taught to their teacher candidate charges. As a result, teacher candidates increased their knowledge, use, and self-efficacy of the ELL principles. The interview data for teacher candidates was consistent with the survey data.

Results from this study highlighted the potential of coaching in higher education as a powerful approach to deliver professional development. Further, results suggested that infusing ELL instructional practices into content methods courses appeared to be a viable method to better prepare teacher candidates to work with ELL students.
DEDICATION

I dedicate this work to three people, whose strength and compassion I admire:

- To my husband, who encouraged and supported me daily while attending to two growing girls,
- To my mom, who talked to me on the drive home every Thursday night after class to make sure I got home safely, and
- To my dad, who always believed in me and pushed me to take risks and make changes in life.
ACKNOWLEDGMENTS

I am grateful to my doctoral committee for their guidance and commitment to this study. Thank you, Dr. Ray Buss for being there to answer “panicked” phone calls at 9:30 at night, engage in endless discussions on data, provide explicit feedback, and most importantly doing it with precision and respect. Thank you for being my “more knowledgable other.” Thank you, Dr. Margarita Jimenez-Silva for directing me to ELL resources, attending faculty institutes, and for supporting me professionally with publishing and conference opportunities. Thank you for being my “revolutionary mentor.” Thank you, Dr. Taryl Hansen for gently pushing me to consider other coaching approaches, offering coaching resources, and meeting with me to discuss reflective conversations. Thank you for being my “meta-coach” in this process.

I am grateful to all my cohort members. Wenger and Wenger-Trayner (2015) defined communities of practice as “groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (p. 1). Our cohort embodied the spirit of Wenger’s definition. Our goal was to improve our local workplace and we leaned on one another to accomplish that goal. I am particularly thankful to my critical friend and cohort member Laura Victor who walked alongside me on this journey.

I am grateful to the iTeachELLs team who encouraged me to innovate. Thank you, Dr. Wendy Farr for allowing me to conduct cycles of action research. Thank you, Dr. Jaclyn Hernandez for pushing me to consider the “how of coaching” as a problem of practice. Thank you, Dr. Sarah Saltmarsh for being a reliable friend during the highs and
lows of life, helping me navigate the doctoral process, and partnering with me to develop
the innovation for this study.

Finally, I am grateful to my husband and children who supported me in the
decision to extend my learning and never wavered in their commitment to support me in
attaining my goal of earning a doctorate. To my husband, thank you for picking up all
the pieces that I dropped as a result of coursework and dissertation life. I could not have
done it without your love and support. To my oldest daughter, Maddie, you continue to
inspire me with your hard work and perseverance in school and dance. To my youngest
daughter, Trystan, your love of life reminded me to take time out to do the same.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>xii</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIST OF FIGURES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>xiii</td>
</tr>
</tbody>
</table>

## CHAPTER

1 LARGER AND LOCAL CONTEXT OF THE PROBLEM OF PRACTICE

- Situational Context ................................................................. 4
- Purpose of the Study .............................................................. 7
- Innovation .................................................................................. 7
- Research Questions ..................................................................... 7

2 THEORETICAL PERSPECTIVES AND RESEARCH GUIDING

THE PROJECT ..................................................................................... 9

- Sociocultural Theory .................................................................. 9
- Selected Studies of Sociocultural Theory ................................... 12
- Implications for the Study .......................................................... 13
- Social Cognitive Theory ............................................................ 14
  - Selected Studies of Social Cognitive Theory .............................. 17
  - Implications for the Study ....................................................... 18
  - Related Literature on Coaching ............................................. 19
    - Previous Cycles of Action Research .................................... 26
      - Cycle 1 .............................................................................. 26
      - Cycle 2 .............................................................................. 28
<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 METHOD</td>
<td>30</td>
</tr>
<tr>
<td>Research Questions</td>
<td>30</td>
</tr>
<tr>
<td>Setting</td>
<td>31</td>
</tr>
<tr>
<td>Participants</td>
<td>31</td>
</tr>
<tr>
<td>Site Coordinators</td>
<td>32</td>
</tr>
<tr>
<td>Teacher Candidates</td>
<td>33</td>
</tr>
<tr>
<td>Role of the Researcher</td>
<td>34</td>
</tr>
<tr>
<td>Intervention</td>
<td>34</td>
</tr>
<tr>
<td>Get-To-Know-You Meeting</td>
<td>34</td>
</tr>
<tr>
<td>Implementation of the Coaching Cycle</td>
<td>35</td>
</tr>
<tr>
<td>Closure Meeting</td>
<td>39</td>
</tr>
<tr>
<td>Instruments and Data Sources</td>
<td>39</td>
</tr>
<tr>
<td>Survey</td>
<td>40</td>
</tr>
<tr>
<td>Site Coordinator Interviews</td>
<td>41</td>
</tr>
<tr>
<td>Teacher Candidate Interviews</td>
<td>42</td>
</tr>
<tr>
<td>Signature Assignments</td>
<td>43</td>
</tr>
<tr>
<td>Procedure and Timeline for Implementation</td>
<td>44</td>
</tr>
<tr>
<td>Data Analysis Procedures</td>
<td>46</td>
</tr>
<tr>
<td>Threats to Validity and Building Validity and Trustworthiness</td>
<td>46</td>
</tr>
</tbody>
</table>
### CHAPTER 4 DATA ANALYSIS AND RESULTS .........................................................48

Results ..................................................................................................................48

Results From Quantitative Data ............................................................................48

KUSE Survey Results: Teacher Candidates .........................................................49

Results From Qualitative Data ..............................................................................51

Site Coordinator Reflective Conversation Results ..............................................51

Enhanced Site Coordinators’ Practice .................................................................52

- Teaching Language Through Content Enhanced
- Site Coordinators’ Practice ..............................................................................53
- Practical Strategies for Teacher Candidates ......................................................54
- New Learning Supported Differentiating Instruction for English Language Learners ..........................................................54
- ELL Instructional Practices Will Become Part of Site Coordinators’ Permanent Practice ...............................................55

Challenges to Infusing ELL Instructional Practices ...........................................56

- Time Devoted To ELL Practices Detracted From Delivery of Social Studies Content ..........................................................56
- Logistical Timing, Which, Included Fixed Course Schedules .............................57
- Sequencing and Timing of Training ..................................................................57
- Benefits Outweighed Logistical Drawbacks .................................................58
Site Coordinator Interviews ..............................................59

Instructional Coaching Impact Cycle .................................60

   Model Strategy Aligned to ELL Principle ..............................60
   Implemented with Support ..............................................61
   Accountability ..........................................................62
   Reflection .......................................................................62

New Learning for Experienced Teacher Educators ...............63

   Six Principles for ELL Instruction ......................................63
   Applicable to Course Content ..........................................64
   Professional Development in Higher Education ..................64

Benefits .............................................................................65

   Benefits for Site Coordinators ........................................65
   Benefits for Teacher Candidates .....................................66

Challenges ........................................................................66

   Time ................................................................................67
   Logistical Timing ..........................................................67

Teacher Candidate Interviews ...........................................67

Differentiation for English Language Learners .....................68

   Differentiation for English Language Learners ..................69
   Using Scaffolding Techniques to Differentiate .....................69
CHAPTER

Confidence in ELL Instructional Practices ..........................................70

Increased Confidence in Knowledge of ELL Instructional Practices ........70

Needed More Practice In Implementing ELL Instructional Practices ..........71

Signature Assignment Results .............................................................72

5 DISCUSSION .........................................................................................74

Complementarity and Integration of Quantitative and Qualitative Data ....74

Explanation of Results ........................................................................76

Coaching Approach and Theoretical Framework ................................77

Increase in Knowledge, Use, and Self-Efficacy for Teacher Candidates ....79

Previous Cycle of Action Research .......................................................81

Limitations ............................................................................................82

Implications for Practice .......................................................................83

Implications for Research .....................................................................84

Personal Lessons Learned ....................................................................85

Conclusion ............................................................................................87

REFERENCES ...............................................................................88
<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. REFLECTIVE CONVERSATION STRUCTURE</td>
<td>94</td>
</tr>
<tr>
<td>B. KNOWLEDGE, USE, SELF-EFFICACY (KUSE) SURVEY</td>
<td>96</td>
</tr>
<tr>
<td>C. SEMI STRUCTURED INTERVIEW PROTOCOL: SITE COORDINATORS</td>
<td>102</td>
</tr>
<tr>
<td>D. SEMI STRUCTURED INTERVIEW PROTOCOL: TEACHER CANDIDATES</td>
<td>104</td>
</tr>
<tr>
<td>E. LETTER OF CONSENT: SITE COORDINATOR</td>
<td>106</td>
</tr>
<tr>
<td>F. LETTER OF CONSENT: TEACHER CANDIDATE</td>
<td>109</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Modified Instructional Coaching Impact Cycle</td>
<td>35</td>
</tr>
<tr>
<td>2. Stanford’s (2013) Understanding Language: Six Key Principles for ELL Instruction</td>
<td>36</td>
</tr>
<tr>
<td>3. Faculty Institute Timeline</td>
<td>38</td>
</tr>
<tr>
<td>4. Alignment of Data Sources to Research Questions</td>
<td>40</td>
</tr>
<tr>
<td>5. Timeline and Procedures for this Study</td>
<td>45</td>
</tr>
<tr>
<td>7. Reliabilities for Teacher Candidate Pre- and Posttest Assessments of Knowledge, Use, and Self-Efficacy</td>
<td>49</td>
</tr>
<tr>
<td>8. Teacher Candidate Pre-and Posttest Means and Standard Deviations for Knowledge, Use, and Self-Efficacy Scores</td>
<td>50</td>
</tr>
<tr>
<td>9. Theme-Related Components, Themes, and Assertions Based on Reflective Conversations Following Training and Implementation of ELL Strategies With Site Two Coordinators</td>
<td>52</td>
</tr>
<tr>
<td>10. Theme-Related Components, Themes, and Assertions Based on Interviews of Two Site Coordinators Following the Intervention</td>
<td>59</td>
</tr>
<tr>
<td>11. Theme-Related Components, Themes, and Assertions Based on Teacher Candidate Interviews Following the Intervention</td>
<td>68</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Zone of Proximal Development Model</td>
<td>11</td>
</tr>
<tr>
<td>2. Big Four Model</td>
<td>22</td>
</tr>
<tr>
<td>3. Instructional Coaching Impact Cycle</td>
<td>23</td>
</tr>
</tbody>
</table>
CHAPTER 1

LARGER AND LOCAL CONTEXT OF THE PROBLEM OF PRACTICE

English Language Learners,
They literally just sit there, copy off their neighbor,
And just wait for the class to be over.
Isolated. They’re really just dozing off,
Basically, the entire hour. Falling behind.

What can we possibly do for them?
Overwhelming. We need help with this.
We’re stuck. We need instructors to guide us.
Give us scenarios. Give us steps to take.
Give us readings. We need to understand.

--Found Poem
(Created from responses of participants in 2015 Arizona State University Focus Group)

The landscape of our nation has been dramatically changing. In 2013, the United States Census Bureau reported a substantial increase in the number of people speaking a language other than English at home. For example, 61.8 million United States residents, or one in five residents, reported speaking a language other than English at home. This is an increase of 2.2 million since 2010 (Camarota & Zeigler, 2014). This change in demographics has also been observed in our educational system. In the 2011-2012 school year, the United States Department of Education reported over four million English language learners representing 9% of pre-K though 12th grade students nationwide (U.S. Department of Education, 2015).

The American educational system has been struggling to keep up with a growing culturally and linguistically diverse population. The shortage of teachers prepared to work with English language learners (ELLs) has plagued the nation since the early 1990s (Gold, 1992). For example in 2002, the National Center for Education Statistics reported that 41% of public school teachers in the United States had ELLs in their classroom. However, only 12.5% of those teachers reported pre-service preparation or in-service
professional development focused on the instruction of language learners. Nearly two decades later, the shortage has remained. In 2015, the United States Department of Education published a nationwide listing of teacher shortage areas (U.S. Department of Education, 2015). English as a Second Language (ESL) and Bilingual Education (BLE) educators made up the nationwide shortage list. In addition, teachers continued to express a lack of training and preparation to meet the needs of language learners (Karabenick & Clemens-Noda, 2004; National Clearinghouse for English Language Acquisition & Language Instruction Educational Programs [NCELA], 2008). The shortage of ESL and BLE teachers coupled with a lack of adequate training and preparation has presented several major implications for our schools and the students whom they serve.

Rumberger and Gandara (2004) asserted, “Inequitable access to appropriately trained teachers” may have contributed to the achievement gap between English language learners and non-English language learners (p. 2036). According to the U.S. Department of Education Office of English Language Acquisition (2015), ELLs were scoring significantly lower in the areas of reading and mathematics on national assessments (U.S. Department of Education, 2015). The disparities in student achievement were highlighted in the 2013 National Assessment of Educational Progress (NAEP) scores. For example, there was a 39-point difference between ELLs and their non-ELL counterparts in reading scores for fourth grade, a 45-point difference in eighth grade, and a 53-point difference in twelfth grade. Similarly, the gap was just as wide for mathematics according to the 2013 mathematics NAEP scores. To illustrate, there was a
25-point difference between ELLs and non-ELLs in fourth grade, a 41-point difference in eighth grade, and a 46-point difference in 12th grade (Nation’s Report Cards, 2013).

Lerma and Stewart (2012) posited the lack of training and adequate preparation for teachers to work with culturally and linguistically diverse students may also have contributed to a disproportionate representation of English language learners receiving special education (SPED) services. The authors argued underqualified teachers working with ELLs struggled in determining whether low student achievement was a result of a learning disability or limited English proficiency (Lerma & Stewart, 2012). This outcome has been problematic because it has resulted in over- or under-identification of ELLs in SPED. Hopstock and Stephenson (2003) featured the over- and under-representation of states reporting ELLs in SPED in their 2003 policy report for the U.S. Department of Education. For example, states reported from 0 to 17.3% of identified English language learners in special education (Hopstock & Stephenson, 2003).

English language learners have also been falling behind in the area of college and career readiness. Further, according to the U.S. Department of Education and the Office of Civil Rights, only 2% of language learners nationwide participated in gifted and talented education, whereas 7% of non-ELLs were enrolled in gifted and talented education (U.S. Department of Education, 2015). Likewise, advanced placement for non-ELLs was more than double the enrollment of English language learners across the United States in the 2011-2012 school year (U.S. Department of Education, 2015). High School graduation rates have also reflected the pervasive disparities that exist between ELLs and non-ELLs. According to the U.S. Department of Education, in the 2011-2012
school year, the national average for high school graduation was 80% whereas the graduation rate for ELLs was at 59% (U.S. Department of Education, 2015).

**Situational Context**

Arizona ranked among the top 15 states with the highest percentage of English language learners (Soto, Hooker, & Batalova, 2015). According to the Arizona Department of Education, approximately 7% or 85,000 students in Arizona were English language learners (Arizona Department of Education, 2014). The profile of an English language learner was changing in Arizona. In general, the majority of English language learners in Arizona were native-born Hispanics of Mexican origin, in the primary grades, and classified at the intermediate level of language proficiency; whereas, prior to this profile change the majority of ELLs were immigrants with limited English proficiency (Arizona Office of English Language Acquisition, 2015; Pew Research Center, 2011).

Consistent with national student achievement data, English language learners in Arizona were performing significantly lower than their non-ELL counterparts. The disparity in student achievement data was reflected in the 2014-2015 AzMERIT scores, Arizona’s statewide achievement test, reported in the 2014-2015 Arizona Report Card. For example, in fourth grade English language arts there was a 38% difference between limited English proficient (LEP) students who scored *proficient* or *highly proficient* and the overall student average, LEP students were not reported for eighth grade, and a 27% difference in 11th grade end-of-course assessment. Similarly, in the 2014-2015 AzMERIT mathematics scores, there was a 38% difference between LEP students who scored *proficient* or *highly proficient* and the overall student average in fourth grade, a 31% difference in eighth grade, and a 28% difference in the high school end of course
Algebra 1 assessment. The 2014-2015 AzMERIT science scores reflected similar results. For example, in the fourth grade there was a 47% difference between LEP students who scored proficient or highly proficient and the overall student average, a 44% difference in eighth grade; high school was not reported. In addition to the disproportionate number of English language learners meeting or exceeding the standards as measured by the AzMERIT assessment, ELLs were also graduating high school at drastically lower rates than their non-ELL counterparts. For example, the overall four-year high school graduation rate in Arizona for the class of 2015 was 77% compared to a 19% graduation rate for students classified as LEP in 12th grade (Arizona Department of Education, 2015).

With a growing number of ELLs in Arizona and unwavering achievement gaps, teacher preparation has been critical. Garcia, Lawton, and Dinz de Figueiredo (2010) posited, “The challenge to ensuring access to high quality instruction for ELLs in Arizona becomes even greater when the preparation of teachers for this task is considered” (p. 5). In the 2015-2016 school year, 13,356 teachers held full English as a Second Language (ESL) or Bilingual Education (BLE) endorsements out of 91,244 teachers in Arizona (Arizona Department of Education Data Management Team, personal communication, November 16, 2015).

Arizona State University’s Mary Lou Fulton Teachers College (MLFTC) has been the fastest rising top tier College of Education in the United States and the largest teacher preparation program in the state (Arizona State University, 2015). MLFTC has been graduating approximately 1,500 teachers per year. However, only 2% or 25 to 28
teachers per year have graduated with an ESL or BLE endorsement (Jimenez-Silva, personal communication, 2015).

The need to support the other 98% of teacher candidates in working with ELLs was further illustrated by an exit survey completed by Mary Lou Fulton Teacher College graduates who stated, “teaching ELLs” was one of three areas in which they felt the least amount of confidence (Jimenez-Silva, personal communication, 2016). In addition, in July of 2015, the Arizona Department of Education changed the requirements for the Structured English Immersion (SEI) endorsement, a requirement for teachers in Arizona who teach students in a structured English immersion model. The SEI endorsement has included specific training on three critical ELL components: policy, structure, and classroom practices (AZ Department of Education, 2008). The components of the SEI training remained the same; however, the number of clock hours was reduced from 60 hours to 45 hours (Arizona Department of Education Certification Unit, personal communication, July 2, 2015). This change in policy affected the courses offered to pre-service teachers at MLFTC. The required SEI courses focusing on teaching English language learners was reduced from two classes to one class for all pre-service teachers.

In 2014, the iTeachELLs project within the MLFTC was awarded an $11.5 million dollar Teacher Quality Partnership (TQP) grant to support the integration of STEM, literacy, and language to prepare all teachers to teach ELLs. As an iTeachELLs early childhood instructional coach, I had the opportunity to support the implementation of key reforms in the MLFTC teacher preparation program so our pre-service teachers would be more successful in understanding and implementing strategies for teaching ELL
students in core content areas (Arizona State University, 2014, ASU iTeachELLs Grant Narrative). This study was inspired by the larger iTeachELLs project within MLFTC.

**Purpose of the Study**

Based on the growing population of culturally and linguistically diverse learners in Arizona, the MLFTC exit surveys, and the reduction of classes focused on teaching English language learners, it became clear that pre-service teachers needed additional training and preparation to work with English language learners. The purpose of my action research project was to examine the influence of infusing ELL instructional practices into ASU social studies courses through instructional coaching.

**Innovation**

The innovation in this study focused on providing instructional coaching to faculty members to support the infusion of ELL instructional practices into ASU social studies courses. Jim Knight’s (2011) definition was used to define coaching in this study: “Instructional coaches partner[ing] with teachers to help them incorporate research-based instructional practices into their teaching” (p. 91).

**Research Questions**

The conduct of this study was guided by the following research questions.

RQ1: How and to what extent did the coaching of site coordinators influence the infusion of ELL instructional practices into ASU social studies courses?

RQ2: How and to what extent did site coordinators self-efficacy change as they infused ELL instructional practices into their ASU social studies courses?
RQ3: How and to what extent did the infusion of ELL instructional practices into social studies courses influence teacher candidates’ social studies lesson planning and instructional practices?

RQ4: How and to what extent did teacher candidates’ self-efficacy change as they infused ELL instructional practices into their social studies lesson planning and instructional practices?
CHAPTER 2
THEORETICAL PERSPECTIVES AND RESEARCH GUIDING THE PROJECT

In Chapter 1, I introduced the problem of practice and provided pertinent information on the context and purpose of this action research project. In Chapter 2, I describe theoretical perspectives, studies relevant to the problem of practice, related literature, and previous action research cycles.

Two fundamental perspectives provided the theoretical frameworks for this action research project. The theoretical perspectives included Vygotsky’s (1978) sociocultural theory and Bandura’s (1977) social cognitive theory.

**Sociocultural Theory**

Although social cultural approaches to learning and development emerged in the 1920s in Russia as Vygotsky and his colleagues explored these approaches, it was not until the late 1950s that these approaches became accessible through his writings (John-Steiner & Mahn, 1996). Vygotsky’s sociocultural theory emphasized that learning and development took place through socially shared activities (Wertsch, 1991). Three key concepts have been threaded throughout Vygotsky’s (1978) sociocultural theory. The concepts were (a) social interaction; (b) zone of proximal development; and (c) the more knowledgeable other (MKO).

The first concept reflected the importance of social interaction in cognitive development. Vygotsky (1978) suggested learning took place through socially shared activities. These socially shared activities had a clear purpose and were goal-directed (Eun, 2008; Vygotsky, 1987). Semiotic mediation was critical to moving from the external socially shared activities to internal individual knowledge and execution of the
activities or skills (John-Steiner & Mahn, 1996). Vygotsky (1981) provided the following examples of semiotic mediation tools that supported moving from external social interactions to internal individual knowledge: “language; various systems of counting; mnemonic techniques; algebraic school systems; works of art; writing; schemes, diagrams, maps and mechanical drawings; all sorts of conventional signs and so on” (p. 137).

The following hypothetical example illustrates social interactions as it was articulated in the sociocultural theory. Two baseball players sat down for dinner after a game they lost. Using language as the semiotic mediation tool, the players reflected on the game and through external dialogue gained an understanding of missed opportunities throughout the game. The baseball players internalized the learning and were determined to make changes as they went into their next baseball game.

The second concept was referred to as the zone of proximal development (ZPD). The ZPD was characterized as the distance between what a learner did independently and what a learner did with support (Vygotsky, 1978). Figure 1 illustrates the zone of proximal development in the sociocultural theory.
The following hypothetical example illustrates the ZPD as it was articulated in sociocultural theory. A teacher assessed a new student to determine what the student was capable of doing on her own with respect to demonstrating knowledge of place value, what the student did with help in regards to place value, and what the individual was not able to do with respect to place value. This assessment was useful because it allowed the teacher to present mathematical concepts in relation to place value that were at the correct level of difficulty for the student while at the same time providing an appropriate level of support.

The third concept within the sociocultural theory was the more knowledgeable other (MKO). Vygotsky (1978) described the MKO as having a greater understanding or being more proficient than the learner in relation to specific tasks, skills, performance, or processes. The MKO theme was inherently connected to the second theme, ZPD, because the MKO needed to be aware of the learner’s ZPD to provide appropriate scaffolds to support the learner (Wertsch, 1991).
The following hypothetical example illustrates the MKO as it has been articulated in sociocultural theory. At the beginning of the year, an experienced teacher, MKO, meets with a beginning teacher to explain how to set up classroom rules and procedures. The experienced teacher invites the beginning teacher to observe her setting up rules and procedures with her students. After the observation, the teachers meet to reflect on the experience.

**Selected Studies of Sociocultural Theory**

One example of research that examined the influence of Vygotsky’s (1978) sociocultural theory came from the work of Jones, Rua, and Carter (1998). The researchers designed a study to analyze the changes in teachers’ science content knowledge. Fourteen teachers who taught early and middle childhood grades and who were from a graduate science methods course volunteered to participate. Using the MKO concept from Vygotsky’s theory, the researchers paired students based on their experience teaching science with more knowledgeable science teachers working with less experienced teachers. Jones et al. (1998) developed five three-week learning cycles that targeted specific science concepts. Each cycle began with identifying the ZPD for each pair and included the following mediation tools to support learning: peers, tools, instructors, teachers’ students, and readings. At the end of the semester, concept maps, transcriptions, portfolios, and journals demonstrated teacher growth in science content knowledge.

Zambo (2013) analyzed the influence of Vygotsky’s (1978) sociocultural theory in her article “Elbow Learning about Change, Leadership, and Research in a CPED-Influenced Program.” This four-year study included Ed.D. students in the Leadership
and Innovation program at Arizona State University. The study focused on an internship class that targeted change, leadership, and research concepts through mentoring. The purpose of the study was to determine how “elbow learning” from a MKO, or mentor leader, supported graduate student learning. Artifacts throughout the course were collected and analyzed through content analysis. The results indicated students’ practical knowledge increased as a result of the “on-the-ground” training with their MKO, or mentor leader. In addition, Zambo asserted, “Through their mentors’ words and actions students came to understand the importance of collaborative leadership style and how leaders work for social justice and equity” (p. 248).

Implications for the Study

The three central concepts embedded in the sociocultural theory have important implications for this action research project. The intervention for this study focused on the knowledge constructed through the external socially shared coaching activities. Recall, socially shared activities should have a clear purpose and be goal-directed (Eun, 2008; Vygotsky, 1987). The planning and reflective conversations that cyclically occur in coaching are socially shared activities that had a clear purpose of infusing ELL instructional practices into the social studies courses. Language is the semiotic tool that is used in the planning and reflective conversations.

The second concept, ZPD, is related to the intervention for this action research project. Those serving as coaches need to assess their protégé’s knowledge and skills related to the content and pedagogy of infusing ELL practices into social studies methods courses. This assessment supports coaches in appropriately planning for the coaching experience.
The MKO concept also has critical implications for this study. Coaches need to be more knowledgeable in the area of effective ELL instructional practices to support the infusion of ELL strategies into content methods courses through coaching. In addition, coaches need to be more knowledgeable in the area of instructional coaching. Knight (2009) confirmed, “Coaches need to have a deep understanding of the practices or content knowledge they share with teachers as well as the coaching practices and communication skills that are necessary for effective coaching” (p. 20).

In the same respect, the coach must be willing to be the less knowledgeable other with respect to the social studies content. The person being coached will have a much deeper understanding of the social studies content. Thus, the coach will need to lean on the protégé’s understanding of social studies content to effectively support the infusion of ELL instructional strategies into the social studies methods class.

**Social Cognitive Theory**

Bandura (1977) posited that interactions between personal, behavioral, and environmental factors mutually influenced the others during learning in social cognitive theory. In the theory, Bandura emphasized learning took place in the context of social settings and primarily through observation. Social cognitive theory offered an agentic position on self-development, adaptation, and change (Bandura, 2005). Bandura (2005) cogently argued, “To be an agent is to influence intentionally one’s functioning and life circumstances” (p. 9).

Self-efficacy has been woven into the social cognitive theory and was included in the agentic perspective. Bandura (1982, 1997) explained self-efficacy as peoples’ beliefs or judgments about their capabilities of performing a specific behavior. The concept of
self-efficacy emerged unexpectedly as Bandura and his colleagues were treating participants with intractable phobias through guided-mastery treatments or opportunities to confront their phobia (Bandura, 2005). The treatments were successful not only in eliminating the phobias but also in changing participants’ beliefs that they could control their fears (Bandura, 2005). This foundational research was a springboard into exploration of belief systems and perceived self-efficacy (Bandura, 2005).

Perceived self-efficacy, judgments of capabilities, have been shown to influence effort and perseverance on tasks (Bandura, 1977, 1997). For example, the greater the perceived self-efficacy the more likely people will be to exert effort and persevere when facing a difficult task. Bandura (1982) claimed perceived low self-efficacy prevented people from engaging in certain behaviors and tasks. He highlighted the importance of understanding the required behavior and the setting in which their actions will be implemented.

Bandura (1982, 1997) claimed there were four main sources of information that influenced self-efficacy: (a) mastery experiences; (b) vicarious experiences; (c) verbal persuasion; and (d) psychological states. The first source, mastery experiences, has been defined as experiences in which individuals were successful (Bandura, 1977). Mastery experiences have served as a source of information that has yielded strong efficacy expectations.

The following hypothetical example was provided to illustrate mastery experiences as it was articulated in social cognitive theory. A child was learning how to ride a bike without training wheels. In the beginning, the child was only able to get the pedals around once or twice without falling. The child continued to get on the bike every
time pedaling for a little bit longer. Each time the child pedaled longer, that is, achieved a mastery experience, the child built a greater sense of personal efficacy for riding the bike.

The second source of information influencing self-efficacy was vicarious experience through live or symbolic modeling (Bandura, 1977). Bandura cautioned that the modeled behavior needed to have clear outcomes. The following example illustrates vicarious experiences as it was articulated in Bandura’s (1977) social cognitive theory. Doctoral students observed a live dissertation proposal defense to gain an understanding of the process. After observing the live dissertation proposal defense, the doctoral students experienced increased self-efficacy in their own ability to successfully defend their dissertation proposals because they saw themselves as similar to the model in terms of their capabilities.

The third source of information was verbal persuasion (Bandura, 1977). This source of information included someone sharing what to expect and was persuaded through dialogue that they had the necessary capabilities to engage in the action or behavior. Verbal persuasion has been the most widely used source of information; however, it was also the source that has shown limitations with respect to influencing self-efficacy.

The following example illustrates verbal persuasion as it was discussed in Bandura’s (1977) social cognitive theory. An employee who had an aversion to public speaking was invited to showcase the company’s products at a local convention. The employee’s manager sat down and had a conversation with the employee about the benefits of the employee taking this opportunity. The manager assured the employee that she had the necessary skills to present at the showcase. After the conversation, the
employee had a higher sense of self-efficacy for public speaking and agreed to speak at the convention.

The final source of information for personal efficacy has been shown to be psychological states (Bandura, 1977). Bandura (1982) claimed people judged their capacity for handling a situation based on their psychological states. The following example was developed to illustrate psychological states as it was expressed in social cognitive theory. A runner embarked on a half marathon. Halfway through the run, the runner experienced a side cramp, his legs were sore, and he was sweating profusely. He started to question his ability to complete the half marathon. The runner’s self-efficacy decreased as his physical and psychological state weakened.

**Selected Studies of Social Cognitive Theory**

The following studies demonstrated the influence of self-efficacy in teaching. Tschannen-Moran and McMaster (2009) conducted a quasi-experimental study in which they focused on how various types of professional development influenced teacher self-efficacy. The researchers used cluster sampling to select 93 participants across nine different schools. A new teaching strategy was implemented with four different groups using a specific professional development format for each group. The treatment for Group 1 included a three-hour training session on the new strategy by a trainer. By comparison, the treatment for Group 2 focused on Bandura’s (1977) vicarious experiences as to source of information. This treatment included the three-hour training session on the strategy by the same trainer in addition to modeling. Treatment for Group 3 highlighted Bandura’s vicarious experiences along with mastery experiences. This treatment included a three-hour training session on the strategy by the same trainer in
addition to modeling and practice. The final treatment for Group 4 encompassed the interventions in the third treatment along with coaching. The Teacher’s Sense of Efficacy Scale (TSES; Tschannen-Moran & Woolfolk Hoy, 2001) was administered to all participants as a pre- and post-intervention assessment, which included items on teacher self-efficacy and modified items on teacher self-efficacy for reading instruction and implementation. The findings demonstrated that Group 4 whose treatment included modeling, application, and coaching had the highest perceived self-efficacy for all elements measured.

In another study, Ross (1992) illustrated the link between teacher efficacy, instructional coaching, and student achievement in a mixed-method study. The study included 18 history teachers in an Ontario school district. The identified coaches were highly competent in the area of history and also had a wide range of experience. Researchers collected quantitative data through a self-reported questionnaire. Qualitative data were collected through interviews. The results of the study clearly demonstrated the benefits of coaching. The findings from this study suggested teachers who had more interactions with their coaches had higher student achievement and a greater sense of self-efficacy in their teaching.

**Implications for the Study**

Given the powerful research results on self-efficacy, it is anticipated that self-efficacy will play a key role in this study. In previous research, faculty members who demonstrate greater perceived self-efficacy exert more effort into their teaching (Gibson & Dembo, 1984; Riggs & Jesunathadas, 1993). Thus, those with higher self-efficacy are expected to more readily infuse ELL instructional practices into their courses; whereas,
faculty members who show lower perceived self-efficacy are expected to not exert as much effort in carrying out the necessary changes in practice. Participants’ self-efficacy for infusing ELL instructional practices in their social studies methods course will be documented in this study.

Two sources of information that influence self-efficacy affect outcomes of this study. Mastery experiences will constitute the primary source of information that will influence efficacy. The coaching process will include opportunities for participants to practice infusing the ELL instructional strategies into their coursework. It is anticipated that successful implementation will have a positive influence on self-efficacy and the use of the ELL strategies during instruction. The second source of information that will influence self-efficacy is vicarious experiences. Modeling of ELL instructional practices by the coach will be a key component in the coaching intervention, which is anticipated to influence self-efficacy and the use of the ELL strategies during instruction.

**Related Literature on Coaching**

The intervention for this action research was coaching. Coaching has become a relatively new form of professional development in the PreK-12 grade educational context (Fletcher & Mullen, 2012). Coaching as a form of job-embedded professional development in higher education has been uncommon. One example of a coaching program situated in higher education has been Harvard’s The Derek Bok Center for Teaching and Learning. This Center partnered with faculty members to provide professional development and support for their teaching (Harvard University, 2017). Empirical research studies on coaching faculty in higher education were particularly
limited. Mentoring in higher education was more common, but still limited (Knippelmeyer & Torraco, 2007).

The art of coaching has been practiced for decades in business settings (Knight, 2007). Joyce and Showers (1980) were among the first researchers to bring coaching to the educational context. Since coaching was introduced to the education field, it has taken on different forms and has been used for different purposes. The following approaches to coaching have been among the most widely used in education: peer coaching, cognitive coaching, content coaching, data coaching, literacy coaching, and instructional coaching (Knight, 2011).

Joyce and Showers (1980), the pioneers of coaching in education, developed a peer coaching approach. This approach involved teachers observing and providing feedback to one another. Peer coaching was based on the premise that professional colleagues could aid one another in reflecting on and thus improving their practices (Joyce & Showers, 1980, 1996).

Cognitive Coaching℠ has been another approach that has become widely used in education. This approach originated with Art Costa and Robert Garmston (2002). Cognitive Coaching℠ was built on the foundation of Cogan and Goldhammer’s 1960’s clinical supervision program at Harvard, which focused on developing reflective, self-directed teachers (Costa & Garmston, 2002). The Cognitive Coaching℠ approach has supported nonjudgmental mediation of thinking. According to Costa and Garmston (2002), “The mission of Cognitive Coaching℠ is to produce self-directed persons with
the cognitive capacity for high performance, both independently and as members of a community” (p. 16).

Lucy West (2009) developed the content coaching approach. This form of coaching focused exclusively on how the coach assisted teachers in acquiring a deep understanding of content through an inquiry-based model (West & Cameron, 2013). West and Cameron asserted that to improve instruction coaches needed to (a) focus on the underpinning concepts in a domain and (b) attend to the development of skills within that domain.

Data coaching has recently emerged as a coaching approach. This form of coaching involved coaches who support teachers in using data to inform their instruction. Love (2009), a proponent of data coaching, posited that the use of reflective questioning and dialogue helped teachers to “make sense of the data together” to create instruction to more readily influence student learning.

Literacy coaching, which was directed at learning teaching skills related to literacy education, has been another form of coaching that surfaced in the educational context. Knight (2007) explained that literacy coaches had an extensive range of roles and responsibilities. The author further described how literacy coaches may have worked exclusively with students, exclusively with teachers, or both to improve literacy skills.

The final coaching approach that has been widely used in education and the one that was used in this action research project was instructional coaching. Jim Knight (2007) developed the instructional coaching approach. Knight (2011) explained, “Instructional Coaches partner with teachers to help them incorporate research-based instructional practices into their teaching” (p. 91). Instructional coaching has embodied
four major components, which Knight (2011) referred to as the “Big Four” (p. 60). The Big Four included (a) planning content, (b) developing and using formative assessments, (c) delivering instruction, and (d) community building (Knight, 2011). These four components are depicted in Figure 2.

Figure 2. Big Four. Adapted from Unmistakable Impact: A Partnership Approach for Dramatically Improving Instruction, by J. Knight, 2011, p. 60.

Knight (2011) described content planning, the first component, as thoughtfully unpacking and mapping standards so students developed the content knowledge and skills they needed to be successful. Knight (2007) emphasized the importance of teachers developing guiding questions during this process. The second component of the “Big Four” was formative assessments. According to Knight (2011), these assessments were to be constructed to ensure students were able to answer the guiding questions crafted during the content planning. The third component in this model was instruction. In this component, teachers focused on enhancing pedagogy for effective transfer of content from the teacher to the students (Knight, 2011). The final component in the “Big Four” model was community building. Knight (2011) defined community building as creating a learning environment where students experienced success. The emphasis in this component was on student behavior and classroom management. Further, Knight (2011)
highlighted the importance of demonstrating genuine respect for all students in this community-building component. Finally, Knight (2011) cautioned that all four components must have been present to have a successful instructional coaching program.

Instructional coaching has been portrayed as a cycle of learning opportunities that were grounded in the “Big Four” components. The three recommended steps of the Knight et al. (2015) instructional coaching impact cycle included (a) identify, (b) learn, and (c) improve. Figure 3 illustrates the instructional coaching cycle and the relations among the steps.

![Figure 3. Instructional coaching impact cycle. Adapted from “3 Steps to Great Coaching: A Simple But Powerful Instructional Coaching Cycle Nets Results,” by J. Knight et al., 2015, Journal of Staff Development, 36(1), p. 10.](image)

Step 1 of Knight and colleagues’ (2015) instructional coaching impact cycle has been called identify. This step involved the coach and protégé collaborating to set a goal. Knight et al. (2015) recommended data analysis such as a video of the teacher’s instruction, student work, or evaluation results to support identifying an appropriate goal. After the goal was determined, the partners selected a strategy to meet the goal.
Step 2 of the instructional coaching impact cycle was labeled *learn*. This step included the teacher learning how to apply the selected strategy. There were two parts to this step. The first part involved the coach clearly explaining the identified strategy to the protégé. The second part of Step 2 involved the coach modeling how to implement the strategy (Knight et al., 2015). Knight and his colleagues offered five different methods of modeling that included modeling in the classroom, modeling in the classroom with no students, co-teaching, visiting other classrooms, and video. Knight et al. emphasized the importance of giving the protégé “look-fors,” directions to look for specific instructional actions regarding the strategy as it was being modeled.

Step 3 of Knight and colleagues’ (2015) instructional coaching impact cycle was called *improve*. In this step, the coach monitored the implementation of the identified strategy in addition to monitoring mastery of learning by students. Knight and his colleagues suggested several methods for monitoring implementation. Some of the methods included observation of implementation by the protégé, review of student work, and examination of assessment data. Then, the coach and protégé engaged in a reflective conversation regarding the implementation of the new strategy.

Dialogue was considered to be a critical element that was woven throughout the steps of the instructional coaching impact cycle (Knight et al., 2015). Knight (2011) defined dialogue as “talking with the goal of digging deeper and exploring ideas together” (p. 38). This type of dialogue was judged to be consistent with Vygotsky’s (1978) sociocultural theory, in which people engaged in socially shared activities where language served as a mediating tool that created knowledge.
The benefits to coaching have been shown to be numerous. Darling-Hammond (2010) claimed ongoing, job-embedded professional development was necessary. She asserted, “The issue in the United States is not that we don’t know what to do to improve teaching and learning. It is that, beyond a few states, we have not organized ourselves to do it systematically” (Darling-Hammond, 2010, p. 206). Thus, coaching is proposed as one way to provide systematic, ongoing, job-embedded professional development to improve teaching and learning.

The power of instructional coaching was illustrated in a study conducted by Cornett and Knight (2008). The study consisted of 51 teacher participants who attended a workshop after school. Random assignment was used to assign the teachers to two different groups. Participants in the first group received coaching as an intervention following the workshop. By comparison, participants in the second group did not receive the coaching intervention. Researchers observed both groups of teachers as they taught and documented evidence of the new learning from the after-school workshop. The findings from this study demonstrated teachers were more likely to transfer new learning to their classrooms if they received coaching. Ninety percent of the teacher participants who received coaching implemented the new learning during documented observations; whereas, only 30% of the teachers who did not receive coaching implemented the new learning. These findings were consistent with those obtained in Bush’s (1984) groundbreaking study in which he demonstrated that of those teachers who received coaching, practice, and feedback, 95% applied new learning to their classroom practice.
**Previous Cycles of Action Research**

To further develop my intervention for this action research project, I previously completed two cycles of action research. The first cycle of action research, Cycle 1, was implemented in fall 2015. The second, Cycle 2, was completed in spring 2016. The purpose of these action research cycles was to inform the development of this action research project. Details of the cycles have been provided in the next section.

**Cycle 1.** Purposive sampling was used to select ASU science methods professors to participate in Cycle 1 (Creswell, 2014). The following criteria were used to determine eligible participants: (a) the professor taught a science methods course in fall 2015 and (b) the professor taught undergraduate students in the early childhood or elementary education program. Based on those criteria, two professors volunteered to participate in Cycle 1. In this cycle, I partnered with another coach to support the infusion of ELL instructional practices into the professors’ science methods courses through coaching. The following are the research questions that guided the conduct of Cycle 1:

- **RQ1:** How did the approach to coaching influence the intervention?
- **RQ2:** What did pre-service teachers know about ELL strategies?
- **RQ3:** What did pre-service teachers want to know about how to infuse ELL instructional practices into their science methods classes?

Because the purpose of Cycle 1 was to inform the development of the intervention for this action research study, we engaged in different approaches to coaching with each participant. We implemented a semi-traditional coaching model with Professor 1. The semi-traditional coaching model consisted of two phases of coaching: observations and
modeling in the classroom and reflective conversations. The reflective conversations were conducted on an irregular basis, as the time and opportunity presented themselves.

The coaching model for Professor 2 consisted of a drop-in approach to coaching where my colleague and I visited the classroom to model mini-lessons on ELL instructional practices for science. There were no planning or reflective conversations for the protégés in this coaching experience.

At the conclusion of Cycle 1, qualitative data were gathered using several approaches. First, face-to-face semi-structured interviews were conducted separately with the professors following implementation of the intervention to learn more about their perceptions of the two coaching approaches. Additionally, I facilitated a teacher candidate focus group from one of the professor’s science methods course to learn more about what pre-service teachers knew about teaching ELLs and what they wanted to know about infusing Saldaña’s ELL instructional practices into their science instruction. The focus group participants included five pre-service teachers, one male and four female students. Responses from the interviews and focus group were recorded and transcribed. The grounded theory approach as outlined by Saldaña (2013) was used to code the responses of participants for both the semi-structured interviews and the focus groups.

The following assertions were made based on the analysis of data and grounded in the research questions:

Assertion 1: The coaching approach needed to be defined for the researcher and for the participants.

Assertion 2: Pre-service teachers had limited knowledge of ELL instructional practices.
Assertion 3: Pre-service teachers desired to learn a variety of strategies to support ELLs in the science classroom including wanting to observe modeling of science lessons for ELLs.

The findings from Cycle 1 confirmed the need to better prepare pre-service teachers to work with ELLs. The Found Poem, introduced in Chapter 1 and created from pre-service teachers’ responses in the focus group, illuminate this need. Further, there were two major implications. First, the information I gained from the focus group with pre-service teachers can be used to inform the content of coaching offered to professors. Second, I need to identify a systematic approach to coaching.

**Cycle 2.** Using what I learned from Cycle 1, I was able to thoughtfully prepare for Cycle 2. Purposive sampling was used to select one ASU instructor to participate in Cycle 2. The purpose of this action research cycle was to continue to develop the intervention for this action research project by focusing exclusively on the approach to coaching. Therefore, I retained Research Question 1 from Cycle 1: “How did the approach to coaching influence the intervention?”

Again, qualitative data were gathered at the conclusion of Cycle 2. A face-to-face, semi-structured interview was conducted with the instructor following implementation of the intervention to learn more about the effectiveness of the refined coaching approach. I used the grounded theory as outlined by Saldaña (2013) to code the participant’s responses to the semi-structured interview. The following assertions were made based on the analysis of data:

Assertion 1: The instructor valued modeling by the coach and co-teaching ELL strategies together.
Assertion 2: The instructor valued opportunities to practice new ELL strategies.

The findings from Cycle 2 confirmed the need to incorporate intentional modeling and practice opportunities into the coaching process. These findings were consistent with Bandura’s (1982) sources of information that influence efficacy. Mastery experiences were consistent with success of application of the new learning and vicarious experiences were consistent with the teacher viewing the modeling done by the coach as part of the coaching protocol.
CHAPTER 3

METHOD

In Chapter 3, I describe the methodology of this action research project. Prior to presenting the methodology, a brief review of the study and context is provided. Recall from Chapter 1, there has been a growing number of culturally and linguistically diverse students in Arizona and there is a shortage of teachers who have been prepared to work with English language learners. The purpose of my action research project was to examine the influence of infusing ELL instructional practices into ASU social studies methods courses using instructional coaching.

Research Questions

This study was guided by the following research questions.

RQ1: How and to what extent did the coaching of site coordinators influence the infusion of ELL instructional practices into ASU social studies courses?

RQ2: How and to what extent did site coordinators self-efficacy change as they infused ELL instructional practices into their ASU social studies courses?

RQ3: How and to what extent did the infusion of ELL instructional practices into social studies courses influence teacher candidates’ social studies lesson planning and instructional practices?

RQ4: How and to what extent did teacher candidates’ self-efficacy change as they infused ELL instructional practices into their social studies lesson planning and instructional practices?
**Setting**

This study took place at the Mary Lou Fulton Teachers College (MLFTC) at Arizona State University (ASU) in the 2016 fall semester. MLFTC has been the fastest rising top tier College of Education in the United States and has maintained the largest teacher preparation program in the state (Arizona State University, 2015). MLFTC has offered a range of undergraduate and graduate degree programs. Courses were held at four university campuses and at partner school districts across the valley.

The work I did in this action research study was situated within the context of the iTeachELLs project. Recall from Chapter 1 that the iTeachELLs project within the MLFTC was awarded an $11.5 million dollar Teacher Quality Partnership (TQP) grant to support the integration of science, technology, engineering, and mathematics (STEM), literacy, and language to prepare all teachers to teach English language learners.

**Participants**

This study was comprised of two groups of participants. The first group of participants included two site coordinators who also served as instructors of the social studies methods courses at their sites. The site coordinators’ role in the university was to “ensure the academic and teaching success of teacher candidates” (Arizona State University, Mary Lou Fulton Teacher’s College, n.d.). Site coordinators taught face-to-face courses and supervised teacher candidates within one school district. I partnered with these two site coordinators to infuse English language learner (ELL) practices into their social studies methods courses. The second group of participants included teacher candidates enrolled in the participating site coordinators’ social studies courses.
Site coordinators. Purposive sampling was used to select site coordinators to engage in this study. The following were used in the sampling process: (a) the site coordinator taught a social studies methods course in fall 2016; (b) the site coordinator taught in the early childhood or elementary education program; and (c) the site coordinator was experienced as to teaching in the program. Based on the criteria presented above, I invited two site coordinators to participate in this study.

Site Coordinator A had over 10 years of teaching experience and held a master’s degree in education. She had five years of experience working with ELLs. Site Coordinator A taught in the accelerated 15-month elementary education Arizona Teacher Certification master’s degree program. This was her first semester teaching the methods course EED 524: Social Studies in the Elementary Classroom. This course started October 13, 2016, and ended December 2, 2016. The following description of the social studies methods course was provided to offer contextual information: “Social Studies methods and standards applied across the curriculum, instructional and assessment strategies for all children in K-8 classrooms” (ASU Syllabus, 2016). This course met at one of the schools within Site Coordinator A’s partner school district.

Site Coordinator B also had over 10 years of teaching experience and held a master’s degree in education. She had seven years of experience working with ELLs. Site Coordinator B taught in the elementary education Arizona Teacher Certification bachelor’s degree program. She had taught the social studies methods course, EED 324: Social Studies in the Elementary Classroom, multiple times. This course started on August 18, 2016, and ended on December 2, 2016. The following description of this social studies course provides contextual information:
Social studies education standards, curriculum, and developmentally appropriate practices for teaching and assessing in grades K-8. The course emphasizes meeting the academic and linguistic needs of diverse learners to include English language learners and valuing diverse cultures and experiences. Exploration of instructional materials, technology tools, and social studies programs. (ASU Syllabus, 2016)

This course met at one of the schools within the Site coordinator B’s partner school district.

**Teacher candidates.** All teacher candidates enrolled in the site coordinators’ social studies methods courses were invited to participate in this study. Teacher candidates were in their final year of the teaching program.

In Site Coordinator A’s class, nine of ten teacher candidates chose to participate in the study. Of the nine teacher candidates, eight were female and one was male. These nine teacher candidates ranged in age from 22 to 43 years of age. All of the teacher candidates were enrolled in the elementary education program and were in their second semester of their program. Seven of the nine teacher candidates had English language learners in their field placement. One of the nine teacher candidates indicated she was fluent in a language other than English.

In Site Coordinator B’s class, all six teacher candidates chose to participate in the study at the beginning of the semester. One teacher candidate withdrew from the elementary education program mid-semester. Thus, only five teacher candidates participated in the full action research project. Of the five teacher candidates, four were female and one was male. These five teacher candidates ranged in age from 21 to 24 years of age. All of the teacher candidates were enrolled in the elementary education program and were in their seventh semester of the program. Four of the five teacher
candidates had English language learners in their field placement classrooms. Two of the five teacher candidates indicated they were fluent in a language other than English.

**Role of the researcher.** In this action research study, my role was to partner with the participating instructors to infuse ELL instructional practices into their social studies methods courses after being coached with an instructional coaching approach. My positionality in this action research study was as an insider dedicated to the actions of this study (Herr & Anderson, 2005). As a coach and researcher, I met with the instructors individually and in a group setting throughout the semester and followed Knight and colleagues’ (2015) instructional coaching impact cycle.

As an action researcher, I collected data throughout the action research study. I administered a pre- and post-intervention survey to site coordinators and teacher candidates. I conducted interviews with both groups of participants, engaged in reflective conversations with site coordinators, and collected classroom artifacts throughout the semester.

**Intervention**

The intervention for this action research project was grounded in Jim Knight’s (2007) instructional coaching approach. This coaching approach was selected as a result of what I learned from the two previous cycles of action research. In addition, the instructional coaching approach was congruent with the theoretical perspectives for this action research study. Details of the intervention are provided in the next sections. This intervention for this study included the following steps:

**Get-to-know-you meeting.** This was an informal meeting between the coach and instructor focused on building the coaching relationship. The coach used this meeting to
informally learn more about the instructor’s knowledge, use, and self-efficacy related to ELL practices. The goals of the partnership and coaching process were discussed during this meeting.

**Implementation of the coaching cycle.** A modified version of Knight and colleagues’ (2015) instructional coaching impact cycle of identify, learn, and improve represented the coaching process utilized in the study is provided in Table 1.

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Modified Instructional Coaching Impact Cycle</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Steps</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify</td>
<td>Identify one of the six principles on which to focus Select a strategy to support the ELL principle</td>
</tr>
<tr>
<td>Learn</td>
<td>Coach clearly explains the identified strategy Coach models how to implement the ELL instructional strategy</td>
</tr>
<tr>
<td>Improve</td>
<td>Monitor the implementation of the ELL instructional practice and/or strategy (observe implementation, co-teach, model in class, analyze teacher candidate work, analyze assessment data) Conduct a reflective conversation.</td>
</tr>
</tbody>
</table>

*Note.* Adapted from “3 Steps to Great Coaching: A Simple But Powerful Instructional Coaching Cycle Nets Results,” by J. Knight et al., 2015, *Journal of Staff Development, 36*(1), 11-18.

The first step in Knight and colleagues’ modified coaching cycle involved identifying a goal and a teaching strategy to meet the goal. For the purpose of this study, the goal was to incorporate Stanford’s Six Key Principles for ELL instruction (Stanford Graduate School of Education, 2013) into the instructor’s social studies course.

Stanford’s six key principles were designed to assist teachers and coaches as they
planned Common Core State Standards (CCSS) aligned lessons for ELLs (Stanford Graduate School of Education, 2013). These principles have been applied to all grade levels and all core content areas including social studies. The developers of these principles asserted there was no hierarchy among the principles and that the principles were applicable to all language learners regardless of language proficiency level.

Stanford’s Six Key Principles for ELL instruction were employed in the iTeachELLs Project and hence they were used in this action research study. These principles were reviewed and selected by Drs. Jimenez-Silva and Hernandez, who were my colleagues in the iTeachELLs Project. The iTeachELLs coaches selected strategies that were aligned to each principle. The Six Key Principles for ELL Instruction represented the content for this instructional coaching approach. The six principles are outlined in Table 2.

**Table 2**

*Stanford’s (2013) Understanding Language: Six Key Principles for ELL Instruction*

<table>
<thead>
<tr>
<th>Principle</th>
<th>Six Key Principles for ELL Instruction Defined</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Instruction focuses on providing ELLs with opportunities to engage in discipline-specific practices, which are designed to build conceptual understanding and language competence in tandem.</td>
</tr>
<tr>
<td>2</td>
<td>Instruction leverages ELLs’ home language(s), cultural assets, and prior knowledge.</td>
</tr>
<tr>
<td>3</td>
<td>Standards-aligned instruction for ELLs is rigorous, grade-level appropriate, and provides deliberate and appropriate scaffolds.</td>
</tr>
<tr>
<td>4</td>
<td>Instruction moves ELLs forward by taking into account their English proficiency level(s) and prior schooling experiences.</td>
</tr>
</tbody>
</table>

Table 2 continued on next page
Table 2 (continued)

*Stanford’s (2013) Understanding Language Six Key Principles for ELL Instruction*

<table>
<thead>
<tr>
<th>Principle</th>
<th>Six Key Principles for ELL Instruction Defined</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Instruction fosters ELLs’ autonomy by equipping them with the strategies necessary to comprehend and use language in a variety of academic settings.</td>
</tr>
<tr>
<td>6</td>
<td>Diagnostic tools and formative assessment practices are employed to measure students’ content knowledge, academic language competence, and participation in disciplinary practices.</td>
</tr>
</tbody>
</table>

The second step of the modified instructional coaching cycle, learn, took place in a group setting through faculty institutes. All site coordinators partnering with the iTeachELLs project for the Fall 2016 semester attended five faculty institutes throughout the semester. Each faculty institute focused on one or two principles and corresponding teaching strategies. During each faculty institute the following process was followed: (a) coaches identified the importance of the targeted principle for site coordinators and critical dispositions associated with the principle; (b) coaches explained and modeled the strategy; and (c) coaches met with their protégé to plan for implementation of the principle/strategy. This planning time included determining how the site coordinator was going to implement the new learning in his or her social studies courses, identifying a date/time to apply the new learning, and determining the coach’s role in the implementation (i.e., observation, modeling in the classroom, or co-teaching). Table 3 displays the timeline for the faculty institute.
The final step in the modified instructional coaching impact cycle, improve, occurred after every faculty institute. This step consisted of implementation of the ELL strategy learned in the faculty institute paired with a reflective conversation. The coach observed the site coordinator implement the new learning or co-taught the new learning with the site coordinator. After implementation, the site coordinator and the coach met to reflect on the ELL principle and strategy that had been infused into their social studies course. The coach employed a reflective conversation structure, which was developed, by the researcher, and Drs. Saltmarsh and Smith, two coaches who worked with other site coordinators on the iTeachELLs Project. The reflective conversations focused on the following categories: (a) reflection on the action the site coordinator took that addressed the principle; (b) how that action was a change of practice for the site coordinator; (c) benefits of implementing the principle/strategy; (d) drawbacks of implementing the principle/strategy; and (d) sustainability of infusing the principle/strategy into their

Table 3

*Faculty Institute Timeline*

<table>
<thead>
<tr>
<th>Faculty institute dates</th>
<th>Targeted principle(s)</th>
<th>Strategies aligned with corresponding principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 24, 2016</td>
<td>ELL Principle 1</td>
<td>Disciplinary specific discourse</td>
</tr>
<tr>
<td>September 14, 2016</td>
<td>ELL Principles 3 &amp; 5</td>
<td>Content-language objectives</td>
</tr>
<tr>
<td>October 5, 2016</td>
<td>ELL Principle 5</td>
<td>Metalanguage strategies</td>
</tr>
<tr>
<td>October 26, 2016</td>
<td>ELL Principle 2 &amp; 4</td>
<td>Metalanguage strategies</td>
</tr>
<tr>
<td>November 16, 2016</td>
<td>ELL Principle 6</td>
<td>Assessment strategies</td>
</tr>
</tbody>
</table>
permanent practice. All reflective conversations were audio recorded. The Reflective Conversation Structure is provided in Appendix A.

**Closure meeting.** The coach met with each site coordinator/instructor individually to reflect on the coaching experience and infusion of all six principles/strategies into their social studies methods courses.

**Instruments and Data Sources**

The research design for this study was a convergent parallel mixed methods design (Creswell, 2014). I used both quantitative and qualitative approaches to examine the influence of infusing ELL instructional practices into ASU social studies methods courses through instructional coaching. The quantitative and qualitative measures were collected and analyzed independently and then brought together to determine whether the findings confirmed or disconfirmed each other. Quantitative data were collected through surveys. Qualitative data were collected through site coordinator interviews, teacher candidate interviews, site coordinator reflective conversations, and signature assignments completed by teacher candidates. Table 4 is provided to demonstrate the alignment of data sources with research questions.
Table 4

*Alignment of Data Sources to Research Questions*

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Survey</th>
<th>Site coordinator interviews</th>
<th>Teacher candidate interviews</th>
<th>Site coordinator reflective conversations</th>
<th>Classroom artifacts, signature assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1: Site coordinator’s knowledge and use</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>RQ2: Site coordinator’s self-efficacy</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>RQ3: Teacher candidates’ knowledge and use</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>RQ4: Teacher candidates’ self-efficacy</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Survey.** The Knowledge, Use, and Self-Efficacy (KUSE; Appendix B) survey was used as a pre- and post-intervention questionnaire for this action research project. This instrument was modified from the iTeachELLs (Arizona State University, 2014) Knowledge, Confidence and Usefulness (KCU) survey. The iTeachELLs (Arizona State University, 2014) KCU survey was modeled after the KCU survey developed by Barton-Atwood, Morrow, Lane, and Jolivette (2005) and used in Project IMPROVE.

There were three main constructs on the KUSE questionnaire: knowledge, use, and self-efficacy (Appendix B). The questionnaire was comprised of 42 questions including six demographic questions. The items were grounded in the six principles of ELL instruction identified in Stanford’s (2013) Understanding Language. There were two parallel items per principle. The questionnaire used a 6-point Likert Scale in which 6
= Strongly Agree, 5 = Agree, 4 = Slightly Agree, 3 = Slightly Disagree, 2 = Disagree, and 1 = Strongly Disagree and by which respondents indicated their level of agreement with the statement. A 6-point scale was chosen to allow for greater variability in the scores among participants. The format of the survey was intentionally developed so participants would focus on one construct (subscale) at a time. The items were worded consistently throughout the survey. For example, an item taken from the knowledge subscale stated, “In my teaching, I have knowledge that allows me to develop language competencies while teaching social studies to ELL students.” An item from the self-efficacy subscale stated, “In my teaching, I am certain I can develop language competencies while teaching science to ELL students.” Refer to Appendix B for the complete KUSE Survey, which consisted of 36 items.

The questionnaire was aligned with all four research questions and was used to assess pre- and post-intervention scores of site coordinators and teacher candidates’ knowledge, use, and self-efficacy of the six key principles for ELL instruction. Participants were asked to create a reproducible ID so survey respondents’ pre- and post-intervention responses could be matched and subsequently analyzed. Data from the pre-intervention survey also supported the coach in determining the site coordinators’ zones of proximal development with respect to infusing the six principles into their social studies methods courses.

Site coordinator interviews. Face-to-face, semi-structured interviews were conducted the first week of the spring 2017 semester for Site Coordinator A and at the end of the fall 2016 semester for Site Coordinator B following implementation of the intervention. The interview questions focused on the coaching experience, knowledge
and use of ELL practices, and the site coordinator’s self-efficacy for infusing ELL practices into the social studies methods courses. The interview consisted of six questions. In general, the questions were constructed to explore the site coordinators’ response to the coaching and their implementation of the ELL strategies in their courses. For example, in one interview question I asked, “What are some of the ELL practices you learned as a result of the coaching experience?” Follow-up questions were employed during the interview depending on the interviewee’s responses. See Appendix C for the complete set of interview questions.

This data collection procedure was conducted to gather information relevant to answering Research Questions 1 and 2 of my action research study. Interview questions focused on the coaching experience allowed me to develop an understanding of the influence instructional coaching had on the infusion of ELL instructional methods into the site coordinator’s social studies methods courses. Interview questions targeting site coordinator’s’ self-efficacy allowed me to better understand whether and how the site coordinator’s self-efficacy had changed as the targeted principles were infused into the ASU social studies methods courses.

**Teacher candidate interviews.** Face-to-face, semi-structured interviews with six randomly selected teacher candidates were conducted the first week of spring 2017 semester for Site Coordinator A and at the end of the fall 2016 semester for Site Coordinator B. The interview questions concentrated on teacher candidates’ application of the six principles for instructing ELLs in their lesson planning and implementation of instructional practices. The interview consisted of five questions. In general, the questions assessed their understanding, use, and comfort in using the ELL principles and
strategies. The following question is an example of an interview question that targeted the implementation of ELL instructional practices: “Talk about one ELL instructional practice you used this semester.” Follow-up questions were asked during the interview depending on participant responses. Refer to Appendix D for the complete set of teacher candidates’ interview questions. Each interview was audio recorded using a portable audio recorder and an application on my laptop. All interviews were transcribed, and I followed the grounded theory as outlined by Saldaña (2013) to code the interviews.

This data collection procedure was used to gather data relevant to answering Research Questions 3 and 4 of my action research study. Interview questions emphasizing how teacher candidates had applied the new learning allowed me to develop an understanding of the influence coaching had on the effectiveness of the instruction provided to teacher candidates and how this instruction influenced their lesson planning and instructional practices. Interview questions targeting teacher candidates’ self-efficacy allowed me to better understand their self-efficacy for teaching social studies to ELLs.

**Signature assignments.** Signature assignments for these social studies courses were analyzed for inclusion of the six principles for ELL instruction. Site Coordinator A required students to write a social studies unit (three to four weeks in length) lesson plan, which included language supports for ELLs. Infusing appropriate scaffolds and supports into grade-level instruction was aligned to ELL Principle 3. By comparison, Site Coordinator B required teacher candidates to write a 30 to 50-minute social studies lesson plan. Infusing the six ELL instructional principles was not a requirement of the signature
assignment. Teacher candidates submitted signature assignments at the end of the courses.

Content analysis was conducted on all signature assignments. The researcher followed Busch and colleagues’ (2012) eight steps for conducting content analysis. This process included (a) deciding on the level of analysis; (b) deciding on how many concepts to code for; (c) deciding to code for existence or frequency of a concept; (d) deciding how you will distinguish between concepts; (e) developing rules for coding your text; (f) deciding what to do with irrelevant information; (g) coding text; and (h) analyzing results. The researcher chose to code sets of words or phrases that represented an ELL principle. Additionally, the researcher chose to code for frequency of ELL principles within each signature assignment. This data collection method was aligned to Research Question 3, which was, “How and to what extent did the infusion of ELL instructional practices into social studies methods courses influence teacher candidates’ social studies lesson planning and instructional practices?”

**Procedure and Timeline for Implementation**

I prepared the majority of materials needed for the intervention and data collection during the summer of 2016. During that same time period, I invited two ASU site coordinators who also served as social studies method instructors to participate in this action research project. Once the site coordinators agreed to be part of the study, I asked them to sign participant consent forms (Appendix E). The intervention began several weeks prior to ASU’s fall 2016 semester. I met with the site coordinators individually to get to know them and invited them to attend faculty institutes. I attended their first class and invited teacher candidates to participate in the study.
The pre-intervention survey was administered to site coordinators in July and to teacher candidates in August. The intervention took place from August to January. The post-intervention surveys, teacher candidate interviews, site coordinator interviews, collection of classroom artifacts (signature assignment), occurred from December through January. Table 5 is included to illustrate the timeline for this study.

Table 5

*Timeline and Procedures for This Study*

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Actions</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>Prepare for intervention</td>
<td>• Read the papers that supports the six principles for ELL instruction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Prepare materials for intervention</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Prepare materials for data collection</td>
</tr>
<tr>
<td>July-August</td>
<td>Recruit site coordinators and teacher candidates</td>
<td>• Invite site coordinators to be part of the study</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Request site coordinators sign letter of consent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Get-To-Know-You meeting : Administer site coordinator KUSE Survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Invite teacher candidates to be part of the study</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Request teacher candidates sign letter of consent</td>
</tr>
<tr>
<td>August</td>
<td>Data collection: Teacher candidates and instructors</td>
<td>• Administer teacher candidates pre-survey: Proctor survey administration in ASU social studies methods courses</td>
</tr>
<tr>
<td>August-November</td>
<td>Intervention</td>
<td>• Engage in the Knight et. al (2015) impact cycle with instructors to infuse ELL identified principles and strategies into social studies content</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Researcher will maintain coaching log</td>
</tr>
<tr>
<td>December–January</td>
<td>Data Collection: Teacher Candidates</td>
<td>• Administer post survey with site coordinator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Administer post survey with teacher candidates: Proctor survey administration in ASU social studies methods classes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Conduct semi-structured interviews with six teacher candidates and two site coordinators</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Collect social studies signature assignments</td>
</tr>
</tbody>
</table>
Data Analysis Procedures

Quantitative analysis procedures varied by group. For the two site coordinators, descriptive statistics were presented based on the survey data. For the teacher candidates, sufficient numbers of student participants allowed for analysis of pre- and post-intervention scores using inferential statistical procedures.

Qualitative data were analyzed using a grounded theory approach as outlined by Saldaña (2013). For the site coordinators, reflective conversations and interviews were audio recorded using a portable audio recorder and an application on my laptop. All reflective conversations and interviews were transcribed, and I followed the grounded theory approach as outlined by Saldaña (2013) to code. Subsequently, codes were aggregated into larger categories, then theme-related components, then themes, and then assertions.

For teacher candidates, interviews were audio recorded using a portable audio recorder and an application on my laptop. Interviews were transcribed, and I followed a grounded theory approach to code the interviews. Content analysis was conducted for all signature assignments. This process included documenting the occurrence of each ELL principle within each signature assignment

Threats to Validity and Building Validity and Trustworthiness

In any action research study, there were threats to validity that were considered. In the study, there were several primary threats to validity. Although there may be others, the primary threats to validity were history and mortality. To mitigate the history threat, I inquired about any additional training the site coordinators were receiving in the
area of ELL development. To mitigate the threat of mortality, I gathered information on the characteristics of teacher candidates who did not to complete the study.

With respect to building validity and trustworthiness, I employed several procedures to foster these outcomes for qualitative data in the study. First, I used multiple data sources including surveys, interviews, reflective conversations, and classroom artifacts and compared the outcomes of these data during the analysis. To the extent these data suggested the same outcomes, validity is increased. The use of rich descriptions (Creswell, 2014); constant checking of codes and writing of memos to ensure clear definitions of the codes (Greene, 2007); and member checking to ensure accuracy of interpretation of participants’ thoughts (Lincoln & Guba, 1985) were used to increase validity and ensure trustworthiness of the data.
CHAPTER 4

DATA ANALYSIS AND RESULTS

Results from this study are presented in the following two sections. In the first section, results from quantitative data are presented. The second section includes results from qualitative data. Quantitative data included a set of pre- and post-intervention KUSE survey results from two site coordinators and 14 teacher candidates. Qualitative data were comprised of reflective conversations with site coordinators and post-intervention interviews with each site coordinator and six teacher candidates. In addition to reflective conversations and post-intervention interviews, content analyses of 13 signature assignments completed by teacher candidates were presented.

Results

Results from Quantitative Data

Quantitative data results are presented in two main sections: (a) KUSE survey results for site coordinators and (b) KUSE survey results for teacher candidates. Means on the KUSE survey increased substantially for the site coordinators. As shown in Table 6, site coordinators’ means increased by about 1.2 to 1.5 points. These changes represented considerable growth on a 6-point scale.
Table 6

*Site Coordinators’ Pre- and Posttest Means and Standard Deviations for Knowledge, Use, and Self-efficacy Scores*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>4.08 (0.35)</td>
<td>5.58 (0.59)</td>
</tr>
<tr>
<td>Use</td>
<td>3.96 (0.29)</td>
<td>5.25 (0.47)</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>4.13 (0.29)</td>
<td>5.71 (0.41)</td>
</tr>
</tbody>
</table>

*Note.* Standard deviations are in parentheses

**KUSE survey results: Teacher candidates.** Prior to conducting the analysis to determine whether the intervention influenced teacher candidates’ knowledge, use, and self-efficacy, Cronbach’s reliability analyses were conducted for the three constructs. Pre- and post-test reliabilities for knowledge, use, and self-efficacy indicated the reliabilities were all acceptable with a range from .87 to .97. All the reliabilities exceeded .70, which indicated the instruments were reliable. See Table 7 for all the reliabilities.

Table 7

*Reliabilities for Teacher Candidate Pre- and Post-test Assessments of Knowledge, Use and Self-Efficacy (n = 14)*

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Pre–test</th>
<th>Post–test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>.94</td>
<td>.92</td>
</tr>
<tr>
<td>Use</td>
<td>.95</td>
<td>.87</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>.97</td>
<td>.94</td>
</tr>
</tbody>
</table>
Repeated Measures Analysis of Variance. Following the reliability analyses, a multivariate, repeated measures analysis of variance (MANOVA) was conducted to determine whether there were differences in the pre- and post-test scores on knowledge, use, and self-efficacy. The overall test was significant, multivariate $F(3, 11) = 7.42, p < .005$, with a very large within-subjects effect size (Olejnik & Algina, 2000), partial $\eta^2 = .67$. Subsequently, individual follow-up repeated measures ANOVAs were conducted for each of the dependent variables. The effect for knowledge was significant, $F(1, 13) = 15.16, p < .003$, with a very large within-subjects effect, $\eta^2 = .54$. Thus, pre- and post-test scores differed significantly on knowledge. Similarly, the effect for use was significant, $F(1, 13) = 23.79, p < .001$, with a very large within-subjects effect, $\eta^2 = .65$, which indicated pre- and post-test scores differed reliably. Finally, the effect for self-efficacy was significant, $F(1, 13) = 12.02, p < .005$, with a very large within-subjects effect, $\eta^2 = .48$, which indicated pre- and post-test scores differed significantly. For each variable, scores increased by approximately one point, which was a large increase.

Means and standard deviations are presented in Table 8.

Table 8

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>3.84 (0.85)</td>
<td>4.90 (0.64)</td>
</tr>
<tr>
<td>Use</td>
<td>3.96 (0.29)</td>
<td>4.74 (0.56)</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>3.96 (1.09)</td>
<td>4.90 (0.67)</td>
</tr>
</tbody>
</table>

*Note. Standard deviations are in parentheses*
Results From Qualitative Data

Qualitative data results are presented in four main sections: (a) site coordinator reflective conversation results; (b) site coordinator interview results; (c) teacher candidate interview results; and (d) signature assignments completed by teacher candidates. For each of the first three sections, a table is used to present the themes, their associated theme-related components, and an assertion. Quotes were used to support the claims.

Site coordinator reflective conversation results. Recall, Improve, was the third step in Knight and colleagues’ instructional coaching impact cycle. This step involved a reflective conversation after every implementation of new learning. The researcher audio recorded all reflective conversations with site coordinators. Two reflective conversations were successfully recorded with Site Coordinator A. Four reflective conversations were recorded with Site Coordinator B. The researcher modified and aggregated identified codes into larger categories and then theme-related components from which two final themes emerged. Table 9 displays the themes from the reflective conversations and their corresponding theme-related components and assertions.
Table 9

*Theme-Related Components, Themes, and Assertions Based on Reflective Conversations Following Training and Implementation of ELL Strategies with Two Site Coordinators*

<table>
<thead>
<tr>
<th>Theme-related components</th>
<th>Theme</th>
<th>Assertions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teaching language through content enhanced site coordinators’ practice</td>
<td>Enhanced site coordinators’ practice</td>
<td>1. Site coordinators claimed their practice was enhanced because they applied ELL instructional practices in their teaching.</td>
</tr>
<tr>
<td>2. Practical strategies for teacher candidates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. New learning supported differentiating instruction for English language learners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. ELL instructional practices will become part of site coordinators’ permanent practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Time devoted to ELL practices detracted from delivery of social studies content</td>
<td>Challenges to infusing ELL instructional practices</td>
<td>2. Site coordinators suggested there were time and logistical challenges when implementing the ELL instructional practices, but benefits outweighed these challenges.</td>
</tr>
<tr>
<td>2. Logistical timing which included fixed course schedules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Sequencing and timing of training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Benefits outweighed logistical drawbacks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Enhanced site coordinators’ practice.** Assertion 1 states, *Site coordinators claimed their practice was enhanced because they applied ELL instructional practices in their teaching.* Reflective conversations with site coordinators following implementation
of ELL practices in their social studies course to teacher candidates provided insights into their perspectives for infusing ELL instructional practices into their methods courses. Four theme-related components embodied the theme that led to Assertion 1: (a) teaching language through content enhanced site coordinators’ practice, (b) practical strategies for teacher candidates, (c) new learning supported differentiating instruction for English language learners, and (d) ELL instructional practices will become part of site coordinators’ permanent practice.

*Teaching language through content enhanced site-coordinators’ practice.*

Both site coordinators expressed that teaching language through content enhanced their practice. For example, Site Coordinator A explained,

> I’ve grown a lot, and so I’ve always felt like that [teaching language] was something, that I had a void in terms of my own practices because that wasn’t ever something that was a huge part of my learning experience, so this is really the first time I’ve done that. It felt really good to be able to enhance this class and give them more opportunities besides content and behavior.

In that same reflective conversation, Site Coordinator A further claimed, “There’s just so much more it’s giving them [teacher candidates] that I haven’t been able to implement in this course in the past, so that was exciting.” Site Coordinator B affirmed this when reflecting on the strategy disciplinary discourse aligned with ELL Principle 1:

> I’ve done that lesson before with the thinking hats and the rules for discussion. I always use a different current event. Sometimes it’s articles. Today it was videos. Adding the justification piece towards the end, I like how this was an add-on to the thinking hats. This added the piece of really walking ‘em [*sic*] through how to formulate an opinion with reasons, to have a conversation using justification after using the thinking hats to collect it all. I liked it as an added piece to that.

She also shared a similar response when reflecting on a strategy aligned with ELL Principle 6:
I think the visual was helpful. Once I lived it out with them, I saw how that’s probably a structure that’s been missing for them, so to have some visual structure for planning for differentiation [differentiating for language]. I definitely think that’s valuable.

**Practical strategies for teacher candidates.** In the reflective conversations, both site coordinators suggested that the ELL strategies presented at faculty institutes were practical and would be easy to implement for teacher candidates. For example, Site Coordinator A shared,

I think that [the ELL strategy] will really help them [teacher candidates] with their future students, in terms of giving sentence frames, giving those supports in order to be able to use those skills. Because it’s so hard to speak in a discourse if you don’t have those baseline skills.

Site Coordinator B acknowledged that the ELL strategies were practical and easy to use when she said,

I think it highlighted for them [teacher candidates] how that would be an easy strategy to use with their own students. [Having] them, physically, doing it was much better than me just telling them about it. Having them actually use it, I think, is going to encourage them to use it themselves.

She later elaborated by sharing how teacher candidates have implemented the strategies when she stated,

They do Google reflections after class, and as I was reading through after the time that you came last, a couple of them talked specifically about using the summarizing graphic organizer in their classrooms, so using that as a structure for helping students create a summary, and then, being able to summarize. I definitely think the benefit is that they’re taking the tools, and then, using them. One of ‘em emailed me right the next day. I posted it as a PDF, and they asked for it as a document so they can use [it].

**New learning supported differentiating instruction for English language learners.** Both site coordinators highlighted how the new learning in faculty institutes supported differentiation for English language learners in their reflective conversations. For example, Site Coordinator A commented,
Well, I think that they [teacher candidates] are going to now be able to differentiate because a lot of times, our ELL students are so bright, and they get the content, but they don’t get they can’t express it. They don’t have those language skills, and so this gives them [teacher candidates] the tools to differentiate between do they need support in mastering the content, or is it really the language skills.

Site Coordinator B also reflected on the importance of the new learning focusing on differentiation for ELLs when she made connections to The System for Teacher and Student Advancement (TAP) Rubric, the instructional evaluation rubric used at Arizona State University. She maintained,

Being able to say, how does this [differentiating for ELLs] help with teacher knowledge of students [indicator on TAP rubric] or address those [descriptors that focuses on differentiation] that we know is good teaching. I think that was a benefit, too, cause it really can be connected to what they’re [teacher candidates are] expected to do.

In that same reflective conversation she asserted,

I was really happy about how they were able to make connections beyond just the English language learner piece of really tying it to differentiation. I think it did a good job of helping them see how you could modify an assessment to meet the language needs of a student while still assessing the main content, which I think is the whole point of doing that chart.

**ELL instructional practices will become part of site coordinators’ permanent practice.** Sustainability was one of the categories used as a guide by the coach during the reflective conversations. Both site coordinators suggested ELL instructional practices would become part of their permanent practice in social studies courses along with other courses they teach. For example, Site Coordinator A responded,

Well, I definitely have already started with Reading 531 and SBE 538 where I’m [course] coordinator, giving some of the tools that align, especially with the language supports. Now I definitely want to put in there the assessments cuz [sic] reading and language do go so hand-in-hand. I want to infuse that course with a few more tools that support our ELL students and that differentiate between what’s a reading skill and what’s a language skill, and so that our professors can be really presenting that information to students.
She also mentioned threading the ELL instructional practices in earlier in her teacher candidates’ course schedules. For example, she reported,

Next year, that’ll be a great opportunity to start off in some of our summer work and Reading 531 or Reading 532, social studies. I can build all this stuff [ELL Instructional Practices] in, earlier in their careers, which will be great.

Site Coordinator B shared similar sustainability views. For example, she suggested how the ELL instructional practices would be something all her teacher candidates had access to through her social studies course. She claimed,

Yeah, definitely [I will continue to use it] in social studies, I would leave this because it doesn’t hurt to go back and address the objectives again because it’s gonna support writing objectives in general. Then it’s important that we’re teaching language explicitly in all of our content, so I’ll definitely keep it here, and it could be something that could be touched on within the unit plan. The nice thing is, is this course [Social Studies], I teach it to my cohorts every time, so every cohort gets this course and this instruction, so if it’s in this class, then every student’s gonna get it.

**Challenges to infusing ELL instructional practices.** Assertion 2 states, *Time devoted to ELL practices detracts from delivery of social studies content.* Site coordinators reflective conversations provided insights into their perspective of challenges with respect to infusing ELL instructional practices into their social studies courses. Four theme-related components comprised the theme that led to Assertion 2: (a) time devoted to ELL practices detracted from delivery of social studies content; (b) logistical timing, which, included fixed course schedules; (c) sequencing and timing of training; and (d) benefits outweighed logistical drawbacks.

*Time devoted to ELL practices detracted from delivery of social studies content.* Both site coordinators agreed that one of the primary challenges to infusing ELL instructional practices was the time it took away from social studies content. For example, Site Coordinator A declared,
I do think running out of time was hard, because I think I would have liked to have had more time to talk about the other discourses and how summarizing fits into that. I know I’m gonna do that more next week, so we just scratched the surface.

Site Coordinator B confirmed that time was a challenge when asked about potential drawbacks. She responded, “There are probably two lessons this semester that I didn’t get to with this cohort that I usually do in this content.” She reinforced the challenge of time when she stated, “I have definite goals within that social studies course that I’m used to promoting.”

**Logistical timing, which, included fixed course schedules.** Throughout the reflective conversations, Site Coordinator B reflected on logistical challenges, which included fixed course schedules. Site Coordinator B explained that the timing of new learning was a challenge because they already had their course schedules with assignments complete. She suggested the benefit of infusing the ELL instructional strategies into the syllabus and course schedule. An example of this is when the site coordinator asserted, “Because you really have to build [ELL instructional strategies] in the assignment, you know what I mean? It’s really hard because there’s an accountability piece [for teacher candidates with assignments].” In another reflective conversation she referenced that the course schedule was a challenge when she commented, “Sometimes, things are already put together by the end, like assignments.”

**Sequencing and timing of training.** Both site coordinators reported sequencing and timing of the new learning introduced in faculty institutes as a challenge. Site Coordinator A said,

Well, and I think, in the future, I’d probably introduce it [Assessment on Language, ELL Principle 6] a little earlier in their teaching career, too, so that because, I mean, and I hope you could tell. They do understand data to a pretty high degree, ’cause I do love it, so I feel like, if I had given them that tool earlier,
it would’ve been something they could’ve built into their internship a little more, and I could’ve had them practicing a little more before we got to their student teaching.

Site Coordinator B also reflected on the timing and sequencing of the new learning for teacher candidates when she suggested,

Right. Like I said, I do think still that it’s okay for it to happen after, too, because developmentally, they’re in term seven. This is their first semester student teaching. It might be too much to try to do all this frontloading. I think there could be some benefit to then adding, looking back, and reflecting, and then how could you add this for some of the pieces, because adding that whole chart and all of that would have taken so much instruction the beginning, it might’ve been harder to see it. They could definitely apply it next semester, the full process, in a better sequence.

In the last reflective conversation, Site Coordinator B expanded on the sequencing of new learning as she explained how ELL Principle 6 assessment would be a better fit after ELL Principle 3, scaffolds and supports. For example, she suggested, “Assessment could have happened with the unit plan and would have better fit with unit planning maybe or somewhere else so that it would free up time.”

**Benefits outweighed logistical drawbacks.** In general, both site coordinators expressed that the benefits of infusing the ELL instructional practices into their social studies courses outweighed the logistical drawbacks. An example of this is when site coordinator A commented, “I do think it’s all good information. It’s all necessary information, but that logistically, it was just a lot.” Site coordinator B affirmed this thought by saying, “I think embedding that strategy is worth the time that it takes because they can actually implement that into their classroom. It makes it meaningful for them, and it'll benefit their students.” In another reflective conversation, Site Coordinator B maintained, “They [the ELL strategies] did take extra time in this lesson, but I think the benefits outweigh [the drawback of time].”
Site coordinator interviews. Semi-structured interviews were conducted with both site coordinators following the intervention. Both interviews were audio recorded, transcribed, and coded. Then, the researcher reviewed the codes and aggregated identified codes into larger categories and then theme-related components from which four final themes emerged. Table 10 displays the themes from the interviews and their corresponding theme-related components and assertions.

Table 10

*Theme-Related Components, Themes, and Assertions Based on Interviews of Two Site Coordinators Following the Intervention*

<table>
<thead>
<tr>
<th>Theme-related components</th>
<th>Theme</th>
<th>Assertions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Model strategy aligned to ELL principle</td>
<td>Instructional coaching impact cycle</td>
<td>1. Site coordinators affirmed the coaching process was instrumental in fostering the application of the ELL practices.</td>
</tr>
<tr>
<td>2. Implemented with support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Accountability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Reflection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Six principles for ELL instruction</td>
<td>New learning for experienced teacher educators</td>
<td>2. Site coordinators indicated the new learning of the six ELL principles was aligned with and immediately applicable to their social studies courses.</td>
</tr>
<tr>
<td>2. Applicable to course content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Professional development in higher education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Benefits for site coordinators</td>
<td>Benefits</td>
<td>3. Site coordinators articulated benefits of the ELL strategies for their instruction and for their students’ teaching.</td>
</tr>
<tr>
<td>2. Benefits for teacher candidates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Logistical timing (fixed course schedule, timing of new learning)</td>
<td>Challenges</td>
<td>4. Site coordinators suggested there were challenges during implementation of the ELL strategies</td>
</tr>
<tr>
<td>2. Time</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Instructional coaching impact cycle.** Assertion 1 states, *Site coordinators affirmed the coaching process was instrumental in fostering the application of the ELL practices.* Interviews following implementation of the program with site coordinators provided insights into their perspective of how coaching influenced the infusion of ELL instructional practices into their social studies courses. Four theme-related components comprised the theme that led to Assertion 1: (a) model strategy aligned to ELL principle, (b) implement with support, (c) accountability, and (d) reflection.

**Model strategy aligned to ELL principle.** During the post-implementation interview, the researcher inquired about the benefits of the coaching cycle. Both site coordinators suggested that modeling by the coach, a strategy aligned to the ELL principle, was an essential part of the coaching process. For example, Site Coordinator A asserted,

> I think a big thing was the modeling aspect of it. Each time we went, there was it wasn’t just talking about the skills. ‘Cuz I heard a lot of the skills and best practices, but I hadn’t got to see it in action. The meetings were very purposeful and always included a modeling piece. I really got to participate as a student in learning through the best practices. I really got the skill and understand what I needed to be bringing back to my classroom.

Later in that same interview she circled back to the importance of modeling when she claimed, “The accessibility of the information with the modeling and documents given to us was just extremely helpful.” Site Coordinator B affirmed this as well, when she responded to that same question with, “In the faculty institute, we were given some research-based strategies that were modeled for us and presented in a way that we could then take to our own coursework and implement.” She later reiterated, “The benefits were that we got modeled strategies that we could then implement into our own coursework.”
**Implemented with support.** Both site coordinators implemented all four strategies introduced in faculty institutes. Recall, site coordinators determined the coach’s role in implementation (i.e., observation, modeling in the classroom, or co-teaching) during the dedicated planning time embedded in every faculty institute. Site Coordinator A chose to co-teach the new learning alongside of the coach for three out of four strategies. She implemented the final strategy on her own as the coach observed. Site Coordinator B chose to take the lead on implementing all strategies while the coach observed.

As site coordinators discussed the coaching experience during the interview, both reflected on the implementation of new learning with the support of the coach. Site Coordinator A reflected on the planning support she received from the coach when she stated,

> Then at the end of each session [faculty institute], we would have planning time for how can we integrate that principle into our work. That was really great because every time you left with the concrete plan of how we were going to implement these principles and best practices right back into our coursework.

She also discussed the implementation with support when she said,

> We were able really meet all the students’ needs. I was able to implement a lot of the new learning, but I also had Malissa to support me in that. Then she would help implement portions of the class that didn’t even have to do with ELL learning as well, so that we could work together to demonstrate what the purpose of the course was. I feel like my students got to see a lot of really positive co-teaching.

During the post-program interview, Site Coordinator B discussed the importance of co-planning with the coach prior to the implementation. She explained, “The coaching was one-on-one, so there was support after our institute to discuss development, so how would I implement the strategies that were being shared in the institute.” She maintained,
“It was supportive because then I had someone to help me think through how I might implement it or work through any challenges that I might have.”

**Accountability.** Both site coordinators expressed how the implementation with support increased accountability for application of the new learning from faculty institutes. For example, Site Coordinator A offered, “Another thing was being able to have the immediate implementation, because I think that upped all of our levels of concern. We knew that we were going to be taking this back to our classrooms right away.” She recognized the “commitment to that material [ELL instructional practices] and the given time was higher.” Site Coordinator B confirmed this when she claimed,

Then I would say the other piece is just the accountability piece, too. Once I go to the training, if I know that someone is gonna come and watch the implementation, then I’m more likely to be sure that I’ve implemented that into my coursework.

**Reflection.** Both site coordinators discussed the reflective conversations embedded in the impact cycle. Site Coordinator A described the process of reflective conversations when she said,

Then Malissa and I would sit down and reflect on the process. What had gone well, what were some challenges or drawbacks. What we could do in the future to ensure that this wasn’t like a one-time implementation of the skill or knowledge that we were giving the teacher candidates. Then from there, we would kind of reflect together on that.

Site Coordinator B expanded on the reflective process when she shared questions asked during the reflective conversations such as, “How did I think it went? What were some next steps? or How could I make it better in the future?” Site Coordinator B also claimed that the verbal reflection was an effective component of the instructional coaching approach. An example is

kinda going back to the coaching piece, but I think the effective part of that, too, was the dialogue after the lesson, the reflection piece, because even though we as
teachers typically reflect anyway on our own, it’s nice to be able to do it verbally and with someone else, and that maybe the coach was able to see something that I wasn’t able to see and highlight. That was beneficial for me thinking about how I would implement it in the future.

**New learning for experienced teacher educators.** Assertion 2 states, *Site coordinators indicated the new learning of the six ELL principles was aligned with and immediately applicable to their social studies courses.* Interviews following implementation of the program with site coordinators provided insights into their perspective on new learning for experienced educators. Three theme-related components comprised the theme that led to Assertion 2: (a) six principles for ELL instruction, (b) applicable to course content, and (c) professional development in higher education.

**Six principles for ELL instruction.** Site coordinators reflected on how the six principles for ELL instruction were aligned and relevant to their social studies courses. Site Coordinator A described the importance of summarizing as a disciplinary discourse in social studies (ELL Principle 1) because it allowed teacher candidates to present controversial issues in an unbiased format. For example, she said,

> The disciplinary discourse, I think that really is something that, just being able to teach my teacher candidates about how powerful it is to give kids the tool of disciplinary discourse. Then we had the candidates themselves prepare information using disciplinary discourse of, I believe it was summarizing teaching information to give an unbiased viewpoint of both sides about hot topics.

She reflected on the success of implementing ELL Principle 6 when she commented, learning how to assess ELL students in a way that focused on their language practices “was incredibly helpful for me. I teach a lot about assessment and data collection. I’m really passionate about it, but I didn’t have that in my skill set.

Site Coordinator B also discussed infusing ELL Principle 6 as she described, “Another strategy was the chart to help think through differentiating for students at
different language levels and how you might assess those students and support them, so the different supports that would be available. That was very helpful.” She also referred to the effectiveness of implementing ELL Principle 3 when she reported,

I learned about creating language objectives that had supports, which was really beneficial because I teach my students about writing objectives, but I didn’t ever teach them how to include the supports into the objective that would help their students meet it, which I think was really effective.

Applicable to course content. Site Coordinator A expressed that the strategies aligned to the six principles were applicable to their social studies courses. She reported, “There was a lot of flexibility to make sure that we were going to be benefiting the students that I work with and integrating it appropriately into the course that I was teaching. Everything was very applicable.” She also commented on the ability to adapt the strategies to meet the needs of her social studies course when she explained,

Then additionally it was very flexible. One of the things that I was slightly nervous about was that I would be asked to implement something that didn’t necessarily align to what my students really were working on or what the coursework called for. Because of that flexibility and the coaching, we were always able to make it really, really meaningful for my students while implementing the ELL practices but not getting away from the integrity of the course.

Professional development in higher education. Both site coordinators discussed professional development in higher education in their interviews. For instance, Site coordinator A reported,

Finally I also feel like it just gave my students a, just an idea of the continuous learning. I was able to model for them that even as veteran in the field, I don’t know everything and that I was attending training that I could apply right back into my classroom.

Site Coordinator B reflected on the professional development experienced educators received as she explained, “This was helpful because we don’t always get new learning
as faculty. A lotta times, we get coursework and the syllabus and materials, but we don’t always get additional support to add things that maybe our students might need.”

**Benefits.** Assertion 3 states, *Site Coordinators articulated benefits of the ELL strategies for their instruction and for their students’ teaching.* Interviews following the intervention with site coordinators provided insights into their perceived benefits of the experience. Two theme-related components comprised the theme that led to Assertion 3: (a) benefits for site coordinators, and (b) benefits for site coordinators.

**Benefits for site coordinators.** Both site coordinators expressed the benefits of the coaching experience in relation to their practice. Site coordinator A claimed,

> I just think it was super beneficial. I hope that everyone gets it. I would say that I wish I’d had this much earlier in my career, because it was so beneficial. I had mentioned to you before, like I was so happy it turned out to be so powerful, because I was so nervous about the time commitment. It ended up being something that I would definitely repeat again and again.

Later in the conversation she elaborated on the knowledge and skills gained through the coaching experience. An example is when she stated,

> I feel, and I know that this isn’t something measurable, but I feel 1000 times more confident [in ELL instructional practices]. I just didn’t really do it [implement ELL instructional practices] before. It’s my fault, from just not having the knowledge and skill set. Now I feel like I can implement it in all my classes. I’m starting a new course tomorrow, a special education course, and I feel like I can really bring in the ELP standards, the disciplinary discourse, metalanguage, assessment, all of those things. Because most of us in Arizona are working with special needs students, but we’re also working with ELL students. Now I feel like I can equip them for both.

Site coordinator B affirmed when she asserted,

> The faculty institute was helpful because it provided new ideas and new instructional strategies for helping with ELL instruction. That was beneficial to me because that was support that I could use in refining my courses to be more helpful to students as they learn how to work with ELL students.

She maintained,
I have already been able to infuse into prob’ly [sic] four lessons, which in a semester I have 15 sessions, so that’s pretty good. Then also now that I have an understanding of it and have implemented those, I’ll be able to spiral back to them in the same semester, so I feel confident in using those strategies.

**Benefits for teacher candidates.** Along with expressing benefits for their teaching, site coordinators also indicated benefits for teacher candidates. Site coordinator A shared that she feels better prepared to support her teacher candidates in working with English language learners. She claimed, “I think really just [sic] allows me to equip my teacher candidates much better than I ever have before.” She then elaborated when she shared,

> Being able to coach my teacher candidate to bring in that very, like very reflective language practices and support in their classroom so that their students are becoming critical consumers of language and understanding what types of different language are used in what different purposes. I think helps them not just with classroom work and being able to pass standardized tests that use those structures, but also just like being able to read a text or listen to a commercial and understand the language that’s being used and how it’s meant to influence one way or another.

Site Coordinator B affirmed the benefit for teacher candidates when she shared, “The benefit for this was that our students have said they want more support with ELL strategies. This was something that we could implement into our coursework that would benefit our students.”

**Challenges.** Assertion 4 states, *Site coordinators suggested there were challenges during implementation of the ELL strategies.* Interviews following the intervention with site coordinators provided insights into their perceived challenges during implementation of the ELL strategies. Two theme-related components comprised the theme that led to Assertion 4: (a) time and (b) logistical timing.
**Time.** Site Coordinator A expressed time as a challenge to implementation. When asked about challenges, she responded, “It’s still very positive in terms of results and outcomes, but I would say that was like the really the only drawback was just being able to find the time to get all of this implemented.” She maintained, “It was adding in another person, which benefitted my course greatly but also when you add in a co-teacher there’s more than one person involved in the planning process. That’s just something that takes a little more time.”

**Logistical timing.** Both site coordinators indicated that fixed course schedules and timing of the new learning was a challenge to implementation of the ELL practices. An example was when Site coordinator A said, “I had a very strange course schedule, so that made it even more challenging.” Site Coordinator B suggested a challenge was fixed course assignment schedules. She asserted, “When our courses are developed and we put out our syllabus for the beginning of the semester, we really don’t have a lot of leeway with assignments.” She followed-up by sharing,

> Since we were implementing these strategies, I couldn’t always make them part of my upcoming assignments if it didn’t fit into things that were already there. The other piece is just the timeframe of the semester. It’s hard to be planning and implementing within a semester that’s already started.

**Teacher candidate interviews.** Semi-structured interviews were conducted with six randomly selected teacher candidates following the intervention, three from Site Coordinator A’s class and three from Site Coordinator B’s class. All interviews were audio recorded, transcribed, and coded. Then, the researcher reviewed and aggregated identified codes into larger categories and then theme-related components from which two final themes emerged. Table 11 displays the themes from the interviews with teacher candidates and their corresponding theme-related components and assertions.
Table 11

*Theme-Related Components, Themes, and Assertions Based on Teacher Candidate Interviews Following the Intervention*

<table>
<thead>
<tr>
<th>Theme-related components</th>
<th>Theme</th>
<th>Assertions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiation for ELLs</td>
<td>Differentiation for English language learners</td>
<td>1. Teacher candidates claimed they learned to differentiate instruction for English language learners.</td>
</tr>
<tr>
<td>Using scaffolding techniques to differentiate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased confidence in knowledge of ELL instructional practices</td>
<td>Confidence in ELL instructional practices</td>
<td>2. Teacher candidates suggested they became more confident in their knowledge of ELL instructional practices, but they wanted more opportunity to practice these skills.</td>
</tr>
<tr>
<td>Needed more practice in implementing ELL instructional practices</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Differentiation for English language learners.** Assertion 1 states, *Teacher candidates claimed they learned to differentiate instruction for English language learners.*

Interviews following implementation of the program with teacher candidates provided insights into their perspective of what they learned through the ELL-infused social studies courses. Two theme-related components comprised the theme that led to Assertion 1: (a) differentiation for English language learners, and (b) using scaffolding techniques to differentiate.
Differentiation for English language learners. All six-teacher candidates interviewed suggested they learned how to differentiate for English language learners in the ELL-infused social studies courses. For example, Teacher Candidate 4 reported, “I learned to differentiate for ELL students and to tailor work towards their level of thinking and towards their—what’s the word? Language, I guess.” Teacher Candidate 3 confirmed,

It was useful to see that [modeled strategies by site coordinator] because we’re huge on differentiation how to be able to recognize where an ELL student might be or where they’re at and assess them, and then be able to okay, here’s the assessment and here’s where they’re at. Now I know where specifically I should be looking at and then taking the strategies that they showed us and seeing what strategy fits best for wherever they measure in the spectrum.

Teacher Candidate 1 affirmed the need for differentiation for ELLs as she explained,

“You’re meeting their needs just like you would for enrichment or someone that is just academically struggling. It’s just one other provision that you're putting in to make sure that you're meeting the needs of your entire group.”

Teacher Candidate 5 reported learning how to differentiate for ELLS by English language proficiency level. She explained, “She [site coordinator] showed us that matrix about basic, intermediate, advanced. I found that very helpful. It gives me a clear view of what I should expect from my [ELL] students and what I want them to go to.”

Using scaffolding techniques to differentiate. Stanford’s Understanding Language, ELL Principle 3, focused on providing rigorous grade level instruction with appropriate scaffolds. During the post-intervention interviews, teacher candidates highlighted their use of providing scaffolding techniques to differentiate for ELLs. For example, Teacher Candidate 1 reported,
If I’m trying to give a concept, I’m trying to do a video, a song, maybe some movement, maybe a specific picture or try and connect it just so you’re giving them a variety of ways to what’s gonna make sense for them.

Teacher Candidate 2 explained a scaffolding technique she and her mentor teacher used when she shared, “Sentence frames often help, and I realize it’s a very basic thing, but nonetheless it works in any grade level.” Teacher Candidate 3 discussed a variety of scaffolding techniques used in her instruction. She described,

A lot of visualizations to help students just recall what events we’re really talking about and just having different type of graphic organizers, like a foldable or just an actual pictorial timeline, along with dates. You can have a picture next to it just to help ELL learners get that visual retention of what you’re teaching.

Teacher Candidate 6 described her differentiation for ELLs as “a lot of visuals. It’s a lot of hand motion. It’s a lot of slowing down your voice. It’s just a lot of it is building vocabulary and language for the kids.”

Confidence in ELL instructional practices. Assertion 2 states, Teacher candidates suggested they became more confident in their knowledge of ELL instructional practices, but they wanted more opportunity to practice these skills.

Interviews following implementation of the intervention with teacher candidates provided insights into their perceived confidence in using ELL instructional practices. Two theme-related components covered the theme that led to Assertion 2: (a) increased confidence in knowledge of ELL instructional practices and (b) needed more practice in implementing ELL instructional practices.

Increased confidence in knowledge of ELL instructional practices. Teacher candidates reported increased confidence in knowledge of ELL instructional practices because of the ELL-infused practices in the social studies. For example, Teacher Candidate 4 asserted,
At first I wasn’t sure how to help them [ELL students], but then I went to [social studies] class and they showed me strategies. I implemented those strategies, so I’m helping them a little better now that I have these strategies in place. I feel what was really good is that I’m so much more aware.

Teacher Candidate 5 affirmed increased confidence when she shared her past experience working with ELL learners. She explained,

I used to actually work with ELL students, like actually work and get paid for that. Back then, I didn’t know all these strategies that we’re using today and how they actually help them. Now I can see it, and I can use data to see how it actually helps them.

Teacher Candidate 2 confirmed an increase in confidence when she responded,

Definitely confident because of course the skills that I’ve been able to develop [from this class] different forms of ELL strategy that I’ve learned were not only within the reading and writing, which is where I primarily practiced it, but I take those same things in the same sentence range are similar and implications [implemented] it into the other subjects whether we’re doing science, math or social studies.

Similarly, Teacher Candidate 1 maintained she was “much more aware [of the ELL instructional practices].”

**Needed more practice in implementing ELL instructional practices.** Some of the teacher candidates indicated they needed more practice implementing the ELL instructional practices. For instance, as Teacher Candidate 1 reflected on her confidence about infusing ELL instructional practices she maintained, “I feel 100% confident that I know I could be very successful, [but] I think it will take a lot of practice.” Teacher Candidate 3 confirmed that more practice was needed to build confidence in implementing ELL instructional practices. Specifically, she shared,

Still learning, I am, just because I am still trying to be confident in being a teacher that even thinking about having ELL in with it is just really kinda’ scary, but I’d probably say from one to five, I’m probably at I’m slowly progressing, so I’m at a three, two and a half to a three, but I definitely need that practice and I’m hoping after this semester with this student, I’ll be able to feel way more comfortable, be
Teacher Candidate 4 suggested that he needed additional practice in selecting the most effective and efficient ELL strategy to implement as he questioned, “What’s the best way to implement them [ELL strategies] and what’s the easiest way to implement them?”

**Signature assignment results.** Thirteen signature assignments for these social studies courses were analyzed for the inclusion of the six principles for ELL instruction using content analysis. Signature assignments were uploaded into HyperRESEARCH (HyperRESEARCH 3.5.2, 2012) and coded using the six principles for ELL instruction.

Recall, signature assignment expectations differed from Site Coordinator A to Site Coordinator B. Site Coordinator A required students to write a social studies unit (three to four weeks in length) lesson plan, which included language supports for ELLs. Infusing appropriate scaffolds and supports in grade-level instruction was aligned to ELL Principle 3. By comparison, Site Coordinator B required teacher candidates to write a 30-to-50 minute social studies lesson plan. Infusing the six ELL instructional principles was not a requirement of her signature assignment.

Although Site Coordinator B did not require students to include any of the principles, students viewed scaffolding as a critical component. The majority of teacher candidates from Site Coordinator A’s and B’s classes included grade-level instruction with supports and scaffolds for English language learners in their signature assignment lesson plans. Of the teacher candidates’ lesson plans, 85% included evidence of ELL Principle 3 (providing appropriate supports and scaffolds for ELLs) in their signature assignment lesson plan. An example of the scaffolds and supports found in Teacher Candidate 1’s lesson plan was “students will discuss with their table partners using the
sentence frames prior to writing. Students will have the visuals of the board to help them
in their thinking.” Teacher Candidate 3 included the following in her signature
assignment lesson plan: “Teacher will lead circle map ideas with students by
incorporating discussion, physical activity, and visuals for ideas in creative story as a
class.” An example of the scaffolds and supports included for Teacher Candidate 4 was

booklets will have sentence frames inside to help students follow along, such as,
“This state’s name is . . .” and “The state’s capital is . . .” Words will be identified
and posted in the classroom, large enough for all students to reference and placed
in the appropriate place on the classroom map.

Teacher Candidate 11 included the following, “There will be a guided notes sheet. We
will create motions for the words. Images will be provided for each of the words.
Sentence and speaking stems will be provided.” Teacher Candidate 12 included a matrix
that differentiated supports by English language proficiency level.
CHAPTER 5

DISCUSSION

The purpose of this action research study is to examine the influence of infusing ELL instructional practices into ASU social studies methods courses through instructional coaching. The intervention is rooted in a modified version of Knight and colleagues’ (2015) instructional coaching impact cycle in which the coach partners with site coordinators to help them incorporate ELL instructional practices into their teaching.

Chapter 5 consists of the following sections: (a) complementarity and integration of quantitative and qualitative data, (b) explanation of results, (c) limitations, (d) implications for practice, (e) implications for research, and (f) personal lessons learned.

Complementarity and Integration of Quantitative and Qualitative Data

Complementarity refers to consistency between quantitative and qualitative data (Greene, 2007). Importantly, complementarity indicates that quantitative and qualitative data lead to the same conclusions. In the present study, the data exhibit high levels of complementarity. Specifically, the quantitative data indicate that knowledge, use, and self-efficacy for the six principles increase significantly. Similarly, during interviews of site coordinators and teacher candidates the qualitative data show growth in knowledge, use, and self-efficacy with respect to the six principles.

Additionally, Greene (2007) suggests complementarity can enrich our understanding of the results. Although knowledge, use, and self-efficacy all increase, it is not clear why that occurs. Thus, eliciting site coordinators’ and teacher candidates’
discussions related to knowledge, use, and self-efficacy helps in understanding why those scores might have changed.

Pre- and post-test scores indicate an increase in knowledge for site coordinators. This quantitative data becomes clearer when we examine the reflective conversation and post-intervention interview data. For example, Site Coordinator B claimed, “I just didn’t really do it [implement ELL instructional practices] before. It’s my fault, from just not having the knowledge and skill set. Now I feel like I can implement it in all my classes.”

Knowledge of ELL instructional practices also increases for teacher candidates. As shown in Table 8, the mean score for knowledge increased by 1.06 points. Consistent with this quantitative outcome, in post-intervention interview data, teacher candidates express an increase in knowledge of ELL instructional practices because of their learning of ELL-infused practices in the social studies methods courses. Next, for site coordinators, post-intervention scores show an increase with respect to use of the ELL principles. Again, consistent with the quantitative data, during the interviews, site coordinators suggest they increased their use of ELL instructional practices. Further, they express the desire to continue to use these practices in social studies and other content areas.

Although the use construct exhibits the lowest pre- and post-intervention mean scores for teacher candidates, an increase of about 1 point in the use of ELL principles is observed. Similarly, in the qualitative data teacher candidates report higher rates of using the ELL principles. In particular, teacher candidates claim their lesson plans also show they were using ELL Principle 3, scaffolding techniques for ELLs, in the classroom.
Nevertheless, they also express a need for additional practice implementing the other ELL principles.

Pre- and post-intervention quantitative scores for site coordinators suggest an increase in self-efficacy. Similarly, qualitative data indicate an increase in self-efficacy for site coordinators. For example, Site Coordinator A claims, “I feel, and I know that this isn’t something measurable, but I feel 1,000 times more confident [in ELL instructional practices].”

Self-efficacy scores for teacher candidates also increase from pre- to post-intervention assessment. Again, teacher candidates’ scores increased significantly by 0.94 of a point. These quantitative data are corroborated by teacher candidate interviews when they report an increase in confidence of ELL instructional practices because they learn the ELL-infused practices in the social studies methods course.

Taken together, quantitative and qualitative data for this study are highly complementary. The qualitative data enhance the quantitative data by providing a deeper understanding of the meaning behind the numbers and the increases in scores that were observed. A more comprehensive explanation of the outcomes is developed below.

Explanation of Results

The explanation of results is presented in three sections. In the first section, Knight and colleagues’ (2015) coaching approach and theoretical framework are drawn upon to explain site coordinator results. In the second section, I describe how the increase of knowledge, use, and self-efficacy among teacher candidates can be accounted for by Bandura’s (1977) social learning theory and Vygotsky’s (1978) sociocultural
framework. Finally, results related to previous action research cycles on coaching faculty are described to help account for the current outcomes.

**Coaching approach and theoretical framework.** In this section, results are connected to Knight and colleagues’ (2015) instructional coaching impact cycle. Recall, the impact cycle consists of three steps: (a) identify, (b) learn, and (c) improve. Concurrently, connections to the theoretical frameworks are examined. Recall, the two theoretical perspectives that provide the theoretical framework for this action research project include Vygotsky’s (1978) sociocultural theory and Bandura’s (1977) social cognitive theory.

The first step of Knight and colleagues’ impact cycle involves identifying a goal and selecting a teaching strategy to meet the goal (2015). In this action research project, the goal is for site coordinators who served as instructors to incorporate Stanford’s Six Key Principles for ELL instruction (Stanford Graduate School of Education, 2013) into social studies methods courses. In this study, I work with coordinators to create strategies aligned to the ELL principles and taught them to the coordinators. Site coordinators report the ELL strategies selected and presented at faculty institutes are practical and easy to implement for teacher candidates.

The second step of the impact cycle, learn, took place in a group setting through faculty institutes. Recall, during each faculty institute the following process was followed: (a) coaches identify the importance of the targeted principle for site coordinators and critical dispositions associated with the principle; (b) the coach explains and models the strategy; and (c) the coach meets individually with the protégé to plan for implementation of the principle/strategy. Thus, the second step of the impact cycle may
contribute to the increase in knowledge of ELL principles for site coordinators. During the post interview, site coordinators report the benefits of modeling within the impact cycle. For example, Site Coordinator B claims, “The benefits were that we got modeled strategies that we could then implement into our own coursework.” The value of modeling new learning is consistent with Bandura’s (1977) second source of information that influences self-efficacy, vicarious experiences, that is to say, observing of the modeling of the strategies. Bandura asserts live or symbolic modeling could positively influence self-efficacy.

In addition to the benefit of modeling, site coordinators also express the benefit of partnering with the coach to plan for implementation of the ELL principles. Planning for implementation occurs through one-on-one conversations. These planning conversations are consistent with Vygotsky’s (1978) sociocultural theory, in which people engage in socially shared activities where language serves as the mediation tool that helps in creating knowledge. Site Coordinator B maintains these socially shared activities are “supportive because then I had someone to help me think through how I might implement it or work through any challenges that I might have.”

The third step of the impact cycle, learn, consists of implementation of the ELL principle and strategy learned in the faculty institute paired with a reflective conversation. The third step of the impact cycle may contribute to the increase in use of ELL instructional practices for site coordinators because they were able to practice it. Both site coordinators report the benefit of practicing the ELL principles and the effectiveness of the reflective conversations. For example, Site Coordinator A shares, “I was able to implement a lot of the new learning, but I also had Malissa to support me in that.” These
results are consistent with Bandura’s (1977) first source of information, mastery experiences, wherein opportunities to perform, which result in success, lead to greater confidence and greater likelihood to engage in the behavior subsequently. In this project, site coordinators have an opportunity to successfully practice the ELL principle with their teacher candidates because they are supported by the coach.

In addition to the benefit of practicing the new learning, site coordinators report the benefits of the reflective conversations that take place after each implementation of the ELL principle with their teacher candidates. Site Coordinator B suggests the verbal reflection is an effective component of the instructional coaching approach. An example is

kinda going back to the coaching piece, but I think the effective part of that, too, was the dialogue after the lesson, the reflection piece, because even though we as teachers typically reflect anyway on our own, it’s nice to be able to do it verbally and with someone else, and that maybe the coach was able to see something that I wasn’t able to see and highlight. That was beneficial for me thinking about how I would implement it in the future.

The knowledge constructed through the reflective conversations is consistent with Vygotsky’s socially shared activities. Recall, socially shared activities should have a clear purpose and are goal-directed (Eun, 2008; Vygotsky, 1987). The reflective conversations have a clear purpose of reflecting on the infusion of the ELL instructional practice into their social studies methods courses. Language is the semiotic tool that supported the learning in these conversations.

**Increase in knowledge, use, and self-efficacy for teacher candidates.** Based on the data, it is clear teacher candidates experience an increase in knowledge from pre-to post-intervention assessment because site coordinators clearly explain and model the ELL strategies. Thus, Bandura’s (1977) social learning theory helps us to understand that
modeling has a very powerful influence on teacher candidates’ learning of the ELL strategies. This process is an extension of the coach’s explanations and modeling that she presented to the site coordinators. For example, Teacher Candidate 3 expressed,

It was useful to see that [modeled strategies by site coordinator] because we’re huge on differentiation how to be able to recognize where an ELL student might be or where they’re at and assess them, and then be able to okay, here’s the assessment and here’s where they’re at.

Despite teacher candidates’ growth in use on the KUSE Survey, they do not always have opportunities to implement ELL practices in the social studies methods class or in their own practice teaching in their classrooms. This is evident in the qualitative data. Teacher candidates express the need for more opportunities to practice ELL strategies. For example, Teacher Candidate 1 claims, “I feel 100% confident that I know I could be very successful, [but] I think it will take a lot of practice.” Signature assignments also reflect a limited use of ELL principles. In their signature assignment, lesson plans, teacher candidates predominately apply ELL Principle 3. Of the teacher candidates’ lesson plans, 85% include evidence of ELL Principle 3, providing appropriate supports and scaffolds for ELLs in their lesson plans. Importantly, no other principles are identified in the lesson plans. Again, we can understand their use of scaffolding by drawing upon Vygotsky’s (1978) sociocultural learning perspective, in which a more knowledgeable other, the teacher candidate, “sets up the environment” to maximize the learning by the students.

Further, the exclusive use of Principle 3 may occur because scaffolding is taught as a technique to support differentiation, which makes it something with which teacher candidates are more familiar. Thus, they can more readily apply this strategy than more challenging ELL principles such as disciplinary specific discourse, for example, which is
a new concept. Additionally, site coordinators do not build in-course assignments that allow teacher candidates to practice the six ELL principles in class or in their own teaching. Site Coordinator B suggests this in her post interview when she asserted,

Since we were implementing these strategies, I couldn’t always make them part of my upcoming assignments if it didn’t fit into things that were already there. The other piece is just the timeframe of the semester. It’s hard to be planning and implementing within a semester that’s already started.

Interestingly, the majority of teacher candidates attribute their increase in self-efficacy to gains in knowledge; whereas, only two attribute the increase in self-efficacy to opportunities to practice implementing ELL strategies. This finding seems to be in contradistinction to Bandura’s (1986) model and warrants closer examination.

**Previous cycle of action research.** Recall, the researcher engaged in two cycles of action research prior to this culminating action research project. Both cycles inform this study and support the selection of Knight and colleagues’ (2015) instructional coaching approach. Results from Cycle 2 of the action research work leading up to this study highlight the importance of modeling and opportunities to practice ELL strategies. Other outcomes from Cycle 2 of the action research work informing this study also strongly suggest the importance of integrating consistent, structured, reflective conversations after every implementation of new learning rather than the inconsistent, unstructured, reflective conversations that occurred in Cycle 2 of this project. Thus, I chose to employ Knight and colleagues’ (2015) impact cycle because it promotes (a) a clear model of new learning; (b) opportunities to practice new learning; and (c) occasions for strong, structured, and consistent reflective conversations. In this study, site coordinators clearly value all of these components.
Limitations

The four main limitations of this study include (a) length of the study time; (b) time constraints; (c) lack of opportunity for teacher candidates to demonstrate ELL strategies; and (d) number of participants. Each limitation is addressed further below.

The first limitation involves the length of the study time. The study was set up with an August through December format. However, Site Coordinator A only had six weeks to implement the ELL strategies because her course started October 13, 2016, and ended December 2, 2016. Site Coordinator B had 12 weeks to implement new learning because her course started on August 18, 2016, and ended on December 2, 2016. Clearly, 6 to 12 weeks of instruction tends to limit opportunities for teacher candidates to implement these strategies in their teaching situations. As the teacher candidates suggest, they would like more time to implement the strategies in their classrooms with students.

The second limitation, time constraints, is related to the first limitation. Site coordinators are responsible for teaching all of the required social studies content within their given course schedule. As they suggest in their interviews, time devoted to ELL practices detracts from the delivery of social studies content. Site Coordinator B confirms this as a limitation when she claims, “There are probably two [social studies] lessons this semester that I didn’t get to with this cohort that I usually do in this content.”

The third limitation deals with providing opportunities for teacher candidates to demonstrate their skills through course assignments, which are not provided for by site coordinators. One explanation for this limitation is that the course assignments in the course syllabus were already set prior to the implementation of this study. Thus, there are prior limits that do not include any assignments requiring students to practice ELL
strategies in the course. For example, Site coordinator B asserts, “When our courses are
developed and we put out our syllabus for the beginning of the semester, we really don’t
have a lot of leeway with assignments.”

The fourth limitation involved the sample size for the site coordinators. Because
only two site coordinators participated in this study, quantitative data for them is quite
limited and descriptive statistics only are appropriate.

**Implications for Practice**

Results from this action research project suggest several implications for practice.
Three implications for practice in this section are (a) more professional development is
needed for faculty members in higher education; (b) coaching in higher education offers a
powerful way to deliver professional development; and (3) infusing ELL practices into
content methods courses appears to be a viable approach to better prepare teacher
candidates to work with ELL students.

The first implication for practice involves the need for professional development
for faculty in higher education settings. Qualitative data from this study suggest the
desire from site coordinators to continue to learn and improve their practice through
professional development. Site coordinators indicate they have limited opportunities to
participate in professional development to meet the growing needs of their teacher
candidates. The lack of professional development opportunities for higher educators
described by site coordinators is consistent with research from Sunal et al. (2001), who
also note there are limited professional development for faculty members in higher
education.
The second implication for practice is the use of coaching in higher education. Results from this action research project suggest there are benefits to using instructional coaching as a form of professional development in higher education. Both site coordinators express that they derive benefits from the instructional coaching approach. Specifically, site coordinators value Knight and colleagues’ (2015) impact cycle of identify, learn, and improve as a powerful model to improve their practices.

The third implication for practice is infusing ELL practices into regular content methods courses. In the current research project, findings suggest there are benefits of infusing ELL practices into social studies methods courses. Site coordinators claimed teaching content and language in tandem is worthwhile for their teacher candidates. Moreover, teacher candidates learned the strategies and believed they are better prepared as a result of what they learned in the courses.

**Implications for Research**

Results from this study suggest several implications for research. In this section, three implications for research are (a) ensuring sustainable practices for site coordinators; (b) requiring targeted learning activities for teacher candidates; and (c) scaling-up of participants and content methods courses.

The first implication for research involves following the same site coordinators into their fall 2017 social studies course to determine whether the ELL practices learned in this action research project are sustainable. The researcher could examine how and to what extent the ELL instructional practices are being implemented in social studies methods courses without coaching support. An instrument that would be helpful in determining the level of use of ELL instructional practices being implemented in social
studies courses by site coordinators is Hall, Loucks, Rutherford, and Newlove’s (1975) Level of Use of an Innovation assessment.

The second implication for research involves re-conducting the study with an emphasis on aligning the ELL practices to course assignments outlined in the syllabus to more effectively examine the influence of this work on teacher candidates’ use of the ELL instructional practices. Teacher candidate assignments and observations of teacher candidates’ classroom teaching would be beneficial in such a research effort.

The third implication for research involves expanding the current study with respect to participants and content methods courses. This would allow the researcher to further explore Knight and colleagues’ (2015) impact cycle as it pertains to the infusion of ELL principles across other methods courses. As this study was inspired by the larger iTeachELLs project, this is the next step for the researcher and her colleagues.

**Personal Lessons Learned**

Throughout this action research journey, many personal lessons were learned along the way. Three key lessons learned are discussed in this section. The three lessons are (a) the power of coaching; (b) the benefits of teaching content and ELL practices in tandem, and (c) the value of incremental cycles of action research.

From this study, the most important lesson learned is the power of coaching as a form of professional development. I have had the opportunity to learn about many different types of coaching approaches and how each approach serves a different purpose. Specifically, I have learned about the influence of instructional coaching and how it can be used as a vehicle for change, if it is implemented effectively. I have learned much from the two cycles of action research that preceded this study to determine the
instructional coaching process that is going to best meet the needs of higher educators. The instructional coaching impact cycle promotes (a) a clear model for new learning; (b) opportunity for site coordinators to practice implementing the new learning; and (c) occasions for reflection and the accountability of implementation. The components of the impact cycle prove to be beneficial for both site coordinators and teacher candidates. There is limited research on coaching in higher education. This action research study illustrates the benefits of using the impact cycle as a form of professional development for higher educators in this context, thus an additional examination of this model with higher educators appears to be warranted.

Another key lesson learned is the benefit of teaching content and ELL practices in tandem. Teaching ELL practices through social studies allows teacher candidates to see what ELL practices look like and sound like in the content area of social studies. It also fosters an environment where language and content are not seen as being separate from one another, that is, in silos; but rather they can be highly complementary of one another.

The third lesson learned is the value of engaging in incremental cycles of action research. The previous two cycles of action research inform the current study and foster deeper research questions, a more effective coaching approach, and more appropriate data sources. ASU’s EdD program defines action research as “a form of disciplined, reflective inquiry into one's professional practice for the purpose of moving towards a principled vision, which is supported in action” (Arizona State University, n.d.). I feel all three cycles of action research along with the support of my committee members and colleagues help to create a movement toward the vision of how to partner with site coordinators to infuse ELL instructional practices into their social studies methods.
courses. Because this study was inspired by the larger iTeachELLs project, I have the opportunity to see some powerful local effects because now all seven coaches are using the instructional coaching impact cycle to partner with site coordinators to infuse ELL instructional practices into other ASU methods courses.

**Conclusion**

American colleges of education are struggling to prepare teachers to work with English language learners. With continuing achievement gaps among ELLs, appropriate teacher preparation to assist new teachers to better teach ELLs is critical. The purpose of my action research project was to examine the influence of infusing ELL instructional practices into ASU social studies methods courses through instructional coaching. The results of this action research project suggest that instructional coaching as a form of professional development increases the knowledge of ELL practices, use of ELL practices, and self-efficacy of employing ELL practices for both teacher candidates and site coordinators.

Site coordinators value the coaching experience. They report on the benefits of the impact cycle and how it supports the infusion of ELL practices into their social studies methods courses. Based on data presented here, instructional coaching appears to be a useful approach to foster the development of ELL practices among site coordinators and develop those skills among teacher candidates. Ultimately, our success in effectively preparing teacher candidates to work with ELLs will determine the success of our ELL students. The instructional coaching approach offers great promise for professional development of higher education course instructors.
REFERENCES


APPENDIX A

REFLECTIVE CONVERSATION STRUCTURE
Reflective Conversation Structure

**Introduction**
The purpose of today’s conversation is to reflect on the implementation of ELL Principle ___ into your ____ methods course. Our conversation should last approximately 20 to 30 minutes and will conclude with an opportunity for us to reflect on future implications of this work.

**Identification of Principle/Concept and Action**
Focus on the action they took that addressed that principle.
In the last faculty institute, you said you were going to (infuse principle by (Strategy)

How do you think infusing ELL principle went?

**Change of Practice**
In what ways is this a change from your previous practice?

**Benefits**
What are some ways your teacher candidates benefitted from this change in practice?

How might you know that teacher candidates will transfer this new learning into their classroom?

**Drawbacks**
Given your experience, what are some potential drawbacks to this change of practice?

**Sustaining**
As you consider teaching principle, what possibilities might there be to infuse this principle into your permanent practice?

**Artifact**
What artifact/evidence might you bring back to the next faculty institute?

**Conclusion**
Thank you for taking the time to meet with me today. I really enjoyed our conversation. Looking at our schedule we are (a) scheduled to be together next _____ or (b) not scheduled to be together until the next faculty institute.

(A) Reminder of who is going to do what by when
(B) If there is anything that comes to mind regarding principle/concept, please don’t hesitate to contact me.

95
APPENDIX B

KNOWLEDGE, USE, SELF-EFFICACY (KUSE) SURVEY
Knowledge, Use, and Self-Efficacy (KUSE) Survey

English language learners

Modified from the iTeach ELLs KCU ELL Survey, 2015

**Time Point:**  □ Pre    □ Post

Please rate the concepts from Stanford’s Six Principles for ELL Instruction (2012) listed below using the criteria provided. Decide how knowledgeable you are about each principle. Then rate how certain you are in your ability to use or implement each concept. Finally, rate how useful each concept is for you. Mark only one oval per row.

**KNOWLEDGE**

<table>
<thead>
<tr>
<th>I have knowledge about ...</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Slightly Agree</th>
<th>Slightly Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>developing language competencies while teaching science to ELL students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>simultaneously teaching science and building ELL students' reading, writing, listening, and speaking skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>employing ELL students' prior knowledge to build new understanding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>using ELL students' home language skills to make content comprehensible.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>implementing standards-based instruction, which is appropriately scaffolded for ELL students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>providing scaffolding for appropriate grade level instruction of ELL students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>implementing instruction that takes into account ELL students' language proficiency levels (and prior schooling experiences).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>incorporating ELL students' language proficiency level (and prior schooling experiences) when delivering instruction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>providing strategies to support ELLs autonomy in using language across a variety of academic situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>developing ELLs' independence for learning through strategies that can be used in multiple instructional situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>using diagnostic tools and formative assessments to monitor ELL students learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>monitoring ELL students learning and subsequently adjust instruction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In my teaching, I ...</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Slightly Disagree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>-------</td>
<td>-------------------</td>
<td>----------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>develop language competencies while teaching science to ELL students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>simultaneously teach science and build ELL students' reading, writing, listening, and speaking skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>employ ELL students’ prior knowledge to build new understanding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>use ELL students’ home language skills to make content comprehensible.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>implement standards based instruction, which is appropriately scaffolded for ELL students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide scaffolding for appropriate grade level instruction of ELL students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>implement instruction that takes into account ELL students’ language proficiency levels (and prior schooling experiences).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>incorporate ELL students’ language proficiency level (and prior schooling experiences) when delivering instruction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide strategies to support ELLs autonomy in using language across a variety of academic situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>develop ELLs’ independence for learning through strategies that can be used in multiple instructional situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>use diagnostic tools and formative assessments to monitor ELL students learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>monitor ELL students learning and subsequently adjust instruction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# SELF-EFFICACY

<table>
<thead>
<tr>
<th>In my teaching, I am certain I can...</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Slightly Agree</th>
<th>Slightly Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>develop language competencies while teaching science to ELL students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>simultaneously teach science and build ELL students' reading, writing, listening, and speaking skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>employ ELL students' prior knowledge to build new understanding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>use ELL students' home language skills to make content comprehensible.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>implement standards based instruction, which is appropriately scaffolded for ELL students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide scaffolding for appropriate grade level instruction of ELL students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>implement instruction that takes into account ELL students' language proficiency levels (and prior schooling experiences).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>incorporate ELL students' language proficiency level (and prior schooling experiences) when delivering instruction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide strategies to support ELLs autonomy in using language across a variety of academic situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>develop ELLs' independence for learning through strategies that can be used in multiple instructional situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>use diagnostic tools and formative assessments to monitor ELL students learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>monitor ELL students learning and subsequently adjust instruction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Demographic Information Form: Teacher Candidates

Participant Confidentiality
All information will be treated as confidential. You will create a reproducible ID to link study measures, while maintaining your confidentiality. Please use the following to create your ID: use the first three letters of your mother’s first name and the last four digits of your phone number (for example, Jane and 123-4567 = JAN4567). The results of this study may be used in dissertations, reports, presentations, or publications but your name will not be used. Results will be shared in the aggregate form.

1. Student Created reproducible ID:

2. What is your age?  

3. Semester in the program:

4. What is your gender?  
   Female
   Male

5. What program are you enrolled in?  
   Early Childhood
   Elementary Education
   Special Education
   ESL or BLE

6. Is your field placement with ELLs? Yes or No

7. Are you fluent in a language other than English?  
   Yes
   No
   If yes, what language?
Demographic Information Form: Faculty

Participant Confidentiality
All information will be treated as confidential. You will create a reproducible ID to link study measures, while maintaining your confidentiality. Please use the following to create your ID: use the first three letters of your mother’s first name and the last four digits of your phone number (for example, Jane and 123-4567 = JAN4567). The results of this study may be used in dissertations, reports, presentations, or publications but your name will not be used. Results will be shared in group form only.

1. Faculty ID:

2. How many year of teaching experience do you have? (number of years):

3. What is your education level? (indicate the highest level):
   - Bachelor’s degree
   - Master’s degree
   - Doctoral
   - Other

4. What is your prior experience teaching English language learners (number of years)?

5. Are you fluent in a language other than English?
   - Yes
   - No
   - If yes, what language?
APPENDIX C

SEMI STRUCTURED INTERVIEW PROTOCOL: SITE COORDINATORS
Site Coordinator Interview

Introduction
Thank you for taking the time to meet with me today. I am meeting with one of my participants ______. It is (date/time/setting/). The professor agreed to do the interview with me. He/She knows it is being recorded. Do you know this is being recorded? Thank you so much for doing this. Our interview should last about 20-30 minutes. I’m going to ask you some questions. You always have an option to refuse answering any question at any time. This is completely voluntary. Do you have any questions for me?

Interview Questions
1. Describe the coaching approach used in Fall 2016?
2. What were some of the benefits of this coaching approach?
3. What were some of the challenges of this coaching approach?
4. What are some of the ELL practices you learned as a result of the coaching experience?
5. Talk about one ELL practice you have infused into your science methods course.
6. How confident do you feel infusing ELL instructional practices into your science methods course? Why?
APPENDIX D

SEMI STRUCTURED INTERVIEW PROTOCOL: TEACHER CANDIDATES
Teacher Candidate Interview

Introduction
Thank you for taking the time to meet with me today. I am meeting with one of my participants ______. It is (date/time/setting/). The pre-service teacher agreed to do the interview with me. He/She knows it is being recorded. Do you know this is being recorded? Thank you so much for doing this. Our interview should last about 20-30 minutes. I’m going to ask you some questions. You always have an option to refuse answering any question at any time. This is completely voluntary. Do you have any questions for me?

Interview Questions
1. What are some of the ELL instructional practices you learned as a result of this science class experience?

2. Talk about one ELL practice you have infused into your lesson plans.

3. Talk about one ELL instructional practice you used this semester.

4. How confident do you feel infusing ELL instructional practices into your science instruction? Why?

5. How was the ELL infused content useful to your teaching?
APPENDIX E

LETTER OF CONSENT: SITE COORDINATOR
Instructional Coaching in Higher Education: Partnering to Infuse ELL Instructional Practices into Social Studies Courses

Site Coordinator Recruitment and Consent Form

I am an Instructional Coach in the Mary Lou Fulton Teachers College at Arizona State University. I am working under the direction of Dr. Ray Buss in the Teachers College. I am conducting a research study to better understand how coaching can impact the integration of strategies for addressing the linguistic and academic needs of English learners into Social Studies courses.

I am inviting your participation, which will involve participating in one 20-minute interview and completing two 15-minute surveys, one at the beginning of the course and one at the end of the course. In addition, you may be videotaped as part of class instruction. You may also be asked to share teaching materials (example: syllabus) for your class. To protect your confidentiality, we will use a unique identifier code (a reproducible id) made up of letters and numbers known only to you, rather than your name, for data collection with the surveys. To create this unique code, you will be asked to record the first three letters of your mother’s first name and the last four digits of your phone number. [First 3 letters of your mother’s first name Mary (ex. mar); Last 4 digits of your phone number (480) 585-0577 (ex. 0577)]. Thus, the reproducible id would be mar0577.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty.

Although there may be no direct benefit to you, possible benefits of your participation are improvements to the teacher preparation program at Arizona State University. There are no foreseeable risks or discomforts to your participation.

I would like to audio record and transcribe coaching sessions and interviews and video record classroom interactions. The coaching sessions and interview will not be recorded without your permission. Please let me know if you do not want the coaching sessions and interview to be recorded; you also can change your mind after the coaching sessions or interview starts, just let me know. Also, let me know if you do not wish to be video recorded as part of the class. Video recordings will be used to examine how the ELL concepts are used in class. Video recordings will be stored on a password protected computer and will only be available to the research team.

Your responses during the interviews will be recorded and transcribed, but these responses will remain confidential. Audiotapes of the interview will be destroyed upon transcription of the tapes. The results of this study will be used in my dissertation and may be used in reports, presentations, or publications but your name will not be used.

If you have any questions concerning the research study, please contact the research team at: Dr. Ray Buss at ray.buss@asu.edu or (602) 543-6343 or Malissa Chavez-Thibault at malissa.thibault@asu.edu. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please sign below if you wish to be part of the study.
By signing below you are agreeing to be part of the study including completing two surveys, audio recording of coaching sessions, and an interview.

Name:
Signature:       Date:

By signing below you are agreeing to be part of the study including video recording of classes.

Name:
Signature:       Date:
APPENDIX F

LETTER OF CONSENT: TEACHER CANDIDATE
Teacher Candidate Recruitment and Consent Form

I am an Instructional Coach in the Mary Lou Fulton Teachers College at Arizona State University. I am working under the direction of Dr. Ray Buss in the Teachers College. I am conducting a research study to better understand how coaching can influence the integration of strategies for addressing the linguistic and academic needs of English learners into Social Studies courses.

I am inviting your participation, which will include completing two 15-minute surveys, one at the beginning of the course and one at the end of the course. To protect your confidentiality, we will use a unique identifier code (a reproducibly id) made up of letters and numbers known only to you, rather than your name, for data collection with the surveys. To create this unique code, you will be asked to record the first three letters of your mother’s first name and the last four digits of your phone number. [First 3 letters of your mother’s first name Mary (ex. mar); Last 4 digits of your phone number (480) 585-0577 (ex. 0577)]. Thus, the reproducible id would be mar0577.

Also, I will randomly ask some students to participate in one 20-minute interview. In addition, I am asking permission to collect and review your lesson plans, classroom artifacts from ELL enhanced lessons, and microteaching experiences. Finally, I am asking for your permission to videotape you during class instruction. You must be 18 years old or older to participate.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty including no affect on your course grade.

Although there may be no direct benefit to you, possible benefits of your participation are improvements to the teacher preparation program at ASU. There are no foreseeable risks or discomforts to your participation.

I would like to audio record and transcribe interviews and video record classroom interactions. The interview will not be recorded without your permission. Please let me know if you do not want the interview to be recorded; you also can change your mind after the interview starts, just let me know. Also, let me know if you do not wish to be video recorded as part of the class. Video recordings will be used to examine how the ELL concepts are used in class. Video recordings will be stored on a password protected computer and will only be available to the research team.

Your responses during the interviews will be recorded and transcribed, but these responses will remain confidential. Audiotapes of the interview will be destroyed upon transcription of the tapes. The results of this study will be used in my dissertation and may be used in reports, presentations, or publications but your name will not be used.

If you have any questions concerning the research study, please contact the research team at: Dr. Ray Buss at ray.buss@asu.edu or (602) 543-6343 or Malissa Chavez-Thibault at malissa.thibault@asu.edu. If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please sign below if you wish to be part of the study.

By signing below you are agreeing to be part of the study including completing two surveys and an interview.

Name:
Signature:       Date:
By signing below you are agreeing to be part of the study including granting permission to provide
classwork to the research team for research purposes.
Name:
Signature:       Date:

By signing below you are agreeing to be part of the study including granting permission to be
video recorded as a part of the class.
Name:
Signature:       Date: