TEACHER PERCEPTIONS ON THE USE OF TECHNOLOGY WITH ENGLISH LANGUAGE LEARNERS

by

Holly Renee Harvil

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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ABSTRACT

The purpose of this transcendental phenomenological study was to understand general education teachers’ perceptions regarding their use of technology with students who qualify for English Language Learner services in an urban Georgia school district. The self-efficacy theory originated by Bandura was used to examine 17 teachers’ experiences of using technology as possible personal preference or as being influenced by environmental factors. The following three research questions were used: (1) How do teachers describe their use of technology in a classroom setting? (2) What are the participants’ understandings of instructional technology in relation to ELL students? (3) How do teachers of ELL students describe their confidence in integrating instructional technology? Participants were interviewed by the researcher, participated in a focus group, and answered a questionnaire. Moustakas’ seven steps were used to analyze the data including horizontalization, identifying individual and composite textural descriptions, and developing structural themes. Each participants’ experiences were viewed independently and then grouped by meaning and similarities into clusters. Results indicated participants used technology daily for instructional and organizational purposes, participants used research based instructional strategies, including technology, but viewed them as universal strategies to use with all students including ELLS, and participants’ confidence in integrating technology varied based on perceived barriers. Implications for the classroom teachers and their ELLs and for district leaders were discovered and discussed. Recommendations for future research include duplication of the study with a larger sample size or participants from across Georgia or the United States, blended learning for ELLs, and teacher expectation for ELLs.

Keywords: English Language Learners (ELLs), waiver, academic vocabulary, technology, English Language Learner services, general education teacher
Dedication

I would like to dedicate this work to my family. First and foremost, I dedicate this work to my husband, Todd, and our children. Without Todd’s support, encouragement, and patience completing this work would not have been possible. Our children, Sara, Ransom, Ana, Thomas, and Rush, have patiently learned the meaning of sacrifice through this project as they have had to endure the challenges of balancing a family, work, and college alongside me. They have provided encouragement and given me the motivation that I needed to keep going when I wanted to stop. I also dedicate this work in memory of my uncle, Morris Braswell, and in honor of my aunt, Madeline Braswell, who always believed in my potential to accomplish great things as a person and as an educator. I dedicate this work in memory of my grandparents, Harold and Fay Braswell, who never gave up on me, pushed me to achieve, reminded me constantly of the importance of an education, and always believed that I could overcome any challenges and hardships that I might face. Their love meant the world to me, and the values they instilled in me still guide my daily decisions. Finally, I dedicate this work in memory of my dad, Jimmy Goss, who was everything to me.
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List of Abbreviations

Accessing Comprehension and Communication in English State-to-State (ACCESS)

Bilingual Education Act (BEA)

Bring Your Own Device (BYOD)

Bring Your Own Technology (BYOT)

Center for Applied Linguistics (CAL)

College and Career Readiness Performance Index (CCRPI)

Computer assisted instruction (CAI)

Direct Vocabulary Instruction (DVI)

Development, Relief, and Education for Alien Minors (DREAM Act)

Elementary and Secondary Education Act (ESEA)

English Immersion (EI)

English Language Learner (ELL)

English Language Proficiency (ELP)

English Speakers of Language (ESOL)

English Learners (EL)

English Speakers of Language (ESOL)

Equal Education Opportunities Act (EEOA)

Georgia Department of Education (GA DOE)

Georgia Department of Education (GDOE)

Georgia’s Statewide Longitudinal Data System (SLDS)

Internal Review Board (IRB)

Limited English Proficient (LEP)
Local Educational Agencies (LEA)

Los Angeles Unified School District (LAUSD)

Long-term English Learner (LTEL)

Los Angeles Unified School District (LAUSD)

Mid-continent Research for Education and Learning (McREL)

Nonlinguistic Representation (NLR)

Office of Civil Rights (OCR)

Opportunity to Learn (OTL)

Public Charter School (PCS)

Research Based Instructional Strategies (RBIS)

Response to Intervention (RTI)

Scholastic Assessment Test (SAT)

School Technology Assistant (STA)

Sobrato Early Academic Language (SEAL)

Social Construction of Technology (SCOT)

Spanish Bridging Vocabulary Instruction (TESB)

Statewide Longitudinal Data System (SLDS)

Teacher Keys Effectiveness System (TKES)

Technology-Enhanced English shared reading with Spanish Bridging (TESB)

Technology Professional Development (TPD)

Testing Participation Committee (TPC)

WIDA-ACCESS Placement Test (W-APT)

World-Class Instructional Design and Assessment Consortium (WIDA)
CHAPTER ONE: INTRODUCTION

Overview

The purpose of this transcendental phenomenological study was to understand general education teachers’ perceptions regarding their use of technology with students who qualify for English language learner services in an urban Georgia school district (Moustakas, 1994). ELLs are currently the fastest growing population in the United States (Barr, Eslami, Joshi, Slattery, Hammer, 2016; Kanno & Kangas, 2014; Dobbins & Rodriguez, 2013); they show higher percentages of high school dropouts than the white and black populations (Kim, Chang, Singh, & Allen, 2015; Kena et al., 2015; U.S. Department of Education, 2013) and may be instructed by teachers who are not certified to address the specific concerns of ELLs (Jacobs, 2016; Kolano & King, 2015; More, Spies, Morgan, & Baker, 2016; National Clearinghouse for English Language Acquisition, 2017; White & Gillard, 2011; Herrera & Murray, 2005). Research into the area of the use of technology, which has potential to boost student achievement with ELLs, is relevant and needed (Blattner & Lomicka, 2012; Chen, 2016; Hines & Silverman, 2009; Richards, 2015).

In Chapter One, I addressed the background of ELLs through historical, social, and theoretical information. This section shares information about the growth of the ELL population, teacher familiarity and teacher interaction with ELLs, and the impact the education of ELLs may have on society. My connection to the study is presented along with problem and purpose statements which includes hardships that ELLs may face if instructional needs of ELLs are not met and the impact technology may have on meeting these needs. I share insight into the significance of the study by describing potential benefits of the study including relevant professional development, improved instructional practices, and support for general education teachers of ELLs. The next section of Chapter One presents the research questions accompanied
by supporting literature. To conclude, I define key terms relevant to the study through literature and then summarize the study.

**Background**

Teachers need to focus on students who may be otherwise overlooked when thinking of making outstanding progress in schools (Foster & Miller, 2007; Han, 2008; Olszewski-Kubilius & Steenbergen-Hu1, 2017; Suarez-Orozco et al., 2010; Wilcox, Lawson, & Angelis, 2015). English language learners may fit into this category. Sadly, schools often see only the struggles and not the rewards in dealing with this group of students and their parents (Datnow & Park, 2015). High expectations are not always set, and these students may be left on their own in many aspects of their education (Kanno & Kangas, 2014). Rance-Roney (2011) told of one such student, Jose. Jose recounted his story of being overlooked in the counselor’s office when he wanted to sign up for the Scholastic Assessment Test (SAT) with a friend. The friend, a fellow senior in high school, was handed a SAT bulletin and reminded to sign up before the deadline while Jose was ignored and not given the information. Jose then decided to learn how to apply to colleges on his own. Years later, he graduated and became a successful teacher (Rance-Roney, 2011).

Unfortunately, Jose’s story is not different from many other English language learner students as teachers and educators underestimate the abilities of ELLs and set lower expectations for ELLs (Cheatham, Jimenez-Silva, Wodrich, & Kasai, 2014). Although Jose had only been in the country for six years when he became a senior in high school, he already had what could only be called an outstanding record for any student; he had maintained all As and Bs and passed all the state required exams (Rance-Roney, 2011). For students such as Jose, educators must make a commitment to reach beyond the norm and ensure that all students, including English language
learners, have access to a guaranteed and viable curriculum. This guaranteed and viable curriculum means that each student must have two critical things: opportunity to learn (OTL) and time (Bosker, 1992; Bosker & Witziers, 1995, 1996; Marzano, 2000, 2003; Scheerens, 1992; Scheerens & Bosker, 1997). According to Marzano (2003), while the idea of ensuring the opportunity to learn and time for learning might sound simplistic; it is complex when you consider the required curriculum for most states would take an average of 15,465 hours to complete with only an average of 9,042 hours available in grades K-12. In addition, the fact must be considered that these hours may not truly be only instructional hours (Marzano, 2003). Basically, for English language learners and in conjunction with OTL and time, a viable curriculum must include a detailed developmental sequence for learning the English language in social and academic contexts (Rance-Roney, 2009). The best way for a viable curriculum to be achieved for ELL students is through a developed ELL program taught by trained teachers who are aware of the special needs of ELL students (Hill & Miller, 2013; Master, Loeb, Whitney & Wyckoff, 2016). General education teachers often feel anxious and have concerns about providing effective instruction for ELL students and cite a lack of preparation and knowledge in how to best serve these students (Cheatham et al., 2014; Calderon, Sanchez, & Slavin, 2011; DaSilva-Iddings & Rose, 2012). Their concerns focus on ELLs’ academic skills, English language proficiency, and a lack of background academic preparation that these students bring to the classroom as well as teachers’ own limited knowledge of language acquisition, time needed to become proficient in a language, and reasonable expectations for ELLs (Cheatham et al., 2014; Craighead & Ramanathan, 2007). Aside from specialized ELL services, bilingual education and technology are recognized as options for increasing achievement for ELLs (Goldenberg, 2014).
Historical

The variation and evolvement of language teaching over the course of a century, beginning in 1910, shows a drastic shift from labeling students as simply the year of their coursework to present day expectations where students are categorized according to their performance and understanding regardless of the number of years of study. More in-depth investigation showed a limited outlook from 1910-1980 regarding language learning. During this time, most evidence pointed to language learners being of an English background learning a foreign language (Kibler & Valdes, 2016).

Mention of dominant societal language learners, or English language learners, did not occur in publication regularly until the 1980s. In fact, there were no guidelines or expectations for serving ELLs until 1968. Loose expectations were put in place through the Bilingual Education Act (BEA) as a part of Title VII in the Elementary and Secondary Education Act (ESEA) (Wiese & Garcia, 2001). The Supreme Court ruled in *Lau v. Nichols* to clarify the expectations for serving ELLs (*Lau v Nichols*, 1974; Moran, 2005). Since the 1990s, research has focused on ways to reach non-native speakers through research and informed curricular methods as well as working to educate instructors (Kibler & Valdes, 2016). Even with a degree of structure set through federal guidelines and accountability, each state still sets its own guidelines on how to identify, serve, and dismiss students from the ELL program (Robinson-Cimpian & Thompson, 2015; Bailey & Kelly, 2010; Calderon et al., 2011).

Social

Aside from performance and betterment for their own growth, additional problems arise when looking at how ELLs could affect a school and community if they are not successful. Schools are held accountable for the performance of all students. ELLs are not an exception.
This accountability means that all ELLs have the potential to impact a school or school district’s school performance rating (DellAngelo, 2016; Richmond, Bartell, & Dunn, 2016). This rating may be a powerful tool in attracting new businesses, families, and building contractors to invest in a community (Gibbons, 2013). These investments serve to keep a community active, vital, and alive. Communities that are negatively impacted by poor student performance often lack resources that could improve their situation (Kearney & Levine, 2016). Furthermore, they often have difficulty recruiting and keeping quality teachers (McKinney, Berry, Dickerson, & Campbell-Whatley, 2007; Thibodeaux, Labat, Lee, & Labat, 2015). In an era of teachers feeling undervalued financially and too often viewed as lacking competence to assess and plan according to student needs, staying in a situation where a school is perceived to be struggling only adds to teachers’ dissatisfaction and desire to leave a school and even the profession (Dunn, 2015). One countermeasure that some schools have opted for is becoming a public charter school (PCS). PCSs function as a public school operating with more autonomy within the organization such as a private business. With this decision comes greater teacher, administrator, and school accountability in exchange for more freedom with curriculum choices as well as rules and regulations (Oberfield, 2016). This accountability in turn opens more opportunity to eliminate teachers who are ineffective (Oberfield, 2016). While this option can address some issues affecting public education, it does not directly address the need for more thorough training and support for teachers who may instruct ELLs within their regular classes (Cheatham et al., 2014).

Losing the struggle to graduate also means that ELLs are not considered desirable job candidates for potential employers (Parr & Bonitz, 2015; Sum, Khatiwada, & McLaughlin, 2009). Unfortunately, these students are often battling more obstacles than learning a second
language and trying to overcome the hurdles this entails in the classroom (Davis, 2013; Dobbins & Rodriguez, 2013). Many of these students are working to overcome the poverty that comes with parents not seen as marketable employees or parents who may even be in the United States illegally (Carhill, Suarez-Orozco, & Paez, 2008; Hagelskamp, Suarez-Orozco, Hughes, 2010; Levitt & Wright, 2014). All of this works together to create a challenge in breaking a cycle of poverty for families who, ironically, often came initially to the US with the intention of bettering themselves and providing well for their children (Gilhooly, 2015; Thomas, Chiarelli-Helminiak, Ferraj, & Barrette, 2016). While some studies have shown immigrant workers adding income to communities, this is not a stable and reliable reality. As jobs wane, at times based on the success of the local schools as perceived by potential citizens, these workers leave and go to other towns. This action continues the cycle of disruption for their children, many of whom have to move schools (Nelson, Nelson, & Trautman, 2014; Thomas et al., 2016).

**Theoretical Background**

Twenty-one percent of children ages five to 17 years old speak another language according to the 2010 United States Census (U.S. Census Bureau, 2012). This percentage translated to approximately 4.4 million English language learners in the public-school system in the 2011-2012 school year (Kolano & King, 2015). With the ELL population identified as the fastest growing population in public schools, a definite concern and need for addressing this population has come to the forefront of education (Barr et al., 2016; Dobbins & Rodriguez, 2013). Even more concerning, however, is the research showing how stressed, uncomfortable, and even ill-equipped many of the teachers who are working with ELLs feel regarding meeting the needs of their students (Barr et al., 2016; Okhee et al., 2016; Wright & Levitt, 2014). When teachers are not comfortable with the students they teach, do not understand the challenges faced
by their students, do not have proper training and support, and do not know how to use proven best practices with their students, the quality of education received by these students may decline. Unfortunately, this scenario seems to be the case with English language learners in the United States (Cheatham et al., 2014; Hill & Miller, 2013).

Work to understand the needs of ELLs, including investigating the best ways to provide adequate support instructionally, how to assess them, and how to exit them from services when they demonstrate proficiency with English, has been done across the country with criteria set by local and state policymakers that these students are held accountable to. According to Robinson-Cimpian and Thompson (2015), policymakers often do not understand educational expectations placed on students, particularly ELLs, and the possible impact of their legislation. One study conducted in the largest ELL populated school district in the nation, Los Angeles Unified School District (LAUSD), tracked eight years of data for ELLs who had attended the LAUSD through two policy changes in the exit criteria for the ELL program. The results of the study showed that the easier, original exit criteria allowed students to exit the program and be reclassified, thus ineligible for ELL services, at a point where a large number of the students were not able to maintain success without the support of the ELL program. Less of an impact was seen in students in grades three through eight as these students were reclassified under less strict exit criteria. High school students affected by this same criteria, however, were 11.7 percent less likely to graduate if they were reclassified using the less stringent criteria. When the expectation for exiting the ELL program was raised, the percentage of students exiting the program who did not graduate was less than one percent (Robinson-Cimpian & Thompson, 2015). This difference demonstrates the possible negative outcomes for students who are not given the proper support. An increase in students who are not graduating high school pose possible negative ramifications
for the students as well as the communities in which they live. If these students are unable to secure adequate employment due to dropping out of school, the community or state often shoulders the cost of providing housing, clothing, and food. Further, higher graduation rates translate to lower prison populations, less government assistance, lower unemployment, and more marriages that last (Heckman, Humphries, & Mader, 2011).

Per Estrada, Gomez, and Ruiz-Escalante (2009), some schools and programs seek to capitalize on what could be an asset for English language learners, bilingual education. While some claim bilingual programs that embrace student differences such as these see growth in all content areas, there is not enough evidence in curricular areas beyond reading to show a significant impact toward raised achievement directly linked to bilingual education (Goldenberg, 2014). However, Antaramian & Huebner (2009) reported programs that focus first on literacy and skill building for their English Language Learners see growth in later years in content areas such as science and social studies. The debates on bilingual education are not likely to be resolved soon as much more research with control groups is needed to draw solid conclusions (Goldenberg, 2014).

Antaramian & Huebner (2009) and Goldenberg (2014) both acknowledged skills that are used for focusing English language learners toward acquiring curriculum such as setting clear learning goals, well-designed instruction, effective modeling, and authentic student engagement produce results for non-ELLs and in turn, schools and districts. Along these same lines, English language learners as well as other learners can benefit and show progress from strategies which help build academic vocabulary (Glass, Mahoney, & Rolstad, 2005; Goldenberg, 2014). Students who do not have this benefit often flounder and may even become an unfortunate statistic. Some even get categorized as long-term English learners (LTEL), which may have
implications beyond the original intent (Olsen, 2010; Thompson, 2015). Thompson (2015) stated, “While intended to highlight the unique needs of students educated in U.S. schools for many years who have not yet met English proficiency criteria, the LTEL label has acquired other connotations” (p. 1). Staff members can begin to think of these students as unreachable or lacking motivation to succeed due to disengagement (Kinsella, n.d.; Thompson, 2015). Menken, Kleyn, and Chae (2012) stated that negative connotations may stem from the description of these LTELs since these descriptions generally tend to focus on weaknesses of students. Olsen (2010) reported due to the label, some LTELs “have internalized a sense of failure and no longer see themselves as belonging in school” (p. 26). An added concern is that these students may be at a greater risk to drop out of school (Kim & García, 2014; Menken et al., 2012).

Another key component that boosts achievement in both ELLs and non-ELLs is building background knowledge. For ELLs, this background knowledge can be even more beneficial if instruction is conducted in their home language. Previewing and reviewing vocabulary incorporating home language specifically seems to have a positive impact (Goldenberg, 2014). In fact, the home language can serve the purpose of bridging the familiar label and concepts in the home language to the new vocabulary in the weaker acquired language. With a shortage of bilingual teachers, many see the benefits of utilizing technology to provide the home language support using programs such as technology-enhanced English shared reading with Spanish bridging vocabulary instruction (TESB) (Leacox & Wood Jackson, 2014).

Even with ELL programs and bilingual education in place for some, the time spent with a regular education teacher must be addressed. Far more ELLs spend the majority of their time with regular education teachers (U.S. Department of Education, 2017a; Georgia Department of Education, 2016; Herrera & Murray, 2005). When the benefits of the use of specialized
strategies for ELL students are examined, it is critical to understand why a teacher would refuse or choose not to use proven techniques that have the potential of assisting ELLs in making quicker academic gains and transition into American schools if they are new to the country or come from a home where English is a second language. As bilingual education may not be an option for a majority of teachers, and some school districts ban the use of a student’s native language, one more prevalent strategy would be the use of technology to enhance learning for ELL students (Foulger & Jimenez-Silva, 2007; Leacox & Wood Jackson, 2014).

**Situation to Self**

Over the years, I have discussed the benefits of the English Language Learner (ELL) program and other specialized strategies with parents of prospective students, but some parents choose to refuse services. Parents may choose to refuse service for a variety of reasons; some of which may include reasons specific to a certain school district such as availability or transportation while other reasons remain unknown. In my experience, when parents have chosen to accept services, parents have never later requested for their child to no longer participate. They have seemed pleased with the progress the student has made in the program. The reality of the program in many schools, however, is that it is only a supplemental service. Very few students in Georgia are enrolled in sheltered programs where ELL students are self-contained and served solely by an ELL-endorsed teacher or in a bilingual program in which students are instructed partially in a native language (National Clearinghouse for Language Acquisition, 2017). Programs of this type are often seen as a way of isolating students and enabling them to continue to rely too heavily on their native language, and they are not highly favored by some educators (Tillmanns, 2010). Even when parents accept services, there are other aspects to consider in what could be best practices in educating an ELL student (Hill &
Miller, 2013). Almost all ELL students spend time in a regular education classroom getting instruction from a teacher who is not specially trained in working with ELL students (White & Gillard, 2011). I investigated perceptions of these teachers who provide instruction for ELL students but who are not specially trained to serve ELL students with a focus on the use of technology to enhance instruction. Many teachers admit to insecurities and difficulties that they feel affect their abilities to provide quality instruction for ELL students (Téllez & Manthey, 2015). Many also recognize that they expect less from ELL students (Cheatham et al., 2014). A doubt in their own teaching abilities and lowered expectations for students can be disastrous for a population like ELL students who are at risk in most schools (Craighead & Ramanathan, 2007; Cheatham et al., 2014). Seeing actual data on teachers’ perceptions in relation to the use of technology in serving ELLs could potentially help school districts know how to better approach training and provide support for teachers in their work with ELL students. Examining the reasons that teachers choose not to use technology or ways that they may use it ineffectively can assist administrators and district leaders in hiring better qualified teachers and providing school districts with goals for building a stronger ELL base of teachers aside from those who may have specialized training. Knowing what misconceptions or perceived obstacles teachers may see can increase the rigor and effectiveness of instruction for ELLs as well as allow better financial planning for school districts as they choose items to purchase that will not only be used but will also be effective (Georgia Department of Education, 2016a; Houck, Rolle, & He, 2010; White & Gillard, 2011). Understanding teacher perceptions and ways that technology is used with English language learners can assist school districts as they help parents make a more informed decision for their family when it comes to choosing ELL services as well.
In Georgia, the English Language Learner program most often refers to English Immersion (EI). English Immersion is a type of instruction where students are in English-only classrooms as opposed to classes that would teach or offer support in their native language. EI is used to assist students who qualify in building academic vocabulary that is used in all subject areas and can help ease a student’s transition as he or she works to learn a new language (Valentino & Reardon, 2015). It is recognized that certain strategies work well to teach ELLs even when the teacher does not have a working knowledge of the student’s native language. One of these strategies is the use of technology to motivate ELLs (Richards, 2015). Incorporating technology with the use of a student’s home language has shown gains. When compared with students of a similar ELL population who were only exposed to adult readers, the students who used technology with a home language component showed significantly stronger gains (Leacox & Wood Jackson, 2014). It is also proven that technology can be used to increase achievement for regular education students as well as for ELLs (White & Gillard, 2011).

Teachers are trained through endorsement programs to meet the needs of unique English language learners. However, most teachers who graduate from a traditional teaching program do so without the benefit of such an endorsement and limited exposure to ELLs, and many of these teachers will serve ELL students in their first year as an educator (Kolano & King, 2015). In fact, these can also include nontraditional teachers who may have earned or are working to earn their teaching degree as they teach their first years in a classroom. This means that students, regular education students as well as ELLs, may be instructed by teachers who have degrees that are entirely unrelated to education (Casey, Davidson, Dunlap, Martin Starrett, & Brister, 2013; Cheatham et al., 2014; Herrera & Murray, 2005; Scherer, 2012; Valentino & Reardon, 2015).
I used an ontological philosophical assumption to guide the study. An ontological philosophical assumption was appropriate based my acknowledgment of multiple perspectives of the participants. I examined each participant’s unique individual experiences of using technology with ELLs during the study. The study also included an axiological assumption as I examined possible personal preferences or environmental factors which may influence participants’ experiences with the use of technology (Creswell, 2013). As the study focused on teachers’ perceptions and experiences, it was appropriate to use a social constructive approach. The study was conducted using broad questions with the opportunity for participants to interact me and with other participants through an interview, a questionnaire, and a focus group. The social constructivist approach was also appropriate as my background in education helped in understanding the information shared by the participants.

Although I have seen progress with English Language Learners who have been exposed to a variety of technology products, I remained neutral in my opinions even if directly asked by participants. I simply sought to better understand the rationale for teachers’ choices in how they instruct ELLs in their regular education classrooms. Finally, I had no direct connection to any of the participants in the study.

**Problem Statement**

There is a problem with the number of English Language Learners who fail to graduate high school. This problem continues to have a negative impact on ELL students because it will result in limited opportunities and hardships that await ELL dropouts who significantly outnumber non-ELL dropouts (Subedi & Howard, 2013) due to their lack of formal education (Parr & Bonitz, 2015; Sum et al., 2009). Without a high school diploma, ELLs will be viewed as undesirable by potential employers (Parr & Bonitz, 2015; Sum et al., 2009).
Despite federal and state mandates that are in place to help provide to qualifying students an equal opportunity to access the curriculum through English Language Learner services, there is an acknowledged achievement gap between English Language Learners and their white counterparts (U.S. Department of Education, 2017b). According to the research, a possible cause of this achievement gap is that teachers who work with ELLs lack confidence and are ill equipped to meet the needs of their students (Barr et al., 2016; Okhee et al., 2016; Weinstein & Trickett, 2016; Wright & Levitt, 2014). Without quality instruction, students may retain their ELL status long term through high school, which can limit their opportunities to take courses that prepare them to pass high school exit exams (Carlson & Knowles, 2016; Kruger, Li, Kimble, Ruah, Stoianov, & Krishnan, 2016; Umansky, 2016) and college entrance exams (Carlson & Knowles, 2016). Instead, struggling ELLs are often enrolled in lower-level classes that do not hold them to high expectations (Dabach, 2014; Cheatham et al., 2014; Umansky, 2016) or prepare them for graduation (Estrada, 2014; Kanno & Kangas, 2014; Umansky, 2016).

One technique that has supported ELL remediation has been the use of technology. Technology may be used in order to support differentiation and opportunities for individual instruction based on diagnostic assessments (Camburn & Han, 2015; Chen, 2016; Coleman, Gibson, Cotten, Howell-Moroney, & Stringer, 2016; Goldenberg, 2014; Keengwe & Hussein, 2014; Kim & Garcia, 2014; Pierce & Cleary, 2014; Richards, 2015; Yeh, 2015). This study will contribute to the literature on effective ELL strategies by using a qualitative phenomenological method to investigate teachers’ perceptions and experiences and their use of technology in educating ELL students.
Purpose Statement

The purpose of this transcendental phenomenological study was to understand general education teachers’ perceptions regarding their use of technology with students who qualify for English language learner services in an urban Georgia school district (Moustakas, 1994). More specifically, the research focused on determining the participants’ perceptions regarding the use of technology with ELLs and the factors that may encourage or prevent the use of technology.

The self-efficacy theory was utilized to guide and inform the study. The self-efficacy theory, developed by Bandura (1977, 1994), states that people’s success may be determined based on their beliefs in their own capabilities. In relation to this study, teachers may or may not implement technology within his or her classroom based on their perceived idea of what they are capable of accomplishing due to their experiences or prior knowledge. At this stage in the research, technology used in the classroom ranges from iPads, activboards, iPods, iPod Touches, personal response systems, to traditional forms of technology such as tape players, overhead projectors, and CD players.

Phenomenological studies investigate a common phenomenon, which in this case was each teacher's experience of teaching ELLs as a general education teacher. Because in-depth knowledge of instructional strategies for use with ELLs, including technology, would likely be present if participants have an ELL endorsement, participants were limited to teachers who are not currently endorsed ELL instructors. Each individual teacher’s perceptions were reviewed to establish and categorize similarities within the participant group (Moustakas, 1994). Participants’ responses were not examined to persuade them in any way but to formulate information that may be useful in the advancement of ELL instruction and possibly lessen...
possible consequences stemming from ELLs receiving inadequate instruction and being more likely to drop out of school (Subedi & Howard, 2013; Parr & Bonitz, 2015; Sum et al., 2009).

Significance of the Study

Seeing data of teachers’ perceptions of the use of technology with ELLs, not just assuming reasons teachers do or do not utilize technology when instructing ELLs, may help school districts know how to better assist all teachers of students who qualify for services. Seeing teachers’ perceptions can also benefit the district’s understanding of how technology is viewed as an instructional tool in general. When school districts understand the reasons that technology is or is not utilized, they can know what misconceptions teachers have or perceived obstacles teachers may see. Eliminating this unknown may assist school district administrators as they help to plan professional development for current teachers and provide support in instruction for ELL students (Calderon et al., 2011). Other benefits may include gaining additional information to assist with budget decisions concerning technology and even gaining insight into hiring procedures for new prospective teachers (White & Gillard, 2011). With the component of financial efficacy added to the College and Career Readiness Performance Index (CCRPI), a new performance and accountability measure, schools cannot afford financially or in theory to spend funds with no research or legitimate need to support their purchases (Georgia Department of Education, 2016a). Not only may such actions result in lower scores on the CCRPI, but their decisions may impact future funding from federal or state avenues, which most districts cannot afford as they rely heavily on these funds above local tax dollars (Arcalean & Schiopul, 2016; Camara, 2013).

Through the information gathered in this study, individual students may benefit as district administrators are able to address the concerns of the teachers. A nonnative speaker gains
academic vocabulary, social benefits, and confidence as he sees himself able to meet daily challenges through the skills taught in a structured ELL program (Téllez & Manthey, 2015). However, not every ELL student is served by a certified ELL teacher or it happens in limited increments based on personnel availability or guidelines set forth by individual states (National Clearinghouse for English Language Acquisition, 2017). Students who are served through the ELL program can have the benefit of interacting with peers who share similar circumstances or challenges. Native speakers, including teachers, cannot identify with the struggles that these students face on a daily basis in the regular education setting (Rance-Roney, 2010). Not only could this study be beneficial to students, it could be cost effective for school districts and give them a firmer foundation for meeting the requirements for testing expectations. Whether parents refuse or accept services, federal mandates require schools to meet the needs of these students (National Clearinghouse for English Language Acquisition [NCELA], 2017). The federal government grants funds on the same level for a student who is being served by an ELL program as a general education student, but the cost is rarely the same when attempting to meet those needs on a more individualized basis. These extra costs are absorbed at the district level (Georgia Department of Education, 2016a; NCELA, 2017). By providing better targeted instruction through technology, districts could possibly save money on other expenditures such as remediation during after school hours or summer school if more teachers utilize proven instructional strategizes such as technology (Georgia Department of Education, 2016a; Houck et al., 2010).

Billions of budget dollars are spent each year on professional development for teachers (Gulamhussein, 2013). With the information gained through the study, the district administrators may address key concerns of teachers through specialized and targeted professional learning.
Based on results, the district administrators may determine where teachers need support whether with technology, classroom management, or direct ELL instructional strategies. In the targeted school system, each school has at least one teacher who is English Speakers of Language (ESOL) endorsed and services ELLs as their full-time job and one technology teacher leader with a few supporting technology team teachers to assist with troubleshooting and professional development. These teachers teach full time in a variety of capacities in addition to supporting their fellow staff members. They are also expected to redeliver pertinent information to their school staff regarding ELLs and technology (Shattuck, 2014; NCSS Strategic Plan 2014-2019, 2017). The time factor alone is a challenge for professional development, but the possibility of actually honing in on the needs of their staff without data would be a rarity (Brown & Militello, 2016). Even allowing teachers to request topics would not be as effective as having deeper knowledge of specific needs through research since many teachers may not have the knowledge base to ask for specialized professional development regarding ELLs or technology (Téllez & Manthey, 2015). Therefore, the results would remain the same as before with traditional blanket trainings based on needs assumed by the district or school leaders.

Finally, there are studies that address student or teacher perceptions on various topics; some studies even address perceptions of ELL learners (Belfatti, 2016; Kim & García, 2014; Rodriguez, Ringler, O’Neal, & Bunn, 2009; So, Zapata-Rivera, Cho, Luce, & Battistini., 2015), teachers of ELLs (Barr et al., 2016; Cheatham et al., 2014; Kolano & King, 2015; Lee, Maerten-Rivera, Buxton, Penfield, & Secada, 2009; Téllez & Manthey, 2015), and teachers’ and students’ perception of the use of technology (Chen, 2016; DeJesus, 2014; Kung & Chuo, 2002; Omberbasic, 2015; Sallimah, 2016; So et al., 2015), but there was a lack of information regarding teachers’ perceptions of the use of technology for their ELL students (Foulger &
Jimenez-Silva, 2007). In fact, per Goldenberg (2014), there is an inadequate amount of research in all areas regarding how to best educate ELLs. In conducting this study, the goal was to gain information through teachers’ perceptions of the use of technology with ELLs. Findings of this study describe how teachers use technology in their classrooms, reveal instructional understandings of general education teachers of ELLs, and identify participants’ perceived barriers with the use of technology.

Research Questions

The following questions guided this study:

**RQ1:** How do teachers describe their use of technology in a classroom setting?

It was important to understand how the participants view technology. Their views on technology and their overall experiences provided insight into their decision to use certain products, programs, or techniques to instruct ELL students. Their overall experiences included information that was specific to their school district and the technology program of the district. Identified misconceptions about the support participant teachers have received, the facilities, or the products available through the district technology program may prove useful in planning future professional development or updating the technology professional development that the district administrators currently use to train staff members (Koh, Chai, & Lim, 016; Shattuck, 2014; So et al., 2015).

**RQ2:** What are the participants’ understandings of instructional technology in relation to ELL students?

Participants were not ELL-endorsed teachers. In this aspect, their knowledge of research in instructional strategies specific to ELLs may have been limited (Cheatham et al., 2014; Téllez & Manthey, 2015). Further, participants were not chosen based on prerequisite understanding of
technology. Therefore, it is possible that participants may have had perceptions about the use of technology without clear understandings of the potential gains for ELL students (Ryoo, 2015; Keengwe & Hussein, 2014). The participants may not have had knowledge of current research regarding the use of technology with ELLs (Reinders & Wattana, 2015). If participants currently use technology, knowing the type and how it is utilized may prove useful for the district.

**RQ3: How do teachers of ELL students describe their confidence in integrating instructional technology?**

Knowing the confidence level of these participants in regard to integrating technology could provide valuable information for moving forward with more structured training for teachers (Greene-Clemons, 2016; Kena et al., 2015). Further, knowing the reasons for not utilizing technology whether it is school based, program based, experience based, belief based, fear based, or something else could allow for more specialized assistance and support for teachers (Keengwe & Hussein, 2014).

**Definitions**

1. *English Language Learners (ELL)* - An English language learner is a student who is not a native English speaker and who is working to acquire knowledge through English (NCELA, 2017).

2. *Waiver* - A waiver is a document parents can choose to sign which waives their right to English language learner Services (NCELA, 2017).

3. *Academic Vocabulary* - Academic vocabulary are terms that are needed to be successful in an academic environment (August, Artzi, & Barr, 2016; DiCerbo, Anstrom, Baker, & Rivera, 2014).

4. *Technology* - Technology is the application of knowledge, methods, or practices for
advancement; technology is a device or piece of equipment used for problem solving (Shapley, Sheehan, Maloney, & Caranikas-Walker, 2010).

5. **English Language Learner Services** - English language learner services is instructional time offered to students who qualify with a certified teacher with an ESOL endorsement (NCELA, 2017).

6. **Perceptions** - Perceptions are a way that an individual thinks or experiences something (Freundlieb, Kovács, & Sebanz, 2016).

7. **General or Regular Education Teacher** - A general education teacher is an educator who teaches students in a classroom setting that is heterogeneously grouped and who is not providing a regulated service based on student needs (NCELA, 2017).

**Summary**

Although English language learners are recognized as the fastest growing population segment of the American educational system, there is still limited research in many areas concerning ELLs (Barr et al., 2016; Dobbins & Rodriguez, 2013). One of these areas is information regarding teachers’ perception of the use of technology in relation to ELLs (Goldenberg, 2014). In fact, according to Robinson-Cimpian and Thompson (2015), future research should include many facets including how to best meet the needs of ELLs in a regular educational setting with a focus on quality instructional practices including technology. With an evident achievement gap between English language learners and their peers of other ethnic groups, this qualitative phenomenological study was conducted to gather information regarding teachers’ perceptions in connection to the use of technology with ELLs and possible opportunities for improvement regarding instruction of ELLs (Hemphill & Vanneman, 2011; Valentino & Reardon, 2015). The relevance of the technology component is compounded by
evidence which points to increased achievement for ELLs with the use of technology (Blattner & Lomicka, 2012; Chen, 2016; Hines & Silverman, 2009; Richards, 2015).
CHAPTER TWO: LITERATURE REVIEW

Overview

The purpose of this study was to determine the perceptions of teachers of ELLs in regard to the use of technology with these students. In this chapter, the self-efficacy theory was examined in relation to the use of technology by teachers in teaching ELLs (Bandura, 1977, 1994). I also presented information concerning the first federal law to address the rights of ELLs in obtaining an adequate education, the continued history of providing services for ELLs, the need for specialized instructional techniques for ELLs, the variations in instructional practices, and the importance of providing proven strategies for these students. Also, I examined teacher perceptions of teaching ELLs, teacher preparation, and student perceptions of their abilities and future possibilities.

Theoretical Framework

The self-efficacy theory was utilized to guide and inform this phenomenological study. The self-efficacy theory, developed by Bandura (1977, 1994), states that people’s beliefs in their own capabilities may determine the success of their actions. According to Bandura (1994), “Self-efficacy beliefs may determine how people feel, think, motivate themselves and behave” (p. 71). In relation to this study, knowing a teacher’s experiences with technology, prior knowledge of instructional technology, and his or her perceptions of his or her own confidence and abilities in utilizing technology may reveal connections to the self-efficacy of individual teachers. I looked for alignment between Bandura’s self-efficacy theory, teachers’ perceptions of using technology with ELLs, and teachers’ perceptions of his or her confidence in relation to utilizing technology with ELLs. Further links were examined in relation to the four sources of self-efficacy as outlined by Bandura (1994).
In addition to defining the theory of self-efficacy, Bandura (1994) explained four sources which may affect self-efficacy. The sources included mastery experiences, vicarious experiences, social persuasion, and reduction of stress and negative emotions. Each teacher's experiences were investigated through this study and some revealed information pertaining to one or more of the four sources. The most effective source for building self-efficacy is mastery experiences, which means the person experiences success that he or she recognizes. A possible example in relation to the current study could include rising achievement data with ELLs based on the implementation of technology. Overcoming adversity may also be an example of mastery experience. Vicarious experience may also be seen as a part of the current study. Vicarious experience means that someone could feel more confident if they see an example of someone else completing a task successfully. In the current study, an example could be a teacher that feels more likely to succeed or more confident in implementing technology based on watching others implement technology (Bandura, 1994). Per Bandura (1994), the third example, social persuasion, is the building of self-efficacy through words of encouragement or praise. In relation to the current study, teachers may share their experiences with having other people encourage them regarding the use of technology with ELLs. Finally, the fourth source to build self-efficacy is through the reduction of stress and negative emotions (Bandura, 1994).

In examining the participants' perceptions, I applied the self-efficacy theory to consider the participants’ experiences with implementing technology with ELLs. I considered all information shared by the participants and looked for links to build self-efficacy which may include any information related to the sources described by Bandura (1994). When examining data, I processed the information given by teachers through the interview, questionnaire, and focus group to find out the teachers’ perceptions and experiences. I also sought information
regarding teachers’ knowledge of instructional practices using technology and the confidence level of participants in using technology.

Examining teachers’ experiences with the use of technology gave me insight into how teachers chose to use technology, how their choices were formed, and if these choices were linked to self-efficacy. I also examined information regarding teacher and peer interactions, real and perceived technical support, and the teachers’ perceived impact of technology on learning for ELLs. I asked questions to further understand the basis of each teacher’s individual experiences with using technology and compared participants’ answers in the context of a focus group.

At this stage in the research, technology used in the classroom may range from iPads, interactive whiteboards, iPods, iPod Touches, and personal response systems to traditional forms of technology such as tape players, overhead projectors, and CD players. In relation to this study, technology may be an effective resource for support and extension of instruction provided by the general education teachers. When teachers may not be trained in instructional best practices for ELLs, learning may be enhanced when students interact with technology.

Technology can be used to make a task more efficient, easier to understand, or it can provide a way to accomplish a task that would ordinarily be beyond the capability of the person or person interacting with the technology. Lastly, the role of the technology can be used to distribute knowledge. In relation to this study, software that is designed to target the needs of ELLs may be used by teachers to provide opportunities for explanation, application, and reinforcement of concepts that students may not understand if interaction is limited to direct teacher instruction. Seeing this type of information may also prove helpful for teachers who are open to learning best practices for working with ELLs.
Related Literature

The term English language learner is used to describe a diverse group of individuals. A student who is a native speaker of a language other than English can be included in this group that can be comprised of students who speak up to 180 different languages (Kieffer, Lesaux, Rivera, & Francis, 2009). These students may also be referred to as English for Speakers of Other Languages (ESOL) or English Learners (EL) (van Olphen, Hofer, & Harris, 2012). For clarity in the research and within this study, the term English language learner (ELL) will be used. Often for these students, along with diversity in language, comes a varied skill level, socioeconomic challenges, and parents who do not fully understand the American school system due to a lack of time in the United States (Echevarria, Vogt, & Short, 2004). Teachers must recognize these unique challenges and work towards helping students overcome them, so they can be successful (Téllez & Manthey, 2015).

With the fastest-growing student population in U.S. schools, children of immigrants are a real population that must become a focus for schools (Dobbins & Rodriguez, 2013; Téllez & Manthey, 2015). According to the National Clearinghouse for English Language Acquisition (2017), ELLs are approximately 11% of the K-12 students in United States’ public schools. Before 1968. When the Bilingual Education Act (BEA) was established as part of Title VII of the Elementary and Secondary Education Act (ESEA) to address ELL’s needs, schools were not required to directly serve ELLs and offer the support they may need (Wiese & Garcia, 2001). In 1974, the Supreme Court ruled in Lau v. Nichols regarding a school district’s obligation to take affirmative steps to help students overcome language barriers to access and participate in educational programs (Lau v Nichols, 1974; Moran, 2005). This ruling led school districts nationwide to reevaluate how English Language Learners were educated. Though there are
federal regulations in place regarding English Language Learners (ELLs), each state still sets its
own guidelines on how to identify, serve, and dismiss students from the ELL program (Bailey &
Kelly, 2011; Calderon et al., 2011; Thompson, 2015). For the first time under the No Child Left
Behind Act (2002), states were required to record progress year-to-year for ELLs in four areas
including reading, listening, speaking, and writing English. Though this created some
consistency, most states still determined how to identify ELLs for services and how to exit
students from the program (Menken et al., 2012; Robinson-Cimpian & Thompson, 2015; Zehr,
2010).

Variations in services, testing, and resources for ELLs persist based on funding,
population, and even state laws (National Clearinghouse for English Language Acquisition,
2017). Although there is a testing consortium, WIDA (formerly World-Class Instructional
Design and Assessment [WIDA], 2017) that is nationally recognized as an appropriate testing
system for dismissal from the ELL program, some states choose not to participate in this
nationally-normed assessment and opt for their own testing for progress and dismissal from the
program (Robinson-Cimpian & Thompson, 2015; WIDA, 2017). The numbers of states
participating in WIDA has varied over the years and is currently at 39 states (WIDA, 2017).

Some states even allow deferment from state testing based on a student’s number of years
in the country (WIDA, 2017). While this allows a period of adjustment for students and the
school, it also allows a period of no stringent accountability for progress of these students
(Figueroa, 2013). This period of adjustment can be viewed by some as time which may not be
maximized instructionally for these students. As some states and teachers do not seem to feel a
sense of urgency regarding the progress of these students, this can be a gamble that may not pay
off for the school or the student (Figueroa, 2013). Not only can a year of instructional focus be
lost, but when students are held accountable to state standards after the year of deferment, they are not prepared, which can be costly for schools in this new age of school and teacher accountability. As state standards and levels of rigor vary, the impact may not be consistent from state to state (Lauen & Gaddis, 2016).

**Georgia English Language Learners: Identification, Laws, and Finance**

Identifying ELLs in the state of Georgia is based on a test called the WIDA-ACCESS Placement Test (W-APT). The W-APT, developed in partnership with the Center for Applied Linguistics (CAL), is administered to any student new to Georgia schools with another language spoken in the home as indicated on a home language form. This includes students from foreign countries or new-to-school students such as kindergarteners. Students must be assessed by the W-APT within the first week of their enrollment. The test, based on five English Language Proficiency (ELP) standards, is then used to determine placement and possible services needed for a student (Center for Applied Linguistics [CAL], 2013). In Georgia, parents have the right to opt out of services for their child. Even if parents decline services, these ELL identified students can be coded within the local system and their data may be tracked to gain information in relation to their performance and their peers (Georgia Department of Education, 2015).

Georgia earns money through national funding to support ELLs. This funding, through Title III Part A, provides Local Education Agencies (LEA) with either direct money for districts with larger ELL populations or through a Georgia Title III Consortium for districts with fewer ELLs. The qualifying number to receive direct money varies, usually rising each year. In 2014, the number of ELLs needed for a district to qualify for direct money was 72 (Georgia Department of Education, 2015). Title III Federal Program, initially part of the Higher Education Act of 1965, evolved over the course of 35 years into what is known as Title III Part
A: The English Language Acquisition, Language Enhancement, and Academic Achievement Act. This was incorporated into the No Child Left Behind Act of 2001 (No Child Left Behind [NCLB], 2002) and was designed to provide support for Limited English Proficient (LEP) children and immigrant youth (Caroll & Bailey, 2015; U.S. Department of Education, 2015).

In Georgia, students are considered a part of the English Language Learner population once they qualify until they test out of the program. The requirement for testing out of the program in Georgia is earning the combined achievement level of five on the ACCESS test through WIDA. Students are tested in tiers according to their time in the country and previous progress. The four achievement areas consist of listening, speaking, reading, and writing. Students as young as kindergarten are required to take this assessment and retest each year to gauge growth (Fox & Fairbairn, 2011; WIDA, 2017).

National Laws and Legislation

As far back as 1896, there have been lawsuits that have had implications for ELLs. The need for such legislation, however, extends much further back. America developed as a nation of immigrants from many different countries, most of which brought their own unique language, needs, and culture to their new home in the United States (Hatton, 2015). Educating students from various backgrounds with various language needs was not something that was a focus in the United States’ education system but drew more attention as prior lawsuits shed light on the needs of ELLs. Most of the lawsuits that apply to ELLs can be traced to the 14th Amendment in the U.S. Constitution and the clauses within that address due process and equal protection (U.S. Const. amend. XIV, 1920; Wright, 2010).

Beginning with Plessy v. Ferguson (1896), the issue of segregation was addressed with a “separate but equal” ruling. This case and the case which reversed its ruling 58 years later,
Brown v. Board of Education (1954), were significant due to the routine segregation of student groups, including students who may speak limited English such as Asians or Hispanics. In other cases specific to the segregation of ELLs, the court swayed in opinion. An original ruling in Independent School District v. Salvatierra (1930) to support the district’s argument that segregation was necessary was later reexamined in Alvarez v. Lemon Grove (1931) and Mendez v. Westminster School District (1946) when the court deemed that segregation was not in the best interest of ELLs (Aguirre, 2005; Alvarez v. Lemon Grove, 1931; Brown v. Board of Education, 1954; Independent School District v. Salvatierra, 1930; Mendez v. Westminister School District, 1946; Plessy v. Ferguson, 1896; Wright, 2010).

The case that became the landmark case of ELL law, Lau v. Nichols (1974), has undergone scrutiny over the last 40 years since the original ruling in 1974. What began as a lawsuit filed on behalf of Chinese-speaking students in the San Francisco school system grew into a national case that stemmed from what was seen as the exclusion of these students in the educational process based on language. The ruling by the Supreme Court cited a violation of Title VI of the Civil Rights Act (Civil Rights Act of 1964, 1964; Lau v. Nichols, 1974; Tran & Bhattarai, 2014). Title VI basically states that no person in the United States shall be subjected to exclusion from an activity receiving federal funding based on basic factors such as race, color, or national origin (Civil Rights Act of 1964, 1964; Tran & Bhattarai, 2014). In relation to ELLs, Title VI requires all students have equal access to the educational process, and that students may not be barred from this access due to language where language is a proxy for race, ethnicity, or national origin, which is the expectation per the interpretation by the Office of Civil Rights (OCR) (O’Sullivan, 2015).

In Lau v. Nichols (1974), the plaintiffs’ argument was based partly in the fact that the
school district offered special language assistance to Spanish-speaking students while it did nothing to assist Chinese-speaking students (Lau v. Nichols, 1974; Moran, 2005; Tran & Bhattarai, 2014). As the case moved through local, district, and court of appeals, the rulings, while sympathetic to the students, deemed that the school district had met its legal obligation to these students and that the language barriers these students faced were in no part caused by any State action (Moran, 2005; Tran & Bhattarai, 2014). Per the Ninth Circuit, the interpretation of Title VI used by the plaintiffs, as defined by OCR, was extreme due to the argument that all students begin school with various degrees of advantages and disadvantages. The Supreme Court, however, considered several key principles which led them to a ruling in favor of the plaintiffs. Among these, Congress had delegated enforcement rights to the Office of Civil Rights therefore making their interpretation of Title VI, including the language policies, legitimate in the eyes of the court. Also, the school district’s acceptance of federal funds held it liable to ensure that no population of students was excluded based on language. The school district’s policy of providing only English instruction with fidelity left it further vulnerable to OCR’s interpretation of Title VI (Lau v. Nichols, 1974; Moran, 2005; Tran & Bhattarai, 2014).

Over the course of the 40 years since Lau v. Nichols (1974), several cases have reversed components of Lau v. Nichols (1974) with only the key component remaining, which simply states that an English-only curriculum can be exclusionary to language-minority students. Guardians Assn v. Civil Service Commission (1983) brought a ruling that gave compensation only for purposeful wrongdoing and not for unintentional adverse effects. In 2001, Alexander v. Sandoval (2001) revoked private right of action under Title VI (Alexander v. Sandoval, 2001; Guardians Assn v. Civil Service Commission, 1983; Lau v. Nichols, 1974; Tran & Bhattarai, 2014). Since private plaintiffs were already granted the right to sue for intentional

While there are other alternatives in place to protect ELLs, none are as all-encompassing and as thorough as *Lau v. Nichols* (1974). The Equal Education Opportunities Act (EEOA) is perhaps the most promising as it defines effects rather than intent in regard to discrimination and allows private individuals to bring suit if necessary (Equal Education Opportunities Act of 1974, 1974; Lau v. Nichols, 1974; Moran, 2005).

**Teacher Perceptions and Preparation**

While some states have recognized the need for targeted ELL instruction and the special challenges, these students face to the degree that parents are not allowed the right to refuse services, most ELLs are still served in the regular classroom for a percentage of the day (Herrera & Murray, 2005; Jacobs, 2016). In Georgia, the percentage of time spent within a regular classroom varies depending on the grade level of the student. For elementary students in grades kindergarten through third grade, the percentage of time spent with a regular education teacher is 86% of their school day. For fourth and fifth graders, the percentage of time increases to 88% of their school day. These figures are based on one segment of service per day with a certified ELL instructor, which is all that the state of Georgia requires. Segment times are 55 minutes per day for kindergarten through third grade and 45 minutes for fourth and fifth grades in what averages as a six-and-a-half-hour school day for Georgia elementary students (Georgia Department of Education, 2015). Other states allow parents to accept or waive ELL services. In either situation, many ELLs find themselves spending numerous hours in a regular educational setting being served by teachers who are not trained in techniques specific to ELLs (Herrera & Murray,
Only three states require all certified teachers to be endorsed to serve ELLs (White & Gillard, 2011). In Georgia, which does not require an ELL endorsement for teachers who instruct ELL as a regular education teacher, only 45-55 minutes of a student’s day is allotted to service from an ELL-endorsed teacher (Georgia Department of Education, 2015).

Other settings for ELL students may include a bilingual setting or a sheltered immersion setting. In most states these are rarely if ever used. In fact, a limited number of teachers who are certified to deliver such instruction proves to be a huge challenge for states that do choose to implement these instructional settings (Jacobs, 2016; Leacox & Wood Jackson, 2014). States such as California who served up to 30 percent of their ELLs in a native language setting are now experimenting with new programs such as the Sobrato Early Academic Language (SEAL) program which focuses not on the language but the quality of instructional practices. With less than 40 percent of ELLs who were in the California bilingual program 10 years or more qualifying as proficient in English, the effectiveness of the bilingual programs were questioned, and now only eight percent of students are served in native language settings (Jacobs, 2016).

Vast differences in ELL services include more than the number of hours served, teacher preparedness, and basic supplies. Technology integration for ELLs ranges from basic language lab types of technology to applications for technology that are specially designed to meet the needs of language learners who learn best when information can be presented in various modes (Boisvert & Rao, 2015; Rance-Roney, 2010; So et al., 2015). The use of technology to present various modes makes sense, but it can be a challenge when teachers are not confident in their abilities to teach ELLs using technology (Foulger & Jimenez-Silva, 2007).

Many teachers express concerns over meeting the needs of their ELL students (Téllez & Manthey, 2015). Reasons for concern include a lack of knowledge of ELL target strategies, a
lack of professional development on how to work with ELLs, and a lack of appropriate resources (Cheatham et al., 2014). Many of these same teachers also acknowledge having ELLs in their classrooms for a majority of the school day rather than having them served by a qualified ELL instructor (Calderon et al., 2011). Teachers also express concerns that there is a lack of communication between the teachers who are ELL certified and the teachers who serve these students for a majority of their class time. A lack of planning time and large caseloads were mentioned as deterrents to open communication among these teachers (Calderon et al., 2011).

According to Birch and Ladd (1997), adults are more likely to bond and develop a relationship with students who have favorable attitudes toward learning. Unfortunately, many ELLs may have difficulty with talking to express their understanding or enthusiasm, therefore making a relationship between teacher and student strained or less than positive (Gilakjani & Sabouri, 2016). When starting with such a deficit, students and teachers can easily become overwhelmed due to miscommunication and misunderstandings (Birch & Ladd, 1997). The need for empathetic, open-minded teachers who have a desire for building relationships with ELLs could be addressed with further training and support through teacher preparation programs and on the job professional development (Roy-Campbell, 2013).

When examining teacher preparation in general, many changes have occurred in the past few decades as trends and research have determined a need for more rigorous, student-centered programs for education majors. One requirement that is taking hold throughout the United States is the need for teachers to leave their program with a thorough background in the use of instructional technology (Muilenburg & Berge, 2015). This background alone, however, does not always translate to technology-savvy teachers who effectively instruct students with technology. The fast pace of changes in societal technology often leave teachers at a
disadvantage as school budgets cannot maintain the same rate of advances (Muilenburg & Berge, 2015). Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, and Sendurur (2012) asserted that personal beliefs along with the attitude of an individual toward technology may be an indicator of how successfully one will implement technology use in his or her classroom. The researchers also noted as a point of interest the commitment a teacher had to change and innovation in the field of technology (Lee, Longhurst, & Campbell, 2017).

While some programs recognize shortcomings and work to shore them up, an investigation is currently pending concerning teachers who pursue certification through alternate routes rather than traditional programs. A group of advocates who filed a lawsuit citing concerns over the “highly qualified” status of these individuals has prompted the U.S. Department of Education to examine the teaching assignments of alternative route teachers. The goal of the investigation was to determine if these teachers are disproportionately assigned to teach students with special needs and ELLs (Sawchuk, 2013). With traditional programs graduating students who are deemed under qualified to serve such students, it would stand to reason that a concern over alternative route teachers serving a disproportionate number of students is legitimate since these teachers basically enter the classroom as on-the-job learners who have not had the benefit of education classes in many cases (Cibulka, 2013).

In a study conducted to gauge the needs of these nontraditional teachers who serve bilingual students during their first three years in the classroom, their main concerns were reported as not knowing what to teach, meeting individual student needs, and planning for differentiation (Casey et al., 2013). According to Roy-Campbell (2013), these concerns are not exclusive to nontraditional teachers. Teachers who earned certification through traditional programs also struggle with understanding how to meet the needs of their ELL population (Barr
et al. 2016; Okhee et al., 2016; Weinstein & Trickett, 2016; Wright & Levitt, 2014). One theory is that instructors in traditional and nontraditional certification programs do not impart this knowledge with their classes of future teachers because they themselves have not been instructed in these practices, and therefore the deficient is rooted deeply within the teacher preparation programs (Roy-Campbell, 2013).

Alternatively-certified educators make up a large population of recently licensed teachers in several states with large ELL populations including Texas and California (Feistritzer, 2009). These teachers earn licensure through a variety of programs that rarely include fieldwork and are usually reliant on Internet courses and passing written exams to show proficiency (Baines, 2010). According to Cibulka (2013), teacher licensure requirements should be more stringent due to the needs of a diverse learning population regardless of the type of school setting in which the teacher will be working in upon earning licensure. Cibulka (2013) further explained that inconsistent regulations show a need for more state involvement in teacher preparation programs to prevent further expenses for schools as they must work to replace inadequate staff.

As state and federal level groups examine the teacher preparation programs, more than just shortcomings are coming to light. One such case is an investigation by the U.S. Department of Justice that found Massachusetts negligent in regard to the education provided for the state’s ELLs. The state was cited for placing too many ELLs in classes with teachers who were inadequately prepared to teach ELLs (Zubrzycki, 2011). One immediate result from the findings was a vote by the Massachusetts Board of Elementary and Secondary Education to require specialized training for teachers who teach academic content to ELLs. From this vote, Massachusetts education regulations changed to require all content teachers and administrators working with or supervising teachers and students to be certified to serve ELLs (Massachusetts
Department of Education, 2016). Even though the state of Massachusetts has required ELL teachers to have special certification, they have not mandated training for content area teachers or administrators. The U.S. Justice Department set clear expectations for Massachusetts to meet the obligations of educating their ELL population as stipulated under the Equal Education Opportunities Act of 1974 (Equal Education Opportunities Act of 1974, 1974). The state recognized the challenge it faced in updating training and funding the training. Though the findings that cited a violation of the civil rights of the state’s ELLs may seem harsh, the reality that these students were not closing the achievement gaps required change (Massachusetts Department of Education, 2016; Zubrzycki, 2011).

Today’s teachers are leaving college, many with the hope of making significant changes themselves in the field of education, to enter a profession that many teachers from a generation ago would find only vaguely familiar (Richmond et al., 2016). Preparing and sustaining the necessary knowledge needed to teach in today’s changing world requires a deeper commitment than ever before as teaching trends, requirements, and expectations have shifted in a number of ways including delivery models, students’ needs, and technology (Camburn & Han, 2015). Changes in education are occurring on a daily basis, and many of these come through the format of technology. In a day and age where one can receive specific feedback within minutes from across the world, the temptation to overlook such an asset must not be disregarded (Pierce & Cleary, 2014).

Teachers who have an attitude and mindset that is open to learning, changing, and exploring will be more likely to set aside time outside of training to further investigate, therefore making them more likely to utilize the technology in their classrooms (Lee et al., 2017; Vannatta & Fordham, 2004). Currently, research trends are aimed to discover the connection between
teachers’ use of technology in instructing rather than the impact on student learning when students are engaged in the use of technology (Goodwin, 2015). However, meta-analysis shows that the use of computers is more effective when there is a variety of teaching strategies implemented in instruction (Hattie, 2008). Perhaps these teachers who take the time to study beyond training do find and implement more effective strategies that possibly enable them to reach more students, including students who face challenges such as ELLs (Coleman et al., 2016).

While Pierce and Cleary (2014) acknowledged that the K-12 educational system continues to face challenges in the realm of training and implementing technology, they found that there are elements in place to make the transition to greater technology utilization possible including Internet maturation. Possible benefits cited by Pierce and Cleary (2014) included increased academic performance with a possibility to close achievement gaps and lessen the digital divide, graduates who are prepared for rigorous work expectations, and workforce advancement that could keep the United States competitive in a global market.

**Student Achievement and Achievement Gap**

Limited research linking teacher beliefs, teacher practice, and student achievement has been conducted (Higgins & Spitulnik, 2008; Lawless & Pellegrino, 2007). In the current age of academic accountability, students are expected to perform regardless of identified learning challenges, low socio-economic status, and various other factors (DellAngelo, 2016; Richmond et al., 2016). In the reality of what this expectation means, teachers and administrators must work closely together to overcome anything that could be identified as a possible stumbling block to passing mandated assessments or derail long-term success (Vansant-Webb & Polychronis, 2016). Patterns, trends, and commonalities among student groups and student
performances should be tracked year to year to provide the best tailored instruction possible (Bertrand & Marsh, 2015). According to the Coleman Report (Coleman et al., 1966), the first report to recognize and address the discrepancies in achievement between minorities and white students, the greatest contributing factor that affected black males and Hispanic males’ achievement rate was a sense of control over their environment (Coleman et al., 1966). New findings gathered and analyzed by Yeh (2015) found that other factors contributed to the achievement gap including environment. Per Yeh’s (2015) findings, a lack of a system to individualize performance tasks and the lack of rapid feedback are stronger factors in widening the achievement gap. This information does not completely discount previous factors; however, it raises questions regarding the effects of low socioeconomic status and teacher performance (Yeh, 2015; Coleman et al., 1966). Past information has led to targeting teachers who are deemed low performing to reform their teaching practices or to create vacancies after terminating teachers who are perceived to be weak. Yeh (2015) also suggested that focusing funding into technology that will address the individualization and feedback, which can be extremely limited, may be a more efficient method for addressing the achievement gap.

In one study designed to track the impact of technology immersion on student achievement in 21 high-need schools in Texas, Shapley et al. (2010) reported a rise in student achievement in the schools that implemented technology with fidelity. One-to-one laptops, smartboards, and tablets were among the technology items used for the immersion study (Shapley et al., 2010). Contributing factors for successful immersion, and therefore improved scores, included administrative support, positive teacher attitude, professional development, technology support, and school culture (Shapley et al., 2010). Further examination revealed peer support among teachers and teachers’ beliefs toward quality instruction had an impact on the
fidelity of implementation for the technology immersion in the Texas-based study (Shapley et al., 2010).

**Quality Instruction for English Language Learners**

The English Language Learner population is the fastest growing segment of the population in American schools with the largest percentages in grades seven through 12 (Kanno & Kangas, 2014). Unfortunately, many of these are categorized as long-term ELLs that have gone through the ELL program since early elementary school (Kim & Garcia, 2014). Research suggests that these long-term students remain in the program due to the inadequate use of quality instructional methods (Calderon et al., 2011; Kim & Garcia, 2014). With these factors in mind, it stands to reason that the need for specific instructional strategies for ELLs should be a priority if there is any hope of moving these students forward (Calderon et al., 2011; Kanno & Kangas, 2014).

Quality instructional methods based in research have been identified as making a significant difference in learning and progress for English Language Learners (Castro, 2015). Among these methods the use of technology integration stands out due to the interactive possibilities and nonlinguistic features that are key components (Richards, 2015; Foulger & Jimenez-Silva, 2007). A recent study conducted and reported by Brown (2016) acknowledged a need for the use of technology with students as they prepare to enter an ever-changing world largely immersed and driven by technology. However, the idea of students being technology ready does not discount the need for human interaction and support as mentioned by Brown (2016). Brown (2016) found that the use of e-readers with a second-grade study group allowed for more practice and independent reading thus enhancing student engagement.

Student engagement has been shown to be a factor in increasing student achievement in
all students, but it is especially critical for ELL students, and one method for increasing interactive learning is through technology (Chuang, 2014; Richards, 2015). The use of computers alone has shown an increase in positive attitudes and engagement among students (Hattie, 2008). When students are given opportunities to participate in hands-on, authentic learning such as e-mail, discussion boards, or blogs, student motivation increases along with their willingness to let go of inhibitions that may affect their daily classroom activities. These methods can also provide direct and individualized feedback without the fear of answering verbally in class (Foulger & Jimenez-Silva, 2007; Richards, 2015; Rowlands, 2014). In a study by Thomas and Muñoz (2016), student participants involved in using mobile phones in the classroom were surveyed. Ninety percent of the high school students used phones as a part of technology integration and learning in the classroom setting. Of the students surveyed, 71% felt the mobile phones were beneficial to learning (Thomas & Muñoz, 2016).

According to Keengwe and Hussein (2014), the use of technology with ELLs helps to close the achievement gap between ELLs and other student populations. Keengwe and Hussein (2014) reported these findings based on a two-year study conducted in two schools in Minnesota with similar student populations. In both schools, 60% of the student population were Somalian refugees who were identified as ELLs. In one school, the students were instructed using computer assisted instruction (CAI). The remaining school taught with only traditional teacher instruction. Students in the school utilizing CAI showed gains in reading and math and were closer to meeting national requirements for No Child Left Behind (2002). Even with the reported gains, Keengwe and Hussein (2014) cautioned that the use of technology should be well planned and purposeful. The use of technology should support teacher instruction and not replace quality instruction delivered by a teacher (Brown, 2016; Keengwe & Hussein, 2014).
Teachers should be encouraged to embrace new technology since it may be an effective tool when teachers are trained and given time to learn the skills needed to implement it to meet student needs (Bebell & O’Dwyer, 2010).

Considering the emphasis on quality instruction for ELLs that includes technology, a new concept known as grounded technology integration has been aligned with the ESOL teaching strategies taxonomy to improve learning for ELLs as teachers select technology strategies which will support learning goals for students (van Olphen et al., 2012). Grounded technology integration aims to focus on instructional planning with practical and useful technology woven in based on content and pedagogy. Integrating technology in such a way works in conjunction with the ESOL taxonomy to meet student needs in the appropriate developmental stage of learning a language. This practice hones in to generate the maximum impact for each student (van Olphen, et al., 2012).

Another argument for the incorporation of technology could come from research showing a lack of teacher literacy instructional knowledge (Kena et al., 2015). The potential for negative impacts on ELLs in such a setting has the potential for setbacks, as referenced by Kim and Garcia (2014), when frequently ELLs require extra support to meet their language needs. A study conducted in Texas, a state with a high ELL population, found that while teachers overall felt confident in their skills of teaching literacy constructs to students including ELLs, when tested their actual knowledge base was low. On average the teachers scored only 39 percent with third grade, and support teachers scored the highest (Barr et al., 2016). Considering such findings, the use of technology that is specialized with information for ELLs is something that many teachers and administrators are in favor of using in classrooms (Saadat, Mehrpour, & Khajavi, 2016). Busse (2013) claimed that too much correction from teachers and peers can
deter students and derail motivation; options available through the Internet specialized for ELLs may prove to be a valuable resource in providing feedback. Technology resources have also been credited with motivating students to self-correct more frequently when writing (Saadat et al., 2016).

**Visual Literacy**

Language and visual representation are closely connected. As one learns a language, he or she internalizes images that represent a given word. He or she then can retrieve this image later when the word presents itself again (Britsch, 2009). With this link being so vital to learning language, it makes sense that an effective means of connecting these images and language are accomplished through the use of technology. This is especially true for younger students or students who are just beginning to learn a new language (Blachowicz & Fisher, 2006). This also connects to a strategy on a list of Research Based Instructional Strategies (RBIS) also known as Marzano’s High Yield Instructional Strategies, Nonlinguistic Representation (NLR), and its use as a means of effectively learning and understanding vocabulary. According to research conducted by Mid-continent Research for Education and Learning (McREL) in Denver, Colorado, the gain from nonlinguistic representation can be as much as 19 percentile points (Dean, Hubbell, Pitler, & Stone, 2012). Nonlinguistic representation also plays a key part in Direct Vocabulary Instruction (DVI) which is a primary instructional strategy for acquiring vocabulary knowledge (Blachowicz & Fisher, 2006).

In order to ensure ELLs advance and make sufficient progress, the instructional strategies should be modified, not the expectations. ELLs must be held accountable to learning the same standards as their non-ELL peers (van Olphen et al., 2012). Teachers should identify the strategies which will meet the needs of the ELLs such as those providing language supports and
then choose technology that will work with those strategies and supports to strengthen their ability to ensure student understanding and learning (Chiu, 2013; van Olphen et al., 2012). In relation to gauging understanding, technology can also be used to support ELLs in assessments. Teachers can incorporate pop-up glossaries using nonlinguistic representation when needed or alternative words in their native language that can assist students with the language aspects without giving them answers. Other traditional resources such as bilingual dictionaries use valuable assessment time and have the potential to provide students with answers instead of support (Guler, 2013).

The importance of strategies that support ELL learning are often familiar and perhaps are already utilized by the teacher, but the impact the use of the strategies can have when used in a cohesive plan to promote academic success is often not understood by teachers (van Olphen et al., 2012). Some of these key strategies are demonstrating and modeling, encouraging student communication with peers and teachers, promoting cross-cultural awareness, clear communication, and checking for understanding (van Olphen et al., 2012). By coordinating these strategies and appropriate technology, guesswork can be decreased as students have more options in how they demonstrate understanding. Examples could include ways students can express their thoughts using technology to show understanding beyond speaking and writing such as the use of a program to draw a response, or a student who struggles with writing could create a voice recording. Technology can also provide ELLs opportunities with practice without the fear of scrutiny as well as with the opportunity to take risks or make mistakes without peers seeing the learning process with which they may struggle (Iaremenko, 2017).

Another avenue open to ELLs who are ready to venture into more of an open forum is blogging. Students of varying abilities may benefit from the development of communication
skills, but a method such as blogging can be especially enticing for students in today’s society that thrives on social media (Thomas, Reyes, & Bluming, 2014). Students see this as an opportunity to express their thoughts and feelings in a safe and protected environment when the teacher sets up a private blog for students to use. Some teachers even report that a stronger sense of community develops among the classmates. This is an added benefit for ELLs who may need extra support from their peers as they learn how to effectively use their new language for meaningful conversations (Curran, 2012).

Technology as a Learning Support to Improve Instruction behind the Scenes

Another prospect that can assist instruction and ELLs is the use of technology for tracking student data and organizing student work. In using software or technology to track student progress, data can be processed quickly and thus turned into useful information to serve students’ direct needs. One such system is Georgia’s Statewide Longitudinal Data System (SLDS), which is used as a massive database to house the most current student achievement information and attendance information available for each Georgia student tracked through the Georgia Department of Education (Georgia Department of Education, 2017). While Georgia school districts and other state school districts use technology in this way, there is a question as to how well teachers understand the uses for the data and the impact it can have on instruction for students, including ELLs, in their classrooms (Conaway, Keesler, & Schwartz, 2015). Something as simple as a transfer of state data from teacher to teacher with domains broken down into specifics can give a student’s next teacher a quick snapshot of where that student stands and allow for early planning before the school year even starts (Calderon et al., 2011; Georgia Department of Education, 2017). Also, the use of similar technology techniques used across a school and district can help eliminate relearning and build student confidence as they
transition into a new classroom. This can be made possible through professional development for teachers and planning across departments on how to incorporate technology in the classroom. Also, the sharing of information and ideas across the schools and districts can help teachers become aware of new applications, programs, or websites that they may find useful in instructing ELL students as well as their peers (Calderon et al., 2011). A remaining question that could be answered by participants of this study is how they see the practice of sharing information impacting learning for ELLs.

Another aspect of technology that can directly benefit students is the option of using cloud tools. These tools make it easier for both students and teachers to access student work and enables them to communicate. This access is important when students have created documents that the teachers need to view thus engaging them in a type of virtual conferencing (Dean et al., 2012; Heitin, 2013). This can be a powerful tool if it is utilized to provide students with feedback that is specific and timely. Such a concept, along with setting clear objectives, has been shown to have an increase in learning of between 12% and 28% (Dean et al., 2012). These students have access to the teacher not just while in class but well beyond (Dean, et al., 2012; Heitin, 2013).

Other web-based resources, such as Edmodo, allow teachers to set up a virtual classroom. As teachers set up a security-protected learning environment for students, they can access pupil uploaded information to assess and provide feedback quickly (Rowlands, 2014). This specific and timely feedback has the potential to provide great academic gains as students could make adjustments in learning and teachers make adjustment to instruction. With this type of support, it is documented that students feel more comfortable taking risks and therefore stay motivated to remain engaged in learning, often trying numerous techniques to internalize and then
demonstrate knowledge (Dean et al., 2012). This type of safe learning environment is particularly important for ELLs who benefit from the opportunity to practice their English skills in a private setting with the teacher (Gustad, 2014).

Online, structured classes can also provide real time information on grades and access to assignments for parents who can provide students who are struggling, such as ELLs, more opportunities for feedback and support (Curtiss et al., 2016). In some online classes, such as Edmodo, student use is recorded so teachers can access documentation for each posting to see who utilized the information. Students also enjoy tracking their progress through online class sites, and per Rowlands’ (2014) study, the use of Edmodo showed an increase in student participation as well as work quality.

Online class formats can also have the added benefit of reaching out to parents of ELLs who otherwise may not understand the learning goals of their students (Curtiss et al., 2016). ELLs often have difficulty verbalizing and explaining class requirements and the activities used to make learning meaningful to their parents. The sheer convenience of accessing the information online may provide motivation for students and parents to become more involved in learning (Blau & Hameiri, 2017; Rowlands, 2014).

**Embedding Technology**

The digital divide, a term coined by Tapscott (1998), refers to the distinct division between those who have access and use technology and those who do not. This is an unfortunate reality for many poverty-level schools and communities (Beegle, 2007). Funding technology can often be alleviated through grants or other sources of revenue such as federal programs like Title I (Schueler & West, 2016). However, the real difference often comes into play in the technology instructional methods used in classrooms (Thomas et al., 2014). Classrooms and teachers may
have access to the same technology items, training, applications, or software, but the perceived value of the impact it could have on learning may possibly regulate how often and how well it is utilized (Hur, Shannon, & Wolf, 2016). Other factors could possibly include a teacher’s own exposure and comfort level with technology or the level of professional development provided that allows teachers to explore and expand their own knowledge base (Calderon et al., 2011; Kena et al., 2015). In many cases, the technology may be in place but a lack of functional understanding or a lack of understanding of potential impact as shown in research leads teachers to other instructional choices (Thomas et al., 2014). Unfortunately, this digital divide can have profound effects on the ELL population as they are trying to master concepts that could be enhanced by the use of technology (Foulger & Jimenez-Silva, 2007; Richards, 2015).

The goal for quality instruction for all students is to use technology to enhance learning. It should not be the dominating focus of a lesson. With that in mind, a suggestion by Jacobs (2010) could prove to be a powerful means for teacher buy in. Jacobs (2010) posited that embedding technology should begin with what is already in the curriculum. Often times teachers, especially veteran teachers, feel comfortable and competent with their curriculum and standards. This creates a sense of security as they work to incorporate technology, which may seem overwhelming (Jacobs, 2010). Thomas et al. (2014) referred to this as the Technology Acceptance Model, applicable to the students as well as teachers, which gauges the value added by the technology, usefulness, and ease of use.

True technology integration can be a powerful thing in a classroom, but the use of technology for “technology sake” takes the focus off the benefits technology can provide for students (Dunbar, 2016). If the key to improving achievement with technology is quality integration then more than just what is used is an important factor and investigations must focus
on purposeful lessons that incorporate technology in such a way that gaining knowledge is still
the focus for students (Jacobs, 2010). In a study by Hines and Silverman (2009), ELLs were
exposed to literacy information using multimedia devices while a control group of ELLs was
given information through teacher read alouds. The ELLs who utilized the multimedia devices
had a seven-point gain in achievement over the control group from their pretest to their posttest.
Regular education students gained at the same rate in both the multimedia group and the control
group. This study demonstrated the important role technology could play for ELLs when used
effectively to enhance instruction (Hines & Silverman, 2009).

Some states have even focused on using gaming as a support for student learning. States
such as West Virginia have built an online community that is credited with not only raising
motivation and achievement but addressing various learning styles (Jacobs, 2010). When
teachers can see gain with ELLs at the same rate as their peers who are not ELLs, a solid
argument for the need to implement technology strategies that can be utilized with ELLs is
created (Richards, 2015; Warschauer & Tate, 2015). A study conducted to examine engagement
patterns of elementary students by Hsieh, Lin, & Hou (2015) showed increased engagement for
students during gaming. Findings noted raised engagement in boys over girls with variations in
verbal reactions, gestures, and facial expressions. According to Hsieh et al. (2015), previous
studies conducted focused on students’ attitudes toward gaming through the use of surveys or
questionnaires rather than conducting action research to see physical reactions of students during
gaming.

As early as 2004, Vannatta and Fordham conducted a study of teacher characteristics and
a possible link to technology integration. Based on their observations, Vannatta and Fordham
(2004) concluded that teachers who took time to explore technology were the ones who seemed
to make the greatest gains in integrating technology successfully in their classrooms. More recently a study by Blanchard, LePrevost, Dell Tolin, & Gutierrez (2016) supported Vannatta and Fordham’s (2004) original findings and further explained that giving teachers an extended time for technology professional development (TPD) allows them to grow and reflect, which can lead to more risk-taking in the classroom. Per Lee, Feldman, and Beatty (2012), the amount of technology prior knowledge a teacher has should also be considered a contributing factor in classroom technology integration.

According Longhurst et al. (2016), the amount of professional development focused on technology impacts more than just technology integration. Longhurst et al. (2016) established a correlation between professional development, technology integration, and student achievement. Findings showed students of teachers who participated in one year of TPD outperformed students of teachers who did not participant in any technology professional development. Further findings showed students of teachers who participated in two years of TPD outperformed students of teachers without TPD or with one year of TPD (Longhurst et al., 2016).

As with any new instructional piece, technology changes may pose issues that cause teachers to be hesitant due to management issues (Fulton, Paek, & Taoka, 2017; Heitin, 2013). When technology is constantly in flux it is challenging for teachers, even those who have extensive training and experience, to stay ahead of the curve and predict how the technology will impact their classroom routines, communication, and organization (Cheong, Shuter, & Suwinyattichaiporn, 2016; Heitin, 2013). Many teachers try to combat this challenge with information they gather from colleagues and trial and error within their own classrooms. These issues can range from students exploring the Internet at inappropriate times, a shortage of electrical outlets, and handling devices to students breaching firewalls (Fulton et al., 2017;
While some solutions such as software to monitor student laptop screens from a hub are better addressed as a school district, many still lie within the realm of the classroom teacher and how he or she decides to address the issue. Things such as mapping out traffic patterns, creating a technology vocabulary that is understood by students, and establishing technology expectations can reduce problematic issues that may arise (Heitin, 2013; Herold, 2016; Wasko, 2016). Some teachers and districts even get very inventive and utilize the challenges to better their technology programs by hiring students who “hack” their system to troubleshoot and shore up any breaches while others involve tech-savvy students in creating student-made videos to assist students who are working to learn new technology concepts (Heitin, 2013).

**New Technology and Initiatives on the Horizon**

Not only is new technology discovered daily, but the way technology is used changes day to day. Unfortunately, the field of education technology can be slow to infiltrate due to funding issues, and when it does arrive, it may take years to properly train staff members in how to best utilize the new products (Claesgens et al., 2013). Due to the delay in technology reaching students and training reaching teachers, a new initiative which relies on prior student knowledge and student-centered learning makes educators reexamine the limits of technology within the classroom through Bring Your Own Device (BYOD) (Baule, 2012a; Bruder, 2014; Wasko, 2016).

In today’s schools some teachers make use of the Bring Your Own Device (BYOD) or Bring Your Own Technology (BYOT) initiative that encourages students to bring their own wireless-capable technology devices to use as a part of a teacher’s planned lessons. Such an idea has been seen as an innovative way to address student needs on an individual level, raise student
achievement, and engage more students in learning (Maher & Twining, 2017). While this type of open-minded instruction may bring great rewards and opportunities for learning, it can also bring challenges for schools with a large number of low socioeconomic students (Baule, 2012b; Bruder, 2014; Flanigan, 2013; Maher & Twining, 2017; Wasko, 2016).

Equity issues are often a factor as students are not all able to afford their own devices (Flanigan, 2013). Schools try to find various ways of addressing student needs but may often overlook points due to their own lack of firsthand knowledge on poverty or their lack of experience with students at or below the poverty level (Baule, 2012b; Beegle, 2007). One example was a school that set up a loaner program for students without devices. Part of the requirement, however, was a deposit from families that was quite substantial to cover lost or damaged devices. This made sense from a financial point of replacing loaner equipment, but it did not make sense for the families who could not afford the deposit (Baule, 2012b). Some schools try to cope with these challenges by requesting new, donated technology items from foundations and businesses or donations from community members for items that they no longer need (Petersen & Poulson, 2016). Challenges can also come in the form of policy changes, network overload, and digital discipline (Flanigan, 2013; Fulton et al., 2017; Heitin, 2013).

The BYOD program may also include obstacles such as parent and teacher buy-in for the program. Many school systems address concerns by developing clear rules, informing stakeholders of the benefits of the initiative, and providing students with information on how to properly use their devices (Baule, 2012a; Flanigan, 2013; Herold, 2016; Larosiliere, Kobelsky, & Mchaney, 2016). Some of these issues can be unique for ELLs as their parents may not be native English speakers or readers. This can make communication about the initiative hard to convey to these parents. In turn, these students may not have the parental support due to a lack of
understanding of the goals of the program even if they have their own devices (Flanigan, 2013). However, a major benefit of BYOD for ELLs is their familiarity with the device they would be using to navigate through information. Instead of the focusing on how to implement and use technology, the focus can truly be on the learning goals (Benjamin, 2016).

Gerard, Varma, Corliss, & Linn (2011) found that TPD is effective in instruction when it is focused on transformation. Transformation in the use of technology only comes when teachers can recognize the need for change and they can justify the need based on their own beliefs (Lee et al., 2017). According to Lee et al. (2017), major indicators that predict the use of technology within one’s classroom were found to be the amount of time devoted to technology training, the number of hours spent outside of the classroom such as planning, learning and exploring technology, and teacher beliefs. Teacher beliefs, which may affect openness to change, was the leading indicator that impacted the transition from teachers participating in technology professional development and learning to use technology to actually implementing their new knowledge with students (Lee et al., 2017). The factor of time spent in TPD has been identified as a stumbling block for some educators (Blanchard et al., 2016; Lee et al., 2017). The study conducted by Lee et al. (2017) followed teachers over the course of two years, and findings showed that teachers who participated in only one year of TPD were less likely to integrate technology than teachers who participated in two years of TPD.

In a 2013 survey of Advanced Placement and National Writing Project teachers, age was another distinction that emerged in technology use among teachers. Findings indicated teachers who made use of technology within their own lives felt more comfortable transitioning that knowledge into their classrooms even if they were hesitant due to concerns of how the students would utilize the technology (Armstrong, 2014). Other factors may contribute to a teacher’s
willingness to take risks and venture beyond his or her normal routine. One of these is his or her teaching philosophy. Teachers who naturally lean toward constructivist teaching tend to utilize technology to promote student exploration and learning (Vannatta & Fordham, 2004).

The perceived challenges of how to best utilize technology such as smart phones, tablets, and even gaming programs should not overshadow the possibility for increasing communication and participation for ELLs (Reinders & Wattana, 2015). According to Reinders and Wattana (2015), teachers and administrators should embrace the unique learning opportunities that these devices create, some of which can be specifically programmed to benefit ELLs by supporting vocabulary development. Even with recognized benefits, a concern for school districts is not having enough devices for all students whether they are district provided, student provided, or a mixture of both. Many teachers have found a way to circumvent this argument regarding BYOD, by arranging cooperative learning groups within the classroom using technology as one of the determining factors of how students are grouped (Armstrong, 2014). While cooperative learning is recognized as an effective strategy in general, it can be especially meaningful for ELLs who need the time and opportunities for authentic discussion this strategy reinforces (Lee, 2014). The other management issue that concerns teachers is how to manage up to 30 devices that may all be different. Some teachers have recognized and chosen to utilize the students themselves as a resource in managing this issue. Many times the students are more familiar with a plethora of devices, so they can serve as technology “experts” assisting other students with technology difficulties while the teacher remains focused on student academic needs (Armstrong, 2014). This affords teachers the opportunity to conference with students who may need extra support, including ELLs, and give individual feedback. This individual feedback is a key component for growth for ELLs, and teachers can find it hard to manage class activities in
regular lessons to allow for this interaction (Hennick, 2014). Hennick (2014) recognized some teachers would find giving specific feedback a daunting task if the technology component was not well managed.

A key reason to remain optimistic regarding technology, however, is the engagement factor (Chuang, 2014; Herrington, Oliver, & Reeves, 2003; Ivala, Gachago, Condy, Chigona, 2013; Pahomov, 2014; Reinders & Wattana, 2015). Per the U.S. Department of Education’s research, most teachers agree that laptops and tablets have increased student participation in classroom activities. Therefore, the benefit is two-fold; with a majority of students across demographics remaining engaged, the time is well spent for both the students engaged in independent or group activities as well as students working or conferencing with the teacher (Armstrong, 2014). In a study conducted by Reinders and Wattana (2015), findings showed the rise in engagement showed an increase in the likelihood of ELLs engaging in conversation with peers and teachers. Participants specifically mentioned a desire to engage more in the technology activities due to feeling safe. Reinders and Wattana’s (2015) participants viewed the technology as comfortable and noted a decrease in their anxiety, even when they were required to speak. In interviews, the participants even referred to noticing improvement in their language abilities themselves (Reinders & Wattana, 2015).

Another initiative that seems to be gaining ground is the idea of flipped classrooms. According to Steed (2012), the fact that many students have electronic devices at their fingertips has changed the way information is accessed on a daily basis by students. Smart phones, complete with high pixel cameras, advanced computing, high speed browsing capabilities, and access to thousands of applications account for nearly 70% of the mobile phone market in the United States (Armstrong, 2014). Flipping classrooms is one option for utilizing the
accessibility of technology to benefit students, parents, and teachers (Steed, 2012). This concept allows more interaction and exploration during class hours while students watch prerecorded videos created by the teacher or other learning sources after school hours (Jensen, Kummer, & Godoy, 2015; Schmidt, & Ralph, 2016). Another benefit is that the electronic resources can remain available to students over a long period of time, which can eliminate factors such as loss of notes and textbooks (Steed, 2012; Ullman, 2013).

As with BYOD, flipped classrooms have some positives and some possible negatives. One of the largest concerns with flipped classrooms is reaching students who may not have access to technology or Internet in their homes (Schmidt, & Ralph, 2016; Fingal, 2012). Some teachers work with the computer lab, librarian, or other resources within their school building to provide time during the student arrival period for students to access the videos on school equipment. Other schools have made use of creative scheduling to allow students and family members access to school technology after regular school hours (Hennick, 2014).

Students bringing their own devices raise concerns beyond the classroom as social media applications, cameras, and other features are viewed as easy ways for students to focus on inappropriate behaviors such as texting, “sexting,” and documenting information for the purpose of cheating while in class (Armstrong, 2014). The possibility of state-mandated testing being photographed and uploaded is a legitimate concern and some states, including Georgia, have personnel assigned to monitor social media during the state assessments though students and teachers are restricted from entering the testing environment with electronic devices (Georgia Department of Education, 2016c). Cyberbullying and gaming are also mentioned as concerns. To counteract the temptation for students to misuse their devices, some districts are creating their own BYOD policies and opting to purchase pricey programs to limit the way students can use
their devices or to enable teachers to observe and monitor what students are viewing while on school grounds (Armstrong, 2014; Bruder, 2014).

**How Can School and District Leadership Make a Difference?**

Administrators have been one of the identified factors contributing to school and student success in low-performing schools with the effect on student performance as high as 25% (Reyes & Garcia, 2014). According to Téllez and Manthey (2015), student achievement gains with ELLs show similar gains with support from building administrators. When the instructional expectations are clearly communicated, demonstrated, supported, and reinforced, teachers feel more confident in their capability to teach and more comfortable asking for clarification or further direction if needed (Téllez & Manthey, 2015). Furthermore, leadership practices that show teachers that ELLs and their progress are valued, such as specific professional development, help teachers to focus in on learning the instructional practices necessary to help these students succeed (McGee, Haworth, & Macintyre, 2015; Téllez & Manthey, 2015).

The same type of support and focus from administrators makes a difference in how technology is implemented (Larosiliere et al., 2016; Lynch, Smith, Provost, & Madden, 2016; Hur et al., 2016; Wasko, 2016). In some school districts, the technology push is led by district leaders and school leaders who believe in leading by example (Davis, 2013). One example of this is Assistant Superintendent Patrick Larkin of Burlington Public Schools in Massachusetts who chose to use tweets and a blog to address education concerns and technology updates for his school district. Of course, Larkin reached more than just his district as he built a group of followers and a network of colleagues who shared information daily. This group of school and technology experts has become an invaluable resource as Larkin has worked to establish monthly technology nights for parents. The district’s goal for these nights was to expose parents to the
new technology that their children are using in the schools (Davis, 2013). Using social media to advertise events such as the one described by Davis (2013) is now an expectation of most parents. Social media also saved the administrators time in creating documents to advertise events as they can simultaneously send out messages through tools created for this purpose on multiple sites such as Twitter, Facebook, and even e-mail (Larkin, 2015).

When administrators set an expectation for embedding technology into teaching, they may use recent research to cite facts and figures about student growth to justify their reasoning (Warschauer & Tate, 2015). Administrators who only cite research without changing their own process of interacting with parents, students, and teachers give teachers an empty expectation. Modeling the use of technology is not only about showing teachers the techniques of how to use it but also emphasizing the importance and the expectation. Leaders who are still using paper and pencil to conduct staff meetings and professional development sessions are sending a mixed message to teachers (Johnson, 2015).

Another key component that administrators and leaders put in place within their schools to support the use of technology is hiring teachers who are willing to be reflective and resourceful (Ertmer, Ottenbreit-Leftwich, & Tondeur, 2015; Tondeur, van Braak, Ertmer, Ottenbreit-Leftwich, 2017). Being resourceful and reflective, coupled with a willingness to learn and grow, helps distinguish between teachers who are committed and teachers who never possess or have lost their passion for teaching. Having the right kind of teachers on staff can help to build morale and respect and develop a staff that surpasses one of typical teachers through the idea of shared leadership (Carpenter, 2015). Beyond the effects of the staff, the effects on the students are powerful as these teachers lead the way in implementing research-based strategies and new technology and making individualized instruction a focus through effective professional
learning communities supported by their administrators (Carpenter, 2015; Vannatta & Fordham, 2004).

Administrators who see themselves as the instructional leader of the school positively impact the influence the school has on student outcomes (Téllez & Manthey, 2015). Other factors can be exactly the same, such as ability in two students, and the difference in achievement can be traced to the leadership within the schools (Hattie, 2008). The leadership within the building permeates into virtually every aspect that affects students. As mentioned by Hattie (2008), creating a safe learning environment for students and teachers is critical. A positive classroom environment, which leads to positive outcomes for students and teachers, is influenced by administrators creating a safe learning zone for teachers. Teachers should have a sense of safety and feel comfortable sharing ideas, taking risks, and voicing concerns (Hattie, 2008). Knowing that there are opportunities to openly discuss strategies and challenges with colleagues and leaders helps to provide much needed support for teachers whether they are new to the profession, a veteran, or a teacher who is trying out new techniques (McGee et al., 2015; Téllez & Manthey, 2015).

**Closing the Achievement Gap for English Language Learners**

Although there is a recognized weakness in teacher preparation and teaching experience in relation to ELLs, policymakers still believe teachers are the single largest factor in closing the achievement gap for ELLs (Turkan & Buzick, 2016). To guide ELLs toward more substantial growth, teachers and districts should look for strategies that are proven to hone in on specific ELL needs such as language development (Hill & Miller, 2013; Richards, 2015). When looking at the strategies school systems are using to attempt to close the gap, several strategies stand out such as focusing on dialogue, written and spoken, concentrating on academic vocabulary,
promoting engagement through technology, and ELL shadowing (Frey, Fischer, & Nelson, 2013; Heitin, 2013; Hill & Miller, 2013; Richards, 2015; Soto, 2012; Toohey et al., 2015). One of these strategies, concentrating on academic vocabulary or academic English, can permeate all the other strategies, and some speculate that it is the true key to growth for ELLs with a focus on engagement whether through oral language or technological means (DiCerbo et al., 2014; Heitin, 2013; Richards, 2015). When students are engaged, the motivation to learn increases, which influences student gains. As students focus on their own learning, they make deeper connections to prior knowledge and key understandings (Hattie, 2008). Engagement is particularly crucial for ELLs who must balance multiple obstacles and face a higher chance of being less motivated due to the task of learning a new language as well as content (DiCerbo et al., 2014; Heitin, 2013; Kim & Garcia, 2014; Reinders & Wattana, 2015; Soto, 2012).

Learning to speak, read, and write a new language is important; however, today expectations for progress must encompass more for ELLs. ELLs must develop digital literacy knowledge, which can then be utilized to continue language development through websites, videos, games, online stories, and even computer programs aimed to target ELL language needs (Richards, 2015; Toohey et al., 2015). Technology not only adds a chance for authentic practice and purpose for ELLs in literacy and other core subjects, it can be a means to prepare students for a global society in which technology knowledge is a key qualification employers have come to expect as the norm (Gustad, 2014; Pahomov, 2014; Richards, 2015).

Some school districts, curious as to what maintained the gap between ELLs and their white counterparts, began using a technique called ELL shadowing to track single ELL students through a day in school. ELL shadowing is designed to give teachers insight into the school day of an ELL with the purpose of increasing teachers’ desire to improve classroom instruction
(Heitin, 2013; Soto, 2012). As mentioned by Soto (2012), teachers who participate in ELL shadowing gain sensitivity and heightened awareness of the struggles and challenges faced by ELLs in the classroom. The knowledge teachers gain through ELL shadowing has many long-term benefits for ELLs including raising engagement of ELL students, which translates to more ELLs graduating high school and working toward the goal of college (Soto, 2012)

**Graduation and Progress toward Higher Education**

Though progress has been made with ELLs showing growth, the gap between populations such as Hispanics, who make up a large percentage of ELLs in the United States, and Whites has remained consistent (Hemphill & Vanneman, 2011). Far more Hispanics than Blacks and Whites become high school dropouts (Kena et al., 2015; Kim et al., 2015; U.S. Department of Education, 2013), even though statistics show that about 90% of the Hispanic population are native born (Passel, Cohn, & Gonzalez-Barrera, 2012). In 2010, the figures reported for high school dropout rates showed a definite difference between race and ethnicity groups with Whites’ dropout rate at 4%, Blacks’ dropout rate at 8%, and the dropout rate for Hispanics at 13%. The difference is even more pronounced when looking at Hispanics born outside of the United States with a rate of 28% dropping out of school (Kena et al., 2015; Kim et al., 2015; U.S. Department of Education, 2013).

Subedi and Howard (2013) pointed out that among studied linguistic groups, ELLs have a higher dropout rate than non-ELLS. In a study conducted by Kim et al. (2015), three factors, student-teacher relationships, gender, and parental education, were identified that may or may not influence high school dropout rates with certain ethnic and linguistic groups. Of the students surveyed, Hispanics and ELLs showed a positive student-teacher relationship as a deterrent for dropping out. Among Hispanics, gender was a significant indicator with boys twice as likely to
dropout as girls. For ELLs, gender and parental education did not seem to have a significant impact (Kim et al., 2015).

Kanno and Cromley (2015) identified two key factors for improvement in enabling more ELLs to achieve their dreams of a four-year college degree. The first factor is the need for more guidance in the early stages of college planning. The second factor is identifying the causes and conditions that steer their decision-making process in choosing their pathway beyond high school (Kanno & Cromley, 2015).

**Why is English Language Learner Success Important?**

When the ELL population continues to grow at a fast pace and often surpasses other minority populations in many areas, these students become a group that gains more attention due to their impact on student achievement scores for schools, districts, and states (Dobbins & Rodriguez, 2013; Thomas & Collier, 2002). Seeing ELL students as worthy individuals, however, is imperative in creating success for these students who face challenges that many educators cannot imagine (Kubota & Lin, 2006; Riley, 2014; Sleeter, 2012; Soto, 2012). Along with social, cultural, and academic challenges, these students often become discouraged as they watch their peers surpass them in the classroom (Case et al., 2013; Kim & Garcia, 2014). A higher dropout rate in high school often translates to frustration, a desire to give in for ELLs, and harder obstacles to overcome as an adult (Heckman et al., 2011; Parr & Bonitz, 2015; Sum et al., 2009). Doors of opportunity are often closed due to what is perceived as a lack of education or motivation by potential employers (Ruiz-de-Velasco, Fix, & Clewell, 2000).

For ELLs to be viable candidates for job placement, degree completion, at least at a high school level, is vital. Without a high school degree, many ELLs fall into repeating the cycle of their parents who struggle to afford basic needs for their families (Carhill & Suarez-Orozco,
2008; Hagelskamp et al., 2010; Levitt & Wright, 2014). Many times, the hope of the family rests on the generation who is currently enrolled in American public schools. These ELL students are viewed as the potential breadwinners for their families once they finish school (Almon, 2010; Kanno & Cromley, 2015). In many cases these families have chosen to leave their home country with the specific goal in mind of obtaining an American education for their children (Greenman, 2013). Many of these families make extreme sacrifices to make the move from their home country including leaving extended family in their home country (Hermosa, Tineo, Aranda, & Posada, 2015).

Once these families have relocated to the United States, their situation continues to be a challenge as many of these families struggle financially due to their lack of job record and limited ability to speak the native language (Carhill & Suarez-Orozco, 2008; Greenman, 2013; Hagelskamp et al., 2010; Levitt & Wright, 2014). Some are forced to take low paying jobs without medical benefits while others cannot find work. This often leads to situations where multiple families are sharing one home and one vehicle in what are often less than perfect circumstances where families sleep in shifts or with multiple family members sharing sleeping quarters. In these conditions, many maintain their determination by focusing on their reasons for making the sacrifice to leave their native country which often includes bettering their chances for an improved situation based on an American education for their children (Greenman, 2013). Some even see this as their only means for staying in the United States as they depend on their children to learn English and learn American culture to assist the family in daily life (Almon, 2010; Kanno & Cromley, 2015).

**ELLs Attitudes toward Language Learning**

Whether thinking about ELLs who are working to learn English or any other person
learning another language, the attitude of the learner toward learning the language can determine the extent of the learner’s success in learning the language (Wilfong, 2015). The learner’s motivation for learning can be examined in two ways. The desire to participate in cultural activities would be integrative motivation while a student learning the language to pass a test, obtain a better job, or obtain an education would be instrumental motivation. A learner with motivation will seek answers to questions, participate in discussion, and engage in learning. In a school setting, instructional strategies can also impact a learner’s attitude toward learning a new language. A learner’s attitude is in flux and can be positive when the strategies for learning are appropriate or the learner’s attitude can shift to frustration and a lack of willingness to participate when the learner becomes discouraged (Choy, 2002; Hattie, 2008; Soto, 2012).

Ghazali, Roszainora, Chittra, and Jusoff (2009) reported taking a learner’s preferences or suggestions for activities and modes of teaching into consideration can have a positive impact on language learning. In a study of 32 ELLs from two different schools, researchers investigated students’ attitudes toward text selection and difficulties of the readers. The goal of the research was to examine methods of teaching in literature classes and find the preferences of ELLs regarding these methods. A questionnaire, a Likert scale, and an interview were used to collect data. Findings showed students preferred short stories due to manageable language, a limited amount of content to digest at once, and fast moving plots, which some students indicated reminded them of movies. The participants did not favor poems and openly responded with suggestions for less archaic language to improve their understanding and desire to read such works. To test this request, teachers then used contemporary poetry which resulted in positive remarks and a greater desire to read and understand the selections. Though some students found having a limited window of time to finish assignments frustrating, taking the students’
suggestions and preferences into account seemed to improve student attitudes toward reading and learning in their new language. While reading, writing, and speaking must also be a part of learning a new language, students showed great interest and improved understanding when they were able to make a visual connection using technology such as computers and television to assist with interpreting text. Technology can be a component that teachers use to boost students’ desire to learn a new language as students listed TV, computers, and music as ways that they enjoy learning language (Ghazali et al., 2009).

Another factor that can improve student attitudes is the use of a variety of strategies that require critical thinking and creativity. As learners have success and become invested in their learning, their attitude improves toward learning the language, which equates to greater success (Choy, 2002; Hattie, 2008).

A recent study by Chen (2016) reported findings in relation to language learners’ perception of learning a language by incorporating social media. Participants reported feeling free to engage in active learning as themselves without feeling self-conscious. They mentioned that it was important to them to feel connected and like part of a community (Chen, 2016). Also, as in previous studies (Blattner & Lomicka, 2012), the research pointed to a high number of interactions using the identified social media such as Facebook due to high interest and a desire to stay connected to the social media community that they felt was supportive to them as language learners (Chen, 2016). High interest as a member of a social media outlet such as Facebook spurned participants to read, write, and practice conversational language an average of five times a day. Participants in Chen’s (2016) study reported finding meaning in the process of learning through social media as they engaged in what they considered to be authentic opportunities for learning and practice.
With daily technology uses increasing, comments shared by participants from Chen’s (2016) study may be particularly useful when determining whether teaching with technology would be beneficial. According to participants, the benefits reach beyond the classroom as they recognized the value of having access to information from their teacher whenever they needed it and rereading posts to gain clarification. The students also commented on seeing the social media network as an information platform that helped them understand new culture and customs (Chen, 2016). As reported by Lantolf and Thorne (2007), developing a cultural understanding is crucial when attempting to learn a second language, therefore the benefits stated by Chen’s (2016) participants are worthy of further examination and seem to solidify the value of using social media in language acquisition.

**ELLs Perceptions of School**

Findings in one study in North Carolina that included 57 monolingual students and 66 bilingual students showed student perceptions of their school climate, instruction, and self-esteem were surprisingly similar. Both sets of students had a positive attitude toward their school and showed overall confidence in their abilities and with meeting school expectations. However, ELLs showed some concern with their abilities to read and write in their family’s native language. Researchers were surprised with the outcome of the study since several of the ELLs claimed to receive punishment for conversing in their native language (Rodriguez et al., 2009).

**Graduation Rates and Success for the Future**

While graduation can prove to be a challenge for many students, ELLs are faced with some unique challenges when it comes to graduating from high school. Faced with exit exams designed for native English-speakers that must be passed in order to graduate, many ELLs
become frustrated and contemplate either accepting a completion certificate, available in a few states, or simply dropping out (Kruger et al., 2016; Cech, 2009).

Other problems arise when taking into account the impact a group of students can have on a school or district’s performance rating. As in years past with adequately yearly progress, schools and districts are still held accountable for all students including students identified as ELLs (DellAngelo, 2016; Richmond et al., 2016). There is no disclaimer that gives allowances for students who may not have adequate English proficiency, students who have had only a limited amount of time in the United States, or students who may not have received formal school prior to entry to the United States. These students are faced with the same expectations as native English-speakers, and therefore, their impact on a school or district’s ranking can be high (DellAngelo, 2016; Freeman, 2012; Richmond et al., 2016). In areas where there is a large population of students with difficulties, the result may necessitate a school being ranked as one in need of closure (Karanxha, Agosto, Black, & Effiom, 2013). Unfortunately, these stiff consequences can give rise to another problem of passing and graduating students who are clearly not ready. Passing students who are not prepared creates further problems as students may graduate but then are still only reading and writing on an elementary level. These students are at a definite disadvantage as they prepare to step into the next phase of their lives (Barrow & Markman-Pitters, 2016).

While many ELLs may desire a college education, they often face factors specific to their needs in relation to language, exposure, and experience (Samuel & Scott, 2014). Some who aspire to go to college must take years of continuing education classes for adults that can be expensive and hard to find in some areas (Nanton, 2016). Others opt for a community college experience and still often find themselves in need of remediation to be successful (Flores &
Drake, 2014; Cech, 2009). A simpler solution could be to allow these students more than four years to graduate without penalty for the school (Cech, 2009).

**Educational Obstacles Faced by Immigrants**

Unfortunately, challenges with instruction are only some of the problems faced by ELL students. Further complications may arise due to their status as an immigrant or their lack of citizenship (Mitchell, 2015). Children belonging to undocumented parents face additional concerns due to the risk of deportation. These children often become discouraged as they get further into the American education system when they realize that their dreams of college and even employment are threatened due to their status (Lee & Walsh 2015; Mitchell, 2015). Educators have noted that they see these students at a higher risk of becoming dropouts due to their inability to afford college and gain work authorization (Adam, 2012; Lee & Walsh, 2015).

To combat these problems, legislation has been proposed to allow undocumented children the choice of obtaining citizenship contingent upon a six-year plan that would include either completion of a college degree or two years of military service (Adam, 2012). This legislation, referred to as the DREAM Act, would allow these students who previously would have considered dropping out of school an opportunity to not only earn a high school diploma but to have a chance to attend college as well as earn citizenship (Civil Impulse, 2017a; Civil Impulse, 2017b; Kantamneni et al., 2016; Figueroa, 2013). This act would allow young immigrants who are enrolled in school or serving in the military to take advantage of an expedited process to secure citizenship while adult immigrants would still have a lengthy process to obtain citizenship (Civil Impulse, 2017a; Civil Impulse, 2017b; Kantamneni et al., 2016). Some states have already created their own legislation, minus the citizenship status change, to assist unauthorized immigrant students (Adam, 2012; Figueroa, 2013). Unfortunately, American
high schools currently graduate approximately 65,000 unauthorized immigrants a year who are unable to pursue a college degree due to fees and tuition costs that cannot be offset by financial aid from government sources (National Immigration Law Center, 2011; Kantamneni et al., 2016).

Further challenges exist in how well ELLs are equipped to handle academic situations in a United States school of teachers who do not speak their native language. There is a limited amount of staff members, not just teachers, who speak a second language (Leacox & Wood Jackson, 2014; Ruiz-De-Velasco et al., 2000). Even among those who do, the likelihood of a staff member that speaks the native language of the student is not high given the number of countries and languages that may be represented (Ruiz-De-Velasco et al., 2000). Even though immigrant students may excel in some subjects such as math and science, the lack of content teachers who can effectively communicate with these students lags and often impacts their ability to remain on track academically as schools find it difficult to develop both their language and subject-matter skills (Leacox & Wood Jackson, 2014; Ruiz-De-Velasco et al., 2000).

Other challenges faced by immigrants were examined through a generational study, and the data results indicated an advantage in academic achievement for second-generational immigrant students over first, third, and later generations. Several external factors were identified to have a negative impact on student achievement for the generational study groups, including poverty, lack of understanding of the American education system, and neighborhood schools that are poorly equipped to meet the needs of immigrant students including language needs (Duong, Badaly, Liu, Schwartz, & McCarty, 2016). While the results showed discrepancies, the compiled research showed the advantage could possibly be linked to factors such as immigrant optimism, a term coined by Kao and Tienda (1995) to explain the optimism
displayed by second-generation immigrant students which they attributed to a better understanding of American culture, improved language skills, and more opportunities based on the second generation’s willingness to take risks in order to make gains (Duong et al., 2016). The authors of the meta-analysis suggested that second generational immigrant students display more determination to succeed based on an innate desire to please their families who they feel sacrificed greatly to provide an improved education and life opportunities. Another interesting theory related to students who may be ELLs is what is referred to as the immigrant paradox. This term refers to the idea that first- and second-generation immigrants show more progress, have greater aspirations, and ultimately are more successful in higher education that their third- and beyond-generation counterparts (Greenman, 2013). Conclusions regarding the third- or higher-generation immigrants suggest that the longer the families are in the United States, the less enamored they become with the idea that they can achieve their goals of living the American Dream (Duong et al., 2016).

**A Lack of Resources for ELLs**

Issues can abound for students who do not have adequate background knowledge or resources available to them whether they are ELLs or students who are instructed in their native language (DiCerbo et al., 2014; O’Sullivan, 2015). These issues can become compounded by difficulties that are unique to ELLs. Poverty impacts many students but data shows that it does impact ELLs in greater numbers. The percent of white children in the United States living in poverty is 12% while the percent of Hispanic children in the United States living in poverty is 28% (Annie E. Casey Foundation, 2017). Even with this type of disadvantage looming, these students are expected to demonstrate gains and are assessed on the same instruments as their counterparts who may come from a home with more resources and a better understanding of the
education system (Figueroa, 2013). These students are held to the same standards as their classmates no matter their background, teacher’s ability and training, or their mastery of the English language (DellAngelo, 2016; Figueroa, 2013; Freeman, 2012; Richmond et al., 2016). While there are safety nets in place for students served through ELL programs such as Testing Participation Committee (TPC) accommodations for those who qualify, often this is not a true means of “leveling the playing field” as educators like to think. Accommodations are used to assist students in gaining equal access to the material in classroom situations as well as when testing. The reality is that it is difficult for these students to achieve on the same level when they begin school not on equal footing. They spend years trying to catch up in a system with teachers who admittedly do not know how to help them achieve (Cheatham et al., 2014; Kim & Garcia, 2014).

Even when the benefits of technology are examined, the lack of knowing how to utilize these resources can have a devastating impact (Kena et al., 2015). This impact can be especially difficult for ELLs to overcome when coupled with teachers who are not only technologically challenged but who also do not know how to push these students beyond barriers that they may face (Cheatham et al., 2014; Freeman, 2012; Kim & Garcia, 2014). Accomplished teachers know how to gauge student needs and tailor learning opportunities to fit these needs in a variety of ways. Students should be actively involved in activities designed to meet their specific needs with specific feedback given throughout the lesson (Hattie, 2008). For ELLs, especially in a large class setting, this can be an effective use of technology as it can be used to give specific and timely feedback to individuals when they are working on a skill (Heitin, 2013). As there are ELL-targeted programs, the possibility for specific feedback to meet the need of a certain population could be an option for a teacher who may be struggling to provide proper support
Attitudes toward Immigration in the United States

Immigrants make up approximately 14% of the population of the United States. With approximately 43 million immigrants, the United States has become the country with the highest number of immigrants in the world (Yaya, 2016). The original citizenship of these immigrants includes countries from across the globe and encompasses many ethnic groups. According to Yaya (2016), in a study utilizing data from the American Community Survey, a sample of three million individuals were examined to gauge adaptation. Information such as demographics, employment, salary, language, residency, and education were included as part of the study. In the sample, 85 percent or 1,910,353 people were native citizens of the United States who were born to American parents in the United States or a territory of the United States. The sample included 275,388 immigrants who were categorized as Latin Americans, Asians, Oceanians, North Americans from Canada or Bermuda, Africans, and Europeans. Findings showed that Latin Americans had the smallest income and the smallest percentage of people in the sample population to attend high school. Further, Latin Americans also accounted for the least number of participants to attend college or earn an advanced degree. On the other end of the spectrum, Asians showed the same earning potential as native citizens of the United States. Asians also showed the highest percentage of persons in the sample that completed college and earned an advanced degree (Yaya, 2016). When disaggregating the data further, Yaya (2016) found that immigrants who spoke another language at home other than English showed higher educational inequalities.

While there is a recognized problem with the educational opportunities available to immigrants and even citizens who face language barriers, another issue arises in the attitudes of
citizens toward immigration (Figueroa, 2013; Yaya, 2016). Over the years, attitudes toward immigrants have shifted with economic trends and political concerns with an increase in recent years (Figueroa, 2013; Yaya, 2016). Although research reported by Segovia and Defever (2010) indicated citizens feel that immigrants contribute to society and often work harder than persons born within the United States, it also shows an increase in concerns about illegal immigration. Information gathered through polls as recently as 2007 showed that nearly eight in 10 Americans believe that most people who have recently moved to the United States are in the country illegally (Segovia & Defever, 2010). Contrary to these polls, only 11 million immigrants are in the United States illegally (Yaya, 2016).

What this misconception can mean for ELLs who are in schools in the United States is that there could be discrimination based on limited language and the perception that students’ families are not legal United States citizens (Liggett, 2013). According to Liggett (2013), this kind of discrimination is not only possible but can be openly viewed in visible signs within many public institutions for “English only” as a way to show patriotism and support of the nation. Furthermore, Liggett (2013) proposed that language has become the new target, even overshadowing acceptance of race. In fact, some states even limit non-English speakers’ ability to drive and vote (O’Sullivan, 2015). Liggett (2013) argued that achievement of ELLs is not valued as evidenced by the requirements of many states for ELLs to take statewide assessments geared toward proficient speakers of English, with only a few states exempting first-year students. When academic language acquisition requires five to seven years, information obtained by these assessments could arguably be inaccurate in showing what an ELL is capable of achieving (Figueroa, 2013). Unfortunately, these standardized assessments are often used to place students in classes thus limiting the opportunities for ELLs to take higher academic content
that can impact college entrance (Kanno & Cromley, 2015; Liggett, 2013).

**ELL Refugees**

Per Stewart (2015), some English language learners are refugees who are fleeing nations torn apart by war and other tragedies. While 52 million people globally found themselves in this type of circumstance in 2013, only a portion qualified for refugee status (United Nations High Commissioner for Refugees, 2014). The official status as refugee depended on a determination of being in imminent danger if the person seeking refugee status returned to his or her home country (Stewart, 2015). Stewart (2015) reported that over half of the 98,400 refugees who were resettled in 2013 were younger than 18 years of age and 66,000 of the refugees were resettled in the United States.

Refugees who enter the United States have lived through crises that most American teachers cannot easily identify with based on their own personal experiences (Perry & Hart, 2012; Roxas & Roy, 2012). This lack of connection can be difficult to overcome, but even more troubling is the discrimination, lack of empathy, and racism that some refugees face (Moinolnolki & Han, 2017; Omberbasic, 2015). According to Omberbasic (2015) and Moinolnolki & Han (2017), refugees are often channeled into lower-level classes and English support classes without their true abilities discerned through proper assessment methods. Further, the focus of these lower-level classes is more often vocabulary and grammar than reading and writing, which are needed for students to be ready for advanced classes and college (Omberbasic, 2015).

According to Keengwe and Hussein (2014), not all schools and communities view refugees as lower-level learners due to challenges with language. The state of Minnesota experienced a large influx of 70,000 Somali refugees due to a civil war in Somalia in 1991. Over
the course of the next six years, Minnesota became the largest settlement of Somali refugees in the United States. To address the unique needs of these refugees who were identified as ELLs, the state of Minnesota established 10 charter schools (Keengwe & Hussein, 2014).

In a study focused on resettling female teenage refugees, Omberbasic (2015) highlighted the importance of technology. Though the participants reported a need to learn more English to feel as smart as their new American peers, technology helped them to connect within their new communities as well as reestablish connections from their countries of origin. The participants even expressed a desire to use English in their digital activities over their native language because they felt that more people could communicate in English than their native language.

The digital activities the participants engaged in most often were Facebook, YouTube, and downloading music and pictures. All participants reported using technology in their personal lives as well as at school (Omberbasic, 2015).

All participants in Omberbasic’s (2015) study indicated an interest in using technology to assist them with daily communication at school. The benefits that they described included the use of music, video, and various styles of typed communication to help the teacher understand what they had learned when being assessed. Based on additional findings through the participants’ responses, Omberbasic (2015) recommended educators advocating for the use of social media in classrooms as part of the learning experience for students and teachers. Social media encouraged the participants to communicate in a more informal manner with their peers, community members, and teachers. This type of communication made conversation easier for the participants, and it gave teachers a glimpse into the life of the participants that allowed connections to form as teachers gained knowledge of the participants’ prior life experiences (Omberbasic, 2015). Omberbasic (2015) claimed this understanding began to build relationships
and trust for the participants with the teachers which served to enhance the learning process of the participants.

In a study conducted and reported by Gilhooly (2015), Karen refugees shared their perceptions of adapting to their new schools, and American teachers shared their perceptions of working with the Karen refugees in a school setting. In interviews, several of the adolescent refugees explained receiving advice from their parents and grandparents regarding not bringing attention to themselves. Their logic was to blend in instead of standing out. This even applied in respect to asking questions regarding their child’s education which Gilhooly (2015), who tutored the Karen students, felt could impede the children’s academic progress. In the group of four families that Gilhooly (2015) interviewed, none of the parents had ever attended a parent conference for any of their children, attended any school-sponsored activities, or contacted a teacher. In fact, the responsibility of education seemed to rest on the older siblings within the family as they signed report cards and took care of daily school matters for their younger siblings. The parents referred to the language barrier as a hindrance. Though the parents voiced support for their children’s education and expressed interest in their children attending college, the lack of parental involvement led to missed opportunities for courses and misunderstandings of school policies. Unfortunately, some teachers misinterpreted a lack of parental communication as a lack of support or apathy (Gilhooly, 2015).

Gilhooly (2015) addressed teacher concerns regarding the lack of parental participation in and gave suggestions for improved communication, which began with the teacher gaining a better understanding of students’ home culture. As a lack of understanding of the student’s culture can cause issues, Gilhooly (2015) encouraged teachers to make home visits and attempt to learn more about family or cultural traditions. As reported by Gay (2002, 2010), it is
necessary for teachers to understand a student’s background, culture, and experiences to provide the most relevant and enriching instructional practices. Furthermore, having this information better equips a teacher when addressing social and emotional needs that may arise within a school setting (Gay, 2002, 2010; Stewart, 2015). An example mentioned by Gilhooly (2015) and Gunn, Brice, and Peterson (2014) referenced Karen names. For Karen refugees and other refugees who are listed as Burmese when entering the United States, even their given names can cause confusion for school staff regarding family relationships and embarrassment or anxiety for the children (Gilhooly, 2015; Gunn et al., 2014).

Aside from gaining understanding for improved instruction within the classroom, Gilhooly (2015) also urged teachers to get involved with students’ families to learn of talents and interests. In doing this, teachers could seek extended opportunities for students to communicate in authentic conversations in English as these opportunities are often limited at home. Gilhooly (2015) encouraged teachers to promote student participation in local clubs, sports, church, and other extracurricular activities to meet this need.

**Summary**

What is known is that technology provides instructional support for students that enhances opportunities for learning, raises engagement, and provides information beyond simple text and books that are found in the classrooms (Blattner & Lomicka, 2012; Chen, 2016; Hines & Silverman, 2009; Richards, 2015). With advances such as personal response systems, interactive whiteboards, and iPods, education and ways in which students learn no longer involve desks in neat rows with students bent over books. Students are more aware of social, cultural, and academic issues than ever before (Lichy & Kachour, 2016). The push for the use of technology with ELLs only serves to support previous findings on how powerful images, sound, and active
engagement can be for all learners (Armstrong, 2014; Chuang, 2014; Herrington et. al, 2003; Ivala et al., 2013; Pahomov, 2014; Reinders & Wattana, 2015; Richards, 2015). What remains to be seen and investigated are perceptions of teachers of ELLs in relation to the use of technology with ELLs. While a few limited studies have shown some teachers use technology with specific programs that focus on literacy skills to assist ELLs, they failed to investigate what may hinder a teacher in choosing to utilize technology with ELLs (Téllez & Manthey, 2015).
CHAPTER THREE: METHODS

Overview

In Chapter Three, I present the research design and explain the process of collecting and analyzing data for the purpose of understanding the instructional choices made by general education teachers of students who qualify for English language learner services specifically related to the use of technology. The study was a transcendental phenomenological study examined in relation to the self-efficacy theory (Bandura, 1994; Moustakas, 1994). Phenomenological studies investigate a common phenomenon which in this case is the teachers’ experience of teaching ELLs as a general education teacher. The following research questions were used in the study:

1. How do teachers describe their use of technology in a classroom setting?
2. What are the participants’ understandings about instructional technology in relation to ELL students?
3. How do teachers of ELL students describe their confidence in integrating instructional technology?

The setting for the study was an urban Georgia school district consisting of approximately 20,000 students. Participants were teachers who identify themselves as general education teachers of ELLs. Participants were limited to teachers who were not currently endorsed as instructors of ELLs. Teachers who are ESOL-endorsed were not considered due to their level of knowledge and experience, including technology, in working with ELLs.

Next, I described the procedures for gaining approval to conduct the study from the university and the school district followed by an explanation of my role as the researcher. Then, I presented information detailing the data collection process which included an interview, a
questionnaire, and a focus group (Castillo-Montoya, 2016; Krueger & Casey, 2014; Worthern, Sanders, & Fitzpatrick, 1997) and clarified what kind of technology items were included in the study. Then, I explained the process of data analysis including transcription of interviews and focus group meetings (Rubin & Rubin, 2012; Seidman, 2013), examining participants’ responses for textural and structural descriptions, and coding the responses (Creswell, 2013; Saldana, 2013). To establish codes, I examined individual participant’s responses in relation to the group of participants’ responses to establish and categorize similarities (Creswell, 2013; Moustakas, 1994; Saldana, 2013). I examined participants’ perceptions to gather information that may be useful in the advancement of ELL instruction. Finally, I concluded Chapter Three by addressing trustworthiness, content validity, ethical considerations, and provided a summary of the study.

**Design**

This study used a qualitative phenomenological methodology. Phenomenology, the science of human conscience and perceptions, was used to understand teacher perceptions of the use of technology with ELLs in an urban Georgia school district (Creswell, 2013). German born Edmund Husserl is generally credited with the development of what is considered to be phenomenology today (Churchill & Wertz, 2015; Moustakas, 1994). Husserl determined that including the human experience and a person’s view on the experience brought in a connection between real and non-real as a person’s perception of an experience can vary from what truly exists (Moustakas, 1994).

In phenomenology, the researcher is the human instrument used to investigate a phenomenon. The qualitative research process starts with identifying a phenomenon and then proceeding into the research using epoche. The process of epoche requires the researcher to enter an investigation with a clear mind that is receptive to the participants’ descriptions of the
phenomenon they experienced (Moustakas, 1994). The researcher must enter the investigation with no preconceived ideas of the participants’ experience. Further, the researcher must negate any prior knowledge and experience he or she may have in order to better understand the phenomenon from the participants’ perceptions.

The purpose of this transcendental phenomenological study was to understand the perceptions of general education teachers regarding their use of technology with students who qualify for English language learner services in an urban Georgia school district (Moustakas, 1994). More specifically, the research focused on determining the participants’ perceptions regarding the use of technology with ELLs and the factors that may encourage or prevent the use of technology. Technology used in the classroom ranged from iPads, interactive boards, iPods, iPod Touches, personal response systems, to traditional forms of technology such as tape players, overhead projectors, and CD players.

The phenomenon that was investigated included experiences and influences that have shaped the decisions of the participants regarding the use of technology with ELL students. As the data was only based on teachers’ experiences and not experiences created by the researcher, the investigation was conducive to a phenomenological study (Creswell, 2013). Due to my lack of connection to the participants and their lived experience, a transcendental approach was appropriate (Moustakas, 1994). I only examined and considered information shared by the participants to understand the phenomenon. Any of my knowledge or experience were set aside during the investigation (Moustakas, 1994).

When examining data, I processed the information given by teachers through interviews, questionnaires, and focus group to find out if the teachers’ perceptions were that the technology tools and devices helped to amplify the learning or cognition of their ELLs. Examining teachers’
experiences with the use of technology gave me insight into how teachers chose to use technology and how their choice was formed. In doing so, I examined teachers’ descriptions and experiences of using technology with their ELLs, their knowledge of technology implementation, and their level of confidence in using technology. I asked questions to further understand the basis of each teacher’s individual experiences with using technology as well as compared their answers in the context of a focus group. Using the self-efficacy theory, I further examined the data to consider if teachers’ decisions regarding the use of technology with their ELLs could be viewed as a personal choice or a choice determined by environmental factors.

I sought appropriate approval from the school district before interviewing and working with teachers in a focus group. I used a questionnaire to gather data and established contact with potential participants through meetings set up with the assistance of administrators at two schools within the Sharp school district. I used a selective process to identify participants based on their status as a teacher who currently has or has had ELL students in his or her general education classroom. I also used snowballing to reach one other teacher that fit the criteria (Creswell, 2013). After the data was collected and analyzed using Moustakas’ seven steps, I may share the information with the school district administrators to give insight regarding how to meet the needs of district teachers (Moustakas, 1994).

I was a former employee of the school district but had no current supervisory connection to the schools where the participants taught. I remained unbiased throughout the study and did not present any opinions of the use of technology in teaching ELL students (Moustakas, 1994). I did not answer questions regarding the use of technology in instructing ELL students or the ELL program in the Sharp County school district. Instead, I referred these participants to the school district administrators and the Georgia Department of Education for any requested information.
Research Questions

The following questions guided this study:

**RQ1:** How do teachers describe their use of technology in a classroom setting?

**RQ2:** What are the participants’ understandings about instructional technology in relation to ELL students?

**RQ3:** How do teachers of ELL students describe their confidence in integrating instructional technology?

Setting

The setting for the study was an urban school district, Sharp County Schools (a pseudonym), located in north Georgia. The school district includes 23 schools ranging from elementary to high school and serves approximately 20,000 students. The leadership of Sharp County Schools included a school board comprised of five elected members, one board-selected superintendent, one deputy superintendent, and 10 specialized directors covering curriculum, assessment, student services, special education, technology, human resources, finances, operations and transportation, and Title I. School-level leaders were determined based on student numbers at each school. Each school had a principal and the number of assistant principals is assigned one per every 450 students which means the number of assistant principals per building ranged from one to five. With this criteria for school leadership assignments in place, Sharp County Schools had 23 principals and 38 assistant principals. Each school had at least one assigned instructional coach who worked as a liaison between the school faculty and the four county-level curriculum coaches and the two curriculum directors. The school district employed 15 ESOL teachers and one ESOL county coordinator.
Two elementary schools in Sharp County were chosen as the locations for the study. Hollonville Elementary (a pseudonym) has a student population of approximately 360 students, 45 staff members, one part-time assistant principal, and one principal. Hollonville Elementary is located in the city limits of the county seat of Sharp County. The Hollonville Elementary school zone consists of mostly rental houses and apartments which may be a contributing factor to the high mobility rate of the school. South Sharp Elementary (a pseudonym) is located in a rural part of the county 12 miles from the closest town. South Sharp Elementary has a student population of approximately 675 students, 75 staff members, one assistant principal, and one principal. South Sharp Elementary has a zone of mostly owner occupied, starter homes which has created a less mobile student population than Hollonville Elementary.

The growth of the ELL population within the district and the shift of the existing ELL population from school to school within the school district were factors which were considered in choosing a setting for the study. Another factor in my choice of Sharp County Schools as the site for the study was based on limited teacher experience in working with ELLs. Until 2010, all ELLs were transported to five assigned schools within the school district. In 2010, the population had grown to necessitate a change in where these students were served and each school became responsible for their own ELL population. As the ELLs were returned to their home schools, ELL-certified teachers were assigned based on the number of students requiring services in each school. ELL-certified teachers were shared between schools when numbers within a school did not require a full-time teacher to provide services. Then general education teachers who had never had any instructional contact with ELLs were suddenly responsible for 80% of their ELLs’ instructional day when ELLs were returned to their home schools (Georgia Department of Education, 2015). A final factor in considering this setting was the push for
technology integration within the school district and the high number of ELL dropouts in the school district.

In the two schools chosen for the study the ELL population has grown in recent years. The ELL population of Hollonville Elementary included approximately 60 ELLs served by a full-time ESOL endorsed teacher. The ELL population of South Sharp Elementary increased from 12 students to 26 students within in a year. ELLs at South Sharp Elementary are served by a part-time ESOL endorsed teacher.

**Participants**

This phenomenological study used purposeful sampling (Creswell, 2013). Participants were chosen based on specific criterion related to the phenomenon being investigated, teachers with teaching experience with ELLs and who also were not ELL certified. Narrowing of participants resulted based on identifying the following: participants who were willing to meet with the researcher for an individual interview, be part of the focus group, and complete the questionnaire. The number of participants who were selected was based on the requirements of Creswell’s (2013) recommendation of 15 to 25 for a phenomenological study (Creswell, 2013; Polkinghorne, 1989). Participants had students who may be recent immigrants from any country or residents of the United States who still speak another language in the home. Participants were chosen from an urban Georgia school district. Participants were found through snowballing as well as cooperation with the school district and school administrators. After contacting building principals, I met with the staff of each of the schools to recruit participants. With a large pool of potential participants, approximately 1,500, in the district, the sample size of 15 to 25 was maintained as 17 participants were chosen to participate in the study (Creswell, 2013; Polkinghorne, 1989). The participants varied by age and varied by number of years of teaching
experience to add credibility through random, purposeful selection (Creswell, 2013). All participants were teachers of elementary grades ranging from kindergarten to fifth grade. All participants were assigned a pseudonym to maintain confidentiality.

**Procedures**

I applied for approval to conduct research with the Sharp County Schools and approval was granted. I introduced myself through a letter to the school district and submitted the required paperwork to the school district. I met and discussed any questions with the district testing director, who is the supervisor assigned to oversee research within the district. Once this process was complete and district approval was granted, I contacted the principals of Hollonville Elementary and South Sharp Elementary through e-mail (see Appendix D). I requested an opportunity to discuss the study with the faculty members of Hollonville Elementary and South Sharp Elementary who were potential participants. Upon meeting with the potential participants, I described the study and asked for those who were willing to complete a screening questionnaire (see Table H1, Appendix H). After the screening questionnaire was completed, potential participants were given the informed consent (see Appendix G). Most participants signed the informed consent and returned it during the recruitment meetings. Participants who did not return the informed consent during the recruitment meeting returned the documents at the interview session. Using the screener and the informed consent documents, I contacted potential participants through e-mail to set up a time for their interview. After verifying informed consent was signed, interviews were conducted with all 17 participants within a week. All participants returned their questionnaires. All participants participated in one of two focus group sessions. All 17 participants completed all portions of the study with the exception of two teachers, Sunny (a pseudonym) and Wren (a pseudonym) who arrived approximately five minutes late for their
focus group session and Penny (a pseudonym) who had to leave the focus group session approximately 10 minutes early due to a parent conference.

I recorded and transcribed the interview and focus groups meetings. I considered only the participants’ experiences as data was collected and examined. I gave participants an opportunity to review their personal data before it was used to begin coding and bracketing. After participant approval, I read through all information collected and began the process of organizing the data by looking for common themes. As these themes emerged, I used the coding and bracketing process to organize the information for further examination and interpretation.

**The Researcher’s Role**

I was a former administrator of the Sharp County School System. I was unable to influence participants to participate. I sought the participants’ experiences and had no influence on how participants responded to the questions in the interviews, questionnaires, or focus group meetings. I reassured participants that their responses were not shared with their supervisors. I also reminded participants throughout the study that their identities would remain confidential as all information was presented in written form with the use of pseudonyms for the school district, schools, and each participant.

The Sharp County School System serves ELL students but also has students on waiver. Currently there are ELL students in each of the 23 schools in Sharp County, but the enrollment is limited in some of the schools. My role was to learn about the experiences of the participants and investigate their influences or reasons they would choose to utilize or not utilize technology with their ELLs. This was a transcendental phenomenological study based on my lack of connection with the participants. My family and I are all native English speakers and therefore would not be considered ELLs. Growing up and attending school in a nearby county, I was
unfamiliar with the needs of ELLs due to a lack of exposure to various cultures. The community culture has expanded in the past 20 years with a shift in the agricultural work force. This mainly occurred due to a lack of desire in children of my generation who were willing to stay and work on family farms. As the need grew for labor, a more diverse culture developed. In fact, my former husband and I employed several Hispanic workers beginning in 2003. In working with these workers and their families, I began to grow concerned for the children in these families. The local school system lacked background knowledge and the resources to properly instruct these students. Seeing the struggles and responsibilities of these children, many of whom were the translators for their family, I became more aware of the potential for these children to remain in a position of hardship without an education suited to their needs.

As a school administrator who has seen the transition from being a school without ELL services to a school with ELL services, I saw the benefits to the ELL program and the use of specific strategies focused on the needs of ELLs. However, I remained unbiased concerning the participants and their decision for providing instruction through the use of technology. In fact, when a teacher asked me for further information concerning the provision of effective ELL instruction, I directed her to the ELL coordinator for the school district rather than answer any specific questions. When participants asked technology questions or attempted to include me in the focus group discussion, I politely declined to comment and encouraged them to talk with the district technology director regarding their concerns and questions. I did not attempt to influence participants to provide instruction in a certain manner.

**Data Collection**

I developed a set of research questions that were investigated in the study. These questions guided any actions of the study such as interview questions, focus group discussion,
and the questionnaire that was developed by me as supported by Worthern et al. (1997). I used triangulation as a recognized means to establish validity of the study by choosing three methods of data collection centered on a single phenomenon (Creswell, 2013; Denzin, 1978; Ely, Anzul, Friedman, Garner, & Steinmetz, 1991). I contacted and informed participants of the nature and purpose of the study once consent was obtained from IRB and the school district. I also informed participants of ethical considerations and the assurance of my unbiased view. I obtained consent from the participants (see Appendix G) before conducting the interviews, questionnaires, and focus groups.

Next, I interviewed each participant in a setting comfortable to them within their school building. I began the interview with introductions. After introductions, I proceeded with the verbal interview. I recorded the interview and transcribed it at a later date. At the end of each interview, I thanked the participants, informed them of the time and place for the focus group, and asked them to fill out a written questionnaire to bring to the focus group or to be returned by e-mail. The participants met to participate in a focus group after I conducted all the individual interviews. Before each focus group discussion began, I welcomed the participants and thanked the participants for their participation. I reassured the participants that all the information shared during the focus group session would be used by me only for purposes of the study. I recorded the focus group session on an electronic recording device to allow me to analyze the information at a later time. I reassured the participants that all information would be reported in a way that maintained confidentiality through the use of pseudonyms for the schools and each participant. I gave participants an opportunity to provide feedback on their interviews to clarify any information.
Interviews

I developed the questions that were used to interview the participants in one-on-one interviews. These questions were literature-based to establish validity and cross-referenced with the research questions to ensure alignment. I developed a matrix to match questions from each instrument developed for the study with the study’s original research questions. Before my proposal was submitted, an expert in the field reviewed the questions. After approval from IRB, I piloted the questions with a small sample of participants outside of the study to ensure clarity and understanding (Castillo-Montoya, 2016). The questions were also reviewed by my dissertation chair before conducting any interviews. I asked participants to sign consent to participate in the interview.

An individual time of 45 minutes was determined for each participant to meet to conduct the interview. Each interview was completed in 20 to 30 minutes which allowed me to condense the interview schedule into two days, one day at each of the two schools, instead of the 3 days that were originally planned. I recorded each interview for later review (Rubin & Rubin, 2012; Seidman, 2013). I reviewed the procedures with each of the 17 participants prior to beginning the interview (see Table I1, Appendix I).
### Table 1

**Standardized Open-Ended Interview Questions**

<table>
<thead>
<tr>
<th>Teacher Background</th>
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<tbody>
<tr>
<td>(1) What is your native language?</td>
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<tr>
<td>(2) What is your country of origin? (If not United States, when did you move to the United States?)</td>
</tr>
<tr>
<td>(3) Please describe your educational background.</td>
</tr>
<tr>
<td>(4) Please describe your level of confidence in your ability to instruct students through technology integration?</td>
</tr>
<tr>
<td>(5) How does technology impact your daily classroom routine?</td>
</tr>
<tr>
<td>(6) What are contributing factors in your level of confidence with technology integration?</td>
</tr>
<tr>
<td>(7) Please describe your comfort level with integrating technology with your ELL students?</td>
</tr>
<tr>
<td>(8) What is your comfort level with writing lesson plans integrating technology?</td>
</tr>
<tr>
<td>(9) How often do you integrate technology with your ELLs?</td>
</tr>
<tr>
<td>(10) What research are you aware of regarding the use of technology with ELL students?</td>
</tr>
<tr>
<td>(11) Please describe your experience with using technology in your classroom with ELLs.</td>
</tr>
<tr>
<td>(12) What are things, if any, do you specifically do to target ELLs with technology?</td>
</tr>
<tr>
<td>(13) Please describe any training in college or since on ELL instructional strategies specific to the use of technology with ELLs.</td>
</tr>
</tbody>
</table>
The purpose of questions one, two, and three about the teachers’ background was to gather information about the participants’ cultural and educational experiences. Questions five and nine provided insight into each teacher’s perception of the value of technology in the classroom. Questions 10 through 14 were asked to gain information regarding the teacher’s knowledge and experience with the use of technology in the support of ELLs. Questions four, six, seven, eight, and nine were constructed to gain information regarding each teacher’s confidence level with the use of technology in his or her classroom. I created a matrix to organize the questions for each of the instruments used in this study to determine alignment of individual questions within the instruments to the three guiding research questions of the study (see Table I3, Appendix I, Table J4, Appendix J, & Table K3 in Appendix K).

I examined the information gathered to gain insight into participants’ experiences, comfort level, and knowledge of technology since the use of technology can be a personal preference. Further, I noted possible motivators or inhibitors that could be internal or linked to experience or circumstances in the participant’s life. I used the questions concerning each teacher’s educational background to examine any connections between the participants’ experiences and the choice to use or not use technology with their students (Tondeur et al., 2017).

**Questionnaire**

I developed a questionnaire to investigate how participants may use technology to instruct ELL students. All 17 participants signed consent to participate in the questionnaire and completed and returned the questionnaire (see Appendix G). Each participant was given up to a week to complete the questionnaire. All participants returned the questionnaires within the given time by bringing them to the focus group session at their school or by e-mailing them to me. I
asked specific questions that I felt were important to the study through my developed questionnaire. In generating my own questionnaire, I needed to establish content validity and arrange for piloting of the questionnaire before participants were asked to answer questions (Castillo-Montoya, 2016). I set up the questions in a predetermined sequence to assist with establishing basic background information about each participant (Valeo & Webster, 2011).

According to Worthern et al. (1997), questionnaires may be created to measure behaviors, opinions, or attitudes of participants. It is permissible for questionnaires to be administered individually, in groups, or even through the mail. Worthern et al. (1997) stated that researchers can choose a variety of questions or statements to gauge a participant’s feelings or outlook on a topic or situation. These may include open-ended items for content analysis as well as short-answer, open-ended, and multiple-choice items using a Likert-type rating scale (Worthern et al., 1997).

I considered using a preexisting questionnaire or instrument. However, a researcher who plans to measure opinions, attitudes, and behaviors generally constructs a survey instrument. Although a Likert-type scale is usually the most appropriate instrument to use when measuring attitudes (Worthern et al., 1997), in accordance with the requirements for qualitative research at Liberty University, I opted to create a short-answer questionnaire. I gave the questionnaire to each participant at the conclusion of the interview session. I asked participants to return the questionnaire at the beginning of the focus group session or by e-mail. I reviewed procedures for completing the questionnaire with each participant as they completed the individual interview (see Table J1 in Appendix J).
Table 2

*Short Answer Questionnaire*

<table>
<thead>
<tr>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) How many years have you been an educator?</td>
</tr>
<tr>
<td>(2) What grades have you taught?</td>
</tr>
<tr>
<td>(3) What degrees or certifications do you hold specific to technology?</td>
</tr>
<tr>
<td>(4) How many years have you worked with English Language Learners?</td>
</tr>
<tr>
<td>(5) What benefits, if any, do you feel students gain when technology is used in the classroom?</td>
</tr>
<tr>
<td>(6) What technology initiatives used by your school district have improved the achievement of ELLs in your classroom?</td>
</tr>
<tr>
<td>(7) How often do you collaborate with your co-workers on technology integration in lessons?</td>
</tr>
<tr>
<td>(8) How are your personal instruction and teaching practices enhanced by technology?</td>
</tr>
<tr>
<td>(9) In your experience, what are specific needs of ELLs when implementing technology?</td>
</tr>
<tr>
<td>(10) How does your administrators’ outlook and value of technology impact your confidence and desire to integrate technology?</td>
</tr>
<tr>
<td>(11) What practices or supports, if any, have your school or district administrators put in place to help you feel confident in integrating technology?</td>
</tr>
</tbody>
</table>

Questions one, two, and three in the questionnaire were designed to gain background information about the participant. Question four was designed to give some background knowledge regarding the amount of time that a participant has worked with ELLs. Questions five and eight were designed to give insight into the participants’ experiences with using technology in a classroom setting. Question six was included to gain information regarding district initiative and supports developed to help ELLs. Questions 10 and 11 were included in the questionnaire to gain information about the level of confidence participants have in integrating instructional
technology and if this confidence is influenced by school leader and district leader support. Questions six, 10, and 11 may also provide information regarding the participants’ understanding of instructional technology and the participants’ confidence regarding integrating instructional technology. Question seven was included to gain information regarding the frequency of teacher collaboration. Question nine was included to determine the level of teacher awareness regarding ELLs with instructional technology.

**Focus Group**

The final method I utilized to collect data was focus groups. The use of information gathered through a focus group from previous interviewees serves to provide clarity and further credibility (Krueger & Casey, 2014). Using the data collected in the interviews and questionnaires, I determined which teachers used technology and which teachers did not use technology. All teachers were determined to be technology users. According to Creswell (2013), focus groups are beneficial when the participants are similar, so I set up the sessions by school. Procedures for the focus group were reviewed at the beginning of each session (see Table K1 in Appendix K).

I planned two times and locations for each school to allow participants to choose the best time for his or her personal schedule. This resulted in a total of four possible focus group sessions. The number of focus group sessions was reduced from four sessions to two sessions based on the participants’ requested participation times with one session conducted at each school. There were 7 participants in the focus group conducted at Hollonville Elementary and 10 participants were in the focus group conducted at South Sharp Elementary. Each session met for 30-45 minutes. During each session, I monitored individual responses and encouraged all participants to share in the discussion. I also worked to ensure there were no participants who
dominate the conversation without allowing others to speak (Creswell, 2013; Krueger & Casey, 2014). I took notes throughout the sessions. In addition, I recorded each session and transcribe it for further analysis. I wrote the questions for the focus group based on literature, and the questions were cross-referenced with the original research questions to ensure validity (Castillo-Montoya, 2016) (see Table K3 in Appendix K).
Table 3

*Focus Group Questions: Groups 1 and 2*

<table>
<thead>
<tr>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background and Basic Questions</strong></td>
</tr>
<tr>
<td>(1) How many years have you been teaching?</td>
</tr>
<tr>
<td>(2) What is your area of certification?</td>
</tr>
<tr>
<td>(3) How many years have you worked with ELLs?</td>
</tr>
<tr>
<td><strong>Group Discussion Questions</strong></td>
</tr>
<tr>
<td>(4) What can deter a teacher from using technology in his or her classroom?</td>
</tr>
<tr>
<td>(5) How much professional learning time is devoted to technology within your building?</td>
</tr>
<tr>
<td>(6) What things or supports are provided to you in your job that assists you with implementing technology?</td>
</tr>
<tr>
<td>(7) How can technology be used to promote student engagement?</td>
</tr>
<tr>
<td>(8) What kind of support does technology provide that a teacher may find hard to provide otherwise?</td>
</tr>
<tr>
<td>(9) How can technology be used to differentiate instruction for ELLs?</td>
</tr>
<tr>
<td>(10) How does technology integration support higher order thinking for ELLs?</td>
</tr>
<tr>
<td>(11) Describe your level of confidence with choosing the appropriate technology information or support to use with ELLs.</td>
</tr>
<tr>
<td>(12) What suggestions do you have for increasing technology use with ELLs in your school district?</td>
</tr>
</tbody>
</table>

The purpose of the questions about the teachers’ background, questions one, two, and three, was to gather information about the participants’ educational experiences and to establish comfort between participants to begin the discussion. Questions four, five, six, seven, and eight were included in the focus group discussion questions to provide insight into the teachers’ perception regarding the usefulness of technology. Questions five and eight also had the potential to provide information regarding the confidence level of teachers when working with
technology. Question 11 also addressed confidence. Questions eight through 12 were included to gauge the teachers’ knowledge of the use of instructional technology with ELLs. All data from the interviews, questionnaires, and focus group sessions was completed within a week.

Data Analysis

Data analysis began after all data was collected and participants had an opportunity to review their personal responses and information gathered through member checks. I read through each response carefully and developed Excel charts to sort the data from each instrument that was administered. I began logging the recorded data for each instrument onto the developed Excel charts in relation to the original research question (Saldana, 2013). However, I realized that the Excel spreadsheet was not going to be the best way to see the data. At that time, I developed individual Word data collection sheets that allowed me to see each question with each participant’s response for easy comparison. I color coded participants’ responses and created a table at the end of each document with a list of mentioned phrases and words. As the data was sorted, I remained open-minded and unbiased (Creswell, 2013; Moustakas, 1994; Saldana, 2013).

Transcription

After all interviews, questionnaires, and focus groups were complete, the transcription process began. The transcription process was completed over the course of 12 days. Using all the gathered data, I established themes and clusters using horizontalization. This method used to sort through the data ensured I viewed each statement or answer regarding the phenomenon equally. Therefore, each participant’s experience was viewed independently and then grouped by meaning and similarities into clusters (Creswell, 2013; Moustakas, 1994). I sorted the findings again to eliminate duplicate information. As the information was resorted, I focused on
establishing textural descriptions to describe what each participant’s perceptions were of what happened with the phenomenon as well as established structural descriptions. Structural descriptions detailed each participant’s view of how the phenomenon was experienced (Creswell, 2013). Next, I looked to recognize and identify any connecting themes which are representative of the participants as a whole using coding (Creswell, 2013; Moustakas, 1994; Saldana, 2013). As I sorted and coded the information, I examined it in relation to the three research questions of the study. I used the coding to identify commonalities and determine significant statements, meaning units, textural descriptions, and structural descriptions. I used these elements to determine the essence of the phenomenon. I described the essence of the phenomenon in a culminating paragraph of the data analysis which told the participants’ experiences of using technology with ELLs (Creswell, 2013). I shared the findings with each participant for a validity check before compiling the final document.

**Textural Descriptions**

As I collected data, I focused on what participants experienced or what happened in relation to the phenomenon. I examined this initially as individual participants’ responses. I examined this information for common themes. Then, I arranged the individual textural descriptions based on common themes into clusters. The clusters became the participation group’s textural description. This included verbatim examples from participants (Creswell, 2013; Moustakas, 1994; Saldana, 2013).

**Structural Descriptions**

Next, I focused on how participants experienced the phenomenon. I examined this information initially as individual participants’ responses. Then I examined the information for common themes. The next goal was to compile the individual structural descriptions into
clusters which became the participation group’s structural description. This combined information gave a very vivid description of each setting and the context in which the phenomenon took place (Creswell, 2013; Moustakas, 1994; Saldana, 2013).

Seven of the participants were staff members of Hollonville Elementary, a school of approximately 360 students and 45 staff members, located within an urban area. Participants taught ELLs daily as either a homeroom teacher who taught all subjects or as a departmentalized course teacher. Participants of Hollonville Elementary described their school as having a family atmosphere even though many recent staff changes were acknowledged, including the principal. They mentioned how there were many people working together to ensure students were successful such as teachers, paraprofessionals, special education staff, specials staff, administrators, and Title I staff. A time of the day that many mentioned was a schoolwide intervention time when all staff members were assigned a group of students to assist depending on the most current data. Several participants even mentioned that the principal jumped right in and instructed students during this time. The administration’s support of technology was shared by some participants. Most participants said they felt encouraged to use technology with all students. However, frustration was evident regarding the age of the devices in the building and the frequency of devices not working.

Ten of the participants were staff members of South Sharp Elementary, a school of approximately 675 students and 75 staff members, located within a rural area of Sharp County. Participants teach ELLs daily as either a homeroom teacher who teaches all subjects or as a departmentalized course teacher. Participants described their school as being in transition. Many teachers moved grade levels and many other staff members left at the end of the previous year. Several of the participants mentioned that they were leaving at the end of the current year.
Many of the participants expressed dissatisfaction with some of the operational and instructional structures in place in the school such as the Media Center and the time spent on non-instructional tasks for teachers. Though there were acknowledged concerns and frustrations, one thing that was clearly conveyed throughout the data collection process with the teachers of South Sharp Elementary was their love for their students and their desire for them to be successful. Another thing that stood out was that this success was not seen as a short-term school year by school year success. Many of the participants expressed concern for their student’s long-term growth and setting the expectation for college and career.

**Coding**

To be successful in the coding process, I relied on some key qualities such as being organized, persistent, flexible, creative, and ethical. These qualities assisted me in working to decipher the data and make connections based on emerging themes (Saldana, 2013). First, I was organized with how the data was stored and how it was logged. Multiple copies were maintained to ensure no data was misplaced or lost. I also needed to be organized as a web or coding map was assembled to show connections between themes. This visual map assisted me in organizing the data into smaller categories. The map, once established, became my centralized location for data analysis (Saldana, 2013). I sorted and added data to the map as it was available. Duplicate information was stored in a separate location.

As I worked to log, organize, and track the data, persistence was needed to work through the process of coding as often as possible. Once themes and connections were established, a lag in processing time could have jeopardized my ability to remember how themes and connections were first formed. Though the coding process was completed over 12 days, I never was far removed from it (Saldana, 2013).
Flexibility and creativity was also important to the process of coding. Both qualities were necessary as there is no exact science to coding qualitative data. Where quantitative data relies on the connections between numbers, qualitative data rests on the interpretation and coding of the researcher. To see these connections in qualitative data, I often looked for themes and connections that may not be obvious at first glance. I was flexible in the approach and willing to see beyond the obvious. An example was the coding of the data concerning technology not working. At first glance, it looked as if most of the participants’ concerns were the same regarding technology not working. However, after I looked closer at each individual response, the variations were identified and included an overall school network issue, a district network issue, applications not working, one teacher’s Activboard working sporadically, one teacher’s computer taking 20 minutes to login, and other examples that showed a more in-depth picture of what took place in each participants’ classroom and in each school. Making those connections, organizing the data, and being able to deliver the information in a clear and concise method takes creativity (Saldana, 2013).

The reliability of data rests in my ability to remain rigorously ethical. According to Saldana (2013), “rigorously ethical” means that each activity that takes place throughout the process from data collection to analysis and then to reporting, the researcher must be acutely aware of how the data is handled and of any interactions with the participants. Each piece of data was considered and all information related to the participants was kept confidential.

Once I internalized these key factors, actual coding began. As the information was read in the interviews and focus group transcripts, I looked for emerging themes and connections. The use of analytic memos was engaged by me to determine emerging themes. These memos were logged on the margins of the transcripts to highlight key words that summarize in a word or
phrase the key points of a participant’s response (Saldana, 2013). From these memos, I identified themes that were organized on an Excel spreadsheet. When the spreadsheet proved too cumbersome, Word documents were created to separate each question from each instrument for easier analysis by question. Each Word document was pre-coded with the participants’ identifying pseudonym. Each individual question was analyzed, and I used highlighting tools within the Word program to identify similarities among participant responses. This process allowed me to break the data down to identify which of the themes and subthemes occurred most frequently. These themes and subthemes were broken down to subcategories.

As stated by Saldana (2013), after initial or first cycle coding took place, I completed “open initial data collection and review before determining which coding method(s) – if any-will be most appropriate and most likely to yield a substantive analysis” (p. 65). My findings in the study’s analytic memos and other data determined if a set coding method was used. Per Saldana (2013), “If needed, you can develop new or hybrid coding methods or adapt existing schemes, customized to suit the unique needs and disciplinary concerns of your study” (p. 65). Therefore, the process truly was reliant on the data. A secondary cycle of coding took place to group the initial codes from the first cycle into broader categories looking for further connections and patterns. This process led to hybrid coding. As these were discovered, overarching themes emerged as the hybrid coding was used and these themes became the major components of the findings. These components guided the written report (Saldana, 2013; Creswell, 2013).

**Trustworthiness**

I ensured trustworthiness through establishing credibility, transferability, dependability, and confirmability (Creswell, 2013; Moustakas, 1994).
Credibility

To present credible findings, I used triangulation between three methods of data collection. Participants were interviewed, answered a questionnaire, and participated in a focus group. I analyzed all data and investigated patterns (Creswell, 2013; Moustakas, 1994; Saldana, 2013). I also utilized member checks to check the data (Creswell, 2013; Moustakas, 1994; Saldana, 2013) during data collection and initial codes were noted upon completing the analysis process (Saldana, 2013). I asked the members about their responses and my analysis of the data to establish credibility (Guba & Lincoln, 1989; Lincoln & Guba, 1985; Saldana, 2013).

Dependability and Confirmability

I used dependability to establish trustworthiness and validity. I addressed dependability using thick, descriptive data, noting details in the data, and becoming familiar with the data through repeated self-analysis (Guba & Lincoln, 1989; Lincoln & Guba, 1985). I used a dependability audit trail and an outside source checked the data. I tracked information thoroughly using data sheets that included information about each participant, when contact was made, when interviews took place, and all information gathered using the interview, questionnaire, and focus group meeting that was transcribed from video or audio tapes for accuracy (Schwandt & Halpern, 1988).

Confirmability addressed the quality of the results of the study and how well they were supported by the participants. References to literature that support my findings were also used to strengthen the confirmability of the study (Guba & Lincoln, 1989; Lincoln & Guba, 1985). A confirmability audit was completed at the time of the dependability audit by inviting participants and an outside source the opportunity to examine the findings to look for connections throughout the data such as themes, categories, and coding choices (Saldana, 2013; Schwandt & Halpern,
1988). Obtaining confirmability through a careful audit made the findings of the study more accepted by potential readers (Schwandt & Halpern, 1988).

**Transferability**

I addressed transferability through the process of purposeful sampling. I screened the participants using a brief questionnaire to determine if they were viable candidates for the study. The requirements for participation in the study included being an educator in elementary grades in Sharp County Schools, a current or former teacher of ELLs, and a teacher who did not hold an ESOL endorsement. Meeting this criterion was critical for me to obtain information relevant to the research questions (Guba & Lincoln, 1989; Lincoln & Guba, 1985).

**Ethical Considerations**

As an educator and researcher, it was imperative that ethical issues were addressed during the study. First, I applied and received approval from the IRB and from the school district before collecting any data from the participants of the study. Once contact was made with participants, I reviewed ethical considerations with them and asked each participant to sign consent in order to participate in the study. I assigned each participant and the setting a pseudonym to maintain confidentiality. An interpreter would have been available if any participants were not native English speakers.

I did not discuss any personal views with the participants before, during, or after the study. I assured participants that I was simply a researcher and not in any way trying to change their methods of instruction for their ELL students. I analyzed data with an unbiased view. All data collected was stored in a locked cabinet or electronically under password protection on my laptop. Finally, I did not have authority or influence as an administrator over any of the participants.
Summary

In summary, the purpose of this transcendental qualitative study was to investigate the perceptions of teachers of English Language Learners and the use of technology to enhance instruction. The participants were selected from one school district of approximately 20,000 students in Georgia. All participants were teachers who have previously taught or are currently teaching ELLs as a general education teacher in a general education setting. Interviews, questionnaire, and focus groups were utilized to gather data. Moustakas’ (1994) seven steps were used to analyze the data including identifying textural and structural data. Common data was sorted and coded to identify trends and commonalities. This information was used to gain an understanding of teachers’ perceptions of the use of technology with ELLs (Creswell, 2013; Moustakas, 1994).
CHAPTER FOUR: FINDINGS

Overview

The purpose of this transcendental phenomenological study was to understand general education teachers’ perceptions regarding their use of technology with students who qualify for English language learner services in an urban Georgia school district. The self-efficacy theory originated by Bandura (1977, 1994) was used to examine the teachers’ experiences of using technology as possible personal preference or as being influenced by environmental factors.

This chapter presents the participants, demographics, introductions, the findings for the research study, and a summary. I will present information detailing the data collected through individual interviews, a questionnaire, and a focus group (Castillo-Montoya, 2016; Krueger & Casey, 2014; Worthern, Sanders, & Fitzpatrick, 1997).

The following research questions will be used in the study:

(1) How do teachers describe their use of technology in a classroom setting?

(2) What are the participants’ understandings about instructional technology in relation to ELL students?

(3) How do teachers of ELL students describe their confidence in integrating instructional technology?

Then, I explain the process of data analysis including transcription of interviews and focus group meetings (Rubin & Rubin, 2012; Seidman, 2013), examining participants’ responses for textural and structural descriptions, and coding the responses (Creswell, 2013; Saldana, 2013). To establish codes, individual participant’s responses in relation to the group of participants’ responses were used to establish and categorize similarities (Creswell, 2013; Moustakas, 1994; Saldana, 2013). I examined participants’ perceptions to gather information
that may be useful in the advancement of ELL instruction. Finally, Chapter Four will address a summary of the data collection study.

**Participants**

Participants were 17 elementary level teachers who identified themselves as general education teachers of ELLs. All of the participants had at least one year of experience working with ELLs. Participants did not include any teachers who have completed an ESOL endorsement as they would likely have had more knowledge of instructional strategies, including technology instructional strategies that should be utilized with ELLs. Included in this group of participants were 17 teachers from two Sharp County Elementary Schools. They ranged in age from 24 to 68 years old and in years of experience in teaching from two to 44 years. The participants included 17 females and no males. All of the participants were native English speakers. Four of the participants are African Americans and 13 were Caucasian. Fifteen participants had experience teaching in multiple elementary grades. Three of the 17 participants had experience teaching in middle grades as well as elementary grades. All of the participants were native English speakers. Of the 17 participants, 12 had earned an advanced degree with two participants having a doctorate. Only one of the 17 participants had an advanced degree in technology integration. Two of the participants had plans to complete their masters within the next five years. Two of the participants had completed their gifted endorsement and one will complete hers as a part of her specialist program this summer at the University of Georgia. One participant planned to begin her ESOL endorsement the upcoming summer as a part of her specialist program. Two participants had a math endorsement, one participant had a coaching endorsement, and one participant was National Board Certified. I assigned each teacher, school, and the district a pseudonym to allow for confidentiality.
To recruit participants, I contacted three Sharp County Elementary School principals to request permission to conduct my study with members of their faculty. Each principal granted permission for me to conduct my study and then each one arranged a meeting with potential participants. In each initial meeting, I introduced myself, explained my study, explained confidentiality procedures for the study, and answered any questions asked by potential participants. As a person expressed interest in participating, he or she was given a screener (see Table H1 in Appendix H) to determine if he or she met the criteria. The screened participants were given the stamped consent form to sign, and a date for conducting the interviews was shared with the potential participants. Contact was established with each participant through email to remind them of the date for their interview and the focus group session. On the arranged dates, interviews were conducted during teachers’ planning periods and focus groups were conducted immediately following the dismissal of students. For the presentation of the information here, the participants are divided by school. I described each school’s teachers, and their background information was included in a participants’ table sectioned by school. Table 4 shares the background information for all participants.
<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>Gender</th>
<th>Age (years)</th>
<th>Years of Teaching Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amy</td>
<td>Female</td>
<td>68</td>
<td>44 years</td>
</tr>
<tr>
<td>Betty</td>
<td>Female</td>
<td>46</td>
<td>19 years</td>
</tr>
<tr>
<td>Casey</td>
<td>Female</td>
<td>32</td>
<td>8 years</td>
</tr>
<tr>
<td>Dani</td>
<td>Female</td>
<td>30</td>
<td>6 years</td>
</tr>
<tr>
<td>Fran</td>
<td>Female</td>
<td>24</td>
<td>2 years</td>
</tr>
<tr>
<td>Gail</td>
<td>Female</td>
<td>37</td>
<td>16 years</td>
</tr>
<tr>
<td>Hannah</td>
<td>Female</td>
<td>45</td>
<td>17 years</td>
</tr>
<tr>
<td>Jill</td>
<td>Female</td>
<td>59</td>
<td>13 years</td>
</tr>
<tr>
<td>Laney</td>
<td>Female</td>
<td>45</td>
<td>12 years</td>
</tr>
<tr>
<td>Liz</td>
<td>Female</td>
<td>44</td>
<td>17 years</td>
</tr>
<tr>
<td>Missy</td>
<td>Female</td>
<td>48</td>
<td>16 years</td>
</tr>
<tr>
<td>Nancy</td>
<td>Female</td>
<td>35</td>
<td>12 years</td>
</tr>
<tr>
<td>Penny</td>
<td>Female</td>
<td>43</td>
<td>14 years</td>
</tr>
<tr>
<td>Sunny</td>
<td>Female</td>
<td>50</td>
<td>28 years</td>
</tr>
<tr>
<td>Val</td>
<td>Female</td>
<td>32</td>
<td>8 years</td>
</tr>
<tr>
<td>Wren</td>
<td>Female</td>
<td>45</td>
<td>19 years</td>
</tr>
<tr>
<td>Zara</td>
<td>Female</td>
<td>36</td>
<td>14 years</td>
</tr>
</tbody>
</table>
Teachers of Hollonville Elementary School (a pseudonym)

Hollonville Elementary School is located in the city limits of Sharpsville and feeds into one of the district’s middle schools. It is comprised of approximately 35 certified staff members and 12 classified staff members. The student body includes 360 students.

Amy. Amy (a pseudonym), a faculty member of Hollonville Elementary School, had been teaching for 44 years with at least three of those years including ELLs. Amy had worked in various grades throughout her career including kindergarten, first, second, third, sixth, seventh, and eighth grades. When discussing how technology enhanced her teaching practices, Amy stated, “I love using flipcharts, games, video clips, and videos every day. If the activboard and/or Internet are for some reason unavailable, the teaching day is just not the same.” (Amy, personal communication, March 19, 2018). Amy went on to share how boring life would be without technology as she incorporated it into daily lessons for things such as videos, music and movement, and reading practice for students which was individualized (Amy, personal communication, March 19, 2018).

Amy explained that some of her comfort level with technology was a result of trainings that she participated in about 10 years ago when the district was at the beginning stages of implementing the use of activboards. She described the instructor’s patience and the time she took to introduce new material to the teachers as a factor in how well she learned the concepts. She also mentioned the school’s current technology coach as someone who was thorough when introducing content and supportive when questions came up during and after trainings. She went on to mention the summer academy that Sharp County Schools has hosted for the past five years and weekly PLCs that were held at her former school. When asked about team collaboration, Amy said, “I send out my flipcharts, but I’m not sure that my grade level uses them” (Amy,
personal communication, March 18, 2018). According to Amy, her teammates mentioned time constraints as the biggest factor in their limited use of technology. While Amy feels that this is an obstacle that can be overcome due to her experience with integrating technology at her previous school, she does sympathize with her teammates. She named weekly professional development and guidance from her former administrators as the elements that helped her to successfully balance the demand of meeting student needs through technology (Amy, personal communication, March 19, 2018).

Amy’s instruction with her ELLs has shown her that ELLs often need a longer time to think and process the question and their answers (Amy, personal communication, March 19, 2018). She mentioned the importance of pre-teaching and presenting information in multiple ways to assist ELLs with learning and making progress. Amy also stressed the importance of repetition with ELLs because, “Something said or seen once will probably fly by most ELLs” (Amy, personal communication, March 19, 2018). In fact, Amy mentioned her use of body movement, music, and actions to reinforce instruction and help ELLs make connections and remember concepts. It also makes instruction enjoyable according to Amy. She said, “I try to pair up my ELs with English speaking friends so they can feel comfortable and gain confidence” (Amy, personal communication, March 19, 2018).

Casey. Casey (a pseudonym) currently teaches first grade at Hollonville Elementary School. She has been teaching pre-K and first grade for eight years. This is her second year working with ELLs. In her questionnaire, Casey mentioned microphones provided by her school system and the benefit she saw in those devices for all students as the microphones improve students’ ability to clearly hear the instruction. When discussing practices or supports provided by her school or district that help her feel more confident in integrating technology, Casey said,
“Our school has a liaison for technology who we can go to if there is some software we are struggling with or one we wish to learn more about” (Casey, personal communication, March 18, 2018). Casey also mentioned trainings conducted by her district where “things are explained thoroughly,” as something that has added to her comfort level with technology (Casey, personal communication, March 19, 2018).

Due to Casey’s age, she felt comfortable experimenting with technology and was open to trying new things with all of her students, including her ELLs. She regularly created flipcharts, used video clips, and various websites and apps such as Studyladder and myON. She integrated a lot of technology into her Daily 5 lessons for her reading block. Casey said,

I actually like writing lesson plans and I include pictures to reference back to and to help my teammates as we share plans. It is easier for me glance at a picture to help me with my teaching rather than trying to read all of the information off. (Casey, personal communication, March 19, 2018).

As comfortable as she was with writing plans and carrying out the activities using technology, she recognized that planning to meet the needs of her ELL students was a challenge for her. She mentioned relying on her co-workers for suggestions and feedback. She credited her school’s ESOL teacher with, “communicating needs of her ELL student” to assist her with planning for him (Casey, personal communication, March 19, 2018). Casey mentioned that this is particularly helpful as her ELL is also diagnosed with autism. She admitted struggling with knowing how much of what she observes with him is due to his diagnosis and the challenges associated with his diagnosis and how much is an actual language barrier due to his limited understanding of English (Casey, personal communication, March 19, 2018).
Hannah. Hannah (a pseudonym), who has taught at another Sharp County school, currently teaches first grade at Hollonville Elementary School. In her 17 years as an educator, she has taught pre-K, kindergarten, first, third, fourth, and fifth grades. She earned her doctoral degree from Valdosta State. Hannah mentioned collaborating with her teammates daily to integrate PowerPoints, interactive lessons, and games into her instructional day through the use of iPads, computers, and an ActivBoard (Hannah, personal communication, March 18, 2018). She made use of programs such as myON, BrainPop Jr., ABCya, Studdyladder, and PebbleGo to provide technology experiences for her students.

Hannah also made use of various technology programs and apps to organize her classroom and track attendance. She used Class DoJo to communicate with her parents and to track student behavior. She used Remind 101 to send out messages to parents. Some of these programs such as the attendance program, Infinite Campus, and Remind 101 were included in trainings provided by the school district. Class DoJo was a program that Hannah taught herself after peer collaboration and watching another co-worker. Hannah stated, “Seeing Ms. Casey use Class DoJo gave me confidence to try it. After that, I taught my team how to use Remind 101” (Hannah personal communication, March 19, 2018).

Although Hannah used technology daily and stated, “Integrating technology into the classroom is an effective way to connect with students of all learning styles,” she shared that she rarely does anything different for her ELLs than she does for her other students (Hannah, personal communication, March 18, 2018). Hannah also mentioned being frustrated with the checkout process for the school’s iPads. She said, “The checkout process was too cumbersome with so much paperwork to fill out that I stopped using them” (Hannah, personal communication, March 19, 2018).
Missy. Missy (a pseudonym) is currently a third grade teacher at Hollonville Elementary School. In her 16 years as an educator she has also taught second grade. She has served in many leadership capacities within her school including grade chair and school leadership.

“ActivBoards, tablets, and laptops have improved achievement,” according to Missy when asked about technology initiatives used by her district to improve the achievement of ELLs (Missy, personal communication, March 18, 2018). Technology devices she has utilized with her students include iPads, an ActivBoard, ActiVotes, computers, and a document camera. When asked how her administrators’ outlook and value of technology impacted her confidence and desire to integrate technology, Missy responded,

I think it impacts it a great deal, the more training we get as a staff the more comfortable we feel using it. The more money they spend on updates or purchasing equipment the more we feel encouraged to use it” (Missy, personal communication, March 18, 2018).

Penny. Penny (pseudonym) is in her 14th year of teaching. She has been a member of the Hollonville Elementary staff for 12 of those years. Penny mentioned that she collaborated with her colleagues weekly to integrate technology into her lessons (Penny, personal communication, March 18, 2018). She currently teaches fifth grade but has experience in first, second, fourth, sixth, and seventh grades as well. In her experience, Penny said “I have not experienced any specific needs of ELL students when using technology. They seem to be able to use technology as well as anyone else” (Penny, personal communication, March 18, 2018).

Sunny. Sunny (a pseudonym) is a fifth grade teacher at Hollonville Elementary School. She has experience teaching multiple grades including kindergarten, first, and second. Sunny has been an educator for 28 years and is considering retirement within the next few years. As a student, Sunny graduated from the first magnet school in Los Angeles and then went on to
college where she earned her bachelor’s degree and two advanced graduate degrees. In her current classroom, Sunny uses technology daily to organize and differentiate within her Daily Five rotations (Sunny, personal communication, March 19, 2018).

Val. Val (a pseudonym) is a native of Sharpsville. She went all through school and graduated from the Sharp County School System. Val has a master’s in reading and math. She plans to continue with her education by obtaining her specialist’s degree within the next few years. She has been a teacher in the Sharp County School System for all eight years of her career. She currently teaches kindergarten and has experience in first and fourth grades. In all of her eight years of teaching, she has worked with ELLs. When asked about what she does to support her ELLs with technology, Val responded with a focus on multiple exposures to skills, pronunciation, and visual opportunities being key concepts for learning. She stated, “Certain letters seem to be harder for them to hear, so giving them multiple times to hear it through technology and then through the teacher’s group works well” (Val, personal communication, March 19, 2018).

Teachers of South Sharp Elementary School (a pseudonym)

South Sharp Elementary School’s faculty includes 45 certified staff members and 16 classified staff members. There are 680 students who attend South Sharp Elementary School.

Betty. Betty (a pseudonym) has been an elementary teacher for 19 years. She has at least three years of experience teaching ELLs. She is a teacher at South Sharp Elementary School and currently teaches fifth grade. She has taught other grades and is contemplating a change in grade level for next year.

Betty was quiet and kept to herself. She was willing to share her thoughts when asked but does not speak openly on her own very often. Betty incorporated technology on a daily basis
as a part of her Daily 5 rounds during Language Arts, but she admitted that she does not feel confident in her abilities with implementing technology (Betty, personal communication, March 26, 2018). She stated, “It seems like I set out with good intentions but there is a roadblock like technology not working” (Betty, personal communication, March 26, 2018). Her normal routine consisted of using technology daily to incorporate Read Theory and ReadWorks into her Daily 5 rounds and to use the laptops or computers in the classroom for assessments and research.

When asked about technology integration with ELLs, Betty said that her confidence and abilities with it were pretty low. She mentioned needing more time to find and explore more resources. She said that she especially struggled with vocabulary acquisition and getting students to understand words. Betty said, “I feel like if I had more time to go out and look at more, I would feel more comfortable” (Betty, personal communication, March 26, 2018). Writing lesson plans for technology integration was another area in which Betty felt she could improve. She stated, “It is something that I check off. There is a box there on the lesson plan and I know that I have to include something” (Betty, personal communication, March 26, 2018). Betty explained that she usually falls back to the familiar things such as PowerPoints, familiar sites, and flipcharts. Again, this was partly due to time constraints.

**Dani.** Dani (a pseudonym) attended a private Christian high school after attending public school from first grade through eighth grades. Her college experience was at a private Christian college in Florida. She was thinking about returning to college for her master’s degree. Dani is currently working at South Sharp Elementary as a third grade teacher. Four of her six years of teaching were teaching in second grade. As a public school teacher, Dani has only worked at South Sharp Elementary. She has worked with special education students and ELLs. She incorporated technology daily and attributed her high level of comfort with technology to her
age. As she is only 30 years old, she pointed out that she has grown up with technology. Dani named two other factors that contributed to her level of confidence with technology integration. She talked about the availability of resources and the expectations of her administrators to use technology. Knowing how strongly her administrators felt about technology, she strived to incorporate it daily (Dani, personal communication, March 26, 2018).

Dani said that her confidence level with regular technology integration was high. She said that she even struggled with her teaching when technology in her room or building is not working (Dani, personal communication, March 26, 2018). She relied on technology as a part of her daily routine with the biggest use coming in during her Daily 5 rounds during Language Arts. Dani reported seeing more student engagement and students who are willing to take ownership of their own learning. She felt that the school district has made an impact on student growth with many of their technology focuses including ActivBoards in almost all classrooms and student multi-points as this has given access to many students who may not have technology at home (Dani, personal communication, March 26, 2018).

When asked about her work with her ELLs, she spoke of the importance of focusing on vocabulary and students reading on their actual reading level (Dani, personal communication, March 26, 2018). In order to have every student reading and answering comprehension questions based on their personal reading level, South Sharp Elementary recently began using Achieve 3000. Dani explained that the program gave each student a pre-assessment and a Lexile was determined by their pre-assessment score. Based on each student’s Lexile, articles and questions were assigned for each student. There was also a vocabulary component of the program which Dani called, “especially critical for ELLs” (Dani, personal communication, March 26, 2018).
**Fran.** Fran (a pseudonym) is from a small, rural town about an hour and a half from Sharp County. Her mother is a middle school teacher in her hometown. Fran, a second-year teacher at South Sharp Elementary School, has taught in first grade and fourth grade. She has worked with special education students, gifted students, and ELLs. She has worked closely with the technology team within her school and offered assistance to colleagues with technology as needed.

Throughout the interview, Fran expressed frustration with the current technology situation at her school. She mentioned that her ActivBoard worked an average of two days a week and her computers took two hours to update each day (Fran, personal communication, March 26, 2018). With these issues, her technology use has been limited this year. When it was available, she used it to do activating strategies, show pictures and videos for science, and to conduct science experiments. She also used it for science PowerPoints which included vocabulary development for their latest topic of study. She went on to stress that she has used technology daily when it was available. Writing lesson plans incorporating technology were not a problem according to Fran. She said, “It is just a problem with implementation when technology isn’t working” (Fran, personal communication, March 26, 2018).

**Gail.** Gail’s (pseudonym) story is one that is unusual for a successful teacher. She dropped out of school in the tenth grade at age 16. At that time, she also ran away from home to get away from a negative home life. After a couple of years, Gail earned her GED and then began college classes. She worked her way through earning her bachelor’s degree. At that time, she began teaching in the public school system. She continued her education by completing her master’s degree, a math endorsement, and a coaching endorsement. She is currently working to finish her specialist degree by May 2018, and she plans to complete her doctorate within the next
Gail is in her eighth year of teaching and coaching in the public school setting. She also has eight years of teaching pre-K in a daycare. This is her first year at South Sharp Elementary. She has worked at two other Sharp County schools. She has served as an Instructional Coach and decided to return to the classroom as a fifth grade math teacher. Gail served as a mentor to her fellow teachers with many technology skills and programs. Some of her colleagues mentioned the help that she has provided to them with Canvas (Liz, personal communication, March 26, 2018; Laney, personal communication, March 26, 2018). During the focus group, at the urging of her colleagues, Gail described how she sets up her Canvas for her students and how she targeted in on student needs by building pathways within Canvas that were unique to each student based on pre-assessments and other student data (Gail, personal communication, March 26, 2018).

As a part of Canvas, Gail focused on vocabulary instruction and the use of nonlinguistic representation. She said, “I do focus on vocabulary because so many of our students don’t understand math vocabulary and language” (Gail, personal communication, March 26, 2018). Another part of Gail’s daily routine used technology to organize her small groups and to set up notetaking in Canvas. Students also benefit from practicing their vocabulary skills as they engaged in discussions in chatrooms on Canvas set up by Gail (Gail, personal communication, March 26, 2018). Another activity which stretched students and required the use of technology are Gail’s “I wonder” questions. Students had to use technology to research and find the answers to the posed questions.

**Jill.** Jill (pseudonym) was an honor student and graduated as valedictorian of her high school class. She went to college for one year and took some time off. She later returned to
college and finished her degree in 2005. Jill has now been a teacher for 13 years. All of her years of teaching have been as a kindergarten teacher at South Sharp Elementary. Jill has served as a leader as a grade chair and as a representative on her school leadership team. She has been a teacher of ELLs for at least four years and worked with ELLs as a paraprofessional before she earned her teaching certificate. She uses technology daily with all of her students. Jill shared how she used technology to help her students with practicing reading skills as a part of Daily 5 each day. She mentioned that she particularly liked websites such as ABCya! and Starfall because they were interactive and focused on pronunciation and gave visuals with written words. Jill stated, “They know that when the computer speaks, they must speak. They have pure sounds for pronunciation” (Jill, personal communication, March 26, 2018). According to Jill, programs such as Kidspiration were good for ELLs because they included the picture and the word in the sorting activities. Students also enjoyed creating their own webs on Kidspiration which helped them to make the connections with the vocabulary terms.

Jill said that these various programs covered a lot of the kindergarten skills, and she used technology as a part of her Daily 5 rounds. She stated, “I like that students aren’t just listening they must be active” (Jill, personal communication, March 26, 2018). Another key component of the programs Jill chose is repetition. She mentioned how important it was for her ELLs to see the skills more than once and get practice with each skill several times.

Jill said her ELLs enjoyed the technology because they saw themselves like the other students. She said, “They know that I expect as much from them as I do from our other friends” (Jill, personal communication, March 26, 2018). While Jill acknowledged that it may take longer for her ELLs to learn initially depending on their English skills, she said, “The payoff is worth putting the time in on the front end” (Jill, personal communication, March 26, 2018). The
only negatives that Jill shared were about writing technology integrated lesson plans, which she struggled with, and that the school’s technology has not been as reliable this year as in past years. She stated, “My students don’t like when computers aren’t available or they go down and don’t work,” (Jill, personal communication, March 26, 2018).

**Laney.** Laney (a pseudonym), a native of Sharp County, was a graduate of the Sharp County School System. She has been a teacher in Sharp County since graduating from college in 1996. She has a gifted endorsement and currently teaches all of the gifted students at South Sharp Elementary School. She has served in various leadership roles such as Assistant Testing Coordinator and Gifted Committee Chair.

Laney said that sometimes she does not feel good about the amount of time she has for planning to use technology: “It isn’t as good as it could be if I had the best resources. This goes back to having the time to find the perfect match for what I am teaching” (Laney, personal communication, March 26, 2018). Another struggle for Laney has been limited technology. She stated,

I am trying to do the flipped classroom model. It would be amazing if I had the one to one technology. It is much more difficult with my larger classes. My largest class is 17 and I only have nine computers. (Laney, personal communication, March 26, 2018).

Laney admitted that she does not know much about technology integration with ELLs specifically. She mentioned that she often thinks back to struggling learners and the research that she knows about technology enhancing their learning. With this in mind, Laney remained determined to make strides in her technology progress. She has been working with a co-worker, Gail, to learn Canvas as part of her yearly goal (Laney, personal communication, March 26, 2018). Canvas, a platform for building unique pathways for students that are based on their
needs and interests, was a challenge for Laney. In discussing professional learning opportunities, Laney said,

I’ve been to lots of county training. One of our teachers in our school has been doing more differentiated training. She has served as a mentor to me. I have gone in to observe her and she also walks through my questions with me. (Laney, personal communication, March 26, 2018)

For Laney’s needs, the differentiated training and mentoring has been more effective as she has attempted to implement Canvas.

Currently, in her gifted segments, Laney said most of her ELLs were pretty proficient with English and she really treated them as she does everyone. “In the past when I had kids who really struggled, I didn’t feel as confident. I think even with these struggling students, I would be better now due to more experience” (Laney, personal communication, March 26, 2018). With this experience, Laney used technology to focus on building background knowledge in her teaching to strengthen vocabulary.

Liz. Liz (a pseudonym) is a fifth grade teacher at South Sharp Elementary School. She has 16 years of experience, and she has worked with ELLs for 10 years. She has her doctorate degree. She has taught in one other Sharp County school and New York City. Liz has worked in third and fifth grades as a team teacher and on a departmentalized team. Her teaching focus was language arts with an emphasis on the writing process and literature responses. She often has had her students engage in peer reviews to provide feedback for their writing samples. Liz also has experience as the regular education teacher in a co-teaching team with a special education teacher.

Liz used technology as a part of her daily lessons. She liked that students are able to
share information immediately through the use of technology. As far as her confidence with integrating technology, she said that she was in the medium range. She felt confident in some things and not as confident in other things. Liz expressed frustration that there is not more time that can be devoted to learn new technology skills. She said, “I have an excellent resource in Gail on my grade level, but I rarely have time to even ask her a question due to our busy schedules” (Liz, personal communication, March 26, 2018).

Nancy. Nancy (a pseudonym) has been teaching for 12 years. All of her years in education have been as a second grade teacher at South Sharp Elementary. She is a graduate of Auburn University with bachelor’s and master’s degrees, and she is currently working on her specialist degree through the University of Georgia. Nancy has been working with ELLs for at least three years and currently relies on her classroom experience to guide her as she has had no formal training for working with ELLs. She was excited to be taking classes this summer for her ESOL endorsement and her gifted endorsement as a part of her specialist degree. This was her first year serving as a mentor teacher.

When asked about the use of technology, Nancy responded,

It is a love/hate relationship. When technology works the way it should, it is a beautiful and wonderful day in the neighborhood. When it works I feel confident. When it doesn’t, I’m not tech savvy enough to fix it on my own. I end up going back to chart paper or using the technology like a PowerPoint and that is not how it is designed to work. (Nancy, personal communication, March 26, 2018)

To combat the struggles with technology not working, Nancy wrote plans integrating technology and then created alternate plans without it in case there are difficulties. While some teachers may see this as extreme, Nancy says that this made her feel prepared for each day no matter what
difficulties might arise. She said, “Students even know to change from browser to browser depending on difficulties or which program we are using” (Nancy, personal communication, March 26, 2018).

Nancy used technology on a daily basis when it was available. She used it as a progress monitoring tool and as a choice for Daily 5 rounds. Something that Nancy enjoyed was finding different activities in various subjects to expose students to things beyond the classroom. Nancy’s class also participated in Genius Hour each week. Nancy described Genius Hour as an opportunity for students to research, write, and present information about a topic of their choice. This was also incorporated into her Daily 5 rounds. While only having six of eight computers working presented a challenge, students had other resources to use for research so they have made it work.

**Wren.** Wren (a pseudonym) currently teaches fourth grade at South Sharp Elementary. She has experience in kindergarten, third, and fifth grades as well. Wren has experience working on grade level teams as well as serving as the reading teacher for 80 percent of a departmentalized grade level. She has a gifted endorsement, and she has served as the Technology Teacher Leader for her school. She still works closely with the technology team within her school and offered assistance to colleagues with technology as needed. Wren has served as a leader, as a grade chair, and as a representative on her school leadership team. She also has a science endorsement.

When asked about her knowledge for working with ELLs, Wren replied,

I am doing a program called VIPKID. A lot of the things that I do with my Chinese speaking students are things that I wish that I had time to properly implement with my
regular classroom ELLs such as visuals and focusing on shorter teaching segments.

(Wren, personal communication, March 26, 2018)

In using the time and equipment she has, Wren has focused on vocabulary instruction. She recognized the advantages of using technology to find photos and videos that enhanced her instruction to make vocabulary more meaningful for her students. She mentioned how many more resources were available for teachers to choose from through the use of technology (Wren, personal communication, March 26, 2018).

As far as things she is able to do within her public school classroom with technology, Wren mentioned using programs such as Read Theory. She said that overall, she was confident except with Achieve 3000 which was the newest program that the district was using to support reading. As the staff has only had one training on Achieve 3000, Wren’s lack of confidence was understandable. Wren looked forward to learning more about it because it was a new tool for differentiation based on the leveling component of the program.

Zara. “Technology is ever changing, and I love to learn things. There is always an app for that” (Zara, personal communication, March 26, 2018). Zara (a pseudonym), a faculty member of South Sharp Elementary School, has been teaching for a total of 14 years with four of these years including ELLs. She was the only participant who has a technology degree. Zara has served as a peer teacher for her school’s teacher academy where she taught her co-workers about several of the technology initiatives adopted by the district such as Viewpath. She has experience working as a team teacher and has served as a math teacher on a departmentalized team. She has worked with special education teachers as the regular education teacher on a co-teaching team.
Zara said, “I definitely use technology daily when it is working. I use it for organizational things like attendance and instructional things like videos or pictures to get students’ attention for a lesson” (Zara, personal communication, March 26, 2018). One form of technology that Zara had used for several years on a regular basis was ActivExpressions. Unfortunately, Zara has now given up on using these individual student response devices that could give a teacher immediate feedback on student understanding. After updates, the devices became too burdensome and inefficient to use. The iPads are also a concern due to limited firewall protection.

When thinking about technology implementation for her ELLs, Zara recognized there were some special factors to consider such as providing one-on-one assistance to get them familiar with the program or device. According to Zara, after the initial support session, most ELLs were able to catch on to the directions for using the technology quickly. Instructionally, Zara looked for programs like MobyMax which offered lessons that are short, concise, and used visuals. This type of lesson was particularly fitting for ELLs. Knowing the importance of differentiation for all students, Zara planned for her students to use MobyMax two to three times a week for math differentiation. Zara said, “When implemented with fidelity, it can help close gaps, provide practice and accelerate students” (Zara, personal communication, March 26, 2018).

**Results**

Phenomenological studies investigate a common phenomenon, which in this case was the teachers’ experience of teaching ELLs as a general education teacher (Moustakas, 1994). Participants signed an informed consent (see Appendix H) before being interviewed, answering the questionnaire, or participating in the focus group. Examination of each individual teacher’s individual perceptions were reviewed in relation to the group of participants to establish and
categorize commonalities (Moustakas, 1994; Saldana, 2013). There was no attempt to persuade participants in any way regarding the use of technology. Participants’ perceptions were examined to formulate information that may be useful in the advancement of ELL instruction.

I transcribed the recorded interviews while reading and rereading the interviews to check for accuracy. Interviews were transcribed, leaving wide margins to allow for my own thoughts and notes regarding the emerging themes to be notated directly on the transcript. These notes were then used to develop a list of themes found within the interviews. Samples of these transcripts are included in Appendix L. Once the interviews were transcribed, each question was placed in a template for coding which contained each participant’s name and an area for their response. Each participant’s response for each question was then copied and pasted into the coding template. Samples of the coding templates are in Appendix M. The transcribed interviews and the coding templates were compared and cross checked for accuracy. The theme list from the transcribed interviews and the theme list from each individual question on the coding templates were examined for consistency.

**Theme Development**

The results of the participant interviews, questionnaires, and focus group were analyzed to identify themes and commonalities among the responses. Using the steps of a phenomenological study as noted by Moustakas (1994), I began with the individual interview results. I read and reread looking for meaning units that were grouped into emerging themes. I examined all relevant information as I looked for repetition of words, phrases, and meanings to begin developing themes. Some repeated words and phrases are listed in Table 5.

Throughout the process, I identified and noted, expanded upon, and highlighted similarities in varying colors in the coding template. This process was repeated as the other
interview responses were read. Using the color-coded templates, the list for each question was compiled at the bottom of each template. Using the same method, the questionnaires were then analyzed. Finally, the information from the focus group was examined to complete the theme list. This information was then compiled on an Excel spreadsheet for easy data retrieval access through the remainder of the process.
Table 5

Repeated Words and Phrases Mentioned by Participants

<table>
<thead>
<tr>
<th>Repeated Words and Phrases</th>
<th>Data Source</th>
<th>Theme:  Sub-Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement</td>
<td>Interview/Questionnaire</td>
<td>Theme 1: Instructional</td>
</tr>
<tr>
<td>Daily 5 Rounds</td>
<td>Interview</td>
<td>Theme 1: Instructional</td>
</tr>
<tr>
<td>More Resources</td>
<td>Interview/Questionnaire</td>
<td>Theme 1: Instructional</td>
</tr>
<tr>
<td>Differentiation for students</td>
<td>Interview</td>
<td>Theme 1: Instructional</td>
</tr>
<tr>
<td>Daily Routine</td>
<td>Interview/Questionnaire</td>
<td>Theme 1: Organizational</td>
</tr>
<tr>
<td>Class DoJo</td>
<td>Interview</td>
<td>Theme 1: Organizational</td>
</tr>
<tr>
<td>Communication with parents</td>
<td>Interview</td>
<td>Theme 1: Organizational</td>
</tr>
<tr>
<td>Explain and model</td>
<td>Interview</td>
<td>Theme 2: Thorough directions</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>Focus Group</td>
<td>Theme 2: Vocabulary</td>
</tr>
<tr>
<td>Visual</td>
<td>Interview</td>
<td>Theme 2: Vocabulary</td>
</tr>
<tr>
<td>Pictures</td>
<td>Interview/Questionnaire</td>
<td>Theme 2: Repetition</td>
</tr>
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<td>Practice</td>
<td>Interview</td>
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</tr>
<tr>
<td>No training</td>
<td>Interview</td>
<td>Theme 3: Technology Not Working</td>
</tr>
<tr>
<td>When it [technology] Works</td>
<td>Interview/Questionnaire/ Focus Group</td>
<td>Theme 3: Lack of Training for ELL Instruction</td>
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<td>Interview/Questionnaire/ Focus Group</td>
<td>Theme 3: Lack of Training for ELL Instruction</td>
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<td>Interview/Questionnaire/ Focus Group</td>
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</tbody>
</table>
During the analysis of the interviews, questionnaires, and focus group data, three distinct themes emerged from the participants’ discussions. The first theme, usage of technology, included the participants’ views of how they implemented and used technology in their classrooms. The second theme, instructional understanding of English Language Learners, gave the participants’ thoughts and experiences of how English Language Learners were instructed with various practices, strategies, and technology. The third theme, barriers faced, included participants’ experiences with attempting to overcome barriers that hindered implementation of quality instruction. This included barriers with instruction of ELLs and the use of technology.

Themes

After analysis of the interviews, questionnaires, and focus groups’ transcripts and coding templates, three themes emerged. Each theme is aligned to a research question and includes a discussion of the corresponding theme and subthemes.

Theme One: Usage of Technology

Theme one and the related sub-themes correspond to research question one. Theme One, usage of technology, was a topic that was mentioned throughout the interviews, questionnaires, and focus groups. Participants were quick to share their thoughts about technology and how they were using technology in their classrooms. In fact, Amy summed up what she felt about technology with a couple of simple statements. She said, “Without it, life would be boring. Students would think this, too” (Amy, personal communication, March 19, 2018).

Instructional. Participants’ thoughts regarding instructional use of technology ranged from listing programs that they use, equipment and how it is utilized, to providing individualized differentiation for students. For many of the participants, differentiation began with the use of technology as a part of their Daily 5 rounds. The Daily 5 is a structure in which teachers
organize reading, writing, and literacy activities to promote independent growth while they are providing small group or individual instruction (Boushey & Moser, 2014). Of the 17 participants, 11 mentioned using the Daily 5 structure to incorporate technology into their instruction. Listening to reading is one of the rounds that was mentioned by Boushey and Moser (2014) to allow students to hear fluent reading while they follow along with the story. Many of the participants mentioned they used technology to address the need for students to hear fluent reading during their Daily 5 rounds.

Participants also mentioned the benefit of student engagement that comes with the proper integration of technology. Liz shared, “Students are more engaged and excited when technology is involved” (Liz, personal communication, March 26, 2018). One example given by Amy mentioned students gaining confidence which leads to engagement. Amy said, “If the student is using a form of technology by himself, then just gaining the ability to do so is a wonderful confidence booster” (Amy, personal communication, March 19, 2018). Other participants mentioned that student engagement improved due to the variety of resources that become available through technology. Penny laughed as she talked about engagement with her ELLs’ clever discovery of using the iPads to translate anything that she might be saying that they didn’t understand (Penny, personal communication, March 19, 2018).

Many participants shared their favorite sites, programs, and apps as they answered the questions corresponding with Research Question One. ReadWorks was the program mentioned most during the interviews and questionnaires with Read Theory being a close second. Other sites mentioned included ABCya!, MyOn, Studyladder, MobyMax, and Starfall. Participants mentioned choosing programs based on student needs. Jill explained her choice of using Starfall with her kindergarteners, “In the story, they must click on each word and sound them out. It will
not sound out sight words. It gives them repetition. At the end, I can print a practice book for each student” (Jill, personal communication, March 26, 2018).

The most frequently mentioned forms of technology used were Activboards and iPads. As Val said, “My whole routine or lesson planning is wrapped around the ActivBoard for displaying activities, students going through rotation during math and reading, and I demonstrate what students are expected to do as an example” (Val, personal communication, March 19, 2018). The use of audio enhancement was mentioned by a few participants as well. Casey said, “The microphones also mean the students can hear me better” (Casey, personal communication, March 19, 2018). Betty mentioned, “My ELLs are at the computer twice a week to work on comprehension” as part of their Daily 5 rounds (Betty, personal communication, March 26, 2018). When discussing the variety of equipment, Sunny stated, “The use of ActivBoards, tablets, and chromebooks have improved student achievement for ELL learners” (Sunny, personal communication, March 19, 2018).

Finally, the sheer number of resources available through the use of technology was mentioned as participants discussed the use of videos, pictures, games, practice activities, and personalized student learning pathways through software programs during the second focus group (Focus Group 2, personal communication, 2018). This was also mentioned by several participants during their interviews and questionnaires as many pointed out the struggle sometimes can be to find the “right fit or perfect match” out of the many resources that are available (Betty, Fran, Laney, and Wren, personal communication, March 26, 2018).

One practice that could make searching for materials more manageable is collaboration among teachers or teams of teachers. When asked how often teachers collaborate about the use of technology, the answers varied. Amy shared that she has not collaborated with her team at all
this year about technology, but she has previously at another school “experienced extensive weekly collaboration so that technology was regularly used in every area of instruction” (Amy, personal communication, March 19, 2018). Amy further explained that she shares flipcharts and other resources with her team. Amy stated, “We don’t talk about them (shared technology resources) and I’m not sure that they (the grade level team) even use them” (Amy personal communication, March 19, 2018). Val said her team met, “often especially if an app or website helped with a skill” (Val, personal communication, March 19, 2018). Other teachers’ responses for collaboration with teammates ranged from a low or never for one teacher to daily for two teachers. Four teachers did not answer the question on the questionnaire about teacher collaboration (personal communication, March 19, 2018 & March 26, 2018).

Organizational. Participants mentioned using technology as an organizational tool to maintain order in their classrooms, track discipline, and communicate with parents. Several participants referred to organizing their instructional groups through technology and displaying that information for students. Hannah mentioned using technology as a part of her “daily routine to take attendance, track behavior with Class DoJo, and communicate with parents through Remind 101” (Hannah, personal communication, March 19, 2018). Penny talked about the organization of preferred teacher resources on the webpage for Hollonville Elementary. She said, “Knowing those resources are available, means I don’t have to carry manuals and extra things home with me” (Penny, personal communication, March 19, 2018).

Several participants shared their ideas for organizing grades, creating and storing assignments for upcoming lessons, and electronically filing parent information. Zara shared that the whole school (South Sharp Elementary) uploaded lesson plans onto a common drive for easy retrieval (Zara, personal communication, March 26, 2018). A few participants mentioned
organizing their instructional groups through technology and described how they displayed that information for students. Other teachers such as Gail and Laney, explained how students used Canvas as an organizational tool for their responses in chatrooms, tracking assignments, and submitting assignments (Gail, personal communication, March 26, 2018; Laney, personal communication, March 26, 2018).

**Theme Two: Instructional Understanding of ELLs**

Theme Two, Instructional Understandings of ELLs, relates to research question two. Fifteen of the 17 participants said that they use technology daily as part of their normal routine. Though all participants acknowledged that they have had no formal training specifically for working with ELLs, many of them indicated using research-based, instructional strategies that are beneficial for all students. A concern is that many of the participants, eight out of 17, indicated that they do not do anything different for the ELLs than their other students. Even when research-based, instructional strategies are used, ELLs often need extra support. This can even be true for ELLs who are capable of excelling (Pereira & de Oliveira, 2015).

**Directions given.** Many participants recognized that ELLs have a need for more intense structure for directions and that directions may need to be explained more thoroughly than with other students. One participant, Casey, mentioned, “They (ELLs) will need patience because they may not understand what the technology is asking them to do. In my class, they get more one on one instruction to know how to use the technology and step by step modeling to feel comfortable with the game or activity” (Casey, personal communication, March 26, 2018). Zara also addressed the need for more one on one directions, “Like most things with ELLs, it (technology) requires more one on one. You have to provide the extra support to get them familiar with the technology sites and apps. After that initial time, most (ELLs) can catch on
quickly” (Zara, personal communication, March 26, 2018). Some teachers may not see the benefit of spending the extra time to ensure ELLs have the opportunity to learn using technology, but Laney’s statements created a persuasive argument.

It (technology) has the potential to teach content within the context of real-world application. Students can see and hear new vocabulary with the context of how it would be seen or really used. It can bridge the gaps with learning a new language. (Laney, personal communication, March 26, 2018).

**Vocabulary.** Vocabulary was suggested as one of the main focuses for ELLs by 12 of the 17 participants. Participants mentioned several aspects of learning vocabulary such as visual, auditory, and correct pronunciation. According to Casey, “ELLs will definitely need visuals to help clarify any misconceptions” (Casey, personal communication, March 19, 2018). Fran also mentioned the importance of using visuals, “When it works, visuals to strengthen vocabulary are important to have to help students with retaining information” (Fran, personal communication, March 26, 2018).

Many of the participants including Val mentioned how technology could be used to enhance vocabulary instruction for ELLs. Val stated, “The iPad is really good for them to see and hear things pronounced. They can see, hear, and manipulate what is on the screen. Some apps speak back to you and prompt students” (Val, personal communication, March 19, 2018). Missy included information in her interview regarding the use of technology to enhance vocabulary instruction. Missy reported,

I do remember doing vocabulary with pictures in PowerPoints. These are included in flipcharts with NLR. A lot of flip charts and online activities highlight words and read
aloud to students. I use these with ELLs, but I have also used them with lower students as well. (Missy, personal communication, March 21, 2018)

Some participants like Nancy and Casey shared specific sites or practices customized for individual students to aid with vocabulary practice. Nancy stated,

The biggest push for ELLs has been vocabulary. I focus on sites that provide strong vocabulary because that is where they lack when they are learning a new language. Starfall and Moby Max are sites that I have used for this. (Nancy, personal communication, 2018)

Casey discussed using technology daily with small groups and with individual students to meet needs. “One particular student is assigned different activities such as listening to read on the tape player to build fluency and for him specifically to hear the language and see the picture” (Casey, personal communication, March 19, 2018).

Dani was particularly excited about the newest technology program at South Sharp Elementary. During the second focus group, she explained the various components of the program to her fellow teachers and mentioned vocabulary specifically. She described how the articles, question, and vocabulary are leveled for students. She went on to explain how the vocabulary terms are highlighted and students can click on the word to hear it pronounced correctly. This feature was something that she felt helped her ELLs. She then explained how one of her ELLs has become very motivated due to the badges and incentives that can be earned through the program (focus group 2, March 26, 2018).

Repetition. Missy said, “Technology provides hands-on learning experienced and practice” (Missy, personal communication, March 28, 2018). Repetition of key literacy skills increases achievement in reading for ELLs (August, McCardle, & Shanahan, 2014). Dani
shared, “With what is known about technology increasing engagement, using technology to accomplish the task of repetition makes sense” (Dani, personal communication, March 26, 2018). Jill stated, “I have seen where these programs (Starfall and ABCya!) have provided students with some independence once they are familiar, and that they often will repeat activities if there is something they aren’t sure about” (Jill, personal communication, March 26, 2018).

Even with the importance of repetition recognized, Amy gave a good reminder, “Information needs to be not just repeated, but presented in a variety of ways” (Amy, personal communication, March 19, 2018). The use of multiple ways for repetition was also mentioned by Val as she explained, “Certain letters seem to be harder for them (ELLs) to hear, so giving them multiple times to hear it through technology and then through the teacher’s group works well” (Val, personal communication, March 19, 2018).

Unfortunately, Fran, Wren, and Zara identified an issue that can be common for ELLs. One of their students is frequently called out of the classroom “to translate for his family’s communication with school personnel,” said Zara (Zara, personal communication, March 26, 2018). When this happens, not only is the student missing the possibility of repetition, he is missing the initial instruction as well.

**Theme Three: Barriers Faced**

The final theme that corresponds with research question three is barriers faced. Barriers can consist of many things and can vary depending on the situation or the person being interviewed. In relation to this study, the teachers, who were the participants, mentioned numerous things which they viewed as barriers to meeting the needs of their ELLs through the use of technology. The sub-themes that were most prevalent were a lack of training for working with ELLs, technology not working, and technology not available.
Lack of training for working with ELLs. Zara stated, “Why are teachers not trained properly to teach ELLs? If we were trained in proper techniques, our students could learn better” (Zara, personal communication, March 26, 2018). The lack of training provided to regular education teachers of ELLs in Sharp County Schools was acknowledged by all 17 participants. One participant mentioned training that she had through the school district for Inspiration which enabled the teachers to use the ActivBoards (Jill, personal communication, March 26, 2018). While this was actually a required course for all Sharp County teachers who use an ActivBoard, Jill was the only participant to mention the course or that there were portions of that training that were specifically targeted for ELL instruction. With the training taking place up to 10 years ago for some teachers, and the fact that most ELLs were bussed to one or two schools in the district at the time, training regarding ELLs may not have seemed relevant to most teachers at the time.

With a lack of training, many teachers may not realize what Amy noticed in her three years of working with ELLs, “Using technology in whole group instruction, ELL students need enough thinking and processing time to make their decisions about answers or even questions” (Amy, personal communication, March 19, 2018). Val shared,

I wasn’t aware of the great apps until the ESOL teacher at Hollonville told me about them. She explained the benefit for the ELLs of mirroring the skill to build skills and make gains. Since then, I have incorporated her suggestions. (Val, personal communication, March 19, 2018)

Without training, many questions arise for teachers who teach these students for the majority of the academic day. Zara mentioned a concern regarding struggling ELLs, “Teachers often wonder if this is a Tier III problem or a language issue” (Zara, personal communication, March 26, 2018). Casey expressed another concern regarding students with special needs, “With
it being first grade there is the question of is it first grade or a language barrier? Plus, with this particular child, he is autistic and that seems to factor into the uncertainty as well.” Uncertainty can be unnerving for teachers who are invested in doing the best for their students as further noted by Penny, “I have a student who is assigned a special iPad with a translation app that has been downloaded for his use, but I’m not sure that he really needs it now. I think it may be more of a comfort thing at this point” (Penny, personal communication, March 19, 2018). Penny went on to elaborate that knowing she is guessing at his level of understanding is not comfortable.

Technology not working. According to Hannah, “Integrating technology into the classroom is an effective way to connect with students of all learning styles” (Hannah, personal communication, March 19, 2018). While this is a great thought, many of the participants mentioned numerous times that they have to use alternate plans because technology does not work properly or sometimes it does not work at all. One voice of frustration was Fran’s as she expressed throughout her interview and questionnaire difficulties with technology not working. “I don’t feel confident because it doesn’t work properly,” said Fran (Fran, personal communication, March 26, 2018). “Since I don’t have a technical background from my studies, I may have to go with plan b which may not be as inviting or as interesting to the students as the original plan” stated Nancy, (Nancy, personal communication, March 26, 2018).

There are times that the technology is unavailable due to a planned outage. As Penny mentioned, “Sometimes the Internet is down county wide and no one can get on and use it. The county does notify teachers when it is going to be down and if some parts are going to be upgraded and unavailable” (Penny, personal communication, March 19, 2018). Even so, Sunny mentioned that frustration is still experienced by some teachers as they are unable to receive the
emails explaining the outage if they do not have a smart phone or do not have good cell service (Sunny, personal communication, March 19, 2018).

When planning lessons, technology is something the teachers count on in Sharp County as their building and district leaders expect to see it utilized. Wren stated, “I am comfortable with it (technology), but I get frustrated when I have links that work in my plans, but they don’t work for students when they are pushed out” (Wren, personal communication, March 26, 2018). Penny further stated, “My own technology in my room is slow and that can slow down my progress with completing a lesson. Then I have to improvise and give other examples on whiteboard” (Penny, personal communication, March 19, 2018).

Even with the frustration, a majority of the participants recognized the effort made by the district to train staff, provide adequate equipment, and the limitations due to funding. Casey stated,

Our school has a liaison for technology who we can go to if there is some software we are struggling with or one we wish to learn more about. The district has also offered additional trainings. We have personnel to come into our schools to ensure that the technology we have is working appropriately. (Casey, personal communication, March 19, 2018).

**Technology availability.** Val shared, “Technology is a huge push in our county. This sets expectations, so I strive to learn how to do or use all of the different things available” (Val, personal communication, March 26, 2018). Nancy also acknowledged the expectations of using technology, “Administration really pushes the use and function of technology within the classroom. They truly want students engaged and equipped to function within a technological society” (Nancy, personal communication, March 26, 2018). Many teachers in Sharp County
Schools, like Val and Nancy, may understand the expectations of the district leaders and building leaders regarding technology usage, but difficulty in meeting the expectations arises when technology is not available. Ten participants of the 17 mentioned concerns with the availability of technology. A variety of issues were mentioned such as loss of connectivity, equipment failure that cannot be repaired or replaced, and too few devices for a classroom or for the school.

Jill mentioned that it is not just the teachers and leaders who are disappointed or upset when technology is not available. According to Jill, “They (ELLs) don’t like when computers aren’t available or they go down and don’t work” (Jill, personal communication, March 26, 2018). Whether in kindergarten as with Jill, or in fifth grade like Gail’s students, students recognize the issues, too. Gail said that her students understand the importance of working with technology daily because she has stressed the importance of technology to her students in how she sets up her classroom activities and expectations. It is great when technology is available but causes a total reshuffling of activities and plans when technology is unavailable (Gail, personal communication, March 26, 2018). Educators communicate that they are working to give students an opportunity to learn and better their chances in life and in the workforce, so teachers like Dani can understand why students are frustrated when they get to school and the technology isn’t available. For some students, like Dani’s, “The opportunity they get at school to use technology is it because they don’t have updated technology at home” (Dani, personal communication, March 26, 2018).

Some participants, like Penny, recognized the effort made by the district to maintain equipment and make buildings “tech friendly.” According to Penny, “They have tried to provide an ample amount of technology for each school in the county. It is not always the most up-to-date technology, but it is made available” (Penny, personal communication, March 19, 2018).
In some cases, as Missy pointed out, the availability of technology comes with some unexpected risks. Missy stated,

We have a grant to have tablets for every third grader (at Hollonville Elementary). I think some teachers are afraid because everything is at their fingertips. Some kids in my class looked up inappropriate material and lost their tablets, but I looked at it as an experience that could happen. You have to roll with the punches. You can’t be afraid of trying things. (Missy, personal communication, March 21, 2018)

Every possibility cannot be anticipated, but many schools work to be proactive to prevent situations such as Missy described or to be ready to address the issue as quickly as possible.

**Research Question Responses**

The research questions are listed with the explanation of each question’s purpose. Data collected from participants’ interviews, questionnaires, and focus groups were examined in relation to each question.

**Research Question One.** Research question one asked, “How do teachers describe their use of technology in a classroom setting?” This question was designed to understand how the participants view and use technology. Their views on technology and their overall experiences provided insight into their decision to use certain products, programs, or techniques to instruct ELL students. Data analysis provided the first theme, usage of technology, and two sub-themes, instructional and organizational. Participants described using technology daily for instructional and assessment purposes through Activboards, iPads, computers, and laptops. They shared websites, apps, and programs that they used for instruction and organization. Participants also explained their usage of technology to increase student engagement. Each participant is listed in Table 6 and marked according to their responses in relation to each sub-theme.
Table 6

*Research Question 1: Sub-themes by Participant*

<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>Sub-theme 1: Instructional</th>
<th>Subtheme 2: Organizational</th>
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<tbody>
<tr>
<td>Amy</td>
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<td>Betty</td>
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<td>Casey</td>
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<td>Dani</td>
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<td>Fran</td>
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<td>Gail</td>
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<td>Hannah</td>
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<td>Jill</td>
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<td>Missy</td>
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<td>Nancy</td>
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<td>Penny</td>
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<td>Sunny</td>
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<td>Val</td>
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<td>Wren</td>
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<td>Zara</td>
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Research Question Two. Research Question Two asked, “What are the participants’ understandings of instructional technology in relation to ELL students?” The purpose of this question was to understand the participants’ knowledge regarding the use of technology with ELLs. Since participants were not ELL-endorsed teachers, their knowledge of research in instructional strategies specific to ELLs was limited, but many participants focused on techniques and skills with all of their students which supported ELLs, too.

From the responses associated to this question, I began to see some inconsistency in participants’ responses. Many participants said they never altered instructional content or presentation of content for their ELLs. This was referred to by various participants in response to questions that asked participants to recall or name specific things about their work with their ELLs. While not every assignment may need to be adjusted, several participants mentioned always treating their ELLs instructionally the same as other students. In some instances, this was in contradiction of an earlier statement regarding a need that the participant had identified. This made me question whether these students were treated the same with no additional help or support or if the additional help and support was given, but the teacher dismissed this because providing that assistance was second nature to them. From a few of the comments, it seemed important to some of the participants that all their students were treated as equals with an equal expectation. This brought up another question that led to a suggestion for further research: Do teachers realize they can provide the support needed for their ELLs without compromising their high expectations?

The second theme, instructional understandings of English Language Learners, and the three sub-themes, directions, vocabulary, and repetition are addressed in Table 7.
Table 7

Research Question 2: Sub-themes by Participant

<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>Sub-theme 1: Directions</th>
<th>Sub-theme 2: Vocabulary</th>
<th>Sub-theme 3: Repetition</th>
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</thead>
<tbody>
<tr>
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<td>Missy</td>
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<td>Wren</td>
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<td>Zara</td>
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Research Question Three. Research Question Three asked, “How do teachers of ELL students describe their confidence in integrating instructional technology?” I designed this question to gain understanding of the confidence level of general education teachers of ELLs. Knowing the confidence level of these participants with integrating technology provided helpful information regarding the third theme, barriers faced, and the three sub-themes, lack of training for working with ELLs, technology not working, and technology availability. Many of the
participants had shown years of successful gains with their ELLs even though they lacked proper training in technology and had no training for working with their ELLs. Most of them attributed this success to trial and error through years of working with ELLs of various academic levels. Participants’ success helped to build their confidence while barriers lowered their confidence levels. A few of the participants talked about guidance they received from their school’s ESOL teacher which had helped to bolster their confidence in working with their ELLs and choosing the appropriate technology to meet the needs of their students.

Some participants spoke of their lack of confidence in using technology when it works, and that the thought of technology not working made them even more apprehensive. A few participants mentioned having a moment of panic when an administrator came in to observe and technology did not work properly. Participants expressed concern about how an administrator would score such an observation when the administrator may have thought the problem was a lack of teacher knowledge instead of technology not working properly. These types of problems added to participants’ list of frustrations with technology that chipped away at their level of confidence in using it effectively. Overall, the group of participants expressed confidence in integrating technology, but their confidence level varied depending on the barriers they faced at the moment in question. Sub-themes related to Research Question Three are listed in Table 8.
Table 8

Research Question 3: Sub-themes by Participant

<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>Sub-theme 1: No Training for ELLs</th>
<th>Sub-theme 2: Technology Not Working</th>
<th>Sub-theme 3: Technology Availability</th>
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Theoretical Framework

The self-efficacy theory was utilized to guide and inform this phenomenological study. The self-efficacy theory, developed by Bandura (1977, 1994), stated that people’s beliefs in their own capabilities may determine the success of their actions. In considering the four areas of self-efficacy, the participants were varied. There were some participants who demonstrated self-
efficacy in multiple ways. There were three participants who did not give any indication of self-efficacy. Mastery was the category with the most participants, and social persuasion was the category with the least participants. Eleven of the participants indicated mastery. In relation to the self-efficacy theory, mastery means they saw themselves having success with an indicated task and that success provided reassurance and encouragement for them to move forward with a similar task. Four participants showed self-efficacy through a vicarious approach which means that they felt confident and ready to try a task based on seeing someone else have success with the task. Three of the participants mentioned situations of social persuasion that helped them develop self-efficacy. Social persuasion means that the participant was recognized or praised for their effort or accomplishment which led to a willingness to continue working on the task. There were five participants who demonstrated self-efficacy through reduction of stress and negative emotion.
Table 9

*Experiences of Participants using the Self-Efficacy Theory*

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<thead>
<tr>
<th>Participant Pseudonym</th>
<th>Mastery</th>
<th>Vicarious</th>
<th>Social Persuasion</th>
<th>Reductive of Stress and Negative Emotion</th>
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**Summary**

This chapter contained data gathered from 17 participants who were general education teachers of ELLs. The data represents the perceptions of the participants regarding the use of technology with ELLs. The participant group consisted of all women with their years of teaching experience ranging from two to 44 years. Participants were individually interviewed by
the researcher, answered a questionnaire, and participated in a focus group.

Moustakas’ (1997) seven steps of data analysis were utilized. The following three themes emerged from the data: usage of technology, instructional understanding of ELLs, and barriers faced. In addition to the themes, eight sub-themes were evident. The sub-themes were instructional, organizational, directions given, vocabulary, repetition, lack of teacher training for ELLs, technology not working, and availability of technology. Each of the three identified themes and related sub-themes were connected back to one of the three research questions.

I used the three following research questions in my study: “How do teachers describe their use of technology in a classroom setting?”, “What are the participants’ understandings of instructional technology in relation to ELL students?”, and “How do teachers of ELL students describe their confidence in integrating instructional technology?”

The theme of usage of technology was connected back to the first research question as participants described their use of technology in a classroom setting. The two sub-themes of instructional uses and organizational uses were addressed by participants. Participants detailed ways that they use technology to instruct students by giving websites, apps, describing their use of certain devices, and discussing engagement.

The theme of instructional understanding of ELLs was linked to the second research question as participants described their knowledge of instructional strategies and the use of technology in working with ELLs. Participants shared information which formed the three sub-themes of directions given, vocabulary, and repetition. All participants said they had no formal training or classes related to instructing ELLs since college, but the themes identified aligned with acknowledged best practices for ELLs.

The theme of barriers faced was related back to the third research question as participants
discussed their perceived barriers in working with the integration of technology with their ELLs. A lack of training for working with ELLs was mentioned by all participants. The lack of training was a frustration for many participants since they spent around 80 percent of their instructional day with ELLs and they are not trained in best practices specific to ELLs.

In reviewing the information regarding the second sub-theme of technology not working, 11 out of 17 participants mentioned they have some concerns with this type of problem. This ranged from connectivity issues with the Internet to equipment failure. The view of some teachers varied, depending on their location, when they discussed technology availability. Schools in Sharp County have been heavily reliant on Title I funds for technology for approximately 10 years. Each school’s ability to fund initial technology projects or replace items over time depended on a flexible amount granted through federal funds each year. Several participants mentioned their schools purchased laptop carts or iPad carts that were assigned to various grade levels. These purchases should have increased availability, but when existing equipment needed to be replaced, new technology did not consistently increase availability.

In the next chapter, a summary of the findings is presented accompanied by the discussion section with supporting literature for each research question. Themes and sub-themes are examined in relation to the matching research questions. Implications, delimitations, limitations, and future research are also addressed.
CHAPTER FIVE: CONCLUSION

Overview

The purpose of this transcendental phenomenological study was to understand general education teachers’ perceptions regarding their use of technology with students who qualify for English language learner services in an urban Georgia school district. The self-efficacy theory originated by Bandura (1977, 1994) was used to examine the teachers’ experiences of using technology as possible personal preference or as being influenced by environmental factors.

I examined participants’ perceptions using the following three research questions:

1. How do teachers describe their use of technology in a classroom setting?
2. What are the participants’ understandings about instructional technology in relation to ELL students?
3. How do teachers of ELL students describe their confidence in integrating instructional technology?

I collected data through interviews, questionnaires, and focus groups and analyzed the data using the steps for a phenomenological study outlined by Moustakas (1994). There were 17 female participants in the study. Their ages ranged from 24 years old to 68 years old, and their years of teaching experience ranged from two years to 44 years.

In the summary of findings, I presented the findings from the study as it related to and answered each research question. The discussion section provided information on the theory of self-efficacy by Bandura (1977, 1994) and discussed how the theory related to my findings. The discussion section also linked my findings to empirical literature. Implications for teachers, ELLs, and the school district were shared. Delimitations and limitations are discussed as I reflected on factors that may have impacted the study such as population or limited geographic
location. Recommendations for future research were presented and discussed. Chapter Five concluded with a summary.

**Summary of Findings**

Through analysis of the data collected through interviews, questionnaires, and focus groups, three main themes emerged including: usage of technology, instructional understandings of ELLs, and barriers faced. As each theme was examined, sub-themes developed. The research questions were examined in relation to the discovered themes and sub-themes and an answer to each research question was then evident.

**Research Question One**

Research Question One asked, “How do teachers describe their use of technology in a classroom setting?” Research Question One was designed to understand how the participants view and use technology. Their views on technology and their overall experiences provided insight into their decision to use certain products, programs, or techniques to instruct ELL students. Through data analysis the theme of usage of technology and two sub-themes, instructional and organizational, emerged.

Through the questions related to research question one, an image of bustling classrooms filled with engaged students formed based on the participants’ responses. All participants reported using technology daily. Participants described a variety of technology tools they used in the course of their instruction with the most utilized being Activboards, iPads, and student computers or laptops. They also shared a plethora of websites and apps they used to enhance instruction. The majority of the participants mentioned using websites and apps as a part of their differentiated instruction since most of the websites and apps could track student progress and advance them to harder skills as they showed growth.
Participants also mentioned using technology to increase student engagement through interactive opportunities. Several participants shared that students who rarely participated in daily class activities showed a dramatic increase in effort and attitude when technology was a part of a lesson. Participants also discussed using technology for assessment purposes.

Finally, participants described many ways they chose to use technology in their classrooms to assist them with organizing information and increasing efficiency. Technology sites, programs, and apps were mentioned for storing grades, tracking attendance and discipline, and contacting parents. Several participants thought, when technology was working properly, the time saved through the use of technology as an organizational tool created more instructional time for their students.

**Research Question Two**

Research Question Two asked, “What are the participants’ understandings about instructional technology in relation to ELL students?” Research question two was designed to understand the participants’ knowledge regarding the use of technology with ELLs. Instructional understandings of ELLs was the theme that stemmed from Research Question Two. The three sub-themes that were associated with this theme are directions given, vocabulary, and repetition.

According to participants, none of the 17 participants had any knowledge of any current research regarding ELLs. However, most participants referred to one or more research-based instructional strategies that they used with their ELLs and other students to assist them in making progress. Participants seemed to view these research based instructional strategies, including technology, as universal strategies to use with all students including ELLs. Most of the participants claimed that they did not do anything specific for their ELLs. Participants explained their own practices as examples of their understanding of the use of instructional technology with
ELLs. Several participants shared the differences they could see when they took the time to go through directions step by step with their ELLs. They mentioned the emphasis that should be placed on vocabulary for ELLs to make gains in the regular classroom. Many participants described how they squeezed in extra vocabulary practice for their ELLs using technology. A key element mentioned with teaching vocabulary to ELLs was the benefit of giving a visual as well as the word to build vocabulary. Several teachers described using websites or apps to do this easily and to allow for repetition as needed. The use of an audio enhancement system was also mentioned by some participants for clarifying pronunciations of words spoken by the teacher.

**Research Question Three**

Research Question Three asked, “How do teachers of ELL students describe their confidence in integrating instructional technology?” Questions from the interview, questionnaire, and focus groups were aligned to Research Question Three to determine participants’ confidence in integrating technology. During data analysis, the theme of barriers faced along with three sub-themes emerged. The three sub-themes, including a lack of training for working with ELLs, technology not working, and technology not being available, were topics that participants mentioned frequently throughout the study as barriers that impacted their level of confidence when they integrated technology with their ELLs.

It was evident that many of the participants felt helpless and unsure of how their ELLs could be viewed by others based on their true abilities and not be held back due to a possible language barrier. This uncertainty seemed to be rooted in how participants viewed themselves as inadequate teachers for their ELLs due to a lack of training. Participants discussed how limiting it felt to know that they have not been properly trained to work with ELLs, yet their ELL
population had increased. They also explained how the lack of training with ELLs permeates into other areas of their teaching such as choosing the best technology for their ELLs.

Though many participants expressed confidence in using technology when initially asked, throughout the study this confidence seemed to decline as more and more examples were shared regarding the issues with technology not working or technology being unavailable. Participants discussed how having the technology in the building does not mean it is available. Part of what they identified as the concern with availability was the lack of student knowledge in how to operate the technology. They deemed this as part of availability because the student knowledge was not available for students to access and use to make technology lessons work within time constraints. In turn, this uncertainty affected their confidence in knowing exactly how to integrate technology.

Some participants spoke about their lack of confidence in using technology when an administrator comes into their classroom due to technology failure, students’ lack of knowledge, and even what participants viewed as their administrators’ lack of knowledge in integrating technology. Overall, participants were confident with the integration of technology, but this level of confidence was diminished for almost all participants based on perceived barriers such as a lack of training for working with ELLs, technology not working, and unavailability of technology.

**Discussion**

The purpose of this transcendental phenomenological study was to understand general education teachers’ perceptions regarding their use of technology with students who qualify for English language learner services in an urban Georgia school district. The self-efficacy theory
originated by Bandura (1977, 1994) was used to examine the teachers’ experiences of using technology as possible personal preference or as being influenced by environmental factors.

**Theoretical Framework**

The self-efficacy theory was utilized to guide and inform this phenomenological study. The self-efficacy theory, developed by Bandura (1977, 1994), stated that people’s beliefs in their own capabilities may determine the success of their actions. According to Bandura (1994), “Self-efficacy beliefs may determine how people feel, think, motivate themselves and behave” (p. 71). In relation to this study, knowing a teacher’s experiences with technology, prior knowledge of instructional technology, and his or her perceptions of his or her own confidence and abilities in utilizing technology may reveal connections to the self-efficacy of individual teachers.

**Self-efficacy Theory**

In this study, each teacher’s experiences were gathered, analyzed, and cross-referenced with the four sources of Bandura’s (1977, 1994) self-efficacy theory. The data utilized in this study was collected through individual interviews, individual questionnaires, and focus groups to find out the teachers’ perceptions and experiences. The four sources of self-efficacy are mastery experiences, vicarious experience, social persuasion, and reduction of stress and negative emotions (Bandura, 1994). Mastery experiences are described as someone recognizing their own success. Vicarious experience may be seen as a teacher feeling more confident because of seeing others have success. Social persuasion is the building of self-efficacy through words of encouragement or praise. Reduction of stress and negative emotions is the fourth source outlined by Bandura (1994).

In examining the participants’ perceptions, I applied the self-efficacy theory to consider
the participants’ experiences with implementing technology with ELLs. I considered all information shared by the participants through their interviews, questionnaires, and the focus groups. Using this information, I looked for links that may have contributed to build self-efficacy in the participants. Experiences of participants in which they felt success or encouragement through one or multiple sources of self-efficacy could be viewed as having improved their confidence in their own abilities with the use of technology with their ELLs. Connections between the four sources of self-efficacy and the teachers’ experiences revealed how and why some of the participants chose to use technology. Only three of the participants did not have an experience that was linked to one of the four sources of self-efficacy.

In this study participants demonstrated each of the types of self-efficacy. Some participants shared experiences which showed mastery which means they saw themselves having success with an indicated task and that success provided reassurance and encouragement for them to move forward with a similar task. An example of mastery may be seen in Zara. When discussing her confidence with technology, Zara indicated a high level of confidence and explained that she worked at something until she figured it out. She said that she taught herself and then taught others. Gail also described how she learned technology on her own. She said the more she learned, the more confident she felt and the more risks she was willing to take to learn more.

Some participants showed self-efficacy through a vicarious approach which means they felt confident and ready to try a task based on seeing someone else have success with the task. Hannah shared an example of vicarious self-efficacy. In her interview, she explained that she felt that she could try ClassDojo because she saw Casey use it with her class and she saw how Casey used the data. Laney explained how her confidence and willingness to try several new
technology programs came from watching Gail. She also asked Gail questions to gain clarification about anything that she was unsure of with the technology before trying it. After trying the various technology programs, Laney went back to Gail with any questions. In seeing Gail and being willing to try it, she demonstrated vicarious self-efficacy. By gaining clarification and going to Gail with follow up questions, she further developed self-efficacy through reduction of stress and negative emotion.

Three of the participants mentioned situations of social persuasion that helped them develop self-efficacy. Val described her hesitation and lack of self confidence in choosing appropriate technology activities for her ELLs. She developed self-efficacy through social persuasion after working with the school’s ESOL teacher to use choose websites and apps that would be appropriate for her ELLs. The ESOL teacher praised Val for her willingness to try new technology and activities with her ELLs. Val gained confidence and even began to try new things on her own. This confidence evolved into her sharing and teaching others on the school staff.

There were five participants who demonstrated self-efficacy through reduction of stress and negative emotion. Amy shared her experiences with self-efficacy through reduction of stress and negative emotion. One incident she mentioned was centered around a day she knew she was going to be absent. She discussed how she planned every detail including making a special flip chart for the lesson on living and non-living things. She allowed herself plenty of time to think through the various questions that might arise from the students and tried to address these as well. In planning for the technology days in advance, she had time to think through the activity and to choose the best possible resources to include.
Empirical Literature

ELLs are currently the fastest growing population in the United States (Barr et al., 2016; Kanno & Kangas, 2014; Dobbins & Rodriguez, 2013). However, at the time of this study, there was limited research regarding ELLs. Research in the area of the use of technology, which has the potential to boost student achievement with ELLs, was relevant and needed (Blattner & Lomicka, 2012; Chen, 2016; Hines & Silverman, 2009; Richards, 2015). A deficit was seen in research in reference to teachers’ perception of the use of technology in relation to ELLs (Goldenberg, 2014). In findings from this study, three themes emerged including: usage of technology, instructional understandings of ELLs, and barriers faced. Each theme was examined in relation to published literature from prior research. Similarities between this study and prior research are noted as are findings from this study that differ from prior research. Also discussed are findings which emerged that were of interest beyond the identified themes.

Theme 1: Usage of technology

In this study, through the analysis of interview, questionnaire, and focus group responses, usage of technology emerged as the first theme. Instructional usage and organizational usage were the two identified sub-themes. Research Question One asked: “How do teachers describe their usage of technology in a classroom setting?” Research Question One aligned with theme one. Research Question One was designed to provide insight into teachers’ perceptions of technology and their preferences for how to use it in their classrooms.

Most of the participants noted that their willingness to use technology was reliant on the ease of operation and their ability to see the benefit which in turn shaped their attitude toward various types of technology. This was consistent with findings by Ertmer, et al. (2012), Hur et al. (2016), and Lee, et al. (2017). As suggested by Thomas et al. (2014), participants noted a
lack of functional understanding of technology can steer them toward other instructional choices. Further, many participants’ responses supported recent research by Blanchard et al. (2016) as well as an older study with similar findings by Vannatta and Fordham (2004) which indicated the amount of technology professional learning for teachers can translate to their willingness to implement and take risks with technology in the classroom. Several participants even related this hesitation to implement new technology to their fear of being observed by an administrator during a time when they were in the beginning stages of learning a new technology device, skill, app, or site.

As reported by Richards (2015) and Chuang (2014), many of the participants acknowledged the engagement level and motivation of their ELLs increased when technology was used in their classrooms. Participants also mentioned an increase in positive student attitudes when technology is utilized well which has been reported by Hattie (2008), specifically with the use of computers. Going a step beyond regular instructional engagement, some of the participants mentioned technology apps or portions of online class structures such as Canvas in which students participated in technology activities similar to gaming. Participants felt when students used these gaming components that they could see students surpassing compliant participation and moving into patterns of high motivation and engagement. Participants described their students’ eagerness to participate and their verbal and nonverbal expression of disappointment when the activity ended. This is similar to findings by Hsieh et al. (2015) which stated that observations of elementary students during academic gaming showed an increase in engaged behaviors such as leaning in toward the screen, smiling, self-conversations, and increased motivation and competitiveness. These behaviors were seen as evidence of the students’ curiosity and ability to gain pleasure from their participation in the gaming activity.
Theme 2: Instructional understanding of ELLs

Research Question Two asked, “What are the participants’ understandings about instructional technology in relation to ELL students?” Theme two aligned with Research Question Two. Although none of the participants have had any formal training or classes related to instructing ELLs since college, the themes identified for theme two aligned with acknowledged best practices for ELLs. The three sub-themes identified addressed directions given, vocabulary, and repetition. Even with the three sub-themes identified being best practices, the participants still expressed great concern about their lack of knowledge and understanding of their students’ needs.

The majority of the participants in my study stated they had doubts and felt unsure about the best ways to meet the instructional needs of ELLs. All the participants attended a traditional teaching program and earned a teaching degree. In a study by Casey et al. (2013), these same feelings of inadequacy were expressed by nontraditional teachers of ELLs. As nontraditional teachers often go through a modified certification program and may not have an education degree, they are often uncertain of best practices during their first few years of teaching. Findings from my study support additional studies reported by Roy-Campbell (2013), Barr et al. (2016), Okhee et al. (2016), Weinstein and Trickett (2016), and Wright and Levitt (2014) that documented teachers who earned certification through traditional teaching programs may have feelings like nontraditional teachers and also struggle with understanding how to meet the needs of their ELLs.

All participants acknowledged a desire to better understand instructional strategies that would assist their ELLs in achieving. Many went beyond this acknowledgement to describe what they have done through trial and error within their own classrooms or learning via co-
worker experiences to improve instructional outcomes for their ELLs. Some even described their administrators’ role in data analysis to help meet student needs and how this impacts instructional practices within their building. This type of commitment to the advancement of instructional practice is not only aligned with research by Vasnsant-Webb and Polychronis (2016) and Bertrand and Marsh (2015), it also addressed the question regarding the level of teacher understanding for the use of data to improve instruction for ELLs posed by Conaway, et al. (2015). The participants seemed to understand how to use data based on their responses, but they did not see this as being only related to ELLs. When asked about their knowledge of ELLs specifically, they expressed uncertainty. According to DellAngelo (2016) and Richmond et al. (2016), students were expected to perform regardless of identified challenges and participants of this study recognized that this achievement expectation applied equally to ELLs in the state of Georgia as seen on their yearly CCRPI report (Georgia Department of Education, 2015).

Many of the participants spoke of the need to present information to ELLs in various ways, but they often found this challenging due to their limited experience with ELLs which is consistent with research by Foulger and Jimenez-Silva (2007). Foulger and Jimenez-Silva (2007) reported that teachers were unsure of how to best choose and present information to ELLs even though they recognized the benefits of using non-linguistic and animated images with their ELLs. Previous research regarding the positive impact of sound and active engagement for all learners was supported by findings from this study in which almost all participants mentioned seeing a rise in student achievement for all students, and especially ELLs, with the use of sound and active engagement (Armstrong, 2014; Chuang, 2014; Herrington et. al, 2003; Ivala et al., 2013; Pahomov, 2014; Reinders & Wattana, 2015; Richards, 2015).
Participants explained the benefits of using research based instructional strategies, including technology, to build academic vocabulary and background knowledge with their ELLs. They noted the importance of vocabulary being a key component for academic growth of ELLs which supports findings in previous research studies (Glass et al., 2005 & Goldenberg, 2014). Glass et al. (2005) and Goldenberg (2014) mentioned the building of academic vocabulary and background knowledge gives ELLs information to make new connections. Goldenberg (2014) pointed out skills such as setting clear learning goals, effective modeling, well-designed instruction, and authentic student engagement as instructional components that helped ELLs grow academically. As participants in my study claimed, Goldenberg (2014) acknowledged seeing results with these strategies with students who are not ELLs, too. All of the 12 participants who mentioned the importance of vocabulary reported using technology for the non-linguistic benefits which assisted their students with learning vocabulary. Many of them spoke specifically about things they do in their own classrooms with technology to show students a picture and the associated word together. Most of them used the Activboard, student computers, and iPads to keep students engaged in learning vocabulary during their Daily 5 rounds while they worked with students in small groups or help individual student conferences. For the participants in my study, part of the appeal of the technology component was that it was easy for students to use after they learned how to operate a device. Also, the interactive nature of the technology kept students engaged which meant teachers could focus on their other students. The use of technology for non-linguistic benefits was previously reported by Richards (2015) and Foulger and Jimenez-Silva (2007). Richards (2015) and Foulger and Jimenez-Silva (2007) reported the benefit for ELLs of seeing an image to accompany the corresponding words whether the words were English their native language. They also mentioned the benefit of interactive
features for students including the capability of interacting through technology with the teacher for direct feedback that is private. This feature was mentioned by a few of the participants as a highlight of Canvas. Through Canvas, the students had a platform which provided privacy for the correction of their work. This was also mentioned as a positive feature of the Activexpressions and Activotes because teachers liked that students could submit an answer in a whole group setting with only the teacher knowing they may not have answered correctly.

**Theme 3: Barriers Faced**

Research Question Three asked: “How do teachers of ELLs describe their confidence level in integrating instructional technology?” Theme three and the three sub-themes of lack of training to work with ELLs, technology not working, and availability of technology correlated with Research Question Three.

The participants of this study mentioned being unsure of themselves with instructing ELLs due to a lack of training for working with ELLs and a lack of personal knowledge which is consistent with prior research (Cheatham et al., 2014; Calderon, Sanchez, & Slavin, 2011; DaSilva-Iddings & Rose, 2012). According to Cheatham et al. (2014), Calderon et al. (2011), and DaSilva-Iddings & Rose (2012) teachers’ concerns focused on ELLs’ academic skills, English language proficiency, and the deficit in background academic preparation that these students may bring to the classroom. Teachers also worried about their own limited knowledge of language acquisition, the time needed to become proficient in a language, and understanding how to set reasonable expectations for ELLs.

Brown and Militello (2016) reported, being able to target the needs of a school staff without collecting data would be rare. This statement appeared to be accurate as demonstrated by the data shared by participants in this study. Participants mentioned such a wide variety of
needs, even with the overarching themes of ELLs and technology, that it would be difficult to pinpoint a focus to deliver quality professional development. So, even with data collected and themes being limited, providing quality professional development to meet teachers’ needs may still prove challenging. According to Téllez and Manthey (2015), even when teachers request topics for professional development, it may not prove effective if teachers do not have the knowledge base to be able to articulate their needs. This also seemed to be supported to an extent by the data gathered as some of the participants weren’t sure what exactly they needed help with other than to say ELLs or to say something about general technology.

One of the frustrations mentioned by participants regarding technology not working or being unavailable was that participants felt their students’ opportunities for increasing achievement were impacted by the lack of working or available technology. According to White and Gillard (2011), this is possible as technology has been shown to increase student achievement. In fact, information has been reported indicating the increase in achievement specifically for ELLs. Technology provides information beyond text and books found in the classroom, enhances opportunities for learning, and raises engagement through more social connections which may lead to increased student achievement (Blattner & Lomicka, 2012; Chen, 2016; Hines & Silverman, 2009; Richards, 2015).

**Additional Related Literature and Study Findings**

Some of the findings from this study extended previous documented studies. One example is the information that has been gathered in other studies regarding graduation rates for ELLs and job potential (Kim, Chang, Singh, & Allen, 2015; Kena et al., 2015; U.S. Department of Education, 2013; Parr & Bonitz, 2015; Sum, Khatiwada, & McLaughlin, 2009). This study provided information on elementary teachers’ concerns for the future of their ELLs. Several of
the participants acknowledged daily expectations for their ELLs go beyond classroom performance as they take on tasks such as caring for siblings, translating paperwork from the school, and in general have more responsibility than other students their age. Participants mentioned how their students are removed from classes to translate information on a regular basis. According to these participants, missing class time for any task is less than ideal considering these are students who are already struggling and not meeting expectations. Seeing this level of concern as early as elementary grades was very revealing. Per findings in this study, we can now see concern for graduation and job potential is not limited to just middle school or high school as students move closer to graduation. In addition, with none of the 17 participants speaking a foreign language, and participants’ remarks that explained situations of students missing class time to be used to translate for personnel, it seems that research by Leacox and Wood Jackson (2014) and Ruiz-De-Velasco, et al. (2000) that claimed there is a limited number of staff members within schools who speak a foreign language is supported.

Based on several participants’ responses, there may be a concern with parents having a limited amount of knowledge regarding American schools which is further compounded by a deficit in understanding English and being able to communicate clearly with school personnel. Research from Echevarria, et al. (2004) mentioned this problem as a concern for ELLs as they struggled to communicate with their children’s teachers regarding grades and daily school life. They also reported parents of ELLs had trouble understanding their own children as they shared information from the school.

Another interesting point found in responses from my study participants regarded student confidence. Téllez and Manthey (2015) referred to gains that ELLs may experience in academic vocabulary, social benefits, and confidence as they see themselves able to meet daily challenges
through the skills taught in a structured ELL program. However, participants in my study noted the rise in their students’ confidence as they were able to master concepts in their general education classroom setting.

One of the factors participants shared that affected their ability to make progress with learning new technology was time constraints. Quite a few participants expressed frustration with the challenge of finding time to learn new technology practices or to learn how to operate a new device. They discussed the challenges in going to a one session training that may only last for a 45 minutes planning period and then being expected to follow through in the classroom with the information. Some participants shared how one on one coaching has worked better for them when the person coaching them is in their building. Positives they shared were that they can go back and ask questions or ask the coach to come observe them teaching to give them tips on their implementation of the technology. Even with this model, there were negative factors including a lack of time for the coaching to take place and the challenge of finding time for continued support. Both the positive and negative factors were consistent with research shared by Hur et al. (2016) and a study conducted by Kopcha (2012). Teachers found professional development more effective when more time could be devoted to a single topic for an extended time (Hur et al., 2016; Kopcha, 2012). Kopcha’s (2012) findings showed teachers had a more positive attitude and willingness to use technology when the professional development took place through one on one mentoring. Hur et al. (2016) explained how changing professional development by listening to the teachers’ concerns such as the amount of time given to a topic and the teachers’ ability to seek further guidance after a session, created greater confidence and self-efficacy.
Another factor mentioned by Hur et al. (2016) was the importance of the administrators’ role as the technology leader in the building. Even if they were unable to demonstrate techniques, teachers were more willing to implement technology if they knew their administrator was supportive of them taking risks and understood that technology has many challenges such as budget and availability. When administrators committed to implementing technology, attended trainings, and modeled their expectations for teachers, the commitment from teachers to implement technology was even greater (Larosiliere et al., 2016; Lynch, Smith, Provost, & Madden, 2016; Hur et al., 2016; Wasko, 2016). In my study, some of the study participants, even within the same school, disagreed on how their administrators’ beliefs and knowledge affected technology practices within their school building. There were a few participants at one of the schools who thought their administrators did nothing to promote or understand the importance of technology. They found this upsetting due to the expectations for the use of technology and how this could impact their Teacher Keys Effectiveness System (TKES) evaluation. They did not like the thought of being evaluated by someone who did not understand what they were evaluating. Other participants said that their administrators encourage the use of technology and they have a working knowledge of it because they attend technology trainings with the teachers. For these participants, seeing their administrators involved with the training seemed to have a positive impact on them. They saw their administrators learning beside them and this dedication was viewed as the administrators being invested in the process of implementing technology.

Just as there was information that correlated and even extended previous research, there was some information gathered through the study which was not aligned to previous research.
Several examples including lowered teacher expectations, a teacher’s ability to understand challenges of ELLs, funding to support technology, and

Cheatham et al. (2014) reported teachers and educators underestimate the abilities of ELLs and set lower expectations for ELLs. Findings in my study did not support teachers underestimating students and setting lower expectations for their ELLs. Even though participants were vocal about their own perceived shortcomings in providing instruction for their ELLs, none of the participants mentioned having lower expectations for their ELLs. Many of them expressed concerns regarding the challenges they recognize their ELLs face in a regular classroom setting, and several of them even acknowledged how important it is to hold them to the same high standards as other students.

Kibler and Valdes (2016) reported research and efforts to educate teachers of ELLs has been the focus of advancing ELLs through curricular methods since the 1990s. While this may be true through endorsement programs, as the participants in this study shared, in their school district there is no training for general education teachers of ELLs. All the participants in my study have been teaching, most within Sharp County for their entire careers, with no instruction or training on how to support ELLs. A variation in my study which was inconsistent within the two schools was the level of support given to regular education teachers by the ESOL endorsed teacher. In one school, there were several teachers who gave very specific examples of how the ESOL teacher provided ideas, support, and materials to assist teachers. In the other school, none of the 10 participants mentioned the ESOL endorsed teacher who serves the ELLs even when asked about collaboration.
While Rance-Roney (2010) noted that native speakers, including teachers, often cannot identify with the struggles that ELLs face, participants in my study seemed very aware of possible struggles and obstacles that their students face daily in the classroom and even in their home environment. As none were ELLs themselves, they do not have first-hand knowledge of the struggle of learning in an immersion environment such as their students do. However, throughout the interview, questionnaire, and focus group sessions, the responses of participants indicated an impressive level of knowledge and understanding of their students that seemed to be derived from time spent talking to their students, getting to know ELL families, and deep reflection. Even with this knowledge base and their proven success with various instructional practices with ELLs, study participants were hesitant to given themselves credit and still questioned their decision making with instructional practices and selecting the proper technology for their ELLs.

The challenge of keeping up with societal technology due to limited school funding was reported in studies by Muilenburg and Berge (2015) and Clasesgens et al. (2013). However, the greater challenge for the participants in my study seemed to be more closely related to professional development and a lack of time as technology changed faster than they could learn, implement, and effectively use it. Quite a few of the participants, including participants who were not far removed from their college years, mentioned the fast-moving changes with technology as being a deterrent for teacher usage. Some participants of my study noted challenges with perfecting any technology practice or device before it was replaced by the school district with a new gadget or program. These findings more closely aligned with the second portion of the Clasesgens et al. (2013) study which mentioned the amount of time that is needed to train staff as a contributing factor for outdated technology practices in classrooms.
Implications

Due to the candid responses of participants, the varied experiences of the participants, and the amount of information shared, a rich data set made the findings for this study relevant and potentially beneficial for two groups.

Teachers and Their English Language Learners

Teachers are the single largest factor in closing the achievement gap for ELLs (Turkan & Buzick, 2016). For the students of Sharp County Schools to be ready for college and careers, instructional needs must be addressed and met. Teachers, and therefore their ELLs, could benefit from the information gathered relating to Theme One: Usage of Technology and Theme Two: Instructional Understandings of ELLs.

Theme One: Usage of Technology

The theme of usage of technology was discovered through this study of participants’ perceptions of the use of technology with ELLs. Two subthemes, instructional use and organizational use, emerged from the responses of the participants. Instructional use included participants’ use of technology in their Daily 5 rounds as a part of their language arts instruction, promoting student engagement, sharing resources such as videos and pictures with students, and providing differentiation for students. Organizational use included ways to maintain an orderly classroom and discipline tracking, submit attendance and grades, and communicate with families.

While software that is designed to target the needs of ELLs may be used by teachers in some school districts, that opportunity does not exist in Sharp County Schools. There is no software used in Sharp County Schools that is designed for ELLs. However, the participants in this study were resourceful and made use of various websites, apps, and programs through
technology such as iPads, Activboards, laptops, and student computers. Some teachers also utilized document cameras, CD players, handheld phones, and other devices to provide opportunities for application and practice of concepts. Some of the programs mentioned by participants such as Achieve 3000 and MobyMax leveled students and provided tasks and lessons based on students’ needs. So, student needs are targeted and differentiation is provided even though the programs may not be designed specifically for ELLs. This information and the participants’ success with various programs could be beneficial to other teachers in the district who may not be using the same programs.

As some participants noted, the use of technology has been something that has increased student engagement in their classrooms. Participants reported the use of technology to increase student interest and involvement in the learning process. One participant even noted that she noticed her ELLs feel empowered to take more risks when using technology. For teachers who may be struggling with seeing the benefits of implementation or weighing the input versus outcome, information shared by the participants of this study could prove useful as participants gave many ideas of how to use technology in effective ways with all students.

Another aspect of technology that was mentioned frequently by participants was the use of technology for organizational purposes. Participants mentioned the increased efficiency of using technology to track discipline, communicate with parents, and record attendance. Knowing these thoughts from colleagues could assist other teachers in making the decision to try programs and apps such as Class DoJo and Remind 101 that were mentioned by study participants.

Class DoJo, a computer-based program for charting behavior, is currently viewed as being one of the most accurate behavior tracking systems and is recognized for providing more
in-depth feedback that other systems because it allows teachers to record positive as well as negative comments, and it allows teachers to communicate with parents through the program (Krach, McCreery, & Rimel, 2017). Remind 101 was used by teachers to push out reminders of events and assignments to parents or students using an app that most users download to their phone (McKnight, O'Malley, Ruzic, Horsley, Franey, & Bassett, 2016). The use of both programs could increase communication with parents and assist teachers in providing data and feedback to parents in a timely manner. In this new technology age, parents of Sharp County Schools no longer need to wait nine weeks for a report card as delivery of information can happen daily. Teachers who may not be currently utilizing these resources may find the participants’ experiences with these programs helpful in deciding to make a change in their own practices for tracking discipline and communicating with parents.

**Theme Two: Instructional Understanding of ELLs**

In this study, the theme of instructional understandings for ELLs was noted. Subthemes within this theme revealed teacher strengths and areas for improvement for the teachers of Sharp County Schools. The subthemes were (a) directions given, (b) vocabulary, and (c) repetition. While these are practices that are recognized as high-quality instructional practices for ELLs, not all of the participants indicated knowledge of these practices and the potential impact they could have on student achievement for ELLs (Britsch, 2009; Hill & Miller, 2013; Richards, 2015).

When teachers can see gains with ELLs at the same rate as their peers who are not ELLs, a solid argument for the need to implement technology strategies that may be utilized with ELLs is created (Richards, 2015; Warschauer & Tate, 2015). A study conducted to examine engagement patterns of elementary students by Hsieh et al. (2015) showed increased engagement for students during gaming. Findings noted raised engagement in boys over girls with variations
in verbal reactions, gestures, and facial expressions. According to Hsieh et al. (2015), previous studies focused on students’ attitudes toward gaming through the use of surveys or questionnaires rather than conducting action research to see physical reactions of students during gaming.

Language development is a key to substantial growth for ELLs (Hill & Miller, 2013; Richards, 2015). Engagement is especially important for ELLs who must contend with learning a new language as well as learning content (DiCerbo et al., 2014; Heitin, 2013; Kim & Garcia, 2014; Reinders & Wattana, 2015; Soto, 2012). Strategies such as development of vocabulary through technology not only promote engagement, but they also help raise achievement for ELLs (Frey et al., 2013; Hill & Miller, 2013; Richards, 2015; Toohey et al., 2015). As vocabulary has the potential to strengthen all academic areas, it is a focus that makes sense for teachers to hone in on during instruction (DiCerbo et al., 2014; Heitin, 2013; Richards, 2015).

**District Leadership**

As district leadership made decisions for the entire district and often directed or assisted building level administrators with decisions concerning a particular school, their influence should be taken into account when looking at the results of this study and possible benefits from the study findings. In doing so, Theme Three: Barriers Faced should be examined for opportunities for improvement which could impact instructional practice and achievement.

**Theme Three: Barriers Faced**

In reflecting upon the themes that emerged from the study, barriers faced by staff stood out as being an issue that district leadership needed to be aware of in order to make possible adjustments or changes. Barriers that were significant in the study were (a) lack of training for working with ELLs, (b) technology not working, and (c) technology availability.
The first sub-theme for barriers faced was a lack of training for teachers working with ELLs. Participants expressed concern for what they considered to be a hinderance to providing quality instruction for their ELLs. This concern is not isolated to Sharp County Schools. According to Téllez and Manthey (2015), many teachers expressed concerns over meeting the needs of their ELL students. Teachers who were not trained to meet the needs of ELLs often struggled to know how to work on ELL target strategies and had a difficult time finding appropriate resources (Cheatham et al., 2014). Knowing that ELLs spent most of their day with teachers who have no training for working with these students is something that district leaders in Sharp County may want to consider in planning future professional development.

Other barriers that were mentioned by teachers were technology not working and a lack of available technology. Participants described frequent interruptions in Internet connectivity, equipment that is outdated, equipment that does not have updates that are required for basic functions such as email, links that do not work due to antiquated programs that are no longer compatible, a shortage in devices, and equipment that is not replaced when it is beyond repair. A teacher’s perceived value of the impact technology could have on learning may possibly regulate how often and how well it is utilized (Hur et al., 2016). In the case of Sharp County Schools when technology may not be as effective as it could be, teachers may choose to leave out certain types of technology or activities based on factors beyond the true possible impact for student learning.

As technology was a focus for Sharp County Schools, as indicated by most participants in the study, knowing the perspective of the classroom teacher who utilized technology daily is important. Without feedback from the teachers, the district may or may not know which devices, programs, and technology professional development sessions were truly meeting the needs of
teachers and students efficiently. Also, knowing the reasons for some teachers not utilizing technology may allow for more specialized support for those teachers (Kenngwe & Hussein, 2014).

When there was a lack of consistency with technology, whether it was due to change or something not working properly, even experienced teachers struggled with knowing how to handle different situations or how to anticipate possible outcomes that may arise from the changes (Cheong et al., 2016; Heitin, 2013). Teachers found it difficult to maintain a level of functionality with technology and may have developed a lack of desire to use technology when it was constantly changing. So, in some cases, the technology may have been in place, but other factors led teachers to other instructional choices (Thomas et al., 2014). Unfortunately, the choice to veer away from technology may have had a powerful impact on the ELL population as they were trying to master concepts that could have been enhanced using technology (Foulger & Jimenez-Silva, 2007; Richards, 2015).

There was a need for ELLs to develop digital literacy knowledge for instructional purposes as well as for establishing themselves as part of the global workforce (Gustad, 2014; Pahomov, 2014; Richards, 2015). Technology may be used to practice skills needed to improve math and reading through a variety of digital means such as websites, videos, games, online stories, and even computer programs aimed to target ELL language needs (Richards, 2015; Toohey et al., 2015).

Another consideration for district leadership, though not a theme in this study, could be professional development. A teacher’s willingness to try technology may have been impacted by the amount of time they spent in technology professional development (Blanchard et al., 2016; Lee et al., 2017). Quite a few of the participants mentioned that professional development is an
issue in their school and in the district. On a positive note, participants mentioned that there are a lot of professional development opportunities offered by the district. Participants praised the quality of the professional development and mentioned specific praise for some of the presenters. Their main concern with professional development was a lack of time to attend training and practice the acquired knowledge. Several participants mentioned having knowledgeable teachers such as Gail, Linda, and their STAs who would gladly assist them. The challenge seemed to be finding the time to have a training or even a one-on-one session due to other school obligation and requirements.

According to Longhurst et al. (2016), professional development for technology purposes may have permeated into other instructional areas. In a 2016 study, a correlation was established between professional development, technology integration, and student achievement. The amount of time spent in technology professional development by teachers correlated to their student achievement scores; teachers who spent more time in technology professional development had students with higher achievement scores (Longhurst et al., 2016).

**Delimitations and Limitations**

Delimitations in this study included only using participants who were teachers of ELL students. All teachers were part of one school district. Even though, two elementary schools of 14 possible elementary schools were utilized as a part of the study, and the findings could apply to all district schools in some form. All the elementary schools in the district were Title I schools. Therefore, all data was collected from Title I schools. With all the schools utilized being Title I schools, the question emerged about possible variations in non-Title I schools and if teachers would have some of the same experiences in a non-Title I school.

Limitations could have included the geographical location of the study. The location was
a district that is an urban area, and the teacher perceptions in that location may or may not represent the perceptions of teachers in a more rural setting. In different settings there may have been other factors that influenced a teacher’s decision to utilize technology for ELL students.

**Recommendations for Future Research**

In this study, my goal was to understand the perceptions of teachers of ELLs and their experiences with the use of technology. Based on the findings from this study, several recommendations for future research may be made. The number of participants for this study was within the suggested limits by Creswell (2013) but dividing the number of participants over more schools would give a better overall picture of the school district. Originally, my intention was to have participants from at least three schools. I was approved by the principals at three schools, but participants were volunteers from only two of the schools. No volunteers were from the third school. Future research could include duplicating the same study with a wider range of participants from across Georgia school systems or even the United States.

Another area for further research was the use of blended learning for ELLs. Blended learning is an approach to learning that includes teacher-led instruction, technology components, and encourages student directed learning. Many of the participants in this study described using blended learning in their classrooms, but most did not seem to understand how to use this concept to best meet the needs of their ELLs. More research in this area may help determine if this uncertainty is an isolated phenomenon with Sharp County teachers or if this is a more widespread issue. My recommendation would be for the study to be conducted to include several districts from various regions in the state.

Finally, during my study I noticed that many participants focused on treating all of their students the same instead of acknowledging the need for differentiated support for ELLs. With
the participants in the study, they worked to find solutions for their struggling students whether they were ELLs or not. Most participants were able to quickly give a variety of strategies they used in their classrooms to support individual student needs, but most were reluctant to say they did anything different for their ELLs. When asked specific questions about ELLs’ needs, some could give examples of what they did for these students. However, most participants were still insistent that they implemented these same strategies with other students as well. In listening to their experiences, I wondered if the teachers felt that giving ELLs specialized support meant that they were not holding them to a high expectation. They verbalized their desire to hold them to a high expectation, but I think this is an area that needs further investigation.

Summary

The purpose of this transcendental phenomenological study was to understand general education teachers’ perceptions regarding their use of technology with students who qualify for English language learner services in an urban Georgia school district. The self-efficacy theory originated by Bandura (1977, 1994) was used to examine the teachers’ experiences of using technology as possible personal preference or belief in oneself or as being influenced by environmental factors such as vicarious experience, social persuasion, or reduction of stress and negative emotion. Findings in this area indicated most participants demonstrated self-efficacy through mastery, which indicated they had a belief in their own abilities.

In conclusion, though there are many factors that may have contributed to enhanced learning for ELLs, there are some underlying characteristics that were inherent in quality educators. According to a 2003 study comparing National Board-Certified teachers and non-National Board Certified teachers (Hattie, 2008), the differences were observed in student work, lesson plans, interviews, and other artifacts. First, quality educators nurtured and challenged
students with concepts requiring deeper thinking. When students struggled, these educators had a plethora of knowledge and desire to help their students succeed. Secondly, they demonstrated respect including respect for differences in intellect, culture, background knowledge, personality, and learning style. Finally, they recognized the potential of their students and they strived to maximize that potential within their classroom and beyond (Hattie, 2008).

How this information connected to ELLs was simple. They had many of the same needs as other students within a classroom with additional language challenges that created unique difficulties that may not be overcome with a teacher who was not truly a quality educator. An educator who knew how to meet their needs in a variety of ways, including innovative means such as embedding technology, was highly preferable to one who lacked the knowledge, training, and a desire to effectively meet student needs (Blattner & Lomicka, 2012; Chen, 2016; Hines & Silverman, 2009; Richards, 2015).

In relation to this study, although the participants did not have formal training for working with ELLs and many of them stressed how their ELLs were treated the same as other students, the quality of the educators helped them to overcome potential shortcomings in other areas. Most of these educators did not see their ELLs as being different from any other student who may need differentiation to reach expectations, and they worked to find solutions when they noticed a particular need. Luckily, the many instructional practices that were mentioned repeatedly by these participants were established research based instructional practices. For the ELLs who still struggled, participants were willing to try strategies recommended by an ESOL endorsed teacher or they carefully tracked data on strategies they had researched and implemented. The final thing that stood out about this group of participants that was most impressive to me as a fellow educator was the high expectations that the participants held their
ELLs to in the classroom. They viewed each student as an individual who had the potential to reach their high expectations, but they never seemed to lose sight of their responsibility as an educator to help them reach those expectations.

A summary of the findings was organized by research questions and their corresponding themes and sub-themes. Further discussion was presented including related literature connected to each theme and sub-theme. The noted themes were usage of technology, instructional understandings for ELLs, and barriers faced. The sub-themes were instructional and organization for the theme of usage of technology. All participants in the study acknowledged using technology on a daily basis, and many participants indicated they used it to maintain contact with parents. The sub-themes for instructional understandings for ELLs were directions given, vocabulary, and repetition. Although participants had no formal training for working with ELLs, they mentioned three key components of quality instruction for ELLs that were used frequently in their classrooms. The sub-themes for barriers faced included a lack of training for working with ELLs, technology not working, and technology not available. Participants had ideas of how to use technology for all students, but challenges with maintaining functioning equipment seemed to overshadow their ideas.

Implications for teachers and their ELLs and the district leadership of Sharp County Schools were given in relation to the various themes and sub-themes. An area that was addressed as a part of the implications that was not a developed theme was professional development. Delimitations in this study included only using participants who were teachers of ELL students. Limitations included the geographic location as the study is set in an urban school district in Georgia. Teachers’ experiences in a rural district or another part of the United States may have varied depending on different needs. Recommendations for future research consisted
of repeating the study with a wider group of participants and even expanding from one school
district to various ones across the state or United States, researching teachers’ perceptions of
blended learning for ELLs, and investigating teachers’ expectations for ELLs.

Finally, while some teachers were frustrated with what they felt was a lack of
connectivity and a shortage of devices, most of these participants did acknowledge that the
connectivity and number of devices available now, compared to 10 years ago when Activboards
were just beginning to be installed in select Sharp County classrooms, has risen dramatically.
Most of the participants who were teaching during those first few years of Sharp County
Schools’ technology initiative could clearly remember the first technology item that they felt
made a huge difference in how they saw themselves as a teacher and changed how they taught
students.
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U.S. Const. amend. XIV. (1868).

U.S. Const. amend. XIX. (1920).


March 5, 2018

Holly Renee Harvil
IRB Approval 3154.030518: Teacher Perceptions of the Use of Technology with English Language Learners

Dear Holly Renee Harvil,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

[Name]
Administrative Chair of Institutional Research
The Graduate School
APPENDIX B

Letter to Request Permission for School District Research

Feb. 20, 2018

Dr. Andrea Johnson (a pseudonym)
Sharp County Schools
2109 Sharp Drive N.E.
Sharpsville, Georgia 30014 (a pseudonym)

Dear Dr. Johnson,

I am presently a doctoral student at Liberty University in Lynchburg, Virginia, and as you are aware, I am a former assistant principal of Sharp County Schools. I am respectfully requesting permission to survey teachers at the following elementary schools in Sharp County concerning perceptions of the use of technology with English Language Learners: Middleton, Hollonville, and South Sharp. A questionnaire, a focus group meeting, and an interview will be used to gather data.

The information reported in the study will be confidential and will not identify the teachers, students, or schools. Confidentiality will be maintained throughout the study.

This study will aid me in completing degree requirements and will provide useful information regarding teacher perceptions on the use of technology with English Language Learners. Such information may be helpful in determining professional development needs for staff as well as deciding future technology purchases for Sharp County Schools.

Thank you,

Holly Harvil

Advisor and Committee Chair: Dr. Araceli Montoya
Committee Member: Dr. Ralph Marino
Committee Member: Dr. Michael Forehand
APPENDIX C

Letter to Grant Permission for School District Research

February 21, 2018

Liberty University
IRB Board
1971 University Blvd. Suite 1837
Lynchburg, VA 24515

To whom it may concern:

Holly Harvil is authorized to conduct a research study in the [redacted] School District. She has permission to collect data from teachers in order to understand the participants’ perceptions of the use of technology with English Language Learners and the factors that encourage or prevent the use of technology.

The documents and data collected from teachers during this study will be identified only by an assigned coded number to protect the identity of the participating individuals. At no time will teachers’ names or schools be associated with the results of the research. At the end of the research, results obtained from the analysis of data will be published without any identifying information of the participating teachers or schools. Data collected for the study will be stored at Liberty University after the study ends. The identity of the school as well as educational district will not be published in relation with the research.

Confidentiality requirements of the [redacted] system and the university’s Institutional Review Board must be followed.

If you have any questions, please contact me at [redacted].

Sincerely,

[redacted]

Director of Testing, Research and Evaluation
APPENDIX D

Permission Request for School District Principal

March 5, 2018

[Name]
Principal, [School Name]
Newton County Schools
45 Ram Drive
Covington, Georgia 30014

Dear [Name]:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is Teacher Perceptions of the Use of Technology with English Language Learners. The purpose of my research is to understand the participants’ perceptions regarding the use of technology with English Language Learners and the factors that may encourage or prevent the use of technology.

I am writing to request your permission to conduct my research at [School Name]. If possible, I would like to request a 10 minute time to meet with your staff to introduce myself and explain my study. Participants will be asked to be interviewed, participate in a focus group, and answer a questionnaire. The data will be analyzed and the findings will be presented in my dissertation. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, please provide a signed statement on official letterhead indicating your approval or respond by email to [Email Address].

Sincerely,

Holly Harvil
Student of Liberty University
APPENDIX E

Permission Granted by School Principal

Miranda Jones via newtoncounty.onmicrosoft.com
Mar 7 (11 days ago)
to me

Holly,
I will certainly approve your request to conduct your research at [blank]. I will have my permission letter ready this afternoon. It will be scanned to you. Do you have this capability?

Terran Newman via newtoncounty.onmicrosoft.com
Mar 6 (12 days ago)
to me

Hey There!
Of course you can come! I must have missed the earlier email. I am so sorry. What day are you thinking?

Sent from my iPhone

Clydia Newell
Principal
Porterdale Elementary School
45 Ram Dr.
Covington, Ga 30014
770-784-2928

Mar 6 (12 days ago)
to me

Hey!!
This is fine! I'd love to chat sometime too!
We could do Thursday afternoon if that is ok with you.
APPENDIX F

Script for Recruitment for School Meetings

Recruitment of participants will take place at faculty meetings at one of three elementary schools in the Sharp County School System (a pseudonym).

Script for Meeting Staff of ___________________ Elementary School, Newton County Schools

Thank you, Principal ______________ for allowing me to meet with your staff today. I am Holly Harvil, and it is pleasure to be here with you today.

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The purpose of my research is to investigate teacher perceptions of the use of technology with English Language Learners (ELLs). The information gathered will attempt to answer the following questions: How do teachers describe their use of technology? What are the participants’ understandings about instructional technology in relation to ELL students? How do teachers of ELL students describe their confidence in integrating instructional technology? I am here to invite you to participate in my study.

If you are currently or have previously taught English Language Learners as an elementary general education teacher in the ___________________ School System, and do not hold an English Speakers of Other Languages endorsement, and are willing to participate, you will be asked to participate in an interview, complete a questionnaire, participate in a one-time focus group, participate in member checks. It should take approximately two hours for you to complete the procedures listed. Your name and/or other identifying information will be requested as part of your participation, but the information will remain confidential.

To participate, you will be asked to sign consent. A consent document will be distributed at the conclusion of this meeting. The consent document contains additional information about my research, please sign the consent document and return it to me now or at the time of the interview or you may scan and email it to me at the email provided in the consent form.

Does anyone have any questions regarding the purpose of the research or the procedures of the research?

Thank you for your time.
APPENDIX G

Letter of Informed Consent for Teachers

The Liberty University Institutional Review Board has approved this document for use from 3/5/2018 to 3/4/2019
Protocol # 3154.030518

CONSENT FORM

Teacher Perceptions of the use of Technology with English Language Learners Holly Harvil
Liberty University
School of Education

You are invited to be in a research study of a phenomenological study of teachers’ perceptions of the use of technology with English Language Learners. You were selected as a possible participant because you are a general education teacher of English Language Learners, you are an elementary teacher in Newton County Schools, and you do not have an English Speakers of Other Languages endorsement. Please read this form and ask any questions you may have before agreeing to be in the study.

Holly Harvil, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to investigate teachers’ perceptions of the use of technology with English Language Learners in an urban Georgia school district.

Procedures: If you agree to be in this study, I would ask you to do the following things:
1. Participate in an audio recorded interview session lasting approximately 30 minutes.
2. Participate in a 20 minute questionnaire.
3. Participate in a 60 minute, video recorded focus group session with other general education teachers of English Language Learners.
4. Participate in a 15 minute member check.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life. However, I am a mandated reporter, and I am required to report any information regarding child abuse, child neglect, elder abuse, or intent to harm self or others.
Benefits: Participants should not expect to receive a direct benefit from taking part in this study.
Benefits to society include the potential for improvement in the use of technology with English Language Learners and possible improvements in the area of professional development regarding technology.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records. I may share the data I collect from you for use in future research studies or with other researchers; if I share the data that I collect about you, I will remove any information that could identify you, if applicable, before I share the data.

- Participants will be assigned a pseudonym. I will conduct the interviews in a location where others will not easily overhear the conversation.
- Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews will be recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.
- I cannot assure participants that other members of the focus group will not share what was discussed with persons outside of the group.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or Newton County Schools. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

How to Withdraw from the Study: If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.
Contacts and Questions: The researcher conducting this study is Holly Harvil. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [redacted]. You may also contact the researcher’s faculty advisor, Dr. [redacted].

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

**Please notify the researcher if you would like a copy of this information for your records.**

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to audio-record/video-record me as part of my participation in this study.

______________________________________________________________________________
Signature of Participant                        Date

______________________________________________________________________________
Signature of Investigator                        Date
## APPENDIX H

### Screener for Potential Participants

**H1**

_Screener for Potential Participants_

Name of Potential Participant  

School  
Preferred Phone Number  

Preferred Email  

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes</th>
<th>No</th>
<th>Further Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you currently a Kindergarten – 5th grade teacher employed with the School System?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Do you currently or have you ever taught English Language Learners in a general education setting?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Are you ESOL certified?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX I

Procedures, Instrument, and Alignment for Interview of Participants

Table II

*Individual Interview Procedures*

1. Welcome and introductions – The participant will be welcomed and thanked for attending. The researcher will introduce herself as the researcher and provide some basic background information about herself including her name, college, and dissertation topic.

2. College Information – The researcher will share the contact information for Liberty University for participants to contact the IRB if they have any concerns with the procedures of the interview.

3. Assurance of confidentiality – The researcher will remind each participant that all information is to be given voluntarily and with the assurance of confidentiality. Participants should in no way feel pressured, coerced, or obligated to participate.

4. Explanation of Procedures for Individual Interview – Each participant will be informed that the session will be recorded, transcribed, and utilized as part of the fulfillment for the researcher’s data analysis portion of her dissertation. Participants will be informed of the current time and the time expectation for the session. A timer will be set for each question to ensure appropriate time is allowed for each question and that all questions are answered. Each participant will be directed to only answer questions that he or she feels comfortable answering, and the researcher will begin with reading the first question.

5. Appreciation and dismissal – Each participant will be asked if he or she would like to elaborate or add any information at the conclusion of the interview. Participants will each be given a copy of Table 2: Questionnaire to take with them. Participants will be
asked to return this information at the Focus Group session. Each participant will be thanked for his or her participation and dismissed from the interview.
Table I2

*Standardized Open-Ended Interview Questions*

<table>
<thead>
<tr>
<th>Teacher Background Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) What is your native language?</td>
</tr>
<tr>
<td>(2) What is your country of origin? (If not United States, when did you move to the United States?)</td>
</tr>
<tr>
<td>(3) Please describe your educational background.</td>
</tr>
<tr>
<td>(4) Please describe your level of confidence in your ability to instruct students through technology integration?</td>
</tr>
<tr>
<td>(5) How does technology impact your daily classroom routine?</td>
</tr>
<tr>
<td>(6) What are contributing factors in your level of confidence with technology integration?</td>
</tr>
<tr>
<td>(7) Please describe your comfort level with integrating technology with your ELL students?</td>
</tr>
<tr>
<td>(8) What is your comfort level with writing lesson plans integrating technology?</td>
</tr>
<tr>
<td>(9) How often do you integrate technology with your ELLs?</td>
</tr>
<tr>
<td>(10) What research are you aware of regarding the use of technology with ELL students?</td>
</tr>
<tr>
<td>(11) Please describe your experience with using technology in your classroom with ELLs.</td>
</tr>
<tr>
<td>(12) What things, if any, do you specifically do to target ELLs with technology?</td>
</tr>
<tr>
<td>(13) Please describe any training in college or since on ELL instructional strategies specific to the use of technology with ELLs.</td>
</tr>
</tbody>
</table>
Table I3

*Research Question Alignment of Questions for Interview*

<table>
<thead>
<tr>
<th>Interview Questions/Research Questions</th>
<th>Building Background of Participant</th>
<th>1. How do teachers describe their use of technology in a classroom setting?</th>
<th>2. What are the participants’ understandings of instructional technology in relation to ELL students?</th>
<th>3. How do teachers of ELL students describe their confidence in integrating instructional technology?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>x</td>
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<td>4</td>
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<td>12</td>
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</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Three questions</td>
<td>Two questions</td>
<td>Four questions</td>
<td>Five questions</td>
</tr>
</tbody>
</table>
APPENDIX J

Procedures, Instrument, and Alignment for Questionnaire for Participants

Table J1

*Questionnaire Procedures*

<table>
<thead>
<tr>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Participants will be given a copy of the questionnaire as they leave the individual interview.</td>
</tr>
<tr>
<td>2. College Information – I will share the contact information for Liberty University for participants to contact the IRB if they have any concerns with the questionnaire.</td>
</tr>
<tr>
<td>3. Assurance of confidentiality – The researcher will remind participants that all information is to be given voluntarily and with the assurance of confidentiality. Participants should in no way feel pressured, coerced, or obligated to participate.</td>
</tr>
<tr>
<td>4. Participants will be instructed to answer all questions on the questionnaire that he or she feels can be answered. Participants will be instructed to answer in a manner that her or she feels comfortable with such as complete sentences or bulleted lists. The researcher will read the questions with the participants and give the participants opportunities to ask for clarification. The researcher will provide each participant with her phone number and email and encourage the participants to contact her if further clarification is needed.</td>
</tr>
<tr>
<td>5. Appreciation and dismissal – Participants will be thanked for their participation and dismissed.</td>
</tr>
</tbody>
</table>
Table J2

**Questionnaire**

<table>
<thead>
<tr>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) How many years have you been an educator?</td>
</tr>
<tr>
<td>(2) What grades have you taught?</td>
</tr>
<tr>
<td>(3) What degrees or certifications do you hold specific to technology?</td>
</tr>
<tr>
<td>How many years have you worked with English Language Learners?</td>
</tr>
<tr>
<td>(4) What benefits, if any, do you feel students gain when technology is used in the classroom?</td>
</tr>
<tr>
<td>(5) What technology initiatives used by your school district have improved the achievement of ELLs in your classroom?</td>
</tr>
<tr>
<td>(6) How often do you collaborate with your co-workers on technology integration in lessons?</td>
</tr>
<tr>
<td>(7) How are your personal instruction and teaching practices enhanced by technology?</td>
</tr>
<tr>
<td>(8) In your experience, what are specific needs of ELLs when implementing technology?</td>
</tr>
<tr>
<td>(9) How does your administrators’ outlook and value of technology impact your confidence and desire to integrate technology?</td>
</tr>
<tr>
<td>(10) What practices or supports, if any, have your school or district administrators put in place to help you feel confident in integrating technology?</td>
</tr>
</tbody>
</table>
Table J3

Research Question Alignment of Questions for Short-Answer Questionnaire

<table>
<thead>
<tr>
<th>Questionnaire Questions/Research Questions</th>
<th>Building Background of Participant</th>
<th>1. How do teachers describe their use of technology in a classroom setting?</th>
<th>2. What are the participants’ understandings of instructional technology in relation to ELL students?</th>
<th>3. How do teachers of ELL students describe their confidence in integrating instructional technology?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>X</td>
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<td></td>
</tr>
<tr>
<td>4</td>
<td>X</td>
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<tr>
<td>11</td>
<td></td>
<td></td>
<td>X</td>
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</tr>
<tr>
<td>Total</td>
<td>Four questions</td>
<td>Two questions</td>
<td>Three questions</td>
<td>Three questions</td>
</tr>
</tbody>
</table>


### APPENDIX K

**Procedures, Instrument, and Alignment for Focus Groups for Participants**

Table K1

*Focus Group Procedures*

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome and introductions – Participants will be welcomed and thanked for attending. The researcher will introduce herself and provide some basic background information about herself including her name, college, and dissertation topic.</td>
<td></td>
</tr>
<tr>
<td>(1) College Information – The researcher will share the contact information for Liberty University for participants to contact the IRB if they have any concerns with the procedures of the focus group.</td>
<td></td>
</tr>
<tr>
<td>(2) Assurance of confidentiality – The researcher will remind participants that all information is to be given voluntarily and with the assurance of confidentiality. Participants should in no way feel pressured, coerced, or obligated to participate.</td>
<td></td>
</tr>
<tr>
<td>(3) Explanation of Procedures for Focus Group Discussion – Participants will be informed that the session will be recorded, transcribed, and utilized as part of the researcher’s fulfillment for her data analysis portion of her dissertation. Participants will be informed of the current time and the time expectation for the session. A timer will be set for each question to ensure appropriate time is allowed for each question and that all questions are answered. Each participant will be directed to only answer questions that he or she feels comfortable answering, and the researcher will begin with reading the first question. Participants will be encouraged to join into the discussion as they find appropriate. All questions will be read with an opportunity of a moment of wait time if no one answers.</td>
<td></td>
</tr>
<tr>
<td>(4) Appreciation and dismissal – Participants will be thanked for their participation and dismissed from the focus group session.</td>
<td></td>
</tr>
</tbody>
</table>
Table K2

*Focus Group Questions: Groups 1 and 2*

<table>
<thead>
<tr>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background and Basic Questions</strong></td>
</tr>
<tr>
<td>(1) How many years have you been teaching?</td>
</tr>
<tr>
<td>(2) What is your area of certification?</td>
</tr>
<tr>
<td>(3) How many years have you worked with ELLs?</td>
</tr>
<tr>
<td><strong>Group Discussion Questions</strong></td>
</tr>
<tr>
<td>(4) What can deter a teacher from using technology in his or her classroom?</td>
</tr>
<tr>
<td>(5) How much professional learning time is devoted to technology within your building?</td>
</tr>
<tr>
<td>(6) What things or supports are provided to you in your job that assist you with implementing technology?</td>
</tr>
<tr>
<td>(7) How can technology be used to promote student engagement?</td>
</tr>
<tr>
<td>(8) What kind of support does technology provide that a teacher may find hard to provide otherwise?</td>
</tr>
<tr>
<td>(9) How can technology be used to differentiate instruction for ELLs?</td>
</tr>
<tr>
<td>(10) How does technology integration support higher order thinking for ELLs?</td>
</tr>
<tr>
<td>(11) Describe your level of confidence with choosing the appropriate technology information or support to use with ELLs.</td>
</tr>
<tr>
<td>(12) What suggestions do you have for increasing technology use with ELLs in your school district?</td>
</tr>
</tbody>
</table>
### Table K3

Table: Research Question Alignment of Questions for Focus Group Sessions

<table>
<thead>
<tr>
<th>Interview Questions/Research Questions</th>
<th>Building Background of Participant</th>
<th>1. How do teachers describe their use of technology in a classroom setting?</th>
<th>2. What are the participants’ understandings of instructional technology in relation to ELL students?</th>
<th>3. How do teachers of ELL students describe their confidence in integrating instructional technology?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td></td>
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<td>x</td>
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</tr>
<tr>
<td>Total</td>
<td>Three questions</td>
<td>Five questions</td>
<td>Five questions</td>
<td>Three questions</td>
</tr>
</tbody>
</table>
APPENDIX L

Sample Transcripts of Participants for Interview, Questionnaire, and Focus Group

Table 1

Standardized Open-Ended Interview Questions

Teacher Background

1. What is your native language?
   - English

2. What is your country of origin? (If not United States, when did you move to the USA?)
3. Please describe your educational background. Went all through school.
4. Please describe your level of confidence in your ability to instruct students through technology integration?
5. How does technology impact your daily classroom routine? Any whole class or small group activities?
6. What are contributing factors in your level of confidence with technology integration?
7. Please describe your comfort level with integrating technology with your ELL students?
8. How often do you integrate technology with your ELLs?
9. What research are you aware of regarding the use of technology with ELL students?
10. Please describe your experience with using technology in your classroom with ELLs.
11. What things, if any, do you specifically do to target ELLs with technology?
12. Has training, if any, been required to use technology specific to the use of technology with ELLs.
Table 1
Standardized Open-Ended Interview Questions

Teacher Background

<table>
<thead>
<tr>
<th>Question</th>
<th>Hannah</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is your native language?</td>
<td>English</td>
</tr>
<tr>
<td>2. What is your country of origin? (If not United States, when did you move to the USA)</td>
<td>United States</td>
</tr>
<tr>
<td>3. Please describe your educational background.</td>
<td>Valdosta State, Fort Valley Doctorate in Ed Leadership, African American perspective in predominate movement &amp; student achievement</td>
</tr>
<tr>
<td>4. Please describe your level of confidence in your ability to instruct students through technology integration.</td>
<td>I love it. I am pretty confident. I like to restructure with technology. It gives them visual &amp; give them another step, auditory learning too.</td>
</tr>
<tr>
<td>5. How does technology impact your daily classroom routine? Daily routine, attendance, display activity, reward, 101, NECAP, myon, study, teacher, tech, to check out - paperless - gave up. Training w/ Campbell, class demo, peer models, seeing Ms. I was. It gave me confidence to try it. I did some w/ English &amp; Spanish other. Staff training. Adam Ayala. It's good. I tend to watch on my native student too. My Spanish students? student doesn't require as much.</td>
<td></td>
</tr>
<tr>
<td>6. What are contributing factors in your level of confidence with technology integration? Wonderful if I find a program like brain pop jr. Pebblego.com is another one.</td>
<td></td>
</tr>
<tr>
<td>7. Please describe your comfort level with integrating technology with your ELL. It's good. I tend to watch on my Russian student too. My Spanish students? student doesn't require as much.</td>
<td></td>
</tr>
<tr>
<td>8. What is your comfort level with writing lesson plans integrating technology? Daily - very often.</td>
<td></td>
</tr>
<tr>
<td>9. How often do you integrate technology with your ELLs? None.</td>
<td></td>
</tr>
<tr>
<td>10. What research are you aware of regarding the use of technology with ELL students? None.</td>
<td></td>
</tr>
<tr>
<td>11. Please describe your experience with using technology in your classroom with ELLs. It is good. They seem to get it. I make sure they do their sight words more than other students.</td>
<td></td>
</tr>
<tr>
<td>12. What things, if any, do you specifically do to target ELLs with technology? Nothing specific w/ ELL.</td>
<td></td>
</tr>
<tr>
<td>13. Please describe any training in college or since on ELL instructional strategies specific to the use of technology with ELLs. No training w/ ELL.</td>
<td></td>
</tr>
</tbody>
</table>
Table L1

*Questionnaire: Zara*

**Questions**

1. How many years have you been an educator? 14 years
2. What grades have you taught? 3rd, 4th, and 5th
3. What degrees or certifications do you hold specific to technology? Master’s of Instructional Technology
4. How many years have you worked with English Language Learners? 4 years
5. What benefits, if any, do you feel students gain when technology is used in the classroom? When used with fidelity it can help close gaps, provide practice, and accelerate students.
6. What technology initiatives used by your school district have improved the achievement of ELLs in your classroom? Mobymax math offers lessons that uses short, concise lessons with a variety of visuals.
7. How often do you collaborate with your co-workers on technology integration in lessons? Rarely
8. How are your personal instruction and teaching practices enhanced by technology? It allows a larger variety of differentiation.
9. In your experience, what are specific needs of ELLs when implementing technology? ELL’s students need one-on-one assistance with new technology, until they are confident.
10. How does your administrators’ outlook and value of technology impact your confidence and desire to integrate technology? Unfortunately, my administrator does not seem to be very confident in the use of technology.
11. What practices or supports, if any, have your school or district administrators put in place to help you feel confident in integrating technology? Currently, the county is strongly encouraging the use of Canvas. Unfortunately, most of what I know about Canvas I have taught myself.
### Table 2

**Questionnaire**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) How many years have you been an educator?</td>
<td>2</td>
</tr>
<tr>
<td>(2) What grades have you taught?</td>
<td>1st, 4th</td>
</tr>
<tr>
<td>(3) What degrees or certifications do you hold specific to technology?</td>
<td>None</td>
</tr>
<tr>
<td>(4) How many years have you worked with English Language Learners?</td>
<td>2</td>
</tr>
<tr>
<td>(5) What benefits, if any, do you feel students gain when technology is used in the classroom?</td>
<td>✓</td>
</tr>
<tr>
<td>(6) What technology initiatives used by your school district have improved the achievement of ELLs in your classroom?</td>
<td>Don't Know</td>
</tr>
<tr>
<td>(7) How often do you collaborate with your co-workers on technology integration in lessons?</td>
<td>Use laptops once a week in classroom</td>
</tr>
<tr>
<td>(8) How are your personal instruction and teaching practices enhanced by technology?</td>
<td></td>
</tr>
<tr>
<td>(9) In your experience, what are specific needs of ELLs when implementing technology?</td>
<td>They need pictures to understand Visuals, etc.</td>
</tr>
<tr>
<td>(10) How does your administrators' outlook and value of technology impact your confidence and desire to integrate technology?</td>
<td>They just tell us to use it. I have own desire to integrate.</td>
</tr>
<tr>
<td>(11) What practices or supports, if any, have your school or district administrators put in place to help you feel confident in integrating technology?</td>
<td>Only told that it's for TRCES. Had a few trainings, but those were required by board. I've taught myself how to use a few applications/programs.</td>
</tr>
</tbody>
</table>


Questionnaire

Questions

(1) How many years have you been an educator? 8 years
(2) What grades have you taught? K, 1st, 4th
(3) What degrees or certifications do you hold specific to technology? None
(4) How many years have you worked with English Language Learners? All 8 years
(5) What benefits, if any, do you feel students gain when technology is used in the classroom? I believe it is very beneficial to students to use technology. With technology, it helps with different learning styles, students are able to see things differently.
(6) What technology initiatives used by your school district have improved the achievement of ELLs in your classroom? iPads in classrooms. There are great apps available that are very beneficial to ELLs allowing them to hear and see things.
(7) How often do you collaborate with your co-workers on technology integration in lessons? Often especially with an app website helped with a skill.
(8) How are your personal instruction and teaching practices enhanced by technology? Technology helps in many ways. We use technology all day long. The activity board allows me to model or show students things.
(9) In your experience, what are specific needs of ELLs when implementing technology? To be able to hear pronunciation correctly and head phones to block other sounds so they hear correctly.
(10) How does your administrators’ outlook and value of technology impact your confidence and desire to integrate technology? Technology is a huge push in our county. This sets expectations so I strive to learn how to utilize all the tools available.
(11) What practices or supports, if any, have your school or district administrators put in place to help you feel confident in integrating technology? There are PLCs offered at school level & county level.
The ipads allow me to show/teach a skill and have students to have a different way to practice besides pen/paper or paper made games. The computers also give students another learning style to practice skills.
Questions 1 – 3 were used only to familiarize participants. Information from these questions was collected as data through the individual interviews or questionnaires.

Question 4: What can deter a teacher from using technology in his or her classroom?

Amy: Not knowing how to use a specific type.

Missy: My computer hasn’t been updated in quite some time. Just this morning it took 20 minutes to login, so I have quit using it. It is so outdated.

Hannah: You have a dinosaur.

Casey: And if the internet isn’t working.

Missy: And behavior is a concern. Student behavior is a problem because we have such time constraints. Like we just got a new schedule and if it isn’t done in those 15 minutes we have to move on. Time constraints.

Question 5: How much time is dedicated to professional development within your building?

Hannah: Not a lot

Val: County but not our building

Question 6: What things or supports are provided to you in your job that assist you with implementing technology?

Missy: County classes

Val: We have to get our STA to assist us.

Hannah: Our who?

Val: Our STA. Ms. Goodman (a pseudonym). That’s our STA. That’s her title.

Hannah: Oh, I thought she was the lab tech.

Val: She’ll help in situations.
Amy: And she also tries to get the parent involved. She tries to show them how to do things.

She has sent letters home and she helps with logins if people don’t know them.

Missy: Our afterschool program does that, too.

Question 7: How can technology be used to promote student engagement?

Hannah: It gives some students that extra, you know, some may be visual and they need that extra. You know, I can see it, but maybe when I see it on the computer again, maybe it will stick.

Missy: Also, the audio helps for the kids that need that one on one. It helps to give them…

Amy: I don’t know if they still call it being light oriented, but I remember when I took classes years ago, that they talked about how the kids really do look at it more when it is up and there is light and action.

Casey: They really love the interaction.

Missy: Yes, the interaction.

Amy: And learning games that are interactive… when your pen works.

Question 8: What kind of support does technology provide that a teacher may find hard to provide otherwise?

Missy: Differentiated instruction. It is much easier to find a task that they can do independently that will build on something than to put them in a center and hope that it occupies them until I get to them.

Hannah: If the computer is working.

Missy: That’s right.

Hannah: These are some ancient laptops and computers. If they aren’t working it is hard.

Casey: The visual part because you might be able to describe it, but if I can see it…
Val: It helps in Kindergarten with like just like I can teach you what letter a says all day long, but if you can see it. It is hard to differentiate as much in Kindergarten so it is more just having the visual and the interactive because most of these children sit at home and look at something flashing in front of them. So, if I can show it to you in a flashing way, they are more likely to catch it.

Amy: Also, the music. The letter sound music on Starfall is great. The kids love it and they sing aloud with it at the top of their lungs when their headphones are on, so it does engage them.

Question 9: How can technology be used to differentiate instruction for ELLs?

Missy: One way is the vocabulary words being said correctly or when they are being read to. We use a lot of MyOn. The words highlight as it reads so it helps them to say the word correctly.

Question 10: How does technology integration support higher order thinking for ELLs?

Amy: Well, they can get background so they have more to build on so they can get that foundation that they need to get to that higher order thinking.

Casey: I guess if they are using it for research, I guess they could… I can’t think of what I am trying to say. They could use it for their language. When they present it to us it will be something they can actually understand and have thought through.

Amy: That’s really good.

Hannah: Alright.

Amy: I was thinking with the internet there are so many levels that they can get to…

Missy: That is what I was thinking.

Amy: They can go back to have something maybe more simple that what their classmates have, but it gives them the foundation and they can go on.
Question 11: Describe your level of confidence with choosing the appropriate technology information or support to use with ELLs.

Amy: It wanes.

Missy: Specific to ELLs, I don’t know that my confidence is really high because, other than introducing more vocabulary and focusing more on background knowledge, I don’t know that I’ve ever had any training on differentiating technology for ELLs specifically.

Val: I was going to say that there is an app, I can’t tell you what it is called, but it helps them to read the words and I used it last year with one of my ELLs. He knew all of his letters and letter sounds, but he had no idea what it looked like when you put the letters together. I worked with our ESOL teacher and she showed me this app and it helped him to see the letter, hear the sound, and showed him a picture. I became pretty confident because not only did it help him how to read, we were able to find one for sight words. It didn’t have a picture, but he could see the word and hear the word. Now he is reading where?

Casey: He is in an E level.

Val: So, I became pretty confident. I don’t know about with upper grades, but with helping them to learn to read and bridge that. He knew and could say the letter and letter sound then he would say it in Spanish, which I can’t even tell you what letter a would be, but…

Question 12: What suggestions do you have for increasing technology use with ELLs in your school district?

Hannah: Technology that works.
## APPENDIX M

### Data Collection Templates

<table>
<thead>
<tr>
<th>Interview: Question 4 - Please describe your level of confidence in your ability to instruct students through technology integration?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amy</strong></td>
</tr>
<tr>
<td><strong>Betty</strong></td>
</tr>
<tr>
<td><strong>Casey</strong></td>
</tr>
<tr>
<td><strong>Dani</strong></td>
</tr>
<tr>
<td><strong>Fran</strong></td>
</tr>
<tr>
<td><strong>Gail</strong></td>
</tr>
<tr>
<td><strong>Hannah</strong></td>
</tr>
<tr>
<td><strong>Jill</strong></td>
</tr>
<tr>
<td><strong>Laney</strong></td>
</tr>
<tr>
<td><strong>Liz</strong></td>
</tr>
<tr>
<td><strong>Missy</strong></td>
</tr>
<tr>
<td><strong>Nancy</strong></td>
</tr>
</tbody>
</table>
I end up going back to chart paper or using the technology like a powerpoint and that is not how it is designed to work.

Penny 43

I don’t know how effective I would be without it. I have become so accustomed to having it. I had one of the first activeboards in our building.

Sunny 50

I feel confident. We use a lot of technology. I use tech to pull website and interactive notes, document reader to let students see what I’m doing.

Val

I am pretty confident. Most of my undergrad classes involve tech. Ipad, computer, various websites. Become more confident with activboard since I’ve started teaching. Didn’t have that in undergrad.

Wren

With the exception of the newest program like, Achieve 3000, because we’ve only had one PD on it. Overall confident.

Zara

I feel very confident. My masters is in tech integration. When it is working...

Number of Occurrences for Interview Question 4:

<table>
<thead>
<tr>
<th>Category</th>
<th>Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confident or good confidence level</td>
<td>12</td>
</tr>
<tr>
<td>Time Constraints</td>
<td>7</td>
</tr>
<tr>
<td>Technology Not Working</td>
<td>7</td>
</tr>
<tr>
<td>Competent or medium confidence level</td>
<td>2</td>
</tr>
<tr>
<td>Not Confident</td>
<td>2</td>
</tr>
<tr>
<td>Technology background for teacher</td>
<td>2</td>
</tr>
<tr>
<td>Technology Limited Resources</td>
<td>1</td>
</tr>
<tr>
<td>Question effectiveness of teaching without technology</td>
<td>1</td>
</tr>
</tbody>
</table>
Interview: Question 12

<table>
<thead>
<tr>
<th>Name</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amy</td>
<td>Streamlining daily instruction to fit the student. Activboard, student computers, some websites such as starfall and illuminations for NCTM, ipads for sight words. IExcel test practice will be something I am planning to use when we get closer to testing for Iowa. It will show him the same set up as it will be on the actual test. He will need that more than other students.</td>
</tr>
<tr>
<td>Betty</td>
<td>Comprehension is focused in on their level. They are actually pretty consistent with other students this year.</td>
</tr>
<tr>
<td>Casey</td>
<td>Printing paperwork in Spanish for parents. They get more one on one instruction to know how to use the technology and step by step modeling by teacher to feel comfortable with the game or activity. Daily – Using in small groups and he is assigned different activities such as listening to read on tape player to build fluency and for him specifically to hear the language and see the picture.</td>
</tr>
<tr>
<td>Dani</td>
<td>We have just started using Achieve 3000 which is a reading and language program. There is a preassessment which gives them a lexile. It then gives them an article and questions on their level. There is also a vocabulary component. The vocabulary is especially critical for ELLs.</td>
</tr>
<tr>
<td>Fran</td>
<td>When it works, visuals to strengthen voc.</td>
</tr>
<tr>
<td>Gail</td>
<td>Voc. Development. On their pathway, they always get two rounds to go in and one always has a technology focus.</td>
</tr>
<tr>
<td>Hannah</td>
<td>Nothing</td>
</tr>
<tr>
<td>Jill</td>
<td>W all kindergarten, onset and rime, letter recognition and letter sounds, sight words. ELLs may need more stories that are read to them.</td>
</tr>
<tr>
<td>Laney</td>
<td>Nothing now. As a regular classroom teacher, I focused on technology to focus on vocabulary. Building background</td>
</tr>
<tr>
<td>Liz</td>
<td>Vocabulary research and read alouds</td>
</tr>
<tr>
<td>Missy</td>
<td>I do remember doing vocabulary with pics in powerpoints. These are included in flipcharts with NLRI. These are used. A lot of flip charts and online activities highlight words and read aloud to students. I use these with ELLs, but I have also used them with lower students as well.</td>
</tr>
<tr>
<td>Nancy</td>
<td>The biggest push for ELLs has been vocabulary. I focus on sites that provide strong vocabulary because that is where they lack when they are learning a new language. Starfall and Moby Max are sites that I have used.</td>
</tr>
<tr>
<td>Penny</td>
<td>Model initially and then they pick up equally when compared with other students.</td>
</tr>
<tr>
<td>Sunny</td>
<td>Nothing specific</td>
</tr>
</tbody>
</table>
| Val   | I check to see if the ipad is Pronouncing things accurately. Sometimes the apps have accents that are not really how it should be pronounced. Some apps are not US speaking English. If I didn’t say things correctly (like in a
country accent) or if the ipad didn’t say it correctly it messed him up for sounding things out. It required back tracking through letter sounds.

<table>
<thead>
<tr>
<th>Wren</th>
<th>I am doing a program called VIPKID. A lot of the things that I do with my Chinese speaking students are things that I wish that I had time to properly implement with my regular classroom such as visuals, focusing on shorter teaching segments, Total physical response....</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zara</td>
<td>Why are teachers not trained properly to teach ELLs? If we were trained in proper techniques, our students could learn better.</td>
</tr>
</tbody>
</table>

Number of Occurrences for Interview Question 12:

<table>
<thead>
<tr>
<th>Ways to provide instructional support</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td>8</td>
</tr>
<tr>
<td>Seeing ELLs on same level as other students</td>
<td>4</td>
</tr>
<tr>
<td>Does nothing different to target needs of ELLs</td>
<td>3</td>
</tr>
<tr>
<td>Programs, apps, websites, and assessments</td>
<td>3</td>
</tr>
<tr>
<td>Visual</td>
<td>2</td>
</tr>
<tr>
<td>Technology not working</td>
<td>1</td>
</tr>
<tr>
<td>Lack of training for instruction of ELLs</td>
<td>1</td>
</tr>
</tbody>
</table>
In your experience, what are specific needs of ELLs when implementing technology?

<table>
<thead>
<tr>
<th>Name</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amy</td>
<td>Using technology in whole group instruction, ELL students need enough thinking and processing time to make their decisions about answers – or even questions. Something said or seen once will probably fly by most ELLs. Information needs to be not just repeated, but presented in a variety of ways. Being certain to teach (and perhaps pre-teach) necessary vocabulary is very important. Using body movement, music, and action, as well as employing the five senses helps the ELL too. Making instruction enjoyable and varied leads to more progress. That being said, all of those things are just good teaching strategies for ALL students. If you don’t put them to use for all students, there won’t be optimal learning.</td>
</tr>
<tr>
<td>Betty</td>
<td></td>
</tr>
<tr>
<td>Casey</td>
<td>ELL students need explicit directions on what they need to do. They need to be able to see it and touch it. They will need patience because they may not understand what the technology is asking them to do. ELL students will definitely need visuals to help clarify any misconceptions.</td>
</tr>
<tr>
<td>Dani</td>
<td>Building background knowledge of how to use it, and making sure they have the vocabulary understanding of the program you are working with.</td>
</tr>
<tr>
<td>Fran</td>
<td>They need pics to understand voc.</td>
</tr>
<tr>
<td>Gail</td>
<td>Clear direction and guidance</td>
</tr>
<tr>
<td>Hannah</td>
<td></td>
</tr>
<tr>
<td>Jill</td>
<td>Repetition to gain understanding of task</td>
</tr>
<tr>
<td>Laney</td>
<td>Building background knowledge with new vocabulary</td>
</tr>
<tr>
<td>Liz</td>
<td>Repeated exposure</td>
</tr>
<tr>
<td>Missy</td>
<td></td>
</tr>
<tr>
<td>Nancy</td>
<td>At this level same as other students.</td>
</tr>
<tr>
<td>Penny</td>
<td>I have not experienced any specific needs of ELL students when using technology. They seem to be able to use technology as well as anyone else.</td>
</tr>
<tr>
<td>Sunny</td>
<td>Creating an environment where students understand the tasks they are required to complete and making sure technology is user friendly.</td>
</tr>
<tr>
<td>Val</td>
<td>To be able to hear pronunciation correctly and headphones to block other sounds so they hear correctly.</td>
</tr>
<tr>
<td>Wren</td>
<td>Pics help, their ability to use it on their own – some need more assistance</td>
</tr>
<tr>
<td>Zara</td>
<td>ELL’s students need one-on-one assistance with new technology, until they are confident.</td>
</tr>
</tbody>
</table>
Number of Occurrences with Question 9:

<table>
<thead>
<tr>
<th>Assistance and/or clear direction and guidance</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td>4</td>
</tr>
<tr>
<td>Repetition</td>
<td>4</td>
</tr>
<tr>
<td>Pictures and visuals</td>
<td>4</td>
</tr>
<tr>
<td>Unsure</td>
<td>3</td>
</tr>
<tr>
<td>They are the same as other students</td>
<td>2</td>
</tr>
<tr>
<td>Proper environment</td>
<td>2</td>
</tr>
<tr>
<td>Time/Patience to process</td>
<td>2</td>
</tr>
<tr>
<td>User friendly technology</td>
<td>1</td>
</tr>
<tr>
<td>Build background knowledge</td>
<td>1</td>
</tr>
</tbody>
</table>