Fall 11-2019

A Mixed-Methods Study of Applying Andragogical Practices to an Online TESOL Teacher Training Course at a Midwestern University

Daisy Anne Mary Skelly
Lindenwood University

A Mixed-Methods Study of Applying Andragogical Practices to an Online TESOL

Teacher Training Course at a Midwestern University

By

Daisy Anne Mary Skelly

A Dissertation submitted to the Education Faculty of Lindenwood University

In partial fulfillment of the requirements for the
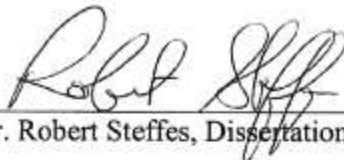
Degree of

Doctor of Education

School of Education

A Mixed-Methods Study of Applying Andragogical Practices to an Online TESOL

Teacher Training Course at a Midwestern University

by

Daisy Anne Mary Skelly
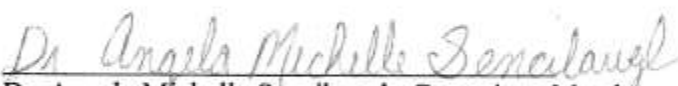
This dissertation has been approved in partial fulfillment of the requirements for the

degree of

Doctor of Education

at Lindenwood University by the School of Education

_____   _____

Dr. Robert Steffes, Dissertation Chair   11-1-19
                                                                                          Date

Dr. Angela Michelle Sencibaugh, Committee Member   11-1-19
                                                                                          Date

Dr. David Buck, Committee Member   11-1-19
                                                                                          Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

Full Legal Name: Daisy Anne Mary Skelly

Signature: *Daisy Anne Mary Skelly*   Date: 11-01-2019

Abstract

Preservice teachers needed to be prepared to teach culturally and linguistically diverse learners, because English learners continued to enroll in new geographic areas. In response to the reauthorization of the federal Elementary and Secondary Education Act, requirements for teaching culturally and linguistically diverse students were added to teacher certification programs at the state level. Universities offering teacher certification programs addressed new program requirements in different ways, including adding competencies to existing courses or creating new courses. The purpose of this mixed-methods study was to investigate the knowledge, pedagogical skill, and self-efficacy levels of preservice teachers and their perceptions of English learners while enrolled in an online TESOL (Teaching English to Speakers of Other Languages) teacher training course using an application of the principles of andragogy in a Midwestern private university. Since this TESOL methods course was a new addition to required curriculum, preservice teachers were surveyed before and immediately following the course to measure their knowledge, pedagogical skill, and self-efficacy levels for teaching English learners and their perceptions of English learners. As an adjunct professor of this TESOL methods course and a full-time public school teacher of English learners, the researcher was aware of the necessity of this certification requirement. Future teachers will have English learners in their classrooms, and they needed to be prepared to teach them. The research results were used to guide curriculum development and instruction at a Midwestern private university. This study added to the body of research regarding the application of the six principles of andragogy to an online TESOL teacher training course, specifically investigating three principles: (a) self-concept of the learner and the

learner's ability to be self-directed; (b) prior experience of the learner; and (c) readiness to learn. Flexibility and growth as an educator were requirements in the modern field of education. Teachers needed to adapt and adjust in response to changes in policy and procedural changes, essential skills learned and developed during teacher training and on the job. Using a course design with an application of andragogical principles facilitated growth in self-directedness and eased the transition from college student to classroom teacher.

Table of Contents

viii

List of Figures

Chapter One: Introduction

Introduction

"The only thing constant is change" ("Who said," 2019, p. 1). This quote, attributed to ancient philosopher Heraclitus of Ephesus, described the public education system in the United States. Cyclical patterns emerged when changes in public education policies and procedures were examined. Kolb's experiential learning cycle developed in 1984, consisted of four main stages: abstract conceptualization, active experimentation, concrete experience, and reflective observation (Kolb & Kolb, 2009, p. 68). Similar to the experiential learning cycle, policies and procedures that affected public schools were written, implemented, experienced, and reflected upon for decades. Lasting changes tended to be the result of a landmark court case, political ideologies, or authorization of federal or state laws, causing local school districts to comply. While many of these changes took years to finally implement at the local level, results of standardized tests often drove lawmakers to reexamine educational laws and begin the cyclical process again. The same process occurred with new strategies, curriculums, technologies, and ideologies: each was conceptually conceived, implemented, and experienced by teachers and learners, then reflected upon and examined. If data demonstrated that positive changes occurred, the new idea continued to be used, but if positive changes did not occur, the new strategy, curriculum, technology, or ideology was replaced with another, and the cycle began again. Teachers needed to adapt and adjust in response to changes in policy and procedural changes, which were essential skills learned and developed during teacher training and on the job.

Student population as a driving factor in policy changes regarding English learners was one example of a cyclical change. The reauthorization of the Elementary and Secondary Education Act in 2015 caused states to reexamine their policies and procedures concerning how this subgroup of students was educated and assessed; thus, changes to teacher certification programs had been implemented to include more requirements to prepare teachers to work with this population. This study examined how one Midwestern university implemented new course requirements in order to prepare preservice teachers to work with English learners. The three-credit-hour teacher training course in TESOL (Teachers of English to Speakers of Other Languages) was designed on an online platform. Preservice teachers were guided through the course with an andragogical approach, which was one that focused on the learning needs of the adult learners, as they prepared to transition from the role of student to the role of teacher.

Purpose of Study

The purpose of this mixed-methods study was to investigate the knowledge, pedagogical skill, and self-efficacy levels of preservice teachers and their perceptions of English learners while enrolled in an online TESOL (Teachers of English to Speakers of Other Languages) teacher training course using an application of the principles of andragogy in a Midwestern private university. Since this TESOL methods course was a new addition to required curriculum, preservice teachers were surveyed before, during, and following the course to measure their knowledge, pedagogical skill, and self-efficacy levels teaching English learners; their perceptions of English learners were also gathered during the course. Students completed the following: (a) pre- and post-surveys; (b) pre-, mid-, and post-questionnaires; (c) reflective journaling; (d) focus groups; and (e)

academic assignments to measure growth. The research results were used to guide curriculum development and instruction at a private Midwestern university. This study added to the body of research regarding the application of the six principles of andragogy to an online TESOL teacher training course, specifically investigating three of these principles: (a) self-concept of the learner and the learner's ability to be self-directed; (b) prior experience of the learner; and (c) readiness to learn. Further, this study added to the body of research about the knowledge, pedagogical skill, and self-efficacy levels of preservice teachers as the levels related to English learners, in addition to their perceptions of English learners.

Rationale of the Study

Students in the United States who spoke a language other than English at home were referred to as English language learners (ELL) or English learners (EL). According to the National Center for Educational Statistics (NCES), this population of students had been the fastest growing subgroup of students (Echeverria, Vogt, & Short, 2017, p. 3) since 2000; therefore, more states, cities, and even rural areas experienced growth in the number of English learners attending school. This was significant because English learners brought a unique set of characteristics and needs to schools, including English proficiency levels and differences in "educational and cultural experiences" (Echeverria et al., 2017, p. 4). There had been an increase in the number of English learners in schools across the nation, yet the number of teachers with experience or training to teach English learners had not increased at the same rate (Li & Peters, 2016). Gándara, Maxwell-Jolly, and Driscoll (2005) wrote that "everyone agrees that ELs must learn

English, learn it well, and meet rigorous standards . . . teachers of English language learners need special skills and training to effectively accomplish this task" (p. 3).

While all teachers needed to be trained to work with English learners, most mainstream classroom teachers were not adequately prepared to teach English learners (Molle, 2013). As more and more English learners continued to enroll in new geographic areas, school districts were often unprepared to teach these students, because academic programs, appropriate resources, and curricula had not been developed. Even more important, "many teachers are not trained to meet the needs of second language learners" (Echeverría et al., 2017, p. 4).

In accordance with federal law, the responsibility for teaching English learners belonged to all teachers. In 2015, the Elementary and Secondary Education Act (ESEA) of 1965 was reauthorized as Every Student Succeeds Act (ESSA), which replaced the 2002 version, No Child Left Behind Act (NCLB). The federal law required that ELs "make progress in learning English, attain English language proficiency (ELP); and learn academic content" (Staehr Fenner, 2016, par. 4). The state of Missouri changed its teacher certification requirements in 2016 by including additional competencies in teaching linguistically diverse learners (such as ELs) to comply with the changes in ESSA. These requirements caused universities to examine ways to include additional competencies into the teacher certification programs. Universities offering teacher certification programs addressed these changes in different ways, including adding competencies to existing courses or creating new courses to meet these requirements (Code of State Regulations, 2018). In particular, at the elementary education level, teacher candidates at one Missouri university had to complete a methods course for

teaching English learners to fulfill this requirement, in addition to a course in cultural diversity (Code of State Regulations, 2018).

Further, funding for programs for English learners was limited. This meant that districts with smaller numbers of ELs did not receive Title III federal funds and used other district monies to provide the required and necessary services. Unlike special education, service minutes for qualified Limited English Proficient (LEP) students were recommended but not mandated in Missouri (Vandeven, 2015, pp. 67-68). Therefore, the primary responsibility for teaching English learners belonged to mainstream classroom teachers, with support from an English language specialist. The number of specialists available in each district was determined by the school district, and some districts with very few ELs may not have a specialist at all (Vandeven, 2015, p. 22). It was imperative, then, that all teachers were trained to work with this special population of students. Professional development (and teacher training courses) could provide teachers with "pedagogical and cultural skills and knowledge including the ability to communicate effectively with students and to engage their families" (Gándara, Maxwell-Jolly, & Driscoll, 2005, p. 3). Teachers who are knowledgeable, skilled, and confident teaching English learners had the opportunity to help this special population of students reduce, and perhaps eliminate, the achievement gap with non-ELs.

While ample research was available about teacher training courses, very little research regarding teacher training courses specifically for preservice teachers of English learners (ELs) existed. This study was designed to help fill that gap. A teacher training course taken during the final semesters prior to student teaching was one way to address the lack of knowledge and skills regarding English learners. A graduate level course at a

private Midwestern University was adapted for undergraduate students to meet this teacher certification requirement. As an adjunct professor of this TESOL methods course and a full-time teacher of English learners, the researcher was aware of the necessity of this certification requirement, because future teachers will have English learners in their classrooms; it was the researcher's responsibility to help develop future teachers' knowledge and skills of English learners.

Teacher training courses took many forms at the university level, and online courses were one option for students. According to Knowles, Holton, and Swanson (2015), andragogy and information technology worked well together. An online course was: "(1) learner controlled, (2) facilitator friendly, and (3) 24/7" (Knowles, Holton, & Swanson, 2015, p. 214); through the design of the online learning experience, the instructor for the course moved "from teacher to facilitator of learning" (p. 244), which was more of an andragogical approach. By using this approach, the researcher believed that the online course would become personal for the learner, thus improving the learning experience. As noted by many researchers and summarized by Gagne (1965), "Learning is a change in human disposition or capability, which can be retained, and which is not simply ascribable to the process of growth" (p. 5). Teaching English learners required specialized skills, because each learner's needs were unique. Classroom teachers differentiated or modified their instruction to meet the linguistic and cultural needs of English learners; often times this involved helping English learners to be self-directed and able to identify their own learning needs. This mirrored the type of learning experience created through the use of andragogy for adult learners. Given the opportunity, teachers used their own personal experiences with being self-directed and

identification of learning needs to create positive learning environments for English learners in their classrooms.   According to Daniel (2014), mainstream teachers and preservice teachers who embraced uncertainty could be empowered "to shift from a desire for exact methods and content to bring human interaction back to the center of instructional decision-making" (p. 21); this was true in andragogy, as Billington (2000) wrote, "Adults who reported experiencing high levels of intellectual stimulation-to the point of feeling discomfort-grew more" (para. 10). Billington (2000) continued, "Students grow more in student-centered as opposed to faculty-centered programs" (para. 13). Thus, an online TESOL teacher training course that was designed based on these andragogical principles could grow the knowledge, pedagogical skill, and self-efficacy levels of preservice teachers studying the educational, linguistic, and cultural needs of English learners.

Research Questions and Hypotheses

Research Question 1: How do preservice teachers perceive English learners during an online TESOL teacher training course?

Research Question 2: How do preservice teachers perceive their own knowledge levels of English learners during an online TESOL teacher training course?

Research Question 3: How do preservice teachers perceive their own pedagogical skill levels for teaching English learners during an online TESOL teacher training course?

Research Question 4: How do preservice teachers perceive their own self-efficacy levels for teaching English learners during an online TESOL teacher training course?

Research Question 5: How are principles of andragogy applied to an online TESOL teacher training course?

Hypothesis 1: There is an increase in the knowledge levels of preservice teachers of English learners as measured by the pre- and post- "Perceptions of Preservice Teachers" (PPST) survey.

Hypothesis 2: There is an increase in the pedagogical skill levels of preservice teachers of English learners as measured by the pre- and post- "Perceptions of Preservice Teachers" (PPST) survey.

Hypothesis 3: There is an increase in the self-efficacy levels of preservice teachers of English learners as measured by the pre- and post- "Perceptions of Preservice Teachers" (PPST) survey.

Hypothesis 4: There is a more positive perception of English learners by preservice teachers as measured by the pre- and post- "Perceptions of Preservice Teachers" (PPST) survey.

Study Limitations

One limitation of the study was time. The study was completed during one spring semester at one Midwestern private university. The course was completed in eight weeks, rather than the traditional 16 weeks; thus, the coursework was completed at a faster pace. Another limitation was the participants were selected from three separate sections of the course taught by two different instructors; therefore, the course experience could have been influenced by the instructor and the student population. In addition, there were a limited number of students enrolled in the course. Finally, preservice teachers by definition had not had much practical experience working with English

learners, and they may not have been able to adequately identify their lack of knowledge and skills for working with English learners.

Definition of Terms

Andragogy: Generally accepted as the art and science of teaching adults, based on the work of Malcolm Knowles. Knowles believed in the connection between learning and characteristics of an adult learner, such as life experience, self-concept, and readiness to learn (Carpenter-Aeby & Aeby, 2013, p. 3). The andragogical model is based on six assumptions, or principles, that are different from the pedagogical model. The six principles of andragogy, according to Knowles, are: a) The need to know; b) The learners' self-concept; c) The role of the learners' experiences; d) Readiness to learn; e) Orientation to learning; f) Motivation. (Knowles, Holton, & Swanson, 2015).

Culturally Responsive Teaching: When teachers recognized the importance of students' cultural references as a part of their regular approach to teaching (Missouri Department of Elementary and Secondary Education [MODESE], 2018, p. 49).

Dual Language Learners (DLL): "Children ages birth to age 5 who are learning two languages at once — their home language and English — and who are not in the K-12 school system" (The National Academies of Sciences, Engineering, & Medicine, 2017, p. 2). May also be referred to as emerging bilinguals (García, Kleifgen, & Falchi, 2008).

English for Speakers of Other Languages (ESOL): "English-language programs that teach English language skills to speakers from non-English language backgrounds. ESL, referring to English as a Second Language, is often used in conjunction or interchangeably with ESOL" (MODESE, 2018, p. 49).

English Language Learners (ELL) or English Learners (ELs): "Speakers of other languages in the process of learning English. This abbreviation may be used to indicate LEP students." (MODESE, Limited English Proficient, 2018, p. 49). Both terms were used interchangeably in research.

English Language Development (ELD): "Instruction that is designed to help ELLs learn and acquire English to a level of proficiency that maximizes their capacity to engage successfully in academic studies taught in English" (MODESE, 2018, p. 49).

English Language Proficiency: An English language learner's tested skills in reading, writing, listening, and speaking English, as compared to the average native English speaking student at the age-appropriate grade level. This proficiency level was often used to classify or re-classify a student as Limited English Proficient, as defined by Title III (MODESE, 2018, p. 50).

Limited English Proficient (LEP): The term used to describe an individual who meets the qualification definitions of Title III, as defined by the U. S. Department of Education. "The term 'limited English proficient', when used with respect to an individual, means an individual-

A. Who is aged 3 through 21;

B. Who is enrolled or preparing to enroll in an elementary school or secondary school;

    (i)   who was not born in the United States or whose native language is a language other than English;

    (ii)   (I) who is a Native American or Alaska Native, or a native resident of the outlying areas; and

C. (II) who comes from an environment where a language other than English has

had a significant impact on the individual's level of English language

proficiency; or

D. (III) who is migratory, whose native language is a language other than

English, and who comes from an environment where a language other than

English is dominant; and

E. whose difficulties in speaking, reading, writing, or understanding the English

language may be sufficient to deny the individual-

(i)   the ability to meet the State's proficient level of achievement on State

assessments described in section 1111 (b)(3);

(ii)   the ability to successfully achieve in classrooms where the language of

instruction is English; or the opportunity to participate fully in

society." (MODESE, 2018, p. 50).

Linguistically Diverse Student (LDS): A student learning English in the U. S.

education system, who spoke a language other than English, and may have had some

additional literacy skills in his or her heritage language (Greenfield, 2013).

Native English Speaker (NES):   A person "who has learned and used English

from early childhood" (MODESE, 2018, p. 51). May also be referred to as native

speaker or English speaker.

Preservice Teacher: For the purposes of the study, a preservice teacher was an

undergraduate or graduate student taking university coursework to complete certification

requirements for teaching.

Perceptions: For the purposes of this study, perceptions were a way of regarding, understanding, or interpreting something; a mental impression ("Perception," n.d.).

Self-directed: Learners were guided and empowered to take responsibility for their own learning activities and became able to transfer learning to new situations and environments (Hiemstra, 1994).

Social Language: The everyday language used in social settings; can usually develop in as little as 1 to 2 years, depending on age, language exposure, etc. Often these skills developed more naturally than academic language (Vandeven, 2015, p. 46).

Teaching English to Speakers of Other Languages (TESOL): "The teaching of English to people whose first language is not English, especially in an English-speaking country" (TESOL, 2018, n.p.). TESOL was also an international organization for teachers of English to speakers of other languages. The study used TESOL to refer to the type of online teacher training course.

Summary

The purpose of this study was to investigate the knowledge, pedagogical skill, and self-efficacy levels of preservice teachers enrolled in an online TESOL teacher training course at one private university, and the application of andragogical practices to the online course. The population of English learners had increased in the United States, and mainstream classroom teachers needed to be prepared to teach diverse students with individualized learning needs. The application of andragogical principles to an online teacher training course was one way to help preservice teachers transition in their roles from students to classroom teachers. The researcher, as an adjunct professor of a TESOL

teacher training course and full-time K-12 ESOL instructor, believed that a course in

ESOL methods was necessary, but more importantly, beneficial for preservice teachers.

Chapter Two: Review of Literature

According to a U.S. Department of Education Fact Sheet (United States of America Department of Education, 2014), all children in the United States were "entitled to equal access to a public elementary and secondary education, regardless of their or their parents' actual or perceived national origin, citizenship, or immigration status" (para. 1). A "Dear Colleague" letter from January 7, 2015, co-written by the U.S. Department of Justice Civil Rights Division and the U.S. Department of Education Office for Civil Rights, reminded public schools and State educational agencies (SEAs) of their legal obligations under the Civil Rights Act of 1964 (Title VI), "They must take affirmative steps to ensure that students with limited English proficiency (LEP) can meaningfully participate in their educational programs and services" (Lhamon & Gupta, 2015, para. 1). The "Dear Colleague" letter continued, "public schools and State educational agencies (SEAs) must act to overcome language barriers that impede equal participation by students in their instructional programs" (Lhamon & Gupta, 2015, para. 1). These two government agencies shared authority for enforcing Title VI in the education context (Lhamon & Gupta, 2015).

Students in the United States whose first language spoken, read, written, or understood was a language other than English were referred to as Limited English Proficient (LEP), English language learners (ELL) or English learners (EL). The reauthorization of the Elementary and Secondary Education Act (ESEA) in 2015 as the Every Student Succeeds Act removed the label of Limited English Proficient (LEP), and replaced it with the term English learner (EL) for school-aged children and Dual language learner (DLL) for young children. A timeline of significant legislation and

landmark cases can be found in Table 1 (TESOL, 2016; Missouri Department of

Elementary and Secondary Education, 2018). As noted in Missouri's "Educating

linguistically diverse students: requirements & practices" (MODESE, 2018) document,

"these laws clarify the obligation of every school to not only enroll students from diverse

language backgrounds, but also to actively implement a program that addresses their

English language and academic development" (p. 7).

Table 1

Significant legislation and landmark cases related to English leaners

Year	Legislation	Summary
1964	Civil Rights Act	Protected students from being excluded from public education or subjected to discrimination
1965	The Elementary and Secondary Education Act (ESEA) authorized	Signed by President Johnson; funded primary and secondary education, with an emphasis on equal access to education
1967	Bilingual Education Amendment (BEA)	Added funding into ESEA for English language instruction; Title VII
1968	BEA funding $7.5 million	Initial funding for BEA
1974	Lau v. Nichols	Supreme Court decision guaranteed that all children (including ELs) were provided an equal education opportunity; all school districts were required to provide ESL programs to ELs regardless of funding.
1974	BEA funding increased to $68 million	First significant funding increase for bilingual education
1974	The Equal Education Opportunity Act	Signed by President Nixon; ensured schools provided equal education opportunities for students, including language minority students
1979	Department of Education established as an executive agency	Established under President Carter

1981	ESEA reauthorized as the Education Consolidation and Improvement Act	Signed by President Reagan
1982	Plyler v. Doe	Supreme Court decision affirmed that public school districts cannot deny immigrant students free public education
1994	ESEA reauthorized as the Improving America's Schools	Signed by President Clinton; language proficiency goals established for all students and Title VII discretionary grants to promote bilingualism were included
2002	ESEA reauthorized as the No Child Left Behind Act (NCLB)	Signed by President George W. Bush; the progress of subgroups of students traditionally overlooked were now in the spotlight: low-income students, students of color, ELs, and students with disabilities
2002	BEA was renamed English Language Acquisition, Language Enhancement, and Academic Achievement Act	Title III of the NCLB statute; program changed to a formula-funded program, emphasizing English language instruction and attainment of English proficiency while meeting the same academic standards as English-speaking peers. Bilingual education decreased. Schools could be penalized for not meeting adequate yearly progress if language proficiency goals were not met
2011	ESEA waivers instituted by Obama Administration	Designed to ease mandates of NCLB by relieving states of requirements for AYP
2015	ESEA reauthorized as the Every Student Succeeds Act	Signed by President Obama; English language proficiency requirements in Title III of NCLB are moved to Title I. Title I is funded to the states, then to local educational agencies (LEAs) based on the number of eligible low-income students. The term "limited English proficient" or LEP, is replaced with "English learner" or EL.
2016	States transition from waivers to ESSA requirements	States are in charge of their Title I planning and accountability systems

Note: Material sourced from MODESE (2016).

With the reauthorization of ESEA in 2015 as the Every Student Succeeds Act

(ESSA), the language proficiency requirements for Title III of NCLB were moved to

Title I. Thus, "The Every Student Succeeds Act (ESSA) was designed to reduce the role of the Federal Government in mandating state education policy and to provide more flexibility" (TESOL International Association, 2016, p. 5). ELs were the fastest growing population of students (Echeverria, Vogt, & Short, 2017, p. 3) and more states, cities, and even rural areas experienced growth in the number of English learners attending school. This was important because English learners brought a unique set of characteristics and needs to schools. Not only were there differences in English proficiency among these students, there were also differences in the "educational and cultural experiences" (Echeverria, Vogt, & Short, 2017, p. 4). As more and more English learners continued to enroll in new geographic areas, school districts were often unprepared to teach these students, because academic programs, appropriate resources, and curricula had not been developed. Even more important, "many teachers are not trained to meet the needs of second language learners" (Echeverria, Vogt, Short, 2017, p. 4). Villegas (2018) agreed that ELLs "are positioned at a decided disadvantage in learning" (p. 132) if their teachers "lack the knowledge and pedagogical skills" necessary to make content "comprehensible and meaningful to them while also supporting their development of proficiency in English" (p. 132). A report presented by the National Academies of Sciences, Engineering, and Medicine, in 2017, stated:

> Despite their potential, many English learners (ELs) -- who account for more than 9 percent of K-12 enrollment in the U.S. -- lag behind their English-speaking monolingual peers in educational achievement, in part because schools do not provide adequate instruction and social-emotional support to acquire English proficiency or access to academic subjects at

the appropriate grade level (National Academies of Sciences, Engineering,

& Medicine, 2017, p. 1).

In February, 2018, the Center for Applied Linguistics (CAL) released a

commentary to discuss the findings of two national reports on language learners to

answer the question, "How can the U. S. overcome its linguistic deficit?" (Arias, 2018).

Two reports were examined; one from the American Academy of Arts and Sciences and

the other from the National Academies of Sciences, Engineering, and Medicine.

According to Arias (2018), both reports "underscore the benefits of second language

learning for all, the need to encourage language study, and the contributions of dual

language and heritage language learners and their communities to U. S. multilingualism"

(p. 1). Arias (2018) continued, "These reports reinforce the position that the promotion

of language and language study is beneficial to the long-term goals of the U. S. as part of

a global, multilingual, multicultural community" (p. 1).

The American Academy of Arts and Sciences was tasked by members of Congress

in 2014 to investigate language learning; a commission was formed, and in 2017, the

commission released its final report and recommendations, *America's Languages:*

Investing in Language Learning for the 21st Century (American Academy of Arts and

Sciences, 2017). A February 28, 2017, press release stated, this "national effort

established to examine the current state of U.S. language education, to project what the

nation's education needs will be in the future, and to offer recommendations for ways to

meet those needs" (American Academy of Arts and Sciences [AAAS], 2017, para. 1).

All five recommendations of the Commission had a relationship to the educational

system: a) increase the number of language teachers in the U. S.; b) supplement language

programs; c) support heritage language instruction; d) create curricula and education materials for use by Native American schools; e) and encourage opportunities for students to experience other cultures and multilingual environments. American Academy President Jonathan Fanton, noted in the press release, "While English continues to be the most commonly used language for world trade and diplomacy, there is an emerging consensus among leaders in business and government, teachers, and scientists that proficiency in English is not sufficient to meet the nation's needs in a shrinking world" (AAAS, 2017, para. 1). In addition, Fanton added that parents were beginning to realize the cognitive and other benefits of "teaching their children a second or third language in addition to English" (AAAS, 2017, para. 1).

The second report highlighted by CAL was by the National Academies of Sciences, Engineering, and Medicine entitled, *Promoting the Educational Success of Children and Youth Learning English: Promising Futures,* released in 2017. According to the report, a committee convened by the National Academies of Sciences, Engineering, and Medicine through its Board on Children, Youth, and Families and the Board on Science Education was tasked "to examine how evidence based on research relevant to the development of DLLs [Dual Language Learners]/ELs from birth to age 21 can inform education and health policies and related practices that can result in better educational outcomes" (The National Academies of Sciences, Engineering, & Medicine, 2017, p. 2).

The February 28, 2017, press release stated: "Early care and education providers, educational administrators, and teachers are not given appropriate training to foster desired educational outcomes for children and youth learning

English" (The National Academies of Sciences, Engineering, & Medicine, 2017,

para. 1). Ruby Takanishi, senior research fellow at New America in Washington,

D.C., chaired the committee that conducted the study and wrote the report.

According to Takanishi (The National Academies of Sciences, Engineering, &

Medicine, 2017), English learners brought a diversity of experiences, cultures,

and languages that were "assets for their development, as well as for the nation"

(para. 4). She continued in the press release,

> Because literacy lies at the center of success in educational systems,
>
> educating dual language learners and English learners effectively is a
>
> national challenge with consequences both for individuals and for society.
>
> Despite their linguistic, cognitive, and social potential, many of them are
>
> struggling to meet the requirements for academic success in American
>
> schools, a challenge that jeopardizes their prospects in postsecondary
>
> education and the workforce with consequences for their health and well-
>
> being. (The National Academies of Sciences, Engineering, & Medicine,
>
> 2017, para. 4)

Arias (2018) noted in the *CAL Commentary* (2017) and as stated in the

Promising Futures report, "the implementation of instructional programs for ELs

occurs within a primarily English-only setting, where it becomes essential that

school leadership be particularly informed about the characteristics of the EL

student population, the importance of the heritage language and culture" (p. 6).

One chapter of the report was titled, "Promising and Effective Practices for

English Learners in Grades Pre-K to 12". Within the chapter, effective

instructional strategies for English Learners were summarized by school setting:

elementary, middle, and high school levels. As noted by Arias (2018), examples

of the promising practices for each of the levels were contained within the

Promising Futures report, along with an in-depth synthesis of research regarding

effective instructional practices for Pre-K to 12 students. This chapter provided

guidance to schools as they prepared for English learners.

Further, these two reports (*Investing in America* and *Promising Futures*)

emphasized the need for the U. S. to have "a well-prepared workforce to care for and

educate children who are DLLs or ELs" (Arias, 2017, p. 6). For example, one of the five

recommendations of the *Investing in America* (AAAS, 2017) report emphasized the need

for more language education teachers. Also, the *Promising Futures* (The National

Academies of Sciences, Engineering, & Medicine, 2017) report contained sections

dedicated to the preparation, recruitment, and retention of teachers of English learners.

One issue that Arias (2017) highlighted was "the lack of educator preparation in their

preservice training to understand the needs of the DLL and EL student population" (p. 7).

The knowledge, skills, and expertise of teachers working with EL and DLL students were

some of the most influential factors.

Unique Characteristics of English Learners

Similar to all types of learners, each English learner came to school with unique

characteristics, but as Villegas (2018) noted, ELLs were simultaneously learning the

English language and academic content taught in English. Language minority students

"are faced with cognitive loads in learning both the content and the language particular to

each content area, while simultaneously developing their English-language proficiency"

(Turkan, Croft, Bicknell, & Barnes, 2012, p. 1). The National Academies of Sciences report, *Promising Futures*, mentioned challenges that students with limited English proficiency face, "such as poverty, living in families with low levels of education, parents' immigrant generational status and years in the United States, and attending under resourced schools" (The National Academies of Sciences, Engineering, & Medicine, 2017b, para. 4). According to Echeverria et al. (2017), some of these unique characteristics included: knowledge of, exposure to, and proficiency in English; knowledge and proficiency of the first language (L1); educational background in L1 and English; sociocultural, emotional, and economic factors; and other educational categories, such as gifted and talented or special education. The amount of diversity of English learners made it necessary for teachers to be prepared and properly trained to teach them. Gándara and Santibañez (2016) concurred, "Without special preparation, even good teachers may find it difficult to meet the needs of English language learners" (p. 32). They continued, "The large and persistent gaps in academic outcomes for English language learners compared with other students indicate that something must be wrong with the teaching approaches we're using" (Gándara & Santibañez, 2016, p. 32).

Another factor considered when discussing English proficiency was the amount of time it took, or should take, for English learners to be proficient enough in English to adequately participate in classrooms. Each year in the United States, English learners were given English proficiency assessments. Individual states determined the cut-off scores for reclassifying English learners as proficient and no longer requiring English language support services. According to the National Academies of Sciences' *Promising Futures* Report Highlights (2017), "it can take from 5 to 7 years for a child who initially

has no or limited proficiency in English….to learn the English necessary to participate in the school's curriculum without further linguistic support" (para. 11).

Barrow and Markman-Pithers (2016) noted that it took time for children to develop oral and academic language proficiency, defined as "the ability to communicate effectively in academic settings, which typically rely on more formal language structure and vocabulary" (p. 168). The work of Cummins (1999, 1979) explained second language acquisition in terms of conversational language and academic language, defined as basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP). According to Cummins (1999), ELs developed BICS in approximately two years, but it took 5-10 years for CALP to develop well enough for children to catch up academically to their native English-speaking peers. Roessingh (2006) expanded Cummins's illustration of an iceberg to represent the BICS-CALP continuum; BICS represented language skills that could be seen (or above the surface), while CALP represented language skills that could not be seen (below the surface). Students moved along the continuum at different rates and in different ways as they were immersed in English language learning experiences (Roessingh, 2006). Therefore, ELs needed time to develop their English proficiency, as language acquisition depended on the child and the environment (Barrow & Markman-Pithers, 2016).

The Need for Effective Teachers of ELs

According to Arias (2018), teachers, administrators, and ancillary personnel (such as health professionals, counselors and school psychologists) "lack adequate preparation to work with DLLs and ELs," and the *Promising Futures* report provided specific recommendations to state and federal agencies to address this. The *Investing in America*

(2017) report provided a way for the U.S. to shift the culture from forcing English-only

assimilation to one that recognized the contributions of heritage languages in a

multicultural society. As Arias (2018) noted, the "national linguistic deficit be addressed

through a transformation of values" (p. 8), from regarding heritage languages of students

as deficits to a view that multilingualism can and should be valued in our schools and

society.

Lopez, Pooler, and Linquanti (2016) wrote, "to ensure that ELs have an equal

opportunity to achieve the same academic standards as other students, state and local

policymakers and educators must provide these students with appropriate instructional

services" (p. 8). These services only happened if "language-minority students-whether

EL or IFEP [initially fluent English proficient]-are properly identified and classified"

(Lopez, et al., 2016, p. 8). In response to ESSA, Missouri and other states created

guidance to help schools identify and classify language-minority students. Missouri's

Educating Linguistically Diverse Students: Requirements & Practices (MODESE, 2018)

provided guidance for schools "to give every school a clear understanding of its

responsibilities toward students with limited English proficiency (LEP) or English

learners (EL)" (p. 4), as well as sample processes, procedures, resources and examples

for planning and implementing a language acquisition program. Further, this document

exerted: "Linguistically diverse students can achieve the same high standards expected of

all students. By combining our knowledge of language and academic learning with the

practical experience of expert teachers, we can meet this goal" (MODESE, 2018, p. 4).

Characteristics of Effective Teachers of ELs

According to Goldenberg (2013), there were some practices that were generally effective for all students, as shown in Table 2. Some of these practices included setting clear goals and objectives, effective modeling of skills, informative feedback to learners, and focused interactions with other students. Clayton (2013) noted many similar effective practices. Teachers who were effective (as measured by increased test scores) for non-ELs were also effective for ELs; however, teachers with specialized instructional approaches, such as the ability to speak their students' native language or who possessed a bilingual certification, demonstrated greater gains for their ELs (Loeb, Soland, & Fox, 2014; Master, Loeb, Whitney, & Wyckoff, 2012; Gándara & Santibañez, 2016).

Table 2

Practices of teachers generally effective for all students

Clear goals and objectives
Appropriate and challenging material
Well-designed instruction and instructional routines
Clear instructions and supportive guidance as learners engage with new skills
Effective modeling of skills, strategies, and procedures
Active student engagement and participation
Informative feedback to learners
Application of new learning and transfer to new situations
Practice and periodic review
Structured, focused interactions with other students
Frequent assessments, with reteaching as needed
Well-established classroom routines and behavior norms

Note. Goldenberg, C. (2013).

In addition, effective teachers understood that bilingualism was a dynamic process in ELs' oral language and literacy development and planned their instruction to fit those unique student characteristics (Garcia, 2009, as cited in de Jong, Harper, & Coady, 2013). Goldenberg (2013) agreed that effective teachers needed to implement additional

instructional supports; however, the author noted many of the suggested supports lacked research evidence that they actually helped ELs.

Collaboration as an effective strategy. Goldenberg (2013) suggested that while limited research was available for teachers on which strategies were most effective, school settings that encouraged teacher collaboration, analyses of student work with colleagues, and consistent implementation and instruction of standards learning goals, and the continuous and systematic evaluation of programs would be how effective strategies were determined. Effective practitioners had the opportunity to study and contribute to the knowledge base of effective instruction for ELs, as well as work together in cross-disciplinary school-wide teams (Goldenberg, 2013; Rance-Roney, 2009). Principle 6 for exemplary teachers of ELs, recommended by TESOL (2018), encouraged teachers to collaborate with one another. Calderón, Slavin, and Sánchez (2011) concurred, "Staff development must be intensive and ongoing, with many opportunities for both peer and expert coaching and information exchange" in an organization "that shares information widely, monitors the quality of teaching and learning carefully, and holds all staff responsible for progress toward shared goals" (p. 109-110). On a larger scale, collaboration needed to occur among policy makers, educational systems, community resources, and researchers to find ways to better serve ELs in schools, especially areas where the population was more transient. (García, Jensen, and Scribner, 2009; Rance-Roney, 2009).

Understanding the role of culture. Nieto (2000) stated, "Teaching language minority students successfully means above all challenging one's attitudes toward the students, their languages and cultures, and their communities. Anything short of this will

result in repeating the pattern of failure that currently exists" (p. 196). Effective teachers

of ELs understood the role of culture and its influence on language development

(National Academies of Sciences, Engineering, & Medicine, 2017). de Jong, Harper, and

Coady (2013) believed teacher knowledge included students' personal linguistic histories

and cultural experiences. de Jong et al. (2013) felt effective classroom teachers

developed expertise in understanding ELLs from a bilingual and bicultural perspective

and required teachers to be knowledgeable of their students "personal linguistic histories

and cultural experiences both within and beyond school" (p. 91). Teachers needed to set

"specific language and literacy objectives for the ELLs in their classrooms" (de Jong, et

al., 2013, p. 92). In addition, effective teachers of ELs discovered information about their

students' first languages, literacy levels, languages spoken at home by the family, and

other literacy practices (de Jong et al., 2013; Turkan et al., 2012). Included also was the

teacher's ability to identify "the language demands that content poses for ELLs'

understanding"; for example, the "linguistic features, such as vocabulary, structures, and

text, that apply to the teaching of all four content areas [mathematics, science, ELA,

social studies]" (Turkan et al., 2012, pp. 9-10). Proficiency levels in oral and written

English needed to be known (Brisk & Harrington, 2000). Prior school experiences (or

lack thereof), as well as linguistic and cultural experiences, influenced school

participation and engagement by ELs (de Jong, et al., 2013). Calderón et al. (2011)

noted, "It is critical for teachers to show respect for the student's primary language and

home culture" (p. 111).

      Knowledge of L1 and L2. Another area effective teachers needed to understand

was how the student's native language (L1) and target language of English (L2) oral and

literacy development were similar and different (de Jong & Derrick-Mescua, 2003).

Teachers understood the "structural aspects of language development (e.g., syntax,

phonology)" and how both L1 and L2 developed ("Promising Futures," 2017, p. 438).

Gándara et al., (2005) found that effective teachers of ELs "have extensive skills in

teaching the mechanics of language and how it is used in different contexts and for

different purposes" (p. 3). By using this knowledge, teachers were able to inform

pedagogy for bilingual learners by challenging themselves to use a variety of question

forms that were appropriate for various proficiency levels, and remembering to keep

culturally responsive practices at the forefront of their teaching and planning (de Jong et

al., 2013). Most importantly, de Jong, et al. (2013) stated, "Preparing teachers to engage

in ELL-inclusive practices requires specialized knowledge and pedagogical skills specific

to the ELLs in their classrooms" (p. 95).

Assessment. Assessment and its use to inform instruction was another area

effective teachers of ELs used in their practice ("Promising Futures," 2017; Calderón et

al., 2011, Goldenberg, 2013). Goldenberg (2013) mentioned that schools should

"systematically collect student work indicating student progress toward desired

outcomes" (p. 11) while also analyzing and evaluating student work to learn what

strategies were working and what were not. Calderón et al. (2011) stated one element of

effective practice was the "constant collection and use of ongoing formative data on

learning, teaching, attendance, behavior, and other important intermediate outcomes" (p.

109). TESOL (2019) Principle 5 suggested that teachers monitor student errors and

provide frequent feedback to students. By assessing all language and literacy domains,

schools used data to target where students needed additional interventions, such as

tutoring, and identified additional challenges ELs faced across the curriculum (Calderón, Slavin, & Sánchez, 2011; de Jong et al., 2013; TESOL, 2019). Effective teachers also understood that at times it was necessary to adapt best practices and "articulate why alternatives are necessary for bilingual learners" (de Jong et al., 2013, p. 94) and be "committed to addressing barriers to learning" (de Jong et al., 2013, p. 94). Effective teachers, according to de Jong et al (2013), had the ability to mediate a range of contextual factors in the schools and classrooms where they teach, involved teachers' awareness of current local, state, and national policies and the effects on English learners.

Cooperative learning and peer interaction. English learners needed opportunities to practice new language skills in a safe environment, and effective teachers created situations for ELs work with other students collaboratively in their classrooms (Calderón et al., 2011). The students were given a chance to talk with others and meaningfully discuss content through cooperative learning activities (Calderón et al., 2011; de Jong et al, 2013; TESOL, 2019). Students were encouraged to develop their critical thinking abilities and increase their knowledge of content through peer interaction and support in small groups (de Jong et al., 2013; Turkan et al., 2012).

Engaging and supporting families of ELs. Understanding how to engage families was another element that effective teachers and schools used (Promising Futures, 2017, p. 440). Schools that served ELs needed to capitalize on the assets of students and families, including "students' and parents' aspirations, staff professionalism and care, and other intangibles as well as financial and physical assets" (Calderón et al., 2011, p. 109), because schools that serve families struggling economically "provide children their best and perhaps only chance to achieve economic security" (Calderón et al., 2011, p. 109).

Effective schools encouraged monolingual teachers to increase communication with families by utilizing bilingual parent liaisons, home visits with an interpreter, local clergy, among other strategies, as "parents of English language learners have an important role to play in the academic success of their children" (Gándara & Santibañez, 2016, p. 36).

Specialized Instructional Practices and Skills for Working with English Learners

Goldenberg (2013) stated that there was some evidence that supports and modifications, such as the ones in Table 3, benefitted ELs, but the research about the effectiveness of the supports and modifications was limited.

Table 3

Supports and modifications for instruction of ELs according to Goldenberg (2013)

Building on student experiences and familiar content (then adding on material that will broaden and deepen students' knowledge);
Providing students with necessary background knowledge;
Using graphic organizers (tables, web diagrams, Venn diagrams) to organize information and clarify concepts;
Making instruction and learning tasks extremely clear;
Using pictures, demonstrations, and real-life objects;
Providing hands-on, interactive learning activities;
Providing redundant information (gestures, visual cues);
Giving additional practice and time for discussion of key concepts;
Designating language and content objectives for each lesson;
Using sentence frames and models to help students talk about academic content; and
Providing instruction differentiated by students' English language proficiency.

Note. Goldenberg, C. (2013).

Additionally, Clayton (2013) suggested similar ideas of effective instructional practices: "1) providing opportunities for meaningful use of new vocabulary, 2) presenting ideas in both oral and written form, 3) paraphrasing students' remarks and gently encouraging them to expand on their responses, and 4) including questions and activities that require elaborated responses in English so that students can practice expressing their ideas" (p. 38). Turkan, Croft, Bicknell, and Barnes (2012) ascertained

that some of the skills that teachers of English learners needed to demonstrate were:

planning group or pair work; "using multimodal representations of content, including

manipulatives, graphic organizers, and realia" (p. 25); build on ELLs' prior cultural and

linguistic experiences; helping ELLs move "back and forth between informal everyday

language and the academic register while making connections between learner's prior

knowledge and the learning objectives" (p. 25). To develop these knowledge and skills

in teachers of ELLs, Turkan et al. (2012) stated, "content-area teacher training needs to

incorporate course- and field-work that invokes learning about the linguistic aspects of

each content area and how to best facilitate ELLs' linguistic challenges" (p. 25).

At the early childhood level, all children were language learners, and it was possible

for young children to learn two languages at the same time. Tazi Morrell and Aponte

(2016) wrote that the term "emergent bilinguals" (p. 12) referred to people who were just

beginning to learn a second language. The authors created a protocol to use with

Universal Prekindergarten students in New York to gather information about the

strengths and unique needs of these young students to "inform instruction and

programming" (Tazi Morrell & Aponte, 2016, p. 13). The Language and Learning in

Prekindergarten (LLPK) protocol was a tool that can be used by teachers to "gain a

linguistic profile with valuable information for planning instruction" (Tazi Morrell &

Aponte, 2016, p. 14).

In addition to using a tool like the LLPK protocol, early childhood educators

needed to be aware of the interlanguage young bilinguals (emergent bilinguals) used to

communicate (Cheatham & Ro, 2010). Interlanguage was the language used by young

children learning a new language while still learning their home language; they practiced

using English words and phrases they heard and applied the language rules they knew

from both languages. These young communicators would draw on all of their language

experience to get their message across. At times it appeared that a young child did not

have any language, as Cheatham and Ro (2010) wrote, "with only basic English phrases

and diminishing ability in their home language, children may seem incapable of

communicating, but educators should remain patient. A lot of language learning is still

occurring" (p. 20). Code switching, or mixing of the two languages, was also frequent

when children were trying to communicate (Cheatham & Ro, 2010). It may seem like the

children were unable to communicate in either language, when actually, the children were

just drawing on all of their language knowledge to convey their message. Effective

teachers of young children used strategies to encourage oral language development, such

as narratives and pretend play, as recommended by the National Association for the

Education of the Young Child (Cheatham & Ro, 2010). Effective teachers of young ELs

also became active participants when engaging in pretend play and narratives and

provided "scaffolding to increase children's language abilities" (Cheatham & Ro, 2010,

p. 21). Cheatham and Ro (2010) concluded, "Young children learning English often

experience a decrease in their home language proficiency as their English skills gradually

improve" (p. 22). Teachers honored this language development by giving students

opportunities to practice their language skills in both their home language and English.

     With older students, sheltered instruction was a useful tool for reducing barriers to

higher education. Sheltered instruction was a term that encompassed instructional

supports and classroom modifications designed to help English learners learn academic

content while they developed English proficiency (Goldenberg, 2013; Clayton, 2013).

Markos and Himmel (2016) created a brief for practicing educators that explained sheltered instruction and its fundamental components, and the brief listed resources for teachers when implementing sheltered instruction. According to Markos and Himmel (2016), through sheltered instruction ESL teachers and content-area teachers collaborated to "strategically and systematically incorporate English language development into content-area instruction" (p. 3). Echeverría, Short, and Vogt (2007) created a model of sheltered instruction teachers used to plan and implement lessons designed to assist ELs comprehend curriculum content and gain skills in language and literacy. This model, the SIOP® model (Sheltered Instruction Observation Protocol), was designed with eight components of instructional strategies used by effective teachers of ELLs; the purpose was to help teachers organize as they developed lessons to include subject area content information and development of English language and literacy skills at the same time. Teachers had to think critically about the language involved in teaching the content; thus, "quality language objectives complement the knowledge and skills identified in the content objective" (Markos & Himmel, 2016, p. 4). It was critical that teachers understood that students' knowledge and understanding of content may not be adequately assessed, unless some modifications were made. Markos and Himmel (2016) also wrote, "the results of most classroom assessments reflect students' language proficiency, even if their intended purpose is to measure only content area achievement" (p. 12). Teachers who used sheltered instruction helped students learn English and grade level content at the same time, thus improving students' opportunities to be college and career ready.

Using knowledge of ELs for lesson planning and implementation. Effective teachers of ELs developed skills in lesson planning and lesson implementation that

resulted from their knowledge of ELs (de Jong et al., 2013; Education Northwest, 2018).

They also integrated content expertise, provided language modeling, created an inclusive

learning environment, and facilitated cooperative learning activities (de Jong et al.,

2013). According to the six principles of exemplary teaching of English learners

published by TESOL International Association, other skills included scaffolding

instruction for comprehensibility, providing clear instructions, monitoring student errors,

and providing ongoing effective feedback (TESOL, 2019). Effective teachers set specific

language and cultural goals with their students (de Jong et al., 2013), and used a variety

of question forms throughout their lessons (de Jong & Derrick-Mescua, 2003). Villegas,

SaizdeLaMora, Martin, and Mills (2018) mentioned the ability of teachers to learn about

their students and have a "repertoire of ways to engage learners effectively" (p. 140).

Calderón et al. (2011) highlighted the importance of specific vocabulary instruction and

integrating reading and writing instruction throughout all disciplines. Discussed in a

brief written by the American Youth Policy Forum (2010), a tool teachers used to support

ELs was all teachers in a school were trained "to understand and incorporate the English

Language Proficiency Standards into their classrooms" (p. 3). Other ideas suggested

were to support teachers in becoming ESL certified, creating plans for students to access

higher education, and ensuring policies "are responsive to the diversity of the ELL

population" (American Youth Policy Forum, 2010, p. 8).

Preparing Future Mainstream Teachers

In 2001, Feiman-Nemser developed a framework "that identifies central tasks of

teacher learning at the preservice, induction, and inservice stages" of a teacher's career

(Feiman-Nemser, 2018, p. 228). The author considered three questions in regards to

teacher learning over time: "(a) What do prospective teachers need to learn *before* they begin teaching? (b) What can teachers learn only after they begin to teach? (c) What are teachers in a position to learn after they have consolidated a basic teaching practice?" (Feiman-Nemser, 2018, p. 228). As teachers progressed through their careers, each stage lent itself to different types of learning; therefore, professional learning opportunities should be geared to the learning needs of the teachers at the various stages. Thus, "learning to teach well happens over time and depends on teachers' access to appropriate professional learning opportunities as part of the ongoing work of teaching" (Feiman-Nemser, 2018, p. 228). Preservice teachers needed opportunities and experiences to develop the knowledge and skills necessary to work with ELs in mainstream classrooms. Pettit (2011) discussed a "poverty of language learning" in U.S. teacher education programs. Many practicing teachers have "an overwhelming lack of knowledge of second language acquisition (SLA), multicultural education, and ESOL pedagogy" (Pettit, 2011, p. 125). However, as Hutchinson (2013) noted, "The challenge is to provide this kind of extensive education and training in a preservice curriculum that is already heavily laden with core certification requirements" (p. 28-29).

Current trends in teacher education. In teacher education courses designed to prepare preservice teachers to work with diverse learners, preservice teachers engaged in reflecting on their own backgrounds and linguistic experiences, which led to the development of a repertoire of skills for working with culturally and linguistically diverse learners. For example, Shim (2017) examined preservice teachers' microaggressions toward people who spoke a language other than English and/or spoke with accented English. Microaggressions, as explained by Shim, were the often unconscious verbal or

non-verbal assaults directed toward a person because of race, gender, immigration status, or other criteria. Microaggressions were often part of systematic or institutional racism affecting People of Color (Shim, 2017). Shim (2017) concluded examining microaggressions was valuable for preservice teachers, because "recognizing and working against counterproductive beliefs and attitudes…can ultimately support the participants' English learning students succeed in their classrooms" (p. 6). Feiman-Nemser (2018) reiterated, "teachers come to their preparation and practice with deeply held, often tacit beliefs about teaching and learning, students, and subject matter based on their own schooling and upbringing" (p. 229). Differences in race, class, gender, and language affected teachers' beliefs and attitudes (Feiman-Nemser, 2018). Hutchinson (2013) believed that preservice teachers needed "opportunities for identifying their underlying assumptions for working with diverse learners" (p. 50). Further, teacher education courses needed to expose preservice teachers to second language acquisition, how to develop students' background knowledge, and how to use their own working knowledge about students when lesson planning and teaching (Daniel, 2014).   Kumar and Hamer (2012) found learning in the areas of cultural diversity and inclusion did occur while preservice teachers were enrolled in teacher education courses; preservice teachers developed positive attitudes toward culturally diverse students, learned how to include adaptive classroom practices into their teaching repertoire, and recognized the importance of a collaborative classroom. Ramanayake and Williams (2017) agreed and added, "Increased exposure to diversity training in teacher education is positively related to increased sensitivity to diverse learners (p. 449)."

Several studies discussed how universities were providing opportunities for preservice teachers to gain knowledge, skills, and practical experience for working with culturally and linguistically diverse learners. Wright-Maley and Green (2015) used a language simulation with preservice teachers. Nichols and Soe (2013) studied the perceptions of preservice teachers as they volunteered as tutors of children with limited English skills. The preservice teachers completed their service work, and for many, "working with ELL students and meeting their parents was an enlightening and confirming opportunity" (p. 225). Walker-Dalhouse, Sanders, and Dalhouse (2009) utilized a pen pal program between university students and middle school ELs. Islam and Park (2015) assigned graduate students enrolled in a reading methods course to work with ELs. Li and Peters (2016) developed a program for K-12 mainstream teachers where the teachers participated in university-led professional development, then implemented the new strategies while working with ELs in a service role.

Markos (2012) and Kolano and King (2015) explored how one foundation/methods course for teaching ELs possibly changed preservice teachers' perceptions; preservice teachers completed observations and clinical hours for hands-on experience with ELs. Kolano and King (2015) noted "perceptions and beliefs changed" (p. 12) as a result of the understandings gained from the course. In addition, "as students became more aware of cultural and linguistic differences and how to approach those in the classroom, they were able to express more confidence in their ability to work with ELLs" (Kolano & King, 2015, p. 13). Markos (2012) found similar results. At the beginning of the study, "students' definitions (of ELs) were deficit based, narrow minded, and presumed common definitions of fluency" (Markos, 2012, p. 49). However,

toward the end of the one semester course, Markos (2012) found that students' understandings broadened as they moved "toward ideas of acceptance and understanding" (p. 52). The students were also "able to expand the way they define the term English language learner" (Markos, 2012, p. 55). Both studies indicated that preservice teachers experienced a positive change in attitudes and understandings toward ELs after just one course; thus, they recommended the requirement was valuable and should continue (Kolano & King, 2015, Markos, 2012). Villegas et al. (2018) wrote, "As prospective teachers learn strategies for teaching ELLs and become more confident in their ability to do so, they may also become more open to having these students in their classrooms" (p. 143-144). While university courses covering theories and strategies for working with English learners were beneficial to preservice teachers, Villegas et al. (2018) continued, "direct contact with ELLs and the opportunities these contacts afford" (p. 144) may be required for preservice teachers to embrace "a vision of teaching that is inclusive of ELLs in mainstream classes" (p. 144). Mainstream classroom teachers also experienced professional development related to English learners. Lucas, Strom, Bratkovich, and Wnuk (2018) reviewed the empirical literature related to the "inservice preparation of mainstream teachers of English language learners" and found programs designed to develop "expertise in student-centered and inquiry-based practices" (p. 160), among others that included a learning component along with a practical component.

Teachers' Beliefs and Perceptions of English Learners

Multicultural education courses were often included in many teacher preparation programs. Multicultural education, as described by Gomez and Diarrassouba (2014), were "educational programs that integrate different ethnic, linguistic, and cultural aspects

in curricula and instructional practices" (p. 89). Gomez and Diarrassouba (2014) wrote,

"Research has conclusively shown that teachers who have developed multicultural

competency are likely to be more successful at meeting heterogeneous learners' academic

needs" (p. 90). Banks (2005), Gay (2002), and Nieto (2000) have greatly advocated the

importance and need for multicultural education and its "important role in preparing

teachers to meet the challenges in diverse classrooms" (as cited in Gomez and

Diarrassouba, 2014, p. 90). Gay (2002) explained, "Culturally responsive teaching is

defined as using the cultural characteristics, experiences, and perspectives of ethnically

diverse students as conduits for teaching them more effectively" (p. 106). Gay (2002)

further suggested culturally responsive teaching "is a learned skill that should be taught

in teacher preparation programs" (p. 113). Taylor, Yeboah, and Ringlaben (2016)

explored the perceptions of preservice teachers "towards multicultural education and

teaching of culturally and linguistically diverse learners" (p. 1). Results of their study

indicated "preservice teachers have the willingness to study and to be aware of

multicultural awareness for them to operate and teach with less difficulty in the teaching

learning process" (Taylor, Yeboah, & Ringlaben, 2016, p. 6).

Schoenfeld (2011) further explained his earlier work regarding in-the-moment

decision making of teachers "as a function of the following: their knowledge and other

intellectual, social, and material resources; their goals; and their orientations (their

beliefs, values, and preferences)" (p. 457). Schoenfeld (2011) continued, "That is,

although beliefs (or more broadly, orientations) are an essential factor in shaping

teachers' behavior, they cannot be considered in isolation" (p.457).   "Beliefs alone

cannot completely shape behavior: what one does is a function of what one decides are

the most important things to do (the goals one sets, consistent with one's beliefs) and the

resources that one has at one's disposal" (Schoenfeld, 2011, p. 459). To further define

the term beliefs, Schoenfeld (2011) explained, *beliefs* "refer to perceptions on the part of

individuals that shape the ways in which they frame or orient themselves to any particular

context, and thus shape the ways they act in that context" (p. 460). Thus, Schoenfeld

preferred the term *orientations*, as it encompassed a broader view of "beliefs, values,

preferences, and tastes" (p 460).

Pohan and Aguilar (2001) examined the "development of two empirical measures

designed to assess educators' personal and professional beliefs about diversity" (p. 159).

They discovered personal beliefs can be so strong that when they are in conflict with

professional knowledge, the personal beliefs will override professional knowledge

(Pohan and Aguilar, 2001). The Professional Beliefs About Diversity Scale (PBADS)

created by Pohan and Aguilar (2001), and John's Five Factor Model of personality (John,

1990) were used by Unruh and McCord in a 2010 study of "personality traits and beliefs

about diversity in pre-service teachers" (Unruh & McCord, 2010, p. 1). Their findings

suggested "individuals who are innately lower in Openness traits will not respond as well

to diversity education efforts and may be ultimately less effective as teachers in a

modern, pluralistic society" (Unruh & McCord, 2010, p. 7). Chiner, Cardona-Moltó,

Gómez Puerta (2015) conducted a study using Pohan and Aguilar's PBADS with 233

inservice and preservice teachers. Their findings indicated that teachers "keep a belief

system that favours multicultural education and attention to diversity" (p. 21). They

found "teachers with no teaching experience showed a higher tolerance towards diversity

in the professional context than the rest of the groups" (p. 21).

Feiman-Nemser (2018) contended that "some teacher candidates hold deficit views of ELLs or regard teaching them as someone else's responsibility" (p. 230); further, "some experienced mainstream teachers share these views" (p. 230). Pettit (2011) agreed that mainstream teachers "need to take responsibility for the education of the ELLs in their classrooms, rather than expecting the English to speakers of other languages (ESOL) teacher alone to have this role" (p. 124). Pettit (2011) continued, teachers' actions in their classrooms reflected their beliefs, so "for ELLs to become academically successful, teachers must hold positive beliefs and high expectations for them" (p. 124).

Wright-Maley and Green (2015) also noted many preservice teachers "lack exposure to minority communities and the lived experiences of people within them" (p. 4); hence, they may hold stereotypical views or negative attitudes toward ELLs. Villegas et al. (2018) cited a similar study in their review of empirical literature about preparing teachers to teach ELs. The study by Zainuddin and Moore (2004) used action research by preservice teachers which required observations and tutoring ELLs in their own schools. The researchers found, as reported by Villegas et al. (2018), preservice teachers expanded their knowledge and understandings of ELs through their personal interactions with ELs. Wright-Maley and Green (2015) stated, "One of the main purposes of teacher education is to positively shape the beliefs and attitudes of pre-service teachers" (p. 4).

Preservice Teacher Self-Efficacy

Tschannen-Moran, Hoy, and Hoy (1998) explored the theories and definitions of self-efficacy in their study, *Teacher efficacy: Its meaning and measure*. The early work of Rotter (1966) and Bandura (1977) led to the definition, "Teacher efficacy is the

teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (p. 233). Thus, a teacher (or preservice teacher) felt confident in his or her ability to teach in a certain context, such as science or reading, but incompetent in other areas, like math or writing, for example. Teachers were more positive about teaching ELLs if they had taken foreign language courses, multicultural education courses, or had some training in ESL (Pettit, 2011). Tschannen-Moran et al., (1998) mentioned, "A teacher who is aware of deficits in his or her capabilities in a certain circumstance but has a belief about how those deficits can be addressed will have a resilient sense of teacher efficacy" (p. 233). Novice teachers (first year teachers) who came into teaching feeling confident in their abilities, suffered losses in their self-efficacy as the actual stresses of teaching became reality. However, those new teachers with support and "a high sense of teacher efficacy found greater satisfaction in teaching, had a more positive reaction to teaching, and experienced less stress" (Tschannen-Moran et al., 1998, p. 236). Thus, providing preservice teachers opportunities to gain confidence in their abilities and specific feedback led to the development of efficacy (Tschannen-Moran et al., 1998).

Gándara et al., (2005) found in their landmark study of almost 5,300 teachers in California, "the greater a teacher's preparation for working with EL students, the more professionally competent he or she felt to teach them" (p. 17).   Another factor that contributed to a teacher's self-rated teaching ability was the number of years teaching ELs; teachers who had taught ELs for more years, had a higher self-rating (Gándara et al., 2005).

Changes to Teacher Preparation in Response to ESSA

Teacher education had to undergo changes in response to federal government requirements and in response to the need that teacher candidates needed to be prepared to teach diverse learners. ESSA requirements for states and school districts required State Education Agencies (SEAs) to consider the abilities of teachers to educate English learners. States responded by re-examining teacher certification requirements. For example, the state of Missouri made changes to its teacher certification requirements in 2016 (Code of State Regulations, 2018) by including additional competencies in teaching linguistically diverse learners (ELs) to comply with the changes in ESSA. Universities offering teacher certification programs addressed these changes in different ways, including adding competencies to existing courses or creating new courses to meet these requirements. López, Scanlan, and Gundrum (2013) examined teacher certification requirements in the United States as compared to the fourth grade Hispanic ELLs scores in reading on the National Assessment of Education Progress (NAEP). One of their findings was in states where ESL or bilingual certification was required for teachers who worked with ELLs, "markedly higher achievement for Hispanic ELLs" was demonstrated on the NAEP (p. 19). They recommended that all teachers have at least one course in educating ELLs, but also cautioned that one course may not be enough "to meet the needs of *all* ELLs" (López, Scanlan, Gundrum, 2013, p. 19). Brisk (2018) stated, "A transformation of teacher education is needed to ensure that preservice teachers are prepared by knowledgeable faculty," (p. 236) and curriculum used in teacher preparation programs included "how to teach bilingual learners in specific disciplines" (p. 236). Additionally, Brisk (2018) recommended, "specialized courses that focus on bilingual

learners and to infuse essential ideas related to the education of this student population into other teacher education courses" (p. 236).

According to the National Center for Education Statistics, the population of ELs has increased since 2000, but the diversity of staff changed little (McFarland et al., 2018). NCES data from 2014-15 showed the teaching workforce was becoming more diverse; however, white teachers were still predominant, even in schools with more diverse populations (Musu, 2019). Villegas and Irvine (2010) found through their literature review arguments for diversifying the teaching force. These three arguments included: "(1) teachers of color serve as role models for all students; (2) the potential of teachers of color to improve the academic outcomes and school experiences of students of color; and (3) the workforce rationale (Villegas & Irvine, 2010, p. 176). To address the problem of lack of diversity of teachers, some states developed Grow Your Own (GYO) teacher programs, creating partnerships among colleges and universities, community colleges, school districts, and community organizations to recruit teachers by providing financial assistance for seeking certification in high need areas, such as bilingual, ESL, or Special Education (Arias, 2018). Another tool for recruiting bilingual students into the field of education was the Seal of Biliteracy (SoBL). This award was given by school districts to graduating high school students, certified proficiency in two or more languages, and was honored by universities, so honorees had the potential to earn college credit in a world language. Encouraging these bilingual students to consider a career in education was another way to develop a more diverse teacher pipeline (Arias, 2018). Some states, such as Missouri, had included recruitment of a more diverse teaching staff into their federal

ESSA plans; most of the states were earmarking Title II funds to develop equity or GYO programs (Arias, 2018).

Andragogy and Online Teacher Training

When discussing teacher training and professional development for teachers, how adults learn was an important concept to understand. Generally accepted as the art and science of teaching adults, andragogy was based on the work of Malcolm Knowles. Knowles believed in the connection between learning and characteristics of an adult learner, such as life experience, self-concept, and readiness to learn (Carpenter-Aeby & Aeby, 2013, p. 3). The andragogical model was based on six assumptions, or principles, that were different from the pedagogical model. The six principles of andragogy, according to Knowles, were: (a) the need to know; (b) the learners' self-concept; (c) the role of the learners' experiences; (d) readiness to learn; (e) orientation to learning; (f) motivation (Knowles, Holton, & Swanson, 2015). Adults also came to the learning environment with different experiences and knowledge levels, and as such, any group of adults was more heterogeneous than a group of children, because adults have more life experiences, background knowledge, interests, goals, and motivations (Knowles et al., 2015). Therefore, adult learning environments needed to provide opportunities for the learning to be more individualized and personalized. Further, adults came to the learning environment capable of being self-directed in their learning, although some adults needed assistance transitioning from dependent learner roles (as in pedagogy) to self-directed roles (Knowles et al., 2015). Henschke (1998) concurred, andragogy's "primary principle is the desire, potential, and ability for self-directedness on the part of the learner" (para. 11).

According to Knowles (1980), pedagogy and andragogy should be viewed as two ends of the same continuum. Knowles (1980) suggested there are times pedagogy and pedagogical strategies are appropriate to use with adults, just as there are times when andragogy and andragogical strategies are appropriate to use with children. Education was defined as a "lifelong process of continuing inquiry," the most important part was "learning how to learn the skills of self-directed inquiry" (Knowles, 1980, p. 41). Table 4 compared the assumptions of andragogy and pedagogy.

Table 4

Assumptions of andragogy and pedagogy

	Assumptions	
About	Pedagogy	Andragogy
Reason for learning	Do what the teacher asks; use in the future	A reason that makes sense to the learner; immediacy of application
Self-Concept	Dependent	Increasing self-directedness
Learner Experiences	Of little worth, to be built upon for future	Learners are a rich resource for learning
Readiness to Learn	Uniform by age-level and curriculum	Develops from life tasks and problems
Orientation to Learning	Subject-centered	Task- or problem-centered
Motivation	By external rewards and punishment	By internal incentives, curiosity

Source: Knowles, M. (1990).

A conceptual framework was developed to facilitate the application of andragogy to a variety of adult learning experiences. The framework, highlighted by Knowles et al. (2015), was referred to as the "Andragogy in Practice Model." This model contained three elements designed to offer a method for comprehending adult learning experiences. The model was applicable to a variety of learning situations, adult learners, and the many ways that adult learning occurs. Developmental outcomes were labeled in the outermost

ring of the model as "goals and purposes for learning," followed by "individual and

situational differences," and finally, "andragogy: core adult learning principles" as the

innermost ring (Knowles et al., 2015, p. 80). According to the model, individual growth,

institutional growth, and societal growth were three broad categories for adult goals and

purposes for learning, and helped shape adult learning experiences. The middle ring of

the model contained the differences that occur in adult learning contexts, such as

differences in subject matter, differences of individual learners, and differences in

situations. The six core assumptions of andragogy were included in the center section of

the model. The two outer rings represented the influences that affected the application of

andragogical principles to learning experiences. The andragogy in practice model

provided a systematic approach to analyze adult learning programs. A completed analysis

helped identify the possible effects of the "goals and purposes for learning" and

"individual and situational differences" on each of the six core assumptions (Knowles et

al., 2015, p. 80).

Isenberg and Titus (1999) wrote the Internet provided a unique experience for

adult learners in three ways: a) The Internet adapted to the needs of the learner because of

its flexibility and adaptability; b) The Internet provided access to many different learning

contexts, transcending traditional geographical or cultural boundaries; c) The Internet

facilitated the adult learning process because the pacing is adapted to the learner. The

authors developed a three-dimensional research/practice model to demonstrate the

dynamic process of 'Research to Practice' and 'Practice to Research' occurring

simultaneously, which was used by practitioners and researchers (Isenberg, 2007, p. 6).

Isenberg (2007) noted,

"Because educators of adults are not physically present to facilitate effective Internet learning, it seems logical that creators of adult Internet learning experiences should follow andragogical principles when creating the programs to increase the likelihood that the adult's learning needs will be met" (p. 7).

Readiness to learn was another factor to consider when looking at adult learning activities. Adults typically became ready to learn when there was a need, such as a job requirement, life event, or a developmental change (Knowles et al., 2015). Teacher education programs and professional development of K-12 educators in the United States increased the availability of online learning opportunities to fulfill a need for training opportunities for adults interested in the field of education (Smith, 2014). Online learning environments were easy to use, reduced travel expenses from attending courses and training in person, and offered many varied types of learning experiences and topics. However, ensuring quality of the training programs and learning experiences was a difficulty for online learning environments (Friedman, Watts, Croston, & Durkin, 2002). Cercone (2008) noted online learning environments were convenient for students; however, instructors and students often experienced a new type of learning in the online environment. Cercone (2008) continued, "Learners and instructor both need to adapt and change as they learn how to use this new medium" (p. 139). Online learning required an understanding of how adults learn (Glancy & Isenberg, 2011).

Blackley and Sheffield (2015) discussed while many teacher education undergraduate students were technically adults, many did not consistently exhibit adult behaviors. The authors questioned why this occurred; possibly "21st century adult learners share a different set of characteristics, perhaps resulting from their upbringing,

schooling, and ubiquitous digital distractions" (Blackley & Sheffield, 2015, p. 398).

Blackley and Sheffield (2015) believed andragogical practices and deep learning required

more energy than surface learning and pedagogical practices for the students and

teachers; however, surface learning and pedagogy did not contribute to "developing 21st

century skills or profession-readiness, particularly in the sphere of teaching" (p. 398).

Blackley and Sheffield (2015) found, "Students want personalized flexible learning, and

instantaneous feedback and communication" (p. 407); thus, they determined preservice

teachers needed to use "digital technologies to personalize their learning and facilitate

their interactions with peers and tutors" (p. 408). To streamline this goal, the authors

suggested online course writers use andragogical principles to create their online learning

environments (Blakely & Sheffield, 2015). Knowles (1980) noted as children become

adults and "move up the educational ladder" (p. 45), they begin to see themselves as less

passive and more active in their learning. Adults became more responsible for and vested

in their learning; thus, they become involved in the actual process of learning. At times

when adults entered a learning situation, their previous learning experiences had

conditioned them to revert to a child-like state. Unfortunately, this was in direct conflict

with an adult's need to be self-directing. Therefore, teachers of adults had to help adults

adjust to a new role in education—that of one who was responsible for one's own

learning (Knowles, 1980, p. 19). The learning process involved the interaction of the

learners and their environment; the quality and amount of learning was influenced by the

quality and amount of interaction. Teachers of adult learners became facilitators of

knowledge, guiding adult learners to discover what they need to know and ways to apply

the knowledge to their lives (Knowles, 1980). Further, Blackley and Sheffield (2015)

stated, "we seek to help students to cross the threshold from a teaching student to a student teacher, developing their teacher identity and helping them feel ready to take their place as members of the teaching profession" (p. 412).

According to Knowles, Holton, and Swanson (2015) andragogy and information technology worked well together. The use of information technology used in an online course was: "(1) learner controlled, (2) facilitator friendly, and (3) 24/7" (Knowles et al., 2015, p. 214). Through the design of the online learning experience, the instructor for the course moved "from teacher to facilitator of learning" (Knowles et al., 2015, p. 244), which was an andragogical approach in order to create a more meaningful experience for the learner (Cercone, 2008). By using this approach, the online course became personal for the learner, thus improving the learning experience. When designing an online learning environment, Collins and Liang (2014) suggested considering the needs of the learner, so the online modules, course content, and tasks could be modified to more fully meet their learning needs.

As noted by many researchers and summarized by Gagne (1965), "Learning is a change in human disposition or capability, which can be retained, and which is not simply ascribable to the process of growth" (p. 5). According to Daniel (2014), mainstream teachers and preservice teachers who embraced uncertainty could be empowered "to shift from a desire for exact methods and content to bring human interaction back to the center of instructional decision-making" (p. 21). This was true in andragogy, as Billington (2000) wrote, "adults who reported experiencing high levels of intellectual stimulation-to the point of feeling discomfort-grew more" (para. 10). Billington (2000) continued, "Students grow more in student-centered as opposed to

faculty-centered programs" (para. 13). Glancy and Isenberg (2011) agreed, "The self-directed learner takes responsibility for his own learning" (p. 8). As stated by Charungkaittikul and Henschke (2018), "Successful learners do not wait for their instructors to tell them where they need to grow. They are committed to lifelong self-directed learning and they are deciding and driving their own development directions" (Charungkaittikul & Henschke, 2018, para. 2).

Summary

Chapter Two highlighted the unique characteristics of English learners in the United States, the need for teachers with specialized training and skills for working with ELs, and characteristics of effective teachers of English learners. Research explored the preparation of future mainstream classroom teachers of ELs, as well as teacher beliefs, perceptions, and self-efficacy. Another highlight included the changes in ways teachers are prepared in undergraduate teacher certification programs in response to legislative and societal changes. The chapter concludes with a brief description of andragogy, the art and science of teaching adults, and its application in an online learning environment.

Chapter Three: Research Method and Design

Purpose of Study

The purpose of this mixed-methods study was to investigate the knowledge, pedagogical skill, and self-efficacy levels of preservice teachers and their perceptions of English learners while enrolled in an online TESOL (Teaching English to Speakers of Other Languages) teacher training course using an application of the principles of andragogy in a Midwestern private university. A TESOL methods course was a new addition to required curriculum; so therefore, the pre-service teachers provided information about their knowledge, pedagogical skill, and self-efficacy levels related to teaching English learners, as well as their perceptions of ELs, before, during, and immediately following the course. Students completed the following: (a) pre- and post-surveys; (b) pre-, mid-, and post-questionnaires; (c) reflective journaling; (d) focus groups; and (e) academic assignments to measure growth. Fraenkel, Wallen, and Hyun (2015) defined a mixed-methods study as one that included both quantitative and qualitative data and produced a variety of results in order to further the understanding of the research topic. The research results were used to guide curriculum development and instruction at a private Midwestern university and add to the body of research about preservice teachers. This study also added to the body of research regarding the application of the principles of andragogy to an online TESOL teacher training course, specifically investigating three principles of andragogy: (a) self-concept of the learner and the learner's ability to be self-directed; (b) prior experience of the learner; and (c) readiness to learn.

Research Questions and Null Hypotheses

Research Question 1: How do pre-service teachers perceive English learners during an online TESOL teacher training course?

Research Question 2: How do pre-service teachers perceive their own knowledge levels of English learners during an online TESOL teacher training course?

Research Question 3: How do pre-service teachers perceive their own pedagogical skill levels for teaching English learners during an online TESOL teacher training course?

Research Question 4: How do pre-service teachers perceive their own self-efficacy levels for teaching English learners during an online TESOL teacher training course?

Research Question 5: How are principles of andragogy applied to an online TESOL teacher training course?

Null Hypothesis 1: There is not an increase in the knowledge levels of preservice teachers of English learners as measured by the pre- and post- "Perceptions of Preservice Teachers" (PPST) survey.

Null Hypothesis 2: There is not an increase in the pedagogical skill levels of preservice teachers of English learners as measured by the pre- and post- "Perceptions of Preservice Teachers" (PPST) survey.

Null Hypothesis 3: There is not an increase in the self-efficacy levels of preservice teachers of English learners as measured by the pre- and post- "Perceptions of Preservice Teachers" (PPST) survey.

Null Hypothesis 4: There is not a more positive perception of English learners by preservice teachers as measured by the pre- and post- "Perceptions of Preservice Teachers" (PPST) survey.

Methodology

A mixed methods comparison study using a non-randomized sample and a purposive sample technique, was performed.

Preparation. Prior to enrolling, students and their academic advisors were provided information about the study and given opportunities to ask questions. Students enrolled in one of three sections: two undergraduate sections and one graduate section. The first undergraduate section of students completed the course during the first eight weeks of a 16-week semester, while the second undergraduate section and the graduate section of the course were completed during the second eight weeks of the 16-week semester. Two different instructors facilitated the online course; however, the course was designed by both instructors, ensuring that course assignments were nearly identical. The graduate section included additional assignments to meet university requirements for a graduate-level course. The course used Canvas as the online Learning Management System (LMS). According to the Canvaslms.com website, "Canvas is a well-established (circa 2010, used in many colleges, universities, and K-12 schools), open-source LMS by Instructure Inc. It is released under the AGPLv3 license for use by anyone interested in learning more about or using learning management system" (Canvas by Instructure, 2019, n.p.). All assignments were completed online directly in Canvas or uploaded and submitted through Canvas.

The required course text was *Making Content Comprehensible for English Learners: The SIOP® Model* (5th edition) written by Echevarría, Vogt, and Short (2017). The text introduced and explained the development of the Sheltered Instruction Observation Protocol (SIOP®) Model; the authors noted, "The goal of this book is to prepare teachers to teach content and academic language and literacy skills effectively to English learners" (Echevarría, Vogt, & Short, 2017, p. 24). During the course, the entire text was read and discussed. Videos (published by Pearson) of the authors explaining the features were embedded in each week's discussion boards for students to review and discuss, too.

Once students were enrolled in the online TESOL methods teacher training course, they completed a consent form. The signed form was emailed to an outside observer, so the instructor did not know who was participating in the study until the completion of the course. To help maintain confidentiality, the outside observer was added to each section of the TESOL methods course as a course observer. Students were introduced to the outside observer through course announcements and the consent letter and had the opportunity to email the observer directly with questions. Students were assigned a non-graded assignment that further explained the study and invited them to participate. Students were assured that their participation was strictly voluntary and did not require any out-of-course effort (with the exception of the focus group). The assignment contained remarks from the researcher explaining the study, emphasizing not participating would not affect student grades and participants would not be identified by name in any presentation of the data. At any time during the semester, a study participant

had the option to re-visit the consent documents housed in the Files section of Canvas

and remove consent by emailing an updated form to the outside observer.

Dependent variables. Dependent variables measured during the study were the

knowledge, pedagogical skill, and self-efficacy levels of preservice teachers and their

perceptions of English learners.

Course data collection. Students enrolled in the TESOL methods course

completed all required coursework, including the pre- and post-surveys, pre-, mid-, and

post-questionnaire, narrative reflections, course assignments and quizzes, and SIOP®

lesson plan. All assignments were the same for study and non-study participants, since

the data were not gathered until final grades were posted. Students received feedback and

grades during the course from instructors.

Students completed the pre-test in the form of an online survey, using a link

within the online course to an external data collection site, *Qualtrics*. The survey was

completed anonymously by all students enrolled in the course. Students were asked to

provide a pin number that could link pre- and post-survey data at the end of the study.

The survey, titled "Perceptions of Preservice Teachers" (PPST), consisted of questions

designed for preservice teachers to share their perceptions of English learners and to self-

rate their knowledge, pedagogical skill, and self-efficacy levels for teaching English

learners. A second pre-test, entitled Initial Reaction Questionnaire (IRQ), consisted of

six questions requiring short essay responses. The IRQ was developed by Markos (2012)

and modified, with permission, by the researcher. One of the first academic assignments

required students to participate in an online simulation/reflection activity, entitled

'English Language Learners: Understanding Sheltered Instruction,' available through

The Iris Center. During the length of the course, reflective journaling occurred in the form of online discussion boards, assignment responses, and quizzes. Students read text chapters and articles and watched companion videos to complete discussion board entries and short-answer quizzes. Mid-semester, students re-visited the Initial Reaction Questionnaire (IRQ) and updated and/or justified their initial response to the first question, "When you hear the words 'English Language Learner', what comes to mind?" For the final assignment, students developed a lesson plan for English learners using the Sheltered Instruction Observation Protocol (SIOP®) as a guide. Students had the option to use the provided lesson plan templates or other lesson plan format to write a lesson plan with the components of a SIOP® lesson plan. A scoring rubric was provided, as well as the opportunity for feedback on rough drafts. The rubric was the Sheltered Instruction Observation Protocol, as found in Appendix A of the text. Students also had the opportunity to read and comment on two other students' lesson plans prior to the final submission deadline. Students completed the post-test survey, "Perceptions of Preservice Teachers" (PPST). A few additional questions regarding the course design were added to the post-survey to gather information about the application of the principles of andragogy. Further, students re-visited the IRQ, then revised and/or justified a question other than number 1, since question 1 was completed for the mid-semester IRQ. Other reflective journals from course assignments were also used to gauge student knowledge, pedagogical skill, and self-efficacy levels, as well as perceptions of English learners throughout the course.

Focus group data collection. After mid-term, students were invited to participate in an online focus group conducted by the outside observer. A separate

Canvas shell was created for this purpose, and only the outside observer and focus group participants had access. The discussion board was moderated by the outside observer, and scrubbed of all personal information; identifiers were used (S1 for Student 1, S2 for Student 2, etc.). The focus group discussion board consisted of eight themes, with follow-up questions posted by the outside observer; focus group participants were encouraged to respond to all eight discussion prompts, but this was not a requirement for participation.

At the conclusion of the semester and after all final grades were posted, the outside observer identified the students who did not give consent or removed consent and removed non-participant data from the data sets prior to giving the data to the researcher for analysis. In this way, confidentiality was maintained.

Results and Analysis. A mixed-methods comparison study using a non-randomized sample, with a purposive sample technique was performed. The qualitative data were analyzed. The researcher read and re-read the data to look for common themes. These data were used to determine if a change in knowledge, pedagogical skill, or self-efficacy levels of preservice teachers occurred. Additionally, the quantitative data were analyzed. The researcher conducted a statistical analysis using a series of *t*-tests to compare the results of the pre- and post- PPST surveys. The researcher used the IRQ to gather baseline data of preservice teachers' initial understandings about ELLs and added to Markos's (2012) research by also focusing on one question of the IRQ, 'When you hear the words *English Language Learner,* what comes to mind?' The researcher read and coded the initial and mid-term responses for themes. When reporting results, all participants were identified using a letter/number code, S1, (Student 1), S2, S3, etc.

Participant responses to the simulation/reflection activity, as well as other assignments, discussion boards, and quizzes were coded and sorted into common themes. The researcher used a code book to contain the data as it was coded and categorized. Narratives from the reflection activities and IRQ statements were used to determine if a change in perception toward English learners occurred during the online training course. Final SIOP® lesson plans were scored using a rubric by the course instructors, randomly assigned and removed of identifying information by the outside observer, to create a consistency in scoring. The lesson plans were then exchanged and scored again. Averages of the scores were used as the final score for the study. This score was used as a benchmark in knowledge and pedagogical skill levels of preservice teachers. The researcher stored the research data results in a file on a password-protected computer.

Application of andragogy in practice model. As a student of andragogy, the researcher had an interest in learning if the required online TESOL methods course was facilitated in a way that was developmentally appropriate for adult learners. Thus, was this online TESOL teacher training course based on andragogical principles, and what impact, if any, did those principles have on the learning environment? The researcher consulted texts, articles, and a former professor of andragogy to glean information about how to examine and analyze an online course for the principles of andragogy. An explanation of one way to analyze an adult learning environment was contained in the eighth edition of the text, *The Adult Learner*, by Knowles, Holton, and Swanson (2015); the 'Andragogy in Practice Model' was explained as "an enhanced conceptual framework to more systematically apply andragogy across multiple domains of adult learning

practice" (Knowles et al., 2015, p. 79). The process used by the researcher is outlined in

Table 5.

Table 5

Andragogy data collection process

Steps to analyze learning experience using principles of andragogy
1.   Data collection matrix of learning environment
2.   Modified 'Worksheet for andragogical learner analysis'
3.   Self-diagnostic rating scale competency as a learning facilitator of a graduate level course
4.   Learning style inventory to identify strengths and weaknesses in applying andragogy

Note. Researcher-created matrix and tools available in Knowles, M. S., Holton, E. F., & Swanson, R. A. (2015).

Depending on the outcome of the analysis, the course could be modified or

changed to better meet the needs of future adult learners. The researcher adapted and

used the following tools: (a) responses to PPST survey questions, (b) 'Worksheet for

andragogical learner analysis' (Knowles et al, 2015, p. 88), (c) a self-diagnostic rating

scale of some of the core competencies of andragogy (Knowles et al, 2015, p. 261), and

(d) researcher-created data collection matrix to guide the analyses of the online learning

environment for the graduate section of the TESOL methods course. One section

(graduate level) of the TESOL methods course was chosen, because learning was

situational, and each class of students experienced the course in different ways;

individual student differences were also considered, so choosing one section allowed the

researcher to explore the application of andragogy to a smaller group of participants. The

researcher selected week 5 (out of 8) to conduct the analysis, as this was over halfway

through the semester and students already had the opportunity to read much of the text,

participated in online course discussions, watched demonstration videos, completed

related quizzes, and shared their ideas for the upcoming SIOP® lesson plan. At this point

in the semester, an instructor had the opportunity to clarify misconceptions and adjust

coursework and timelines; the students had also settled into a learning routine for the

course.

Other methods of andragogical data collection. The researcher created a

matrix to collect course-related data as it applied to andragogy. Each assignment and

course activity for week 5 was considered: Did the assignment contribute to each, any, or

all of these three principles of andragogy: (a) self-concept of the learner and the learner's

ability to be self-directed; (b) prior experience of the learner; and (c) readiness to learn?

How did the assignment contribute to the principles? After all the assignments and

course activities for week 5 were audited using the researcher-created data collection

matrix, the researcher then used a modified version of the 'Worksheet for andragogical

learner analysis' to examine the expected influence of individual, institutional, and

societal "goals and purposes for learning" (Knowles et al., 2015, p. 88) from the

perspective as the instructor of an adult learning course. Again, the researcher reviewed

each learning activity for week 5 and filled in the 'Worksheet' with data gathered from

the course.

The researcher also wanted to examine whether the course design and teaching

practices were oriented toward andragogy or pedagogy. Thus, the researcher completed a

self-diagnostic rating scale as it applied to being the learning facilitator of a graduate

level course and a personal adult learning style inventory. These tools were

recommended by an expert in the field of andragogy, and found in *The Adult Learner* (Knowles et al., 2015).

  Concluding the study. All students enrolled in the TESOL methods course were thanked for their possible participation in the study. Study participants were thanked via email through the outside observer. Findings were shared with the university. Findings were also shared with other professional organizations.

Reliability, Validity, Measurement

  The researcher created a pre-test survey of 30 closed-ended questions and one short answer question. The close-ended questions were written with a 7-choice Likert scale: strongly agree (7), agree (6), somewhat agree (5), neither agree nor disagree (4), somewhat disagree (3), disagree (2), or strongly disagree (1). The short answer question requested respondents to list or describe any additional professional development that they wanted in the future. To help ensure reliability and validity, the researcher asked colleagues and co-workers to complete the survey and make suggestions. The researcher also added the survey as an assignment to a previous semester of the course. Adjustments to questions were made as needed prior to the data collection time. Students completed the survey using a link within the online course to an external data collection site, *Qualtrics*. The survey was completed anonymously by all students enrolled in the course. Students were asked to provide a pin number that could link pre- and post-survey data at the end of the study. The survey consisted of questions designed for preservice teachers to share their perceptions of English learners and to self-rate their knowledge, pedagogical skill, and self-efficacy levels for teaching English learners.

The original IRQ was written by Markos (2012) and used in the study, "Mandated to learn, guided to reflect: Pre-service teachers' evolving understanding of English language learners." Permission was granted to the researcher to use and modify the IRQ as needed for this study.

Discussion board posts, quiz responses, and other course assignments were selected as qualitative data as it related to the hypotheses and/or research questions.

The researcher consulted with an expert in the field of andragogy regarding the use of the tools found in *The Adult Learner* (Knowles et al., 2015).

Study Limitations

One limitation of the study was that it was completed during one spring semester at one Midwestern private university. The course was completed in eight weeks, rather than the regular 16 weeks; thus, the coursework was completed at a faster pace. Some of the graduate participants enrolled in the course indicated they were then-currently employed as a teacher on the survey; however, the researcher is uncertain if these same students were study participants. Their surveys were included in the overall statistical analyses, seven of 14 on the pre-survey and six of 10 on the post-survey. The participants failed to use unique pin numbers on the pre- and post-surveys, so the *t*-tests could not be paired for statistical analyses. Another limitation was the participants were selected from three separate sections of the course taught by two different instructors; therefore, the course experience could have been influenced by the instructor and the student population. In addition, there were a limited number of students enrolled in the course. Finally, preservice teachers by definition had not had much practical experience

working with English learners, and they may not have been able to adequately identify

their lack of knowledge and pedagogical skills for working with English learners.

Summary

While participating in a mixed-methods study, preservice teachers completed the

following: (a) pre- and post-surveys; (b) pre-, mid-, and post-questionnaires; (c) reflective

journaling; (d) focus groups; and (e) academic assignments to measure growth in their

knowledge, pedagogical skill, and self-efficacy levels related to teaching English

learners, as well as their perceptions of ELs, before, during, and immediately following

the course. This study also added to the body of research regarding the application of the

principles of andragogy to an online TESOL teacher training course, specifically

investigating three principles of andragogy: (a) self-concept of the learner and the

learner's ability to be self-directed; (b) prior experience of the learner; and (c) readiness

to learn. The research results were used to guide curriculum development and instruction

at a private Midwestern university and add to the body of research about preservice

teachers.

Chapter Four: Results

Introduction

The purpose of the mixed-methods study was to investigate the knowledge, pedagogical skill, and self-efficacy levels of preservice teachers and their perceptions of English learners while enrolled in an online TESOL (Teaching English to Speakers of Other Languages) teacher training course using an application of the principles of andragogy in a Midwestern private university. Chapter Four includes the results of a mixed-methods approach of the following: (a) pre- and post-surveys; (b) pre-, mid-, and post-questionnaires; (c) reflective journaling; (d) focus group; and (e) academic assignments used to measure growth. Further, as a student of andragogy, the researcher had an interest in learning if the required online TESOL methods course was facilitated in a way that was developmentally appropriate for adult learners, and if andragogical principles had an impact on the learning environment. Chapter Four included the results of the analysis of the application of the six principles of andragogy to an online TESOL teacher training course, specifically investigating three principles of andragogy: (a) self-concept of the learner and the learner's ability to be self-directed; (b) prior experience of the learner; and (c) readiness to learn. Students completed the pre-test and post-test in the form of an online survey, using a link within the online course to an external data collection site, *Qualtrics*. The survey was completed anonymously by all students enrolled in the course. Students were asked to provide a pin number that could link pre- and post-survey data at the end of the study. The survey, titled "Perceptions of Preservice Teachers" (PPST), consisted of questions designed for preservice teachers to share their perceptions of English learners and to self-rate their knowledge, pedagogical

skill, and self-efficacy levels for teaching English learners. A *t*-test was used between the pre-survey and post-survey to determine if the data resulted in a rejection of the null hypotheses. The participants failed to provide unique pin numbers for the pre- and post-surveys, so the *t*-tests were unable to be paired for statistical analyses. The pre-, mid-, and post-questionnaires and reflective journaling responses were analyzed and coded for themes. Because of the limited number of participants, the focus group questions were reviewed but not coded. The results of the quantitative and qualitative analyses are discussed in Chapter Four.

Research Questions

　　Research Question 1: How do preservice teachers perceive English learners during an online TESOL teacher training course?

　　When analyzing the data for Research Question 1, survey responses to Questions 1, 2, 3, 4, 5, 6, 7, 8, 10, and 11 (Appendix B) were considered, along with responses to the mid-IRQ and other student reflective responses. The survey questions were written in a way that a higher average score would indicate a more negative view or perception of English learners, while a lower average score would indicate a more positive view or perception of English learners. As indicated by Figure 1, overall, participants demonstrated a slightly more positive perception of English learners at the end of the course, as compared to the beginning of the course.
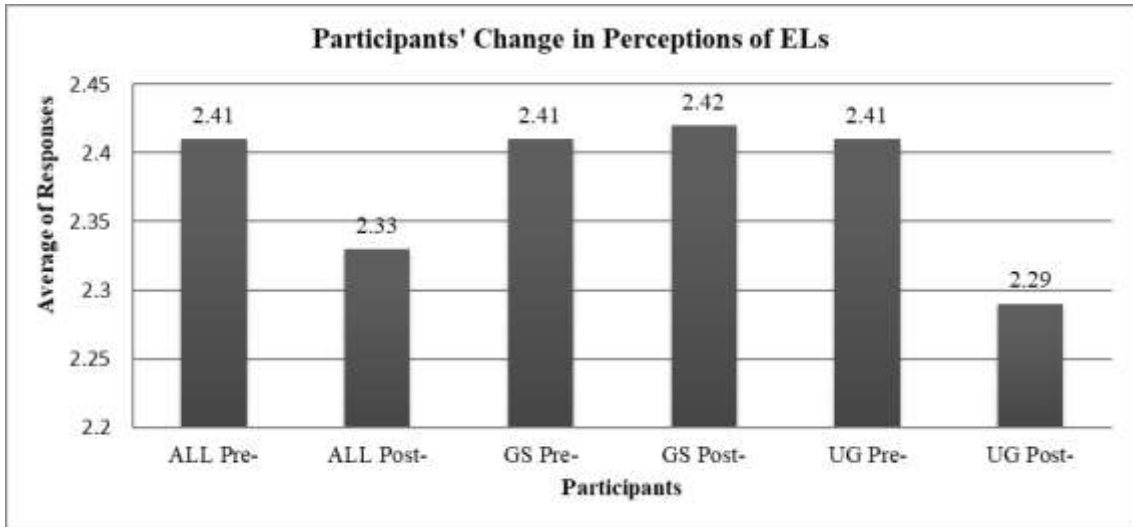
Note. ALL pre-survey: *n*=45; UG pre-survey: *n*=31; GS pre-survey: *n*=14; ALL post-: *n*=39; UG post-: *n*=29; GS post-: *n*=10. GS: graduate students; UG: undergraduate students.

Figure 1. Pre- & post-survey responses of perceptions of English learners by participants.

Even though the researcher failed to reject the null hypothesis 4 due to the lack of

significant statistical change, a change was indicated toward a more positive perspective,

especially among the undergraduate students. There was a -3.53% change for all students

indicated by the survey, and -4.98% change by undergraduates and 0.41% change by

graduates. Participant responses to the mid-IRQ also indicated a change in perception

toward English learners. At the beginning of the course, participants held a narrow or

limited view of English learners, primarily due to lack of exposure to or experience

working with English learners. Following the course, participants expanded their

definitions of English learners to include newly acquired knowledge about second

language acquisition, social and academic language abilities, and cultural and linguistic

diversity. "When I hear ELL now, I have a completely different outlook and respect for

those students," wrote one participant. Another wrote, "I have empathy for these students

and want to help and be the one who can understand in the best way I can." One

participant shared, "As a future teacher I now understand the importance of recognizing

that ELL students have different needs then other students and require a variety of accommodations and modifications to make lessons comprehendible." The participant continued,

> My understanding of ELL students has also grown in the sense that I now realize the ELL community is very diverse. ELL students will come from a variety of cultures with different languages and customs. Also, all ELL students' English abilities vary, so you have to be sure not to lump all ELL students into one big category.

Similarly, when looking at the responses to the *Understanding Sheltered Instruction* video simulation, 45.0% participants indicated they had a better understanding of what ELs experience in classrooms. The activity required participants to watch a series of short videos teaching a government lesson in Portuguese. One summarized a common sentiment,

> From this activity I could kind of experience how an ELL student might feel in a classroom where only English is spoken. That definitely changed my perspective on how I could improve my teaching with ELL students, because I would not want them to feel how I felt watching those videos.

A respondent to the focus group agreed,

> It is difficult to understand how EL students feel in a classroom until you experience it yourself. The lessons taught in a different language with a variety of supports were enlightening and truly showed the struggle of sitting through lessons in which you do not understand most of the language.

Research Question 2: How do preservice teachers perceive their own knowledge

levels of English learners during an online TESOL teacher training course?

Participants' knowledge levels of English learners changed during the course, as

indicated by the survey data and shown in Figure 2. Questions 1, 9, 10, 11, 23 and post-

only Question 26 (Appendix B) were designated as questions to measure participants'

knowledge about English learners. One post-only survey question, Question 26, asked if

the course increased knowledge of English learners. In addition, responses to the mid-

IRQ, other student reflective responses, SIOP® lesson plan scores, and focus group

responses were indicative of participants' knowledge of ELs. As shown in Figure 2, all

groups of participants responded "agree" or "strongly agree" that the course increased
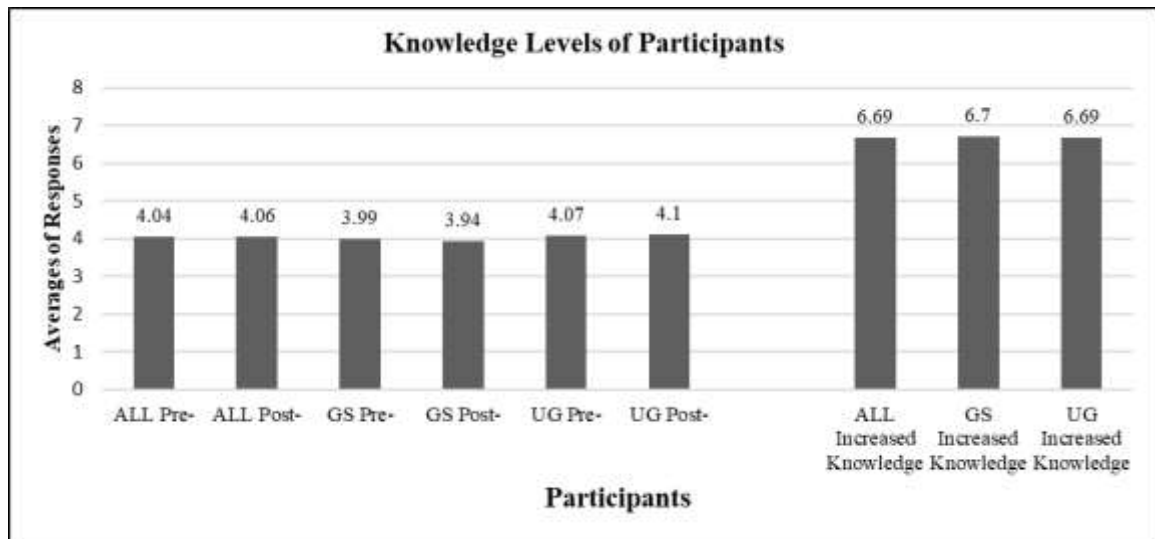
their knowledge of English learners.

Note. ALL pre-survey: $n=45$; UG pre-survey: $n=31$; GS pre-survey: $n=14$; ALL post-: $n=39$; UG post-: $n=29$; GS post-: $n=10$. GS: graduate students; UG: undergraduate students

Figure 2. Pre- & post-survey responses of the knowledge levels of participants.

There was not enough statistical significance to determine if there was a positive

change, to reject null hypothesis 1. However, as a group, all participants experienced

0.5% change, with graduates experiencing -1.3% and undergraduates experiencing 0.7%

change. Also, all students expressed 97.4% agreement that the TESOL methods course

increased their knowledge of English learners, and graduate students agreed or strongly

agreed 100% and undergraduate students agreed or strongly agreed 96.6%. From the pre-

IRQ responses, knowledge of ELs was very basic, with definitions that simply stated ELs

were learning to speak English or learning English as a second language. On the mid-

IRQ responses, a theme that emerged was how the participants had a better understanding

of ELs and their needs as learners. One summarized the general theme, "I now have a

better understanding of how those students feel, and how they learn, and how teachers

have helped them, and also how I as a future teacher can help them as well." Knowledge

of ELs was an area of strength on the SIOP® lesson plan assessment, with 95.2% of

participants scoring 5/5 in the areas of lesson preparation and building background

knowledge. The two focus group participants indicated they had some prior knowledge

of ELs, although it was limited. One student stated, "This course has taught me ways to

interact with English language learners, use and apply different instructional strategies to

help the students grasp the concept, and how to use background knowledge to connect

with the students." In a final course reflective journal, one graduate student wrote, "This

course was very beneficial to me as an educator. I learned so much about ELL students

that I did not know. The information that I gained from this class, I am going to apply

immediately as I prepare for the upcoming school year."

     Research Question 3: How do preservice teachers perceive their own

pedagogical skill levels for teaching English learners during an online TESOL teacher

training course?

Participants perceived their own levels of pedagogical skill above average at the beginning and end of the course. When analyzing the data for Research Question 3, survey responses to Questions 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 and post-only Question 27 (Appendix B) were considered, along with responses to the mid-IRQ, other student reflective responses, SIOP® lesson plan assessment, and focus group responses. As indicated in Figure 3, all students perceived higher levels of pedagogical skill on the post-survey than they did on the pre-survey.
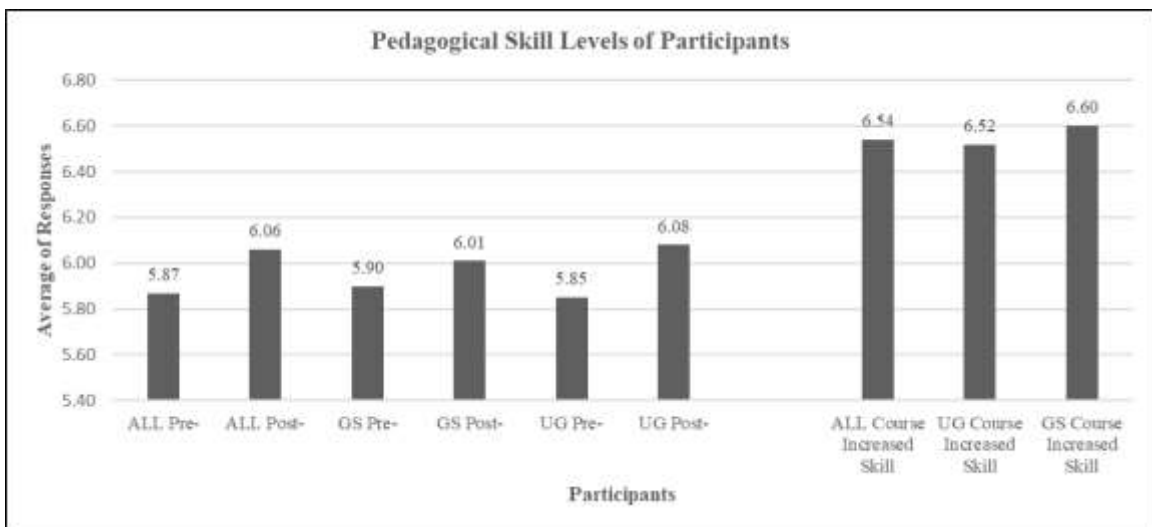
Note. ALL pre-survey: *n*=45; UG pre-survey: *n*=31; GS pre-survey: *n*=14; ALL post-: *n*=39; UG post-: *n*=29; GS post-: *n*=10. GS: graduate students; UG: undergraduate students. Post-survey only question, 'This course increased my skills to teach ELs.'

Figure 3. Pre- & post-survey responses of the pedagogical skill levels of participants.

The undergraduate students expressed the largest increase, from an average of 5.85 to 6.08, an increase of 3.93%. The graduate students had an increase of 1.86%; overall, the participants had an increase of 3.24% in their self-rated levels of pedagogical skill. Additionally, the responses to the post-survey only question, "This TESOL methods course has increased my skills to teach English learners" were 95.9% "agree" or "strongly agree," with an average of 6.54, indicating the course positively increased respondents' perceptions of pedagogical skill.

Responses to the IRQ also indicated an increase in pedagogical skill by the participants. Over half of the participants mentioned strategies learned through the course and the use of the SIOP® method, in addition to building vocabulary, utilizing visuals, manipulatives, and providing extra time. Respondents also mentioned the importance of making lessons comprehensible to students and making connections to previous knowledge. Some mentioned learning about different resources available to help plan and differentiate lessons. A participant noted, "I have learned about different strategies to use to help ELLs to grasp the concept of the language and content. I have also learned ways to help ELLs feel more comfortable and included in the lessons." Another stated, "There are many ways and techniques that a general education teacher can effectively teach ELL students. These techniques also apply to non-ELL students, so they work for the general population of the classroom, as well." In addition, "I also learned more about how to be an effective teacher by how I am supposed to teach ELLs. The teacher must open communication with the student to acknowledge where the student is in their learning progress," concluded a respondent. On the SIOP® lesson plan assessment, 93.1% of participants scored 5/5 in the areas of pedagogical skill, including comprehensible input, strategies, interaction, practice and application, lesson delivery, and review and assessment. One area of strength in pedagogical skill was lesson delivery, while areas of weakness were comprehensive review of vocabulary, review of key concepts, and assessment of student comprehension. The focus group participants further supported a positive change in pedagogical skill levels. One wrote that visuals alone were not enough support concepts-many supports were needed, while the other

noted, "The importance of being consistent with an English language learner" as pedagogical skills needed for teaching ELs.

Research Question 4: How do preservice teachers perceive their own self-efficacy levels for teaching English learners during an online TESOL teacher training course?

Several survey questions measured self-efficacy levels for teaching ELs, including Questions 12, 13, 14, 18, 19, 20, 21, and post-only Questions 28, 29 (Appendix B). These questions helped answer how confident preservice teachers felt about teaching ELs in mainstream classrooms. According to survey data and shown in Figure 4, all participants felt more confident teaching ELs at the end of the course, indicated by a 4.37% change. There was enough statistical evidence to reject the null hypothesis 3 for all participants in the category of self-efficacy; thus, the course significantly changed all participants' self-efficacy levels for teaching ELs.

Undergraduates experienced the highest change, with 4.91%, and the graduates had the lowest with 2.95%. Also, two post-survey questions specifically asked participants about their confidence and preparedness in teaching ELs. All participants indicated an increase in confidence by responding "agree" or "strongly agree" on the survey. Following the course, 90.3% responded they felt prepared to teach ELs, and 96.7% felt more confident in their ability to teach ELs. The IRQ responses also suggested an increase in self-efficacy levels of participants. One mentioned,

> Before I started the class, I couldn't tell you anything about how to teach content to an English Language Learner. I now feel that I may not be an expert on teaching them, but I do know some things to help.
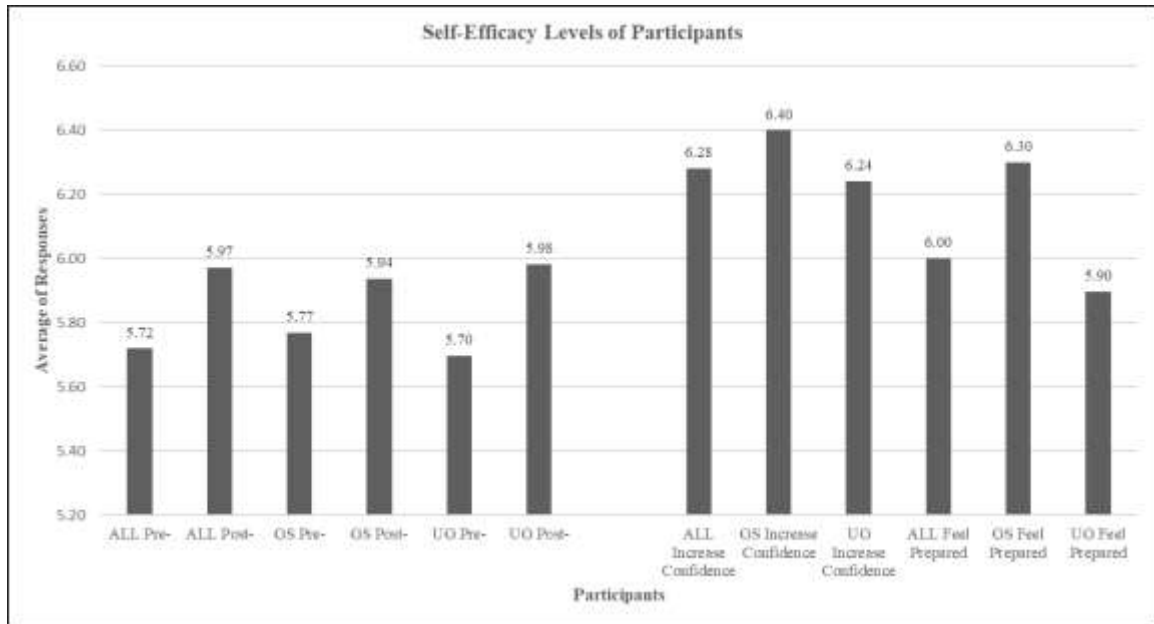
Note. ALL pre-survey: *n=45*; UG pre-survey: *n=31*; GS pre-survey: *n=14*; ALL post-: *n=39*; UG post-: *n=29*; GS post-: *n=10*. GS: graduate students; UG: undergraduate students. Post-survey only questions: 'This course increased my confidence to teach ELs.' and 'I feel prepared to teach ELs.'

Figure 4. Pre- & post-survey responses of the self-efficacy levels of participants

A participant wrote, "The SIOP Model has also helped me feel more confident with teaching ELLs. I feel better prepared and more confident to teach ELL students." Another stated, "When I think about an English Language Learner in my class, it makes me relieved to be taking this course. Otherwise, I do not know if I would be reaching those students in my future classroom." This sentiment was echoed by a fourth participant, "I am excited to learn more about the SIOP model, so when I think about the term 'English Language Learner' I can be confident I will be the teacher that ELLs need."   Further, some other reflective journaling responses reiterated the increase in self-efficacy. Several students said they would recommend this course to others and were glad the course was required. One participant wrote, "By being a participant in this class, my knowledge, skills and confidence was most definitely increased. Taking this course has added so much value to my perspective of teaching." A second participant wrote,

Although this course focused on English language learners, there were so many

tips I would like to implement in my classroom even if I do not have any ELLs.

Overall, after taking this class I feel more confident in regards to educating

English language learners.

A focus group respondent suggested,

While I found this course to be beneficial as a starting place, I believe I would not

feel completely adequate until I had actual experience teaching EL students. I

think this is true for most teaching courses. The information is great, but you can't

see how it actually works until it is put into action with students.

Research Question 5: How are principles of andragogy applied to an online

TESOL teacher training course?

As a student of andragogy, the researcher had an interest in learning if the

required online TESOL methods course was facilitated in a way that was

developmentally appropriate for adult learners. The researcher specifically examined

three of the six principles of andragogy: (a) self-concept of the learner and the learner's

ability to be self-directed; (b) prior experience of the learner; and (c) readiness to learn.

Four data collection tools and some of the PPST survey questions were used to guide the

analyses. The researcher examined herself as a learning facilitator for adult learners, as

well as the TESOL methods course for the application of the principles of andragogy. To

begin, the researcher created a data collection matrix to guide the analyses of the online

learning environment for the graduate section of the TESOL methods course, specifically

week 5 (out of 8). Next, to gather data about the application of the principles of

andragogy, the researcher modified a worksheet developed for this type of analysis from

the eighth edition of the text, *The Adult Learner*, by Knowles, Holton, and Swanson (2015), entitled the 'Worksheet for andragogical learner analysis' (p. 88). Finally, a self-diagnostic rating scale competency and personal adult learning style inventory, also found in *The Adult Learner* (Knowles et al., 2015, p. 261-263) and recommended by an expert in andragogy, were completed by the researcher. The rating scale and learning style inventory allowed the researcher to identify strengths and weaknesses as a learning facilitator when applying the principles of andragogy to a learning environment.

Survey data related to andragogy. The survey questions were divided among three principles of andragogy: self-directedness, prior experiences of the learner, and readiness to learn. Question 24, categorized as self-directedness, asked respondents to choose how the format for the required course. Respondents were allowed to select as many or few of the options available: online only, hybrid-online and seated, seated only, 8-week course, full semester 16 weeks, with a practicum option (classroom experience). As shown in Figure 5, a hybrid option that included coursework online and seated was the most popular option for all students on the pre-survey; however, on the post-survey, hybrid was the most popular option for undergraduates and online only was the most popular for graduates on the post-survey.
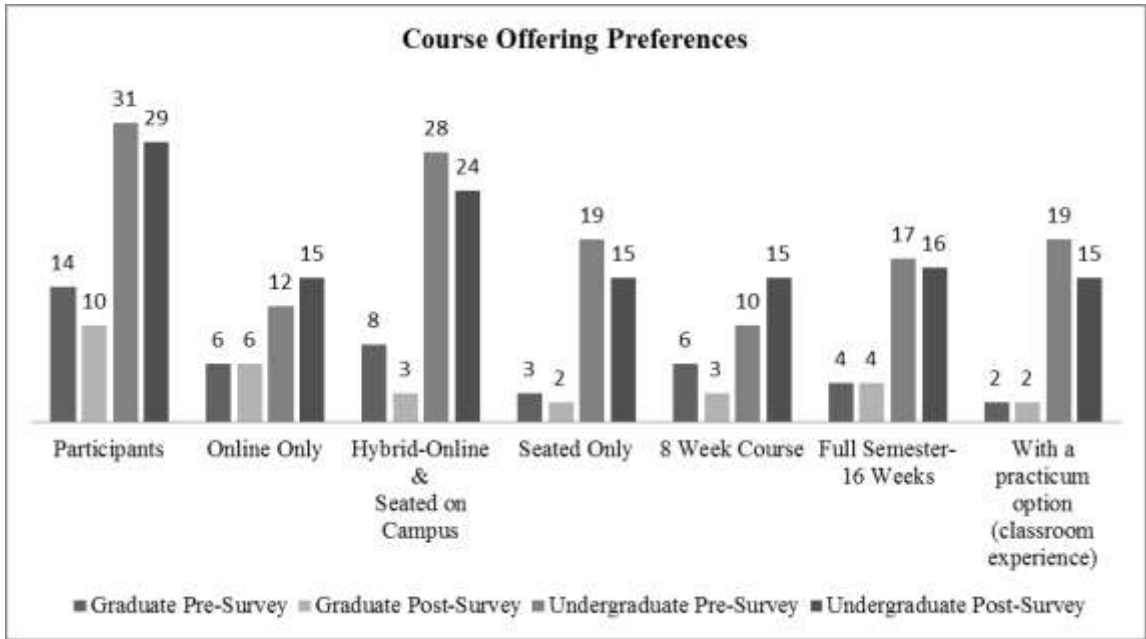
Note. Participants could choose any or all of the course offering choices, so counts may be duplicated. Pre-survey all: $n=45$; pre-undergraduates: $n=31$; pre-graduates: $n=14$; post-all: $n=39$; post-undergraduates: $n=29$; post-graduates: $n=10$.

Figure 5. Self-directedness of the learner represented by course offering preferences.

Over half of undergraduates also preferred the full semester option and with a practicum (classroom experience) on both the pre- and post-surveys. On the pre-surveys, six of 14 (42.9%) graduate students preferred the course as it was offered, online in 8 weeks; on the post-survey 60.0% preferred online, 40.0% preferred full semester, and 30.0% preferred 8 weeks. All participants (100%) agreed or strongly agreed that the course met their needs as learners, as indicated by Question 30 on the post-survey. In addition, all students experienced a positive 9.47% change that this TESOL methods course should be required.

Knowledge and pedagogical skill questions were combined, as these represented the prior experience of the learner. Responses are represented in Figure 6.
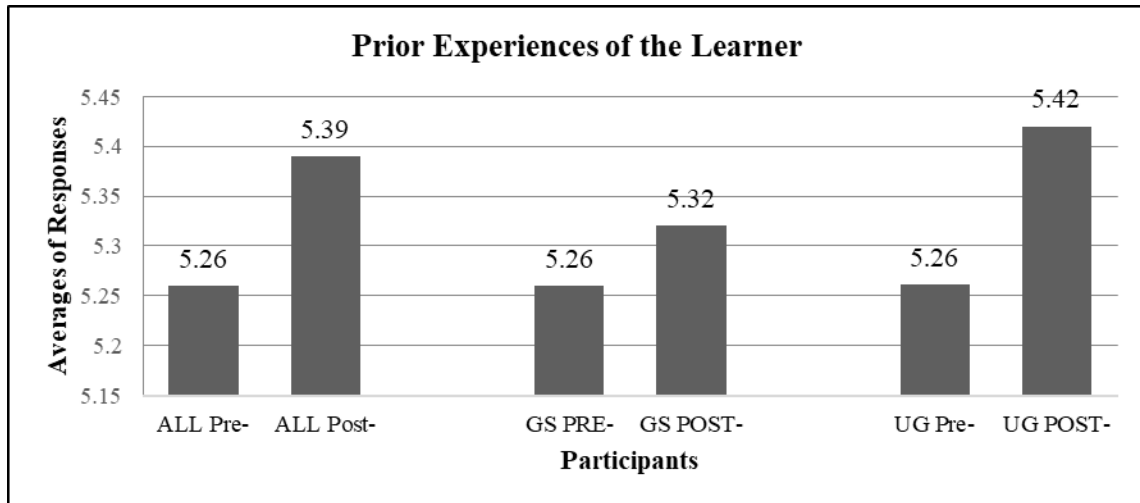
Note. Pre-survey all: *n=45*; pre-undergraduates: *n=31*; pre-graduates: *n=14*; post-all: *n=39*; post-undergraduates: *n=29*; post-graduates: *n=10*. Knowledge and pedagogical skill questions were combined to make 'prior experiences of the learner.'

Figure 6. Prior experiences of the learner represented by knowledge and pedagogical skill.

All students noted a 2.47% increase in knowledge and pedagogical skill; undergraduates experienced an increase of 3.04% and graduate students experienced an increase of 1.14%.

To discuss readiness to learn, Question 21 responses on the pre- and post-surveys were compared, and responses to Question 22 were coded for themes from the pre- and post-surveys. The students were asked if they needed more professional development (PD) in the area of teaching ELLs and what type of professional development they wanted. Prior to the course, 84.4% of all students indicated they wanted professional development on the pre-survey, but 69.2% agreed on the post-survey. The types of professional development also changed. At the beginning of the course, respondents had many varied responses to the types of PD they wanted. A few mentioned wanting any type of PD, because they had no prior experience or knowledge of ELs. Some mentioned learning teaching strategies, how to differentiate, classroom experiences (working with

EL students), and technology resources. There were fewer responses at the end of the

course, but some of the suggestions were the same, such as more teaching strategies and

how to differentiate. However, in-class experiences that facilitated working with ELs,

such as tutoring and time to apply new knowledge while teaching, were mentioned more

frequently. In addition, some respondents requested the time necessary to adequately

plan lessons specific for ELs.

Application of the principles of andragogy to the TESOL methods course. A

matrix of the analyses of week 5 was displayed in Figure 7.

Week 5 Assignments	Application of the Principles of Andragogy		
	Self-concept of adults is heavily dependent upon a move toward self-direction	Prior experiences of the learner provide a rich resource for learning	Adults typically become ready to learn when they experience a need to cope with a life situation or to perform a task
Text readings & reflections posted to discussion board, included 1 original post & 2 responses on classmates' posts	Students did or did not read the text knowing that they needed to contribute to a discussion board.	Students connected text readings to their own experiences or used examples from the text to demonstrate their ideas	Students connected text to current or future learning environment
Additional readings: skim 2 of the 4 assigned articles	Reading all 4 of the articles were optional; only one was required for the article review	Students chose to read an article because they had a connection or similar experience, or because they lacked experience with that topic	Students chose to read a particular text because there was information that they needed from it to help in their work or life experience
Videos	Student did or did not watch video clip	Video reinforced topic of text reading	Students used videos to see

			examples from text in action
Quiz over topic 'providing comprehensible input'	Students completed course requirements	Students provided example of lesson to demonstrate knowledge of topic	Students watched the embedded video, which was a case study example, then answered questions about the video to clarify the topic
Quiz over topic 'collaborative learning'	Students completed course requirements	Students provided example lesson to connect to collaborative learning	Currently teaching, working in a school setting, practicum, or preparing to student teach

Note. Researcher-created matrix of course assignments for week 5 and how three principles of andragogy were applied to each one.

Figure 7. Researcher-created andragogical data collection matrix.

After all the assignments and course activities for week 5 were audited using the researcher-created data collection matrix, the researcher then used a modified version of the "Worksheet for andragogical learner analysis' to examine the expected influence of individual and institutional "goals and purposes for learning" (Knowles et al., 2015, p. 88) from the perspective as the instructor of an adult learning course, as well as how the course design reflected the principles of andragogy. Again, the researcher reviewed each learning activity for week 5 and filled in the "Worksheet" with data gathered from the course, presented in Table 6.

Table 6

'Worksheet for andragogical learner analysis'

	Application of Principles of Andragogy		
	Self-concept of adults is heavily dependent upon a move toward self-direction	Prior experiences of the learner provide a rich resource for learning	Adults typically become ready to learn when they experience a need to cope with a life situation or to perform a task
How did the course design reflect the principles of andragogy?	• Online • Asynchronous • Weekly modules to complete • Progressed at own pace • Completed on own schedule • Tasks were designed for graduate level student	• Graduate level students (understood how to be a student) • Some had worked with ELs • Some had not worked with ELs • Some did not have access to ELs • Some had traveled • Some had studied a language • All had a basic understanding of ELs from the 5 weeks of instruction, text readings, discussion, simulation experience	• Requirement for teacher certification • May have EL students in future classrooms • Societal need for teachers to know how to work with ELs
Individual Goals & Purposes for learning	• Helped future teachers gain knowledge and pedagogical skill • Increased self-efficacy for teaching ELs • Presented positive perception of cultural and	• Built on prior linguistic and cultural experiences to fill teacher "toolbox" • Developed a collaborative climate for learning	• Completed teacher certification requirement • Gained strategies for teaching ELs • Developed the teacher "toolbox"

	linguistically diverse learners		• Practiced how to design lessons that meet the needs of diverse learners
Institutional Goals & Purposes for learning	• Students were satisfied with learning experience • Students continued to take courses at university • Students recommended university to others • University and graduates had positive reputation among school districts and community	• University graduates were well-versed in linguistically and culturally diverse pedagogy • University graduates used prior experiences in their teaching • University students were aware of linguistic and cultural differences • University students were respectful members of online communities	• Teacher certification requirements met • Produced graduates capable of meeting the diverse needs of students • Prepared students for teacher certification tests

Note. Modified 'Worksheet for andragogical learner analysis' to examine the expected influence of individual and institutional "goals and purposes for learning" (Knowles et al., 2015, p. 88) from the perspective as the instructor of an adult learning course, as well as how the course design reflected the principles of andragogy.

Finally, the researcher completed a self-diagnostic rating scale as it applied to being the learning facilitator of a graduate level course and a personal adult learning style inventory. These tools were recommended by an expert in the field of andragogy, and found in *The Adult Learner* (Knowles et al., 2015). The researcher discovered strengths as a learning facilitator in the area of selecting methods, techniques, and materials. A few weaknesses included explaining the differences between didactic instruction and self-

directed learning and the difference between process design and a content plan. The

personal adult learning style inventory revealed the researcher was andragogically

oriented in the areas of "learning orientation," "learning design," "learning methods," and

"program development." In the areas of "how people learn" and "program

administration," the researcher scored in the mid-range between pedagogically oriented

and andragogically oriented, slightly closer to the andragogy end of the spectrum.

Overall, the researcher scored 115, which suggested tendencies toward an andragogical

orientation.

Hypotheses

The averages of the pre-survey and post-survey responses were analyzed to see if

there was a difference between the beginning of the course and the end of the course by

all students and by graduate and undergraduate students. A series of *t*-tests for difference

in independent means were run to determine if the null hypotheses could be rejected.

Null Hypothesis 1: There is not an increase in the knowledge levels of

preservice teachers of English learners as measured by the pre- and post- "Perceptions of

Preservice Teachers" (PPST) survey.

All participants. The researcher conducted a *t*-test for difference in means to see

if the participants increased knowledge levels during an online TESOL methods course

for preservice teachers. Preliminary tests of variances revealed that the variances of each

sample were equal. The analysis revealed that the post-completion knowledge levels

scores for all participants (M= 4.06, SD= 0.61) were not significantly higher than the pre-

completion knowledge scores (M= 4.04, SD= 0.64); $t(82) = .125$, $p = .451$. Therefore, the

researcher failed to reject the null hypothesis and concluded that all participants did not increase knowledge levels after participating in the TESOL methods course.

Graduate students. The researcher conducted the same *t*-test for difference in means to see if graduate students increased knowledge levels during an online TESOL methods course for preservice teachers. Preliminary tests of variances revealed that the variances of each sample were equal. The analysis revealed that the post-completion knowledge levels scores for participants (M= 3.94, SD= 0.57) were not significantly higher than the pre-completion knowledge scores (M= 3.99, SD= 0.61); $t(22) = .19$, p =.573. Therefore, the researcher failed to reject the null hypothesis and concluded that the graduate students did not increase knowledge levels after participating in the TESOL methods course.

Undergraduate students. The researcher conducted the same *t*-test for difference in two means to see if undergraduate students increased knowledge levels during an online TESOL methods course for preservice teachers. Preliminary tests of variances revealed that the variances of each sample were equal. The analysis revealed that the post-completion knowledge levels scores for participants (M=4.10, SD= 0.63) were not significantly higher than the pre-completion knowledge scores (M= 4.07, SD= 0.66); $t(58) =.19$, $p=.423$. Therefore, the researcher failed to reject the null hypothesis and concluded that the undergraduate students did not increase knowledge levels after participating in the TESOL methods course.

Null Hypothesis 2: There is not an increase in the pedagogical skill levels of preservice teachers of English learners as measured by the pre- and post-Perceptions of Preservice Teachers (PPST) survey.

All participants. The researcher conducted a *t*-test for difference in means to see if the participants increased pedagogical skill levels during an online TESOL methods course for preservice teachers. Preliminary tests of variances revealed that the variances of each sample were not equal. The analysis revealed that the post-completion pedagogical skill levels scores for participants (M= 6.06, SD= 0.46) were not significantly higher than the pre-completion pedagogical skill levels scores (M= 5.87, SD= 0.65); $t(38) = 1.58$, $p =.061$. Therefore, the researcher failed to reject the null hypothesis and concluded that the participants did not increase pedagogical skill levels after participating in the TESOL methods course.

Graduate students. The researcher conducted the same *t*-test for difference in means to see if the graduate students increased pedagogical skill levels during an online TESOL methods course for preservice teachers. Preliminary tests of variances revealed that the variances of each sample were equal. The analysis revealed that the post-completion pedagogical skill levels scores for participants (M= 6.01, SD= 0.68) were not significantly higher than the pre-completion pedagogical skill levels scores (M= 5.90, SD= 0.55); $t(22) = .44$, $p =.332$. Therefore, the researcher failed to reject the null hypothesis and concluded that the graduate students did not increase pedagogical skill levels after participating in the TESOL methods course.

Undergraduate students. The researcher conducted the same *t*-test for difference in means to see if the undergraduate students increased pedagogical skill levels during an online TESOL methods course for preservice teachers. Preliminary tests of variances revealed that the variances of each sample were not equal. The analysis revealed that the post-completion pedagogical skill levels scores for participants (M= 6.08, SD= 0.38)

were not significantly higher than the pre-completion pedagogical skill levels scores (M= 5.86, SD= 0.69); $t(28)$ =1.57, p =.064. Therefore, the researcher failed to reject the null hypothesis and concluded that the undergraduate students did not increase pedagogical skill levels after participating in the TESOL methods course.

Null Hypothesis 3: There is not an increase in the self-efficacy levels of preservice teachers of English learners as measured by the pre- and post- *Perceptions of Preservice Teachers* (PPST) survey.

All participants. The researcher conducted a *t*-fest for difference in means to see if the participants increased self-efficacy levels during an online TESOL methods course for preservice teachers. Preliminary tests of variances revealed that the variances of each sample were not equal. The analysis revealed that the post-completion self-efficacy levels scores for participants (M= 5.97, SD= 0.49) were significantly higher than the pre-completion self-efficacy scores (M= 5.72, SD= 0.75); $t(38) = 1.85$, p =.036. Therefore, the researcher rejected the null hypothesis and concluded that the participants did increase self-efficacy levels after participating in the TESOL methods course.

Graduate students. The researcher conducted the same *t*-test for difference in means to see if the graduate students increased self-efficacy levels during an online TESOL methods course for preservice teachers. Preliminary tests of variances revealed that the variances of each sample were equal. The analysis revealed that the post-completion self-efficacy levels scores for participants (M= 5.94, SD= 0.73) were not significantly higher than the pre-completion self-efficacy levels scores (M= 5.77, SD= 0.63); $t(22) = .61$, p =.274. Therefore, the researcher failed to reject the null hypothesis

and concluded that the graduate students did not increase self-efficacy levels after participating in the TESOL methods course.

Undergraduate students. The researcher conducted the same *t*-test for difference in means to see if the undergraduate students increased self-efficacy levels during an online TESOL methods course for preservice teachers. Preliminary tests of variances revealed that the variances of each sample were not equal. The analysis revealed that the post-completion self-efficacy levels scores for participants (M= 5.98, SD= 0.38) were significantly higher than the pre-completion self-efficacy levels scores (M= 5.70, SD= 0.80); *t*(28) =1.77, *p* =.044. Therefore, the researcher rejected the null hypothesis and concluded that the undergraduate students did increase self-efficacy levels after participating in the TESOL methods course.

Null Hypothesis 4: There is not a more positive perception of English learners by preservice teachers as measured by the pre- and post- *Perceptions of Preservice Teachers* (PPST) survey.

All participants. The researcher conducted a *t*-test for difference in means to see if the participants had a more positive perception of English learners during an online TESOL methods course for preservice teachers. Preliminary tests of variances revealed that the variances of each sample were equal. The analysis revealed that the post-completion perception scores for participants (M= 2.33, SD= 0.70) were not significantly higher than the pre-completion perception scores (M= 2.41, SD= 0.65); *t*(82) = -0.57, *p* =.713. Therefore, the researcher failed to reject the null hypothesis and concluded that the participants did not have a more positive perception of English learners after participating in the TESOL methods course.

Graduate students. The researcher conducted the same *t*-test for difference in means to see if graduate students had a more positive perception of English learners during an online TESOL methods course for preservice teachers. Preliminary tests of variances revealed that the variances of each sample were equal. The analysis revealed that the post-completion perception scores for participants (M= 2.42, SD= 0.62) were not significantly higher than the pre-completion perception scores (M= 2.41, SD= 0.44); *t*(22) = 0.03, *p* =.490. Therefore, the researcher failed to reject the null hypothesis and concluded that the graduate students did not have a more positive perception of English learners after participating in the TESOL methods course.

Undergraduate students. The researcher conducted the same *t*-test for difference in means to see if undergraduate students had a more positive perception of English learners during an online TESOL methods course for preservice teachers. Preliminary tests of variances revealed that the variances of each sample were equal. The analysis revealed that the post-completion perception scores for participants (M= 2.29, SD= 0.73) were not significantly higher than the pre-completion perception scores (M= 2.41, SD= 0.73); *t*(58) = -0.60, *p* =.724. Therefore, the researcher failed to reject the null hypothesis and concluded that the undergraduate students did not have a more positive perception of English learners after participating in the TESOL methods course.

Perceptions of Preservice Teachers (PPST) Survey

As described in Chapter Three, all students enrolled in the online TESOL teacher training course were requested to complete pre- and post-PPST surveys. The pre-survey consisted of 25 self-rated questions in the following categories: (a) knowledge of English learners, (b) pedagogical skills for teaching English learners, (c) self-efficacy levels for

teaching English learners, (d) perceptions of English learners. Knowledge and skill

questions were combined to provide a baseline of prior experiences of the learner. The

ratings were: Strongly Agree (7), Agree (6), Somewhat Agree (5), Neither Agree nor

Disagree (4), Somewhat Disagree (3), Disagree (2), and Strongly Disagree (1). Also

included were three other types of questions: (a) one fill-in-the-blank question about the

type of additional professional development the participants felt they needed to further

their knowledge for teaching English learners, (b) one question asking for the

participants' educational level (undergraduate, graduate with no teaching experience, or

graduate with teaching experience), and (c) one question about how the course should be

offered (online, hybrid, seated, 16-week, 8-week, with a practicum option including

classroom experience). The post-survey included four additional self-rated questions: (a)

This TESOL methods course increased my knowledge of English learners; (b) This

TESOL methods course increased my skills to teach English learners; (c) This TESOL

methods course increased my confidence in my abilities to teach English learners; (d)

This course met my needs as a learner. Questions from the survey were assigned to a

category corresponding to the research questions and hypotheses. The survey questions

were also divided among three principles of andragogy: self-directedness, prior

experiences of the learner, and readiness to learn.   The survey data by category were

represented in Figure 8, and Tables 7, 8, and 9 along with statistical analyses.
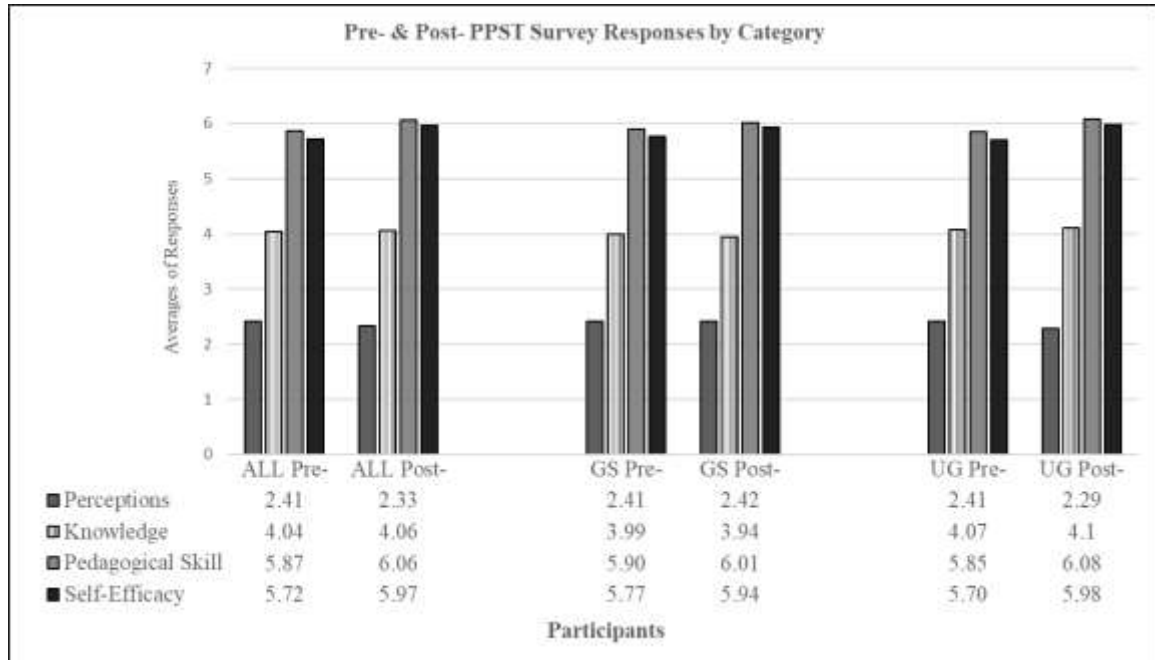
Pre- & Post- PPST Survey Responses by Category

	ALL Pre-	ALL Post-	GS Pre-	GS Post-	UG Pre-	UG Post-
Perceptions	2.41	2.33	2.41	2.42	2.41	2.29
Knowledge	4.04	4.06	3.99	3.94	4.07	4.1
Pedagogical Skill	5.87	6.06	5.90	6.01	5.85	6.08
Self-Efficacy	5.72	5.97	5.77	5.94	5.70	5.98

Note. ALL pre-survey: *n*=45; UG pre-survey: *n*=31; GS pre-survey: *n*=14; ALL post-: *n*=39; UG post-: *n*=29; GS post-: *n*=10. GS: graduate students; UG: undergraduate students.

Figure 8. Pre- & post- perceptions of preservice teachers (PPST) survey responses by category.

Table 7

Perceptions of preservice teachers survey (PPST) results-all students

	Pre-survey		Post-survey				
All Students	Pre-M	SD	M	SD	d.f.	t	p
Knowledge	4.04	.64	4.06	.61	82	0.13	.451
Pedagogical Skill	5.87	.65	6.06	.46	38	1.58	.061
Self-Efficacy	5.72	.75	5.97	.49	38	1.85	.036
Perception	2.41	.65	2.33	.70	82	-0.57	.713

Note. Pre-survey all: *n*=45; pre-undergraduates: *n*=31; pre-graduates: *n*=14; post-all: *n*=39; post-undergraduates: *n*=29; post-graduates: *n*=10.

Table 8

Perceptions of preservice teachers survey (PPST) results-graduate students

Graduate Students	Pre-survey		Post-survey				
	M	SD	M	SD	d.f.	t	p
Knowledge	3.99	.604	3.94	.566	22	.187	.5734
Pedagogical Skill	5.9	.549	6.01	.681	22	-.438	.3328
Self-Efficacy	5.77	.630	5.94	.729	22	-.610	.2742
Perception	2.41	.438	2.42	.620	22	-.027	.4895

Note. Pre-survey graduates: *n=14*; post-graduates: *n=10*.

Table 9

Perceptions of preservice teachers survey (PPST) results-undergraduate students

Undergraduate Students	Pre-survey		Post-survey				
	M	SD	M	SD	d.f.	t	p
Knowledge	4.07	.662	4.10	.632	58	-.194	.4234
Pedagogical Skill	5.85	.693	6.08	.377	58	-1.542	.0642
Self-Efficacy	5.70	.805	5.98	.385	58	-1.731	.0444
Perception	2.41	.734	2.29	.731	58	.599	.7242
Andragogy (Knowledge & Skill)	5.26	.513	6.60	.699	58	-8.521	.00000

Note. Pre-survey undergraduates: *n=31*; post-survey undergraduates: *n=29*.

As mentioned previously, in the category of perception of ELs, there was a -3.53% change for all students indicated by the survey, and -4.98% change by undergraduates and 0.41% change by graduates. In the category of knowledge of ELs, all participants experienced 0.5% change, with graduates experiencing -1.3% and undergraduates experiencing 0.7% change. For the pedagogical skill for teaching ELs category, the undergraduate students expressed the largest increase, from an average of 5.85 to 6.08, an increase of 3.93%. The graduate students had an increase of 1.86%; overall, the participants had an increase of 3.24% in their self-rated levels of pedagogical

skill. A statistically significant change occurred in the category of self-efficacy. According to survey data, all participants felt more confident teaching ELs at the end of the course, indicated by a 4.37% change. Undergraduates experienced the highest change, with 4.91%, and the graduates had the lowest with 2.95%. Survey questions were divided among the three principles of andragogy to provide the researcher with baseline information about the learners enrolled in the course.

The most popular option for all students for course offering preferences (Question 24) was a hybrid option that included coursework online and seated on the pre-survey; however, on the post-survey, hybrid was the most popular option for undergraduates and online only was the most popular for graduates on the post-survey. Knowledge and pedagogical skill questions were combined, as these represented prior experiences of the learner. All students noted a 2.47% increase in prior experiences of the learner; undergraduates experienced an increase of 3.04% and graduate students experienced an increase of 1.14%. To discuss readiness to learn, Question 21 responses on the pre- and post- surveys were compared, and responses to Question 22 were coded for themes from the pre- and post-surveys.   Following the course, fewer respondents felt a need for professional development, so all students experienced -19.2% change, GS experienced -19.8% change, and UGs experienced -17.0% change. Two additional questions on the post survey applied to knowledge and skill. All students indicated 96.8% positive change, undergraduates had 95.2% positive change, and 100% of graduates indicated an increase in knowledge and pedagogical skill because of the TESOL methods course. Figure 9 showed the average of responses for the five additional post-survey questions, Questions 26, 27, 28, 29, and 30 (Appendix A).
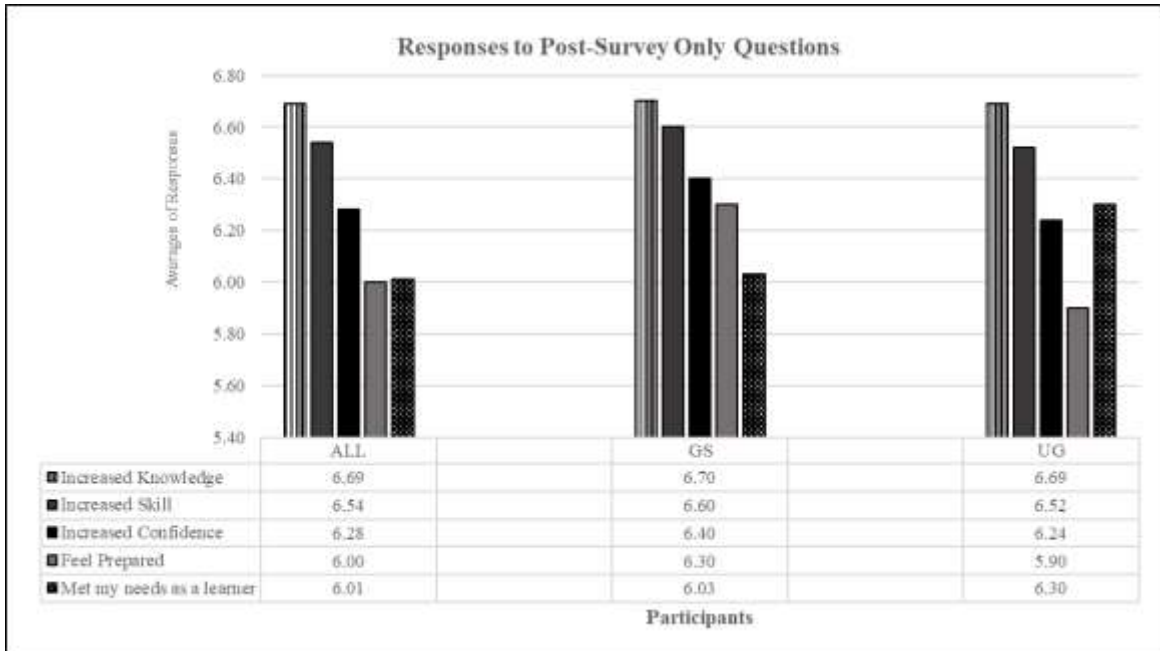
Note: Post-all: *n*=39; post-undergraduates: *n*=29; post-graduates: *n*=10.

Figure 9. Responses to post-survey only questions

IRQ Pre-Results

The IRQ consisted of six questions, as shown in Table 10. Four graduate students and 27 undergraduate students completed the IRQ pre-questionnaire. The responses from each question were coded for themes and discussed. Some participant responses were included in more than one theme per question. The researcher used the IRQ to gather baseline data of preservice teachers' initial understandings about ELLs.

Table 10

Responses to Initial Response Questionnaire by Graduate & Undergraduate Participants

Question	Responses
1. When you hear the words "English Language Learner" what comes to mind?	• Three graduate students (GS) and 3 undergraduate students (UG) responded ELLs were learning to speak English • 1 GS and 14 UG stated that ELLs were students whose first language was not English, but they are learning English as a second or foreign language. • 1 GS and 8 UG mentioned ELLs moved from another country, while 2 UG felt ELLs "may struggle academically or socially because of the language barrier".
2. What are some of the best ways to learn a second language?	• Taking classes, tutoring, individualized instruction or online courses (5 GS and 11 UG) • Immersing yourself in the culture (5 GS and 5 UG) • Consistent practice and daily exposure (8 UG) • Social interactions with peers (2 GS, 8 UG) • Use of videos, audio or music (7 UG) • Other visuals (3 GS, 4 UG) • Explicit modeling by a teacher (3 UG) • Vocabulary instruction (4 UG), • Flashcards (1 UG) • games (1 UG), • reading books (3 UG), • writing (3 UG), and
3. If you moved to a non-English speaking country and were in school, or had a child in school, what support or services would you expect?	• A language teacher, tutor, or translator (2 GS and 19 UG) • Instruction should be comprehensible (1 GS, 8 UG) • Visuals or pictures (1 GS, 4 UG) • A caring and supportive staff that would be patient with a new language learner (1 GS, 8 UG) • An effort by the staff to communicate with parents (3 UG) • Extended time on exams (1 UG) • Other language resources available as needed (1 GS, 1 UG)
4. What's the best way to teach content to	• Visuals, such as word walls, pictures, posters, labeling, and anchor charts (1 GS, 19 UG) • Hands-on activities and manipulatives (1 GS, 3 UG).

a student who doesn't understand English?	• Bilingual instruction or transitional instruction to help students transition from native language to English (1 GS and 8 UG) • Translator (1 GS and 5 UG) • Tutoring (1 GS, 1 UG), • Group work or buddy (1 GS, 5 UG) • Vocabulary instruction (1 GS, 4 UG) • Connecting to something they understand (4 UG) • Differentiated instruction and other accommodations (1 GS, 4 UG).

5. Should English language learners be required to take annual state content area assessments? Why or Why not?	• Most responded 'Yes' (4 GS, 19 UG)
	  o Tests should be administered with additional supports, such as extended time or with a translator (2 GS, 14 UG).
	  o Tests could help see how the ELLs are growing and learning (1 GS, 18 UG)
	• Eight UG responded 'No'
	  o Assessment was not fair if it's not in the native language (1 UG)
	  o ELLs should take an English proficiency test first (1 UG)
	  o Tests should be modified (4 UG).
	  o Parents and teachers should be able to decide if the ELLs should take the state tests (2 UG) on a case-by-case basis

6. Some states require that English be used as the language of instruction in the classroom. Should voters decide on the language of instruction in K-12 classrooms? Why or Why not?	• Language of instruction should not be voted upon by voters (4 GS, 24 UG) • School district should determine the language of instruction by going with the majority (3 GS, 5 UG) • 9 UG believed that voters should not decide the language of instruction because "not all voters are teacher" or have an educational background. • English (5 UG) should be taught in schools, because "to be successful members of society, then English needs to be used in the classroom. The job of the teacher is to prepare students for life • 3 UG wrote voters should determine the language of instruction o A vote would provide clear expectations for teachers and schools and consistency throughout their education

Note: Respondents: four graduate students (GS); twenty-seven undergraduate students (UG)

IRQ Mid-Results

The researcher added to Markos's (2012) research by similarly examining the question, "When you hear the words *English Language Learner* what comes to mind?" To begin the mid-IRQ, the participants were asked to explain what they originally wrote and what experiences they drew on from their lives to answer the question initially. In the second part of the question, participants were asked to explain how their thinking on this question had evolved, including how the participants' original ideas and thoughts had been strengthened or changed. The mid-IRQ was administered through the course after week 4 of the 8-week schedule. Three major themes emerged from the reflective responses during the mid-IRQ, when compared to the pre-IRQ: participants' perceptions of ELLs; participants' descriptions of the roles of teachers of ELLs; and struggles that ELLs encounter in the school environment.

Three of four (75.0%) graduate students and 25 of 27 (88.9%) undergraduate students specifically mentioned that their thinking about ELLs had evolved, changed, or had been strengthened during the first four weeks of the course. The remaining graduate student and two undergraduates felt they already had a strong understanding of ELLs, but they all mentioned strategies and ideas from the text they learned during the course. Two students admitted to not knowing what 'English Language Learner' meant on the pre-IRQ. One stated, "I think of teachers and how they themselves need to learn more of different language use throughout their education and careers." But, the participant realized that was "completely wrong" in the mid-IRQ. The other student similarly changed to a detailed description of ELLs in the mid-IRQ.

Participants' perceptions of ELLs. Participants' perceptions of ELLs were a common theme that emerged from the mid-IRQ. Participants stated what they knew about ELLs changed since the beginning of the course. Responses included comments about how their thinking about ELLs as students changed from "students who speak a different language" to students who "are kids," "more than an ELL," and "a kid who is there for an education, just like everyone else." They also expressed a better understanding of the feelings of ELLs, how they learn, and the amount of potential these students have. "They are kids and we need to consider what it would be like to be in their shoes," wrote one participant. They included that ELLs were a diverse group of learners, with varied life experiences, socioeconomic backgrounds, and levels of English proficiency. In particular, one participant summed it up this way,

> At first, I thought of the term "English Language Learner" as just a vocabulary term that we needed to know in this class. I realized that ELL students have such great potential and can get really excited to learn. I now don't think about ELLs as just a term that I need to know, but I think of that term as a concept that I need to understand so that I can have a great relationship with my ELL students.

Others mentioned that ELLs needed teachers to work with them. EL students brought prior experiences with them to the classroom, and ELLs were using their skills to contribute to the school community. One participant stated, "No one should be denied an education whatever the matters are." Another wrote, "They are not to be seen as someone who has a disability, but just a barrier that is being worked on every single day so they may learn and comprehend what is being taught." A participant concluded,

When answering what I think of when I hear ELL, I said that I think it is someone

who is not able to communicate very well. By saying that I was being obviously

being ignorant. ELL students aren't unable to communicate, they are just learning

to communicate in another language which they are not proficient in. Their

English may be hard to understand, but that is why they are learning and should

be listened to attentively and not written off, ever.

Participants as teachers of ELLs. Another theme that emerged from

participants was their roles as teachers of ELLs. The participants commented that all

teachers needed to be prepared to help these students, because ELLs received limited

support from specialists. Also, participants emphasized that all classroom teachers

needed to be prepared to teach ELLs, because the number of ELLs was growing and the

number of trained teachers for ELLs had not grown at the same rate, and ELLs were not

receiving the help they needed within the classroom (referenced from the text). Over half

of the participants mentioned strategies learned through the course and the use of the

SIOP® method, in addition to building vocabulary, utilizing visuals, manipulatives, and

providing extra time. Participants said there were differences in conversational English

versus academic English. One student mentioned the amount of "depth and creativity

needed to teach ELLs," but the strategies for ELLs could benefit native English speakers,

too. Further, one student stated, "I have realized how hard it must be for a teacher to

make sure the students fully comprehend what the teacher is discussing." Others

mentioned relationships needed to be formed and the "need to be doing all we can within

the classroom to ensure their success." Another wrote, "It is our job to realize their

potential and find ways to cater to it within the classroom." One participant summarized,

"Our goal as teachers is to teach EVERY single student in our classroom. We (teachers) do not have to know that language to connect and teach those students."   Additionally, "There are many ways and techniques that a general education teacher can effectively teach ELL students," wrote a participant.

Struggles ELLs face. Struggles that ELLs faced was another theme that emerged from the IRQ. Personal struggles, such as not being understood by teachers and classmates, being shy and unsure with a new language, and lacking time to learn English before taking mandatory assessments, were included in the IRQ responses. Some ELLs were thought to not have anyone at home to help them with English, because a native language was spoken in the home. Further, participants mentioned ELLs needed help understanding the language of the classroom, and they were learning English at the same time they were learning content. "Therefore, these students are going to go through a lot of stress and will have challenges in the classroom," wrote one participant. Teachers not properly prepared to teach ELLs might not have felt comfortable or confident teaching ELLs. English language learners were in classroom environments that were not supporting their English language development.

IRQ Post-Results

To answer the post-IRQ, students were asked to choose a question from the pre-IRQ (except Question 1). They were asked to explain how their thinking had evolved on this question during the course. This included how their original ideas or thoughts had been strengthened or changed.

Question 2 Results. Seven participants (2 GS, 5 UG) revisited question 2, 'What are some of the best ways to learn a second language?'   A few themes emerged from

their responses. The first theme included immersion and constant exposure to the second language.   Participants defined this as being around the language as much as possible, including school, where ELL students should be within the classroom of English speakers. One student summarized this way, "The more you hear it, the more familiar it becomes. It's a lot like listening to music. You know the songs you listen to the most through constant repetition." The second theme discussed was the strategies teachers should use in classrooms with ELLs.   Some of the strategies mentioned were hand gestures, labeling objects, vocabulary instruction, and connecting visuals to content, as well as providing opportunities to use their language skills with peers. In addition to these strategies, one respondent felt all four language domains (reading, writing, listening, and speaking) should be included in lessons to help students fully experience language learning. In addition to strategies, participants mentioned that teachers need to be patient and supportive. Some additional ideas involved how the participants' thinking about learning had changed. For example, one mentioned, "Before taking this course, I didn't think much about how hard it was to learn a second language. Now I realize what goes into learning a second language and the struggles one must face to learn a different language."

  Question 3 Results. One GS and three UGs revisited Question 3. All four mentioned how their thinking had evolved during the semester. One participant wrote, "I now have resources and material to draw from about how to teach ELL students. I have learned so much throughout his semester about introducing vocabulary as well as other information to ELLs." Another wrote, "Because of this class, I now know what it takes to help ELL students be successful in school!" The third participant wrote, "I feel like I

have learned a lot form this course, especially for setting expectations for me as a teacher.

I feel as if I could set expectations for myself to meet that would benefit my future ELL

student." Additionally, the participants suggested specific teaching strategies, such as

the SIOP® model. One respondent commented,

> I would expect that the general classroom teacher would be knowledgeable in
>
> how to teach ELL students. I would expect that she uses a lot of repetition in her
>
> teaching, incorporates visual aids and graphic organizers, scaffolds her
>
> conversations and lessons, and has a general plan for teaching new vocabulary
>
> terms that she uses all year.

One wrote, "I would want them to be patient and understand of where I am coming from

in my past experiences." Language specialists and translators were also mentioned as

possible services, along with an individualized plan for language learning. Patience for

the language learner was noted. Community services and public health places were

mentioned, too, as resources the writers would expect help to learn the second language.

Question 4 Results. Thirteen participants (1 GS, 12 UG) revisited Question 4.

Many strategies were highlighted in their responses, including the SIOP® model and

various components of it. Additionally, several participants mentioned differentiating

instruction, modifying assignments, and explicit English instruction. "I also learned that

there is no set best way to teach content to a student who does not speak English. The

best method depends on what works best for that student(s)," explained one participant.

While visual support, vocabulary instruction, and pacing were mentioned, participants

also included the importance of clear content and language objectives, learning about

students' backgrounds, and providing opportunities to practice language skills with peers

as additional strategies. Many of the respondents wrote about how much they had learned through the course. For example, one participant shared,

> Throughout this semester my thoughts have been strengthened and changed with the help of each week's readings and video materials. I have learned that there is so much more that goes into teaching ELL students. I feel better prepared and more confident to teach ELL students.

Question 5 Results. Six UGs answered Question 5.   Five of the six still felt ELLs should be required to take state assessments, and one mentioned the value of assessments by noting, "I think it is important for all students to be tested or assessed to see their progress and what they need to work on."   One participant did not agree that ELLs should be required to take state assessments. However, that same person wrote, " I truly think that if these students are required to take these exams the option of the tests being translated in a different language (their dominant language) should be available." The others agreed that native language translations or translators should be provided for the ELLs when taking state assessments, and other helps were suggested like a dictionary, the test read aloud, or extended time. The word *fair* appeared in several of the responses; for example, one respondent wrote, "But it is not fair to assess a student in a language they are not proficient in. This is because they will most likely not do as well on the test, and the result will not be accurate to their actual ability." Another person concurred,

> I don't think it is morally correct to assess these language learning students in a language they do not completely understand. Not only will ELL students possibly struggle with reading and comprehending the written material, but these tests are

not designed for students with experiences that come from outside of the US. In

many questions, they force students to draw on previous experiences and

knowledge that ELL students might not understand, thus putting them at an even

further disadvantage.

Question 6 Results. Only 1 UG responded to Question six. The participant

wrote,

I was on the fence about this question at the start of the semester but now I don't

believe voters should choose about instruction and what language it MUST be

taught in. Unfortunately the majority of voters aren't educated on the subject

matter and aren't capable of making rational decisions that are on the basis of

education and research based strategies. Experts should be the one making the

laws, people educated for years with practice and understanding.

Focus Group Results

The focus group was created as a separate Canvas shell. Volunteers emailed the

outside observer, and the outside observer added them into the course. The researcher

created eight discussion boards to facilitate the discussion, and then the outside observer

conducted the focus group. Five volunteers were added to the shell, but only two

participated in the discussion. The participants answered as few or as many questions as

they wanted and had the opportunity to respond to each other; however, only one student

responded to seven of the eight posts, and the other participant responded to two posts.

As indicated by the exchange, both participants had limited prior experience working

with ELs.

Post 1: *Before this course, what was your prior experience with English learners, either personally or professionally?*

Student 1: *As a pre-service teacher, I have not had much experience with EL students. I did work with an EL student during the (University) Reading Camp. This experience was valuable to see how their learning needs differed from English speaking learners.*

Student 2: *My prior professional experience is working with students who were participants in an English program from another country. My prior personal experience with English learners is volunteering with students who attended the same college as me.*

The students were asked to share examples from the course to show what they had learned and how they applied (or will apply) this knowledge.

Post 2: *What are some things you have learned about English learners from the course materials (videos, text, articles, and discussions)? How will you use this information in your future classroom?*

Student 1: *I think that biggest takeaway was that visuals are not enough to further understanding of concepts. It requires a variety of supports especially vocabulary supports to help students grasp concepts.*

Student 2: *Some things I have learned about in this course is the importance of being consistent with an English language learner. For example, as the teachers were planning the lessons the key elements in the same language was mentioned. I can use this in my future classroom by being direct with the vocabulary I provide to my students for each lesson.*

A further follow up question was used to learn even more about the use of the course

content and if the content was meeting the needs of the learner.

> Post 3: *What course assignment, activity, video, etc. do you find to be the most*
>
> *valuable for your teaching? If you could share a course assignment, activity,*
>
> *video, etc. with a friend or colleague, which one would it be, and why?*
>
> Student 1: *The assignment that I thought was most impactful was the simulation*
>
> *videos at the beginning of the course. It is difficult to understand how EL students*
>
> *feel in a classroom until you experience it yourself. The lessons taught in a*
>
> *different language with a variety of supports were enlightening and truly showed*
>
> *the struggle of sitting through lessons in which you do not understand most of the*
>
> *language.*

No participants responded to Post 4.

> Post 4: *What do you think are the most important things to do as a teacher to*
>
> *help English learners be successful throughout the school year?*
>
> No Responses

This question was written to gather information about participants' perceptions,

knowledge, and pedagogical skill levels.

> Post 5: *If you have input about who will be in your class of students, would you*
>
> *choose to have English learners in your classroom, or would you request to not*
>
> *have them? Why, or why not?*
>
> Student 1: *This is definitely a tough one because there are so many needs to be*
>
> *met for English speaking students that having EL students may seem like an*
>
> *additional task to manage throughout the year. However, I do believe that the*

biggest benefit of having EL students in the classroom is the opportunity to

expand the cultural knowledge of English-speaking students. Depending on the

school, many students may not have experience with other types of ethnicities. So

overall, I think having an EL student would be beneficial for all students and the

teacher.

This question was intended to gather data about the course text and activities.

Post 6: *Do you think you will use SIOP® again? Why or why not?*

Student 1: *I will most definitely use aspects of SIOP® in the classroom. I like the*

language objectives and displaying them on the board with content objectives. I

am not sure I will ever be as in depth with specific lesson plans, but the elements

of SIOP® will definitely be useful to keep in mind when creating lessons.

This question was written to gather more information about the course requirements and
meeting the needs of the learners.

Post 7: *Do you feel that you are adequately prepared to teach English learners*

after taking this course? If not, what improvements or additions would you

recommend? If yes, please explain why you feel adequately prepared.

Student 1: *While I found this course to be beneficial as a starting place, I believe I*

would not feel completely adequate until I had actual experience teaching EL

students. I think this is true for most teaching courses. The information is great,

but you can't see how it actually works until it is put into action with students. I

would add more practice creating supports specifically for EL students. I believe

many teachers know the importance of helping the students, but may not

understand what truly great supports look like in a lesson. More opportunity to

create those and then receive feedback on how to improve or why it works would

be helpful.

Question 8 was written to help the instructors and course designers to continue improving

the course in order to meet the needs of the learners.

Post 8: *What additional information do you want to learn in this course or in*

future courses about English learners?

Student 1: I think more clarification on what is expected from a general

classroom teacher versus an actual EL teacher. Will the EL teacher provide

supports for me to use or would I be required to create everything myself?

Summary

Students enrolled in the TESOL methods course completed all required

coursework, including the pre- and post-surveys, pre-, mid-, and post-questionnaire,

narrative reflections, course assignments and quizzes, and developing a SIOP® lesson

plan. All assignments were the same for study and non-study participants, since the data

were not gathered until final grades were posted. Students received feedback and grades

during the course from instructors. The survey, titled "Perceptions of Preservice

Teachers" (PPST), consisted of questions designed for preservice teachers to share their

perceptions of English learners and to self-rate their knowledge, pedagogical skill, and

self-efficacy levels for teaching English learners. A second pre-test, entitled Initial

Reaction Questionnaire (IRQ) consisted of six questions requiring short essay responses.

Students revisited the IRQ at mid-semester and the end of the semester. During the

length of the course, reflective journaling occurred in the form of online discussion

boards, assignments, and quizzes. For the final assignment, students developed a lesson

plan for English learners using the Sheltered Instruction Observation Protocol (SIOP®) as a guide. Students completed the post-test survey, "Perceptions of Preservice Teachers" (PPST). A few additional questions regarding the course design were added to the post-survey to gather information about the application of the principles of andragogy. Finally, the researcher conducted a self-evaluation of the application of the principles of andragogy using five tools: the PPST survey, researcher-created data collection tool, "Worksheet for andragogical learner analysis" (Knowles et al., 2015, p. 88), self-diagnostic rating scale competency, and personal adult learning style inventory.

Chapter Five: Discussion, Implications, and

Recommendations

Overview

Students in the United States whose first language spoken, read, written, or

understood was a language other than English were referred to as Limited English

Proficient (LEP), English language learners (ELL) or English learners (EL). ELs were

the fastest growing population of students (Echeverria, Vogt, & Short, 2017, p. 3) and

more states, cities, and even rural areas experienced growth in the number of English

learners attending school. These students often come from diverse backgrounds, both

linguistically and culturally. This was important because English learners brought a

unique set of characteristics and needs to schools. As more and more English learners

continued to enroll in new geographic areas, school districts were often unprepared to

teach these students, because academic programs, appropriate resources, and curricula

had not been developed. Even more important, "many teachers are not trained to meet

the needs of second language learners" (Echeverria et al., 2017, p. 4). Teacher education

had to undergo changes in response to federal government requirements and in response

to the need that teacher candidates needed to be prepared to teach diverse learners. ESSA

requirements for states and school districts required State Education Agencies (SEAs) to

consider the abilities of teachers to educate English learners. States responded by re-

examining teacher certification requirements. For example, the state of Missouri made

changes to its teacher certification requirements in 2016 (Code of State Regulations,

2018) by including additional competencies in teaching linguistically diverse learners

(ELs) to comply with the changes in ESSA. Universities offering teacher certification

programs addressed these changes in different ways, including adding competencies to existing courses or creating new courses to meet these requirements.

During this study, one TESOL (Teaching English to Speakers of Other Languages) teacher methods course at a Midwestern private university was examined to discover if the knowledge, pedagogical skill, and self-efficacy levels of preservice teachers increased, and if their perceptions of English learners became more positive. Students completed the following: (a) pre- and post-surveys; (b) pre-, mid-, and post-questionnaires; (c) reflective journaling; (d) focus groups; and (e) academic assignments to measure growth. The researcher hoped to discover if the course content and methodology were meeting the needs of the learner and fulfilling the requirements set forth by the state teacher certification program. The research results were used to guide curriculum development and instruction at a private Midwestern university and add to the body of research about preservice teachers. In addition, this study added to the body of research regarding the application of the principles of andragogy to an online TESOL teacher training course, specifically investigating three principles of andragogy: (a) self-concept of the learner and the learner's ability to be self-directed; (b) prior experience of the learner; and (c) readiness to learn. The researcher hoped to continue to improve and develop the online TESOL methods course to better meet the needs of the adult learner.

Major Findings

The major findings of the mixed-methods study were both quantitative and qualitative. Quantitative analyses of the surveys revealed a statistically significant change for the category of self-efficacy, and therefore, the researcher was able to reject the null hypothesis. There were not statistically significant changes for the categories of

perceptions of ELs, knowledge of ELs, or pedagogical skill levels for teaching ELs, so the researcher was unable to reject the null hypotheses for these categories. However, the qualitative analyses revealed positive changes in all categories (perceptions of ELs, knowledge of ELs, pedagogical skill levels for teaching ELs, and self-efficacy levels for teaching ELs) when reviewing the questionnaires, reflective journaling, and other academic assignments.   The researcher also discovered strengths as a learning facilitator in the area of selecting methods, techniques, and materials. The personal adult learning style inventory revealed the researcher was andragogically oriented in the areas of "learning orientation," "learning design," "learning methods," and "program development." Overall, the researcher was shown to have tendencies toward an andragogical orientation when facilitating a graduate level course.

Discussion: Questions and Hypotheses

Perception of English Learners

  Null Hypothesis 4: There is not a more positive perception of English learners by preservice teachers as measured by the pre- and post-*Perceptions of Preservice Teachers* (PPST) survey.

  The analysis revealed that the post-completion perception scores for participants were not significantly higher than the pre-completion perception. Therefore, the researcher failed to reject the null hypothesis and concluded that the participants did not have a more positive perception of English learners after participating in the TESOL methods course. The results were similar for graduate and undergraduate students. One possible reason for this was the way the survey questions were worded. They were written from a negative perspective, yet analyzed for a positive change. A

recommendation would be to re-examine the questions for accuracy before using the survey again.

Research Question 1: How do pre-service teachers perceive English learners during an online TESOL teacher training course?

Even though the researcher failed to reject the null hypothesis due to the lack of significant statistical change from survey data, a change was indicated toward a more positive perspective, especially among the undergraduate students. Participant responses to the mid-IRQ also indicated a positive change in perception toward English learners. At the beginning of the course, participants held a narrow or limited view of English learners, primarily due to lack of exposure to or experience working with English learners. Following the course, participants expanded their definitions of English learners to include newly acquired knowledge about second language acquisition, social and academic language abilities, and cultural and linguistic diversity. Participants stated that what they knew about ELLs changed since the beginning of the course. Responses included comments about how their thinking about ELLs as students changed from "students who speak a different language" to students who "are kids," "more than an ELL," and "a kid who is there for an education, just like everyone else." They also expressed a better understanding of the feelings of ELLs, how they learn, and the amount of potential these students have. Several students indicated a desire to learn more about English learners, so they could be more prepared to teach them. They were particularly interested in actually observing and working with these students, because prior to the course they did not know that ELs had specialized educational needs. But, by the end of

the course, they realized ELs needed individualized or differentiated instruction in order to learn English and content at the same time.

From the perspective as the researcher and practicing teacher in the field of English learners, these changes in perception were encouraging. The participants were realizing that ELs have unique needs, but these needs could be met in the regular classroom environment by a teacher with carefully planned strategies, patience, and a willingness to include English learners in their classroom communities. The researcher's desire was to advocate for the English learners, so they are not forgotten or passed along, but instead welcomed and valued and given opportunities to be successful students.

The findings of this study are similar to those found in research. As mentioned in the literature review, Kumar and Hamer (2012) found learning in the areas of cultural diversity and inclusion did occur while preservice teachers were enrolled in teacher education courses; preservice teachers developed positive attitudes toward culturally diverse students, learned how to include adaptive classroom practices into their teaching repertoire, and recognized the importance of a collaborative classroom. Ramanayake and Williams (2017) agreed and added, "Increased exposure to diversity training in teacher education is positively related to increased sensitivity to diverse learners" (p. 449). Gay (2002) explained, "Culturally responsive teaching is defined as using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively" (p. 106). Gay (2002) further suggested culturally responsive teaching "is a learned skill that should be taught in teacher preparation programs" (p. 113). Taylor, Yeboah, and Ringlaben (2016) explored the perceptions of preservice teachers "towards multicultural education and teaching of culturally and

linguistically diverse learners" (p. 1). Results of their study indicated "preservice teachers have the willingness to study and to be aware of multicultural awareness for them to operate and teach with less difficulty in the teaching learning process" (Taylor et al., 2016, p. 6). The researcher wanted to expose the preservice teachers to the possible challenges and rewards that could occur when working with ELs in the hope that as they enter the world of education as classroom teachers, they continue to view ELs as children that want to be educated. A recommendation to continue improving perceptions of ELs would be providing opportunities within the course to personally interact with ELs or including more video clips of ELs in classrooms, with time to reflect and share.

Knowledge Levels of Preservice Teachers

Null Hypothesis 1: There is not an increase in the knowledge levels of preservice teachers of English learners as measured by the pre- and post-*Perceptions of Preservice Teachers* (PPST) survey.

The post-completion knowledge levels scores for all participants were not significantly higher than pre-completion knowledge level scores. Therefore, the researcher failed to reject the null hypothesis and concluded that all participants did not increase knowledge levels after participating in the TESOL methods course. When analyzed by student type, neither graduate students nor undergraduate students demonstrated a significant increase in knowledge levels of ELs. One of the reasons for a lack of change in knowledge could have been the difficulty defining knowledge of ELs. Some of the survey questions were determined to be perception or pedagogical skill questions instead of knowledge, so there were not many questions to analyze for the category of knowledge. Also noteworthy was the fact that the graduate student

knowledge levels went down slightly. Before using the survey again, perhaps the questions should be re-examined for confusing wording or misinterpretation.

Research Question 2: How do pre-service teachers perceive their own knowledge levels of English learners during an online TESOL teacher training course?

While there was not enough statistical significance to determine if there was a positive change to reject the null hypothesis, all participants experienced a positive change in their knowledge levels. From the pre-IRQ responses, knowledge of ELs was very basic, with definitions that simply stated ELs were learning to speak English or learning English as a second language. On the mid-IRQ responses, a theme that emerged was how the participants had a better understanding of ELs and their needs as learners. One summarized the general theme, "I now have a better understanding of how those students feel, and how they learn, and how teachers have helped them, and also how I as a future teacher can help them as well." Knowledge of ELs was an area of strength on the SIOP® lesson plan assessment, with 95.2% of participants scoring 5/5 in the areas of lesson preparation and building background knowledge. The text readings, course assignments, and discussions were adequate in providing general knowledge about English learners, but more importantly, the course helped preservice teachers realize that all ELs are not the same. ELs are a diverse group of students, and it is of upmost importance for the teacher to get to know the students in the classroom, so that instruction can be carefully planned and implemented. One participant shared,

> After reading the textbook, I learned that ELLs are students that need help in
> understanding the language of the classroom because they are not fluent in
> English. This information is very important to note because as a future educator

we learn that ELLs will spend most of the day in the mainstream classroom and have not received individualized instruction to meet their language needs.

Research supported ELs have unique characteristics and learning needs. According to Echeverria et al. (2017), some of these unique characteristics included: knowledge of, exposure to, and proficiency in English; knowledge and proficiency of the first language (L1); educational background in L1 and English; sociocultural, emotional, and economic factors; and other educational categories, such as gifted and talented or special education. The amount of diversity of English learners made it necessary for teachers to be prepared and properly trained to teach them. Throughout the course, participants indicated their knowledge of the unique characteristics and needs of ELs. The course text, additional readings, and videos provided many opportunities for participants to increase their knowledge; however, the shortened, 8-week course time frame may have hindered the thoughtful reading and reflection that needs to occur to truly internalize new knowledge. A recommendation would be to incorporate knowledge of ELs into other teacher training courses throughout the teacher certification program.

Pedagogical Skill Levels of Preservice Teachers

Null Hypothesis 2: There is not an increase in the pedagogical skill levels of preservice teachers of English learners as measured by the pre- and post-*Perceptions of Preservice Teachers* (PPST) survey.

The analysis revealed that the post-completion pedagogical skill levels scores for participants were not significantly higher than the pre-completion pedagogical skill levels scores. Therefore, the researcher failed to reject the null hypothesis and concluded that the participants did not increase pedagogical skill levels after participating in the TESOL

methods course. However, the statistical analysis revealed moderate evidence that all

students did increase their pedagogical skill levels. Undergraduate students also revealed

a moderate increase in pedagogical skill, but graduate students did not. Some of the

students wrote about various strategies they learned from the text and videos, and on the

SIOP® lesson plan assessment, 93.1% of participants scored 5/5 in the areas of

pedagogical skill, including comprehensible input, strategies, interaction, practice and

application, lesson delivery, and review and assessment. However, preservice teachers

did not have an opportunity to try any of the strategies within a classroom environment,

so the ability to internalize them was limited to online discussions. One recommendation

would be to include opportunities to try out a teaching strategy with a student, and then

reflect on the experience.

Research Question 3: How do pre-service teachers perceive their own

pedagogical skill levels for teaching English learners during an online TESOL teacher

training course?

Participants perceived their own levels of pedagogical skill above average at the

beginning and end of the course, as indicated by the pre- and post-surveys; however,

there was not a statistical significance to reject the null hypothesis. Additionally, the

responses to the post-survey only question, "This TESOL methods course has increased

my skills to teach English learners" were 95.9% agree or strongly agree, with an average

of 6.54, indicating the course positively increased respondents' perceptions of

pedagogical skill. Responses to the IRQ also indicated an increase in pedagogical skill

by the participants. Over half of the participants mentioned strategies learned through the

course and the use of the SIOP® method, in addition to building vocabulary, utilizing visuals, manipulatives, and providing extra time.

These same strategies and practices were mentioned in research, as outlined in the literature review. Some of these practices included setting clear goals and objectives, effective modeling of skills, informative feedback to learners, and focused interactions with other students. Teachers who were effective (as measured by increased test scores) for non-ELs were also effective for ELs; however, teachers with specialized instructional approaches, such as the ability to speak their students' native language or who possessed a bilingual certification, demonstrated greater gains for their ELs (Gándara & Santibañez, 2016; Loeb et al., 2014; Master et al., 2012). While this course did not provide opportunities for students to utilize these strategies in a practicum situation, the researcher encouraged participants to incorporate them in their lesson plans, even plans written for non-ELs. The researcher also encouraged participants to continue their education by seeking additional teacher certification in the area of English learners and to seek out opportunities to observe and work with ELs in a classroom environment. Research supported mainstream classroom teachers with increased knowledge and pedagogical skills related to English learners were more effective teachers of ELs.

Self-Efficacy Levels of Preservice Teachers

Null Hypothesis 3: There is not an increase in the self-efficacy levels of preservice teachers of English learners as measured by the pre- and post- *Perceptions of Preservice Teachers* (PPST) survey.

The analysis revealed that the post-completion self-efficacy levels scores for participants were significantly higher than the pre-completion self-efficacy scores.

Therefore, the researcher rejected the null hypothesis and concluded that the participants did increase self-efficacy levels after participating in the TESOL methods course. While undergraduates significantly increased self-efficacy levels during the course, graduate students did not significantly increase self-efficacy levels; however, graduate students did demonstrate a positive change in self-efficacy levels. The researcher was encouraged by the finding that students did increase their self-efficacy levels toward teaching ELs. To further build this confidence, a recommendation would be to add opportunities to observe ELs in classroom environments and try instructional strategies, with opportunities for reflection and feedback.

Research Question 4: How do pre-service teachers perceive their own self-efficacy levels for teaching English learners during an online TESOL teacher training course?

Several survey questions were reviewed to help answer how confident preservice teachers felt about teaching ELs in mainstream classrooms. According to survey data, all participants felt more confident teaching ELs at the end of the course, indicated by a 4.37 % change. There was enough statistical evidence to reject the null for all participants in the category of self-efficacy; thus, the course significantly changed all participants' self-efficacy levels for teaching ELs. Also, two post-survey questions specifically asked participants about their confidence and preparedness in teaching ELs. All participants indicated an increase in confidence by responding agree or strongly agree on the survey. Following the course, 90.3% responded they felt prepared to teach ELs, and 96.7% felt more confident in their ability to teach ELs. The IRQ responses also suggested an increase in self-efficacy levels of participants. Several students said they would

recommend this course to others and were glad the course was required, because as one participant wrote, "By being a participant in this class, my knowledge, skills and confidence was most definitely increased. Taking this course has added so much value to my perspective of teaching." A second participant wrote,

> Although this course focused on English language learners, there were so many
>
> tips I would like to implement in my classroom even if I do not have any ELLs.
>
> Overall, after taking this class I feel more confident in regards to educating
>
> English language learners.

Noted in the literature review, Tschannen-Moran et al. (1998) mentioned, "A teacher who is aware of deficits in his or her capabilities in a certain circumstance but has a belief about how those deficits can be addressed will have a resilient sense of teacher efficacy" (p. 233). Novice teachers (first year teachers) who came into teaching feeling confident in their abilities, suffered losses in their self-efficacy as the actual stresses of teaching became reality. However, those new teachers with support and "a high sense of teacher efficacy found greater satisfaction in teaching, had a more positive reaction to teaching, and experienced less stress" (Tschannen-Moran et al., 1998, p. 236).   The researcher agreed that confidence in a teacher's ability to teach was much more powerful than the knowledge of what was being teaching. From personal experience, walking into a classroom as a new teacher was a frightening and at times overwhelming experience; however, new teachers that showed confidence in their abilities were able to survive and thrive. Additionally, the researcher believed new teachers armed with knowledge and pedagogical skills could be confident in their abilities, because the course had provided

them with research-based, tried-and-true strategies to use immediately with any group of learners.

Application of the Principles of Andragogy

     Research Question 5: How are principles of andragogy applied to an online TESOL teacher training course?

     As a student of andragogy, the researcher had an interest in learning if the required online TESOL methods course was facilitated in a way that was developmentally appropriate for adult learners. In order to complete analyses of the course from an andragogical perspective, it was necessary for the researcher to learn more about designing and implementing an online learning environment. The researcher began by asking questions, such as: (a) Do the course objectives meet the requirements set by the university and other agencies? (b) Is the course structured in such a way that students are able to complete the objectives? (c) Is the course designed with the adult learner in mind, i.e., does the course design consider the knowledge and experiences the learners bring to the environment? (d) As the instructor of an online course, what is my role? (e) Does the course encourage self-directedness on the part of the learner? (f) How can I create a positive learning environment, so that this required course is meaningful for the learner? The researcher specifically examined three of the six principles of andragogy: (a) self-concept of the learner and the learner's ability to be self-directed; (b) prior experience of the learner; and (c) readiness to learn. Four data collection tools and some of the PPST survey questions were used to guide the analyses. The researcher examined herself as a learning facilitator for adult learners, as well as the TESOL methods course for the application of the principles of andragogy.

When discussing teacher training and professional development for teachers, how adults learn was an important concept to understand. Knowles believed in the connection between learning and characteristics of an adult learner, such as life experience, self-concept, and readiness to learn (Carpenter-Aeby & Aeby, 2013, p. 3). The researcher was determined to learn if this course was meeting the needs of the learners required to take it. An andragog was one who was a life-long learner, constantly searching for ways to improve or advance the field of study. In this case, the researcher had a passion for the plight of the nation's English learners and a sincere interest in helping others become knowledgeable and skilled at teaching them. This journey as a researcher reaffirmed beliefs that knowledge was a powerful tool; the more one knew about a topic, the more one wanted to learn. The video simulation experience used during week 1 of the course was one example of how this course met the needs of the adult learner. Many of the students indicated in their introduction responses that they had no prior experience working with ELs or even knew much about them. Some of the students had studied a foreign language, and a few had traveled abroad. They indicated their lack of knowledge about ELs was influencing their participation in the course-they were ready to learn. The video simulation provided all the students with a shared experience as to what life was like as a student in a class being taught in a language different than their own. They experienced frustration, mental stress, and other negative feelings as they failed to answer the required questions. But, as the teacher provided instructional supports during the lesson, they became more successful at answering. The participants developed empathy for non-English speaking students, recognizing their struggles as learners in English-only classrooms. They also noted simple changes and strategies that could be implemented by

teachers to facilitate comprehension by the students. As mentioned in the literature review, according to Daniel (2014), mainstream teachers and preservice teachers who embraced uncertainty could be empowered "to shift from a desire for exact methods and content to bring human interaction back to the center of instructional decision-making" (p. 21). This was true in andragogy, as Billington (2000) wrote, "Adults who reported experiencing high levels of intellectual stimulation-to the point of feeling discomfort-grew more" (para. 10). The researcher felt that the video simulation experience, in particular, helped the participants grow their knowledge, pedagogical skill, and self-efficacy levels as they relate to ELs.

The researcher examined week 5 of the course for the application of three principles of andragogy. The researcher determined the text readings, reflections, videos, and quizzes were representative of the application of the principles of andragogy to this course at this time. To carry this further, several elements of the course design reflected the three principles. For example, the course design encouraged self-directedness because it was online, asynchronous, and could be completed at one's own pace (within the 8-week time constraint). The design reflected the prior experiences of the learner by providing opportunities sharing experiences in discussions, text readings, and other assignment activities. In addition to the video simulation experience, the adults became ready to learn about ELs, because this course was required for teacher certification. The researcher also examined how the course related to individual goals and purposes for learning. The researcher found the course built upon a move toward self-direction by helping preservice teachers gain knowledge and pedagogical skill, increasing self-efficacy for teaching ELs, and presenting a positive perception of culturally and

linguistically diverse learners. The course provided experiences for the learner by building on prior linguistic and cultural experiences and developing a collaborative climate for learning. The students completed a teacher certification requirement and gained strategies and pedagogical skills for teaching ELs. Participants indicated institutional goals and purposes for learning were met when they expressed their satisfaction with the course during final reflection responses, as well as the continuation of coursework at the university. Other institutional goals and purposes for learning were university graduates were well-versed in linguistically and culturally diverse pedagogy, the application of prior experiences in their teaching, awareness of linguistic and cultural differences, and encouraging students to be respectful members of online communities. Also, at the institutional level, teacher certification requirements were met, graduates of the education program were capable of meeting the diverse needs of students, and preservice teachers were prepared for state certification tests.

For the self-discovery piece of the andragogical analyses, the researcher completed a self-diagnostic rating scale as it applied to being the learning facilitator of a graduate level course and a personal adult learning style inventory. The researcher discovered strengths as a learning facilitator in the area of selecting methods, techniques, and materials. A few weaknesses included explaining the differences between didactic instruction and self-directed learning and the difference between process design and a content plan. The personal adult learning style inventory revealed the researcher was andragogically oriented in the areas of "learning orientation," "learning design," "learning methods," and "program development." In the areas of "how people learn" and "program administration," the researcher scored in the mid-range between pedagogically

oriented and andragogically oriented, slightly closer to the andragogy end of the spectrum. Overall, the researcher scored 115, which suggested tendencies toward an andragogical orientation. The researcher planned to use this information to continue facilitating online learning environments with the adult learner in mind. One recommendation in the area of andragogy was to always keep the needs of the learner in mind when planning course design and course activities. A learning facilitator should be flexible enough to allow students to be self-directed (within the constraints of the course design) and encourage students to share their prior knowledge and experiences. Building an online community of learners was a challenging task, but one that was also very rewarding. As students progressed through the course and expressed their new knowledge and ideas about ELs, the environment became very energized and exciting. A lot of learning occurred in a very short amount of time! The researcher intended to continue improving the course and examining it again for the three additional principles of andragogy, perhaps incorporating more opportunities for self-directedness through the use of learning contracts or other means of assessment. The researcher agreed with Blackley and Sheffield (2015) when they stated, "we seek to help students to cross the threshold from a teaching student to a student teacher, developing their teacher identity and helping them feel ready to take their place as members of the teaching profession" (p. 412). By applying andragogical principles to the online learning environment, the researcher felt this course was a step toward this goal.

Study Limitations

As previously mentioned, there were a few study limitations. One limitation was time. The study was completed during a shortened eight week semester at one

Midwestern private university. Another limitation was the participants may have had different course experiences due to the course being taught by two different instructors and the student population of each section. Further, there were a limited number of students enrolled in the course. Finally, preservice teachers by definition had not had much practical experience working with English learners, and they may not have been able to adequately identify their lack of knowledge and pedagogical skills for working with English learners.

Implications

The TESOL (Teaching English to Speakers of Other Languages) teacher training course was a requirement for preservice teachers seeking teacher certification in early childhood and elementary education at a Midwestern private university and by the Missouri Department of Elementary and Secondary Education. This requirement was put in place in 2016 with the reauthorization of the Elementary and Secondary Education Act, entitled Every Student Succeeds Act (ESSA), in response to the growing population of English learners enrolled in U. S. public schools. Participant responses at the beginning of the course clearly indicated a lack of exposure to English learners-most preservice teachers enrolled in the course had not observed, worked with, or even attended school with English learners. However, the demographics of our state (and nation) were changing, and as such, mainstream classroom teachers needed to be prepared to teach English learners. A course (or competencies) in the methodology for teaching English learners was an important component in teacher preparation programs and should remain a requirement for preservice teachers. In addition, professional development in the methods for teaching ELs was strongly recommended for practicing

teachers that may not have had a TESOL teacher training course during their preparation program. Following the andragogical analyses of the institutional goals and purposes for learning, the course met the needs of the preservice teachers by fulfilling teacher certification requirements and provided a learning experience that reflected positively on the university and the school. Graduates of the teacher preparation program were knowledgeable and capable of meeting the needs of culturally and linguistically diverse students, and therefore, graduates had the opportunity to become knowledge leaders in their schools and communities. Individually, preservice teachers completing this TESOL teacher training course had the knowledge and experience with providing sheltered instruction to English learners in their classrooms by implementing the *SIOP®* model in their lesson planning and instruction.

Recommendations for Future Study

The researcher had several recommendations for future study, based on the results of this study and other similar studies. At the state and university levels, competency requirements in the area of culturally and linguistically diverse students should continue to be a requirement for teacher certification and become more embedded within the teacher preparation programs. The researcher also recommended including a practicum component for observing and working with culturally and linguistically diverse students, because witnessing first-hand how strategies can be used in a classroom further increased the knowledge and pedagogical skill levels of preservice teachers. The practicum could include observing classrooms with diverse populations or volunteer time working with English learners. Further, the university should continue to integrate instructional strategies for ELs into other teacher training courses; this TESOL teacher training course

should not be the first- and only-time preservice teachers learn about individualizing and differentiating instruction for diverse learners. To facilitate this process, the researcher recommended faculties throughout the school of education collaborate when designing and implementing courses, exchanging syllabi to offer suggestions, and opening dialogue about diverse learners and their needs. The researcher similarly recommended offering more courses in TESOL, so students continued their learning and had the opportunity to add a specialized certification for teaching English learners. For preservice teachers, this course was designed with the upper level student in mind, one with previous practicum experiences and experience writing lesson plans. The researcher suggested that students take the course concurrently with a course that includes a practicum, such as a reading or writing methods course, so the strategies learned from the text could be tested in the field. To further improve the course, the researcher recommended building in time for a practicum component when the course is taught during a 16-week semester. The researcher also recommended adding additional video clips of EL student and teacher interactions in mainstream classrooms. The researcher and other course instructor received positive feedback regarding this course, and as such, planned to keep the format and structure the same. However, as new research and pedagogy were available, the course was updated, so that the preservice teachers were prepared for diverse learners in their classrooms.

For other future studies, one area that should be continued to be studied was the use of the *SIOP®* model as a pedagogical tool. This model has been used for over 25 years in classrooms, but was the model still meeting the needs of today's ELs and their teachers, or does it need to be updated? Goldenberg (2013) stated that there was some

evidence that supports and modifications benefitted ELs, but the research about the effectiveness of the supports and modifications was limited. Thus, the researcher recommended further study in the area of essential knowledge and pedagogical skills necessary for teachers to work with ELs. Research in this area was still developing, and while many strategies and skills were recommended, few have been supported by research as being effective in improving achievement for ELs. Further, a comprehensive list of essential knowledge and pedagogical skills for working with ELs should be created for preservice and practicing teachers. This list could be embedded into teacher education programs, so when a preservice teacher exits a teacher preparation program, what they should know and be able to do were easily identifiable on an assessment. Additionally, this comprehensive list could be used to guide professional development programs for practicing teachers.

The area of transition of the preservice teacher from student to student teacher to classroom teacher was another recommendation of study. Were teacher preparation programs doing enough to support new teachers once they leave the university environment? Were new teachers adequately prepared to teacher in today's classrooms, with enough knowledge, pedagogical skills, and self-efficacy that will sustain them for more than 5 years? While teacher certification programs reflected the requirements set forth in federal and state laws, the researcher recommended program administrators further evaluate the content of the required courses to continually improve and reflect the needs of the local schools. The researcher recommended continued study of teacher preparation programs and their relationships and partnerships with local school districts,

where preservice teachers developed their knowledge, pedagogical skill, and self-efficacy in practical settings.

In regards to andragogy, the researcher recommended further study in adult education and meeting the needs of the modern adult learner. The researcher recommended instructors first learn about themselves as teachers and learners, so the learning environments they created adequately met the needs of the adult learner. As technology continued to evolve and change, learning environments needed to evolve and change; thus, it was recommended that research continued in the application of andragogical principles to online learning environments, specifically in the area of teacher training.

Changes to methodology of the study. When conducting a survey with college students, the researcher recommended building in features into the survey, so that the survey can be paired automatically. The researcher requested the students to create a pin, and many of them self-selected the same pin, so the pre- and post-survey data could not be paired for analyses. Also, getting participants to answer the focus group questions online was challenging. An adequate number of students volunteered to participate, but then the participants never posted responses. The end of the school year was a busy time for students, so starting the focus group earlier in the semester would be the researcher's recommendation. Or, offer another way to conduct the focus group, perhaps with a teleconference call.

Conclusion

An investigation of the knowledge, pedagogical skill, and self-efficacy levels of preservice teachers and their perceptions of English learners while enrolled in an online

TESOL (Teachers of English to Speakers of Other Languages) teacher training course

using an application of the principles of andragogy in a Midwestern private university

was the purpose of the study. As the demographics of the U.S. population continued to

evolve, preservice teachers needed to be prepared to teach culturally and linguistically

diverse learners. English learners had unique characteristics the often required

individualized and differentiated instruction. Preservice teachers needed many

instructional strategies as they prepared for the challenges of teaching in mainstream

classrooms. Changes in the knowledge, pedagogical skill, and self-efficacy levels of

preservice teachers continued as they progressed through the remaining coursework and

student teaching experience. Their perceptions of English learners may have also

changed through exposure and experience. Flexibility and growth as an educator were

requirements in the modern field of education. Trends in education paralleled Kolb's

experiential learning cycle: policies and procedures that affected public schools were

written, implemented, experienced, and reflected upon. A landmark court case, political

ideologies, or authorization of federal or state laws often caused local school districts to

comply with new lasting changes. The same process occurred with new strategies,

curriculums, technologies, and ideologies: each was conceptually conceived,

implemented, experienced by teachers and learners, then reflected upon and examined. If

data demonstrated that positive changes occurred, the new idea continued to be used, but

if positive changes did not occur, the new strategy, curriculum, technology, or ideology

was replaced with another and the cycle began again. Teachers needed to adapt and

adjust in response to changes in policy and procedural changes, essential skills learned

and developed during teacher training and on the job. Using a course design with an

application of andragogical principles facilitated growth in self-directedness and eased

the transition from college student to classroom teacher.

References

American Academy of Arts and Sciences. (2017, February 28). *United States needs to significantly increase access to language learning to remain competitive* [Press release]. Retrieved from https://www.amacad.org/news/united-states-needs-significantly-increase-access-language-learning-remain-competitive

American Youth Policy Forum. (2010, July). *Building capacity to promote college- and career-readiness for secondary-level English Language Learners: Policy brief featuring Austin, Texas* (Issue Brief July 13, 2010). Washington, DC: Author.

Arias, M. B. (2018, February). *How can the U.S. overcome its linguistic deficit? The findings of two national reports on language* learners [CAL Commentary on "America's Languages: Investing in language education in the 21st century" by the American Academy of Arts and Sciences and "Promoting the educational success of children and youth learning English: Promising futures" by the National Academies of Sciences, Engineering and Medicine]. Retrieved from http://www.cal.org/resource-center/publications-products/cc-how-can-u.s.-overcome

Barrow, L., & Markman-Pithers, L. (2016). Supporting young English learners in the United States. *The Future of Children, 26*(2). doi:http://dx.doi.org.ezproxy.lindenwood.edu:2048/10.1353/foc.2016.0017

Billington, D. D. (2000). Seven characteristics of highly effective adult learning programs. *New Horizons for Learning*, 1-3.

Blackley, S., & Sheffield, R. (2015). Digital andragogy: A richer blend of initial teacher education in the 21st century. *Issues in Educational Research*, *25*(4), 397-414.

Brisk, M. E. (2018, April). Transforming education by embracing bilingual learners. *The Educational Forum, 82*(2), 235-240. Routledge.

Brisk, M. E., & Harrington, M. M. (2000). *Literacy and bilingualism: A handbook for all teachers.* Mahwah, NJ: Erlbaum.

Calderón, M., Slavin, R., & Sánchez, M. (2011). Effective instruction for English learners. *The Future of Children*, 103-127.

Carpenter-Aeby, T., & Aeby, V. G. (2013). Application of andragogy to instruction in an MSW practice class. *Journal of Instructional Psychology, 40*(1), 3-13.

Cercone, K. (2008). Characteristics of adult learners with implications for online learning design. *AACE Journal, 16*(2), 137-159.

Charungkaittikul, S., & Henschke, J. A. (2018). Applying an andragogical approach to foster lifelong self-directed learning in 21st century higher education classroom settings. *Journal of Educational Leadership in Action, 5*(2). Retrieved from https://www.lindenwood.edu/academics/beyond-the-classroom/publications/journal-of-educational-leadership-in-action/all-issues/volume-5-issue-2/applying-an-andragogical-approach-to-foster-lifelong-self-directed-learning-in-21st-century-higher-education-classroom-settings/

Cheatham, G. A., & Ro, Y. E. (2010). Young English learners' interlanguage as a context for language and early literacy development. *Young Children*.

Chiner, E., Cardona-Moltó, M. C., & Gómez Puerta, J. M. (2015). Teachers' beliefs about diversity: An analysis from a personal and professional perspective. *Journal of New Approaches in Educational Research, 4*(1), 18–23.

Clayton, C. (2013). Exemplary teachers of English language learners: A knowledge base. *Journal of Research in Education, 23*(2), 35-64.

Code of State Regulations. (2018, December 31). Department of Elementary and Secondary Education. Division 20-Division of Learning Services, Chapter 400- Office of Educator Quality. Jefferson City, MO. Retrieved from https://www.sos.mo.gov/adrules/csr/current/5csr/5csr.

Collins, L., & Liang, X. (2014). Task relevance in the design of online professional development for teachers of ELLs: A Q methodology study. *Turkish Online Journal of Distance Education, 15*(3), 268-281.

Commission on Language Learning. (2017). America's languages: Investing in language education for the 21st century. Cambridge, MA: American Academy of Arts & Sciences.

Cummins, J. (1999). BICS and CALP: Clarifying the distinction (Report No. ED438551). *Washington, DC: ERIC Clearinghouse on Languages and Linguistics.*

Daniel, S. M. (2014). Learning to educate English language learners in pre-service elementary practicums. *Teacher Education Quarterly, 41*(2), 5-28.

de Jong, E. J., & Derrick-Mescua, M. (2003). Refining preservice teachers' questions for second language learners: Higher order thinking for all levels of language proficiency. *Sunshine State TESOL Journal*, *2*(2), 29-37.

de Jong, E. J., Harper, C. A., & Coady, M. R. (2013). Enhanced knowledge and skills for elementary mainstream teachers of English language learners. *Theory into Practice, 52*(2), 89-97.

Echevarría, J., Vogt, M., & Short, D. J. (2017). *Making content comprehensible for English learners: The SIOP® model.* Boston: Pearson.

Education Northwest. 2019. What all teachers should know about instruction for English language learners. https://educationnorthwest.org/resource/what-teachers-should-know-about-instruction-english-language-learners

Feiman-Nemser, S. (2018). What does research tell us about educating mainstream teachers to work with ELLs? *The Educational Forum, 82*(2), 227-234, DOI: 10.1080/00131725.2018.1420872

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2015). *How to design and evaluate research in education.* Columbus, OH: McGraw-Hill Education.

Friedman, A., Watts, D., Croston, J., & Durkin, C. (2002). Evaluating online CPD using educational criteria derived from the experiential learning cycle. *British Journal of Educational Technology, 33*(4), 367-378.

Gagne, R. M. (1965). *The conditions of learning.* New York: Holt, Rinehart and Winston.

Gándara, P., & Santibañez, L. (2016). The teachers our English language learners need. *Educational Leadership, 73*(5), 32-37.

Gándara, P., Maxwell-Jolly, J., & Driscoll, A. (2005). Listening to teachers of English language learners: A survey of California teachers' challenges, experiences and professional development needs. Santa Cruz: University of California, Center for the Future of Teaching and Learning.

García, E. E., Jensen, B. T., & Scribner, K. P. (2009). The demographic imperative. *Educational Leadership, 66*(7), 8-13.

García, O., Kleifgen, J. A., & Falchi, L. (2008). From English language learners to

emergent bilinguals. Equity Matters. Research Review No. 1. *Campaign for Educational Equity, Teachers College, Columbia University.*

Gay, G. (2002). Preparing for culturally responsive teaching. *Journal of teacher education, 53*(2), 106-116.

Glancy, F. H., & Isenberg, S. K. (2011). A conceptual elearning framework.

In *European, Mediterranean & Middle Eastern Conference on Information Systems 2011 (EMCIS2011)* (pp. 636-649).

Goldenberg, C. (2013). Unlocking the research on English learners: What we know--and don't yet know--about effective instruction. *American Educator, 37*(2), 4.

Gomez, M. N., & Diarrassouba, N. (2014). What do teachers need to support English learners? *English Language Teaching, 7*(5), 89-101.

Greenfield, R. (2013). Perceptions of elementary teachers who educate linguistically diverse student. *The Qualitative Report, 18*(47), 1-26.

Henschke, J. A. (1998). Modeling the preparation of adult educators. *Adult learning, 9*(3), 11-13.

Hiemstra, R. (1994). Self-directed learning. *The sourcebook for self-directed learning*, 9-20.

Hutchinson, M. (2013). Bridging the gap: Preservice teachers and their knowledge of working with English language learners. *TESOL Journal, 4*(1), 25-54.

Instructure/Canvas lms. (2019, April 19). Canvas by Instructure. Retrieved on June 26, 2019 from https://github.com/instructure/canvas-lms/wiki

Isenberg, S. (2007). *Applying andragogical principles to internet learning*. Cambria

Press.

Islam, C., & Park, M. (2015). Preparing teachers to promote culturally relevant teaching:

Helping English language learners in the classroom. *Multicultural Education,

23*(1), 38.

Knowles, M. (1990). *The adult learner: A neglected species.*

Knowles, M. S. (1980). *The modern practice of adult education.*

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2015). *The adult learner: The

definitive classic in adult education and human resource development* (8th ed.).

Oxon: Routlege.

Kolano, L. Q., & King, E. T. (2015). Preservice teachers' perceived beliefs towards

English language learners: Can a single course change attitudes?. Issues in

Teacher Education, 24(2), 3-21.

Kolb, A. Y., & Kolb, D. A. (2009). Experiential learning theory: A dynamic, holistic

approach to management learning, educatr and development. *The SAGE

handbook of management learning, education and development,* 42-68.

Kumar, R., & Hamer, L. (2012). Preservice teachers' attitudes and beliefs toward student

diversity and proposed instructional practices: A sequential design study. *Journal

of Teacher Education, 64*(2), 162-177.

Lhamon, C. & Gupta, V. (2015 January 7). Dear colleague letter. Washington, DC: U.S.

Department of Education, Office for Civil Rights & Department of Justice, Civil

Rights Division.

Li, N., & W. Peters, A. (2016). Preparing k-12 teachers for ELLs: Improving teachers' l2

knowledge and strategies through innovative professional development. *Urban

Education*, 0042085916656902. doi:10.1177/0042085916656902

Loeb, S., Soland, J., & Fox, L. (2014). Is a good teacher a good teacher for all?

Comparing value-added of teachers with their English learners and non-English

learners. *Educational Evaluation and Policy Analysis, 36*(4), 457-475.

Lopez, A. A., Pooler, E., & Linquanti, R. (2016). Key issues and opportunities in the

initial identification and classification of English learners. *ETS Research Report

Series, 2016*(1), 1-10.

López, F., Scanlan, M., & Gundrum, B. (2013). Preparing teachers of English language

learners: Empirical evidence and policy implications. *Education Policy Analysis

Archives, 21,* 20.

Lucas, T., Strom, K., Bratkovich, M., & Wnuk, J. (2018, April). Inservice preparation for

mainstream teachers of English language learners: A review of the empirical

literature. *The Educational Forum 82*(2), 156-173. Routledge.

Markos, A. M. (2012). Mandated to learn, guided to reflect: Pre-service teachers'

evolving understanding of English language learners. *Issues in Teacher

Education, 21*(1), 39-57.

Markos, A., & Himmel, J. (2016). Using sheltered instruction to support English learners.

Center for Applied Linguistics.

Master, B., Loeb, S. Whitney, C., & Wyckoff J. (2016). Different skills? Identifying

differentially effective teachers of English language learners. *The Elementary

School Journal, 117*(2), 261-284.

McFarland, J., Hussar, B., Wang, X., Zhang, J., Wang, K., Rathbun, A., Barmer, A. . . . & Bullock Mann, F. (2018). The Condition of Education 2018. NCES 2018-144. *National Center for Education Statistics.*

Missouri Department of Elementary and Secondary Education. (2018). Educating linguistically diverse students: Requirements & practices (Handbook). Jefferson City, MO: Author.

Molle, D. (2013). The pitfalls of focusing on instructional strategies in professional development for teachers of English learners. *Teacher Education Quarterly, 40*(1), 101-124. Retrieved from https://files.eric.ed.gov/fulltext/EJ1014349.pdf

Musu, L. (2019, February 20). A slightly more diverse public school teaching workforce. [Blog post]. NCES Blog. National Center for Education Statistics. Retrieved from: https://nces.ed.gov/blogs/nces/2019/02/20/default

Nichols, J. D., & Soe, K. (2013). An analysis of preservice teacher responses to participation in a literacy program for new immigrant children. *Multicultural Perspectives, 15*(4), 220-226.

Nieto, S. (2000). Affirming diversity: The sociopolitical context of multicultural education (3rd ed.). New York: Longman.

Perception. (n.d.). In online dictionary, dictionary.com. Retrieved from https://www.google.com/search?q=Dictionary#dobs=perception

Pettit, S. K. (2011). Teachers' beliefs about English language learners in the mainstream classroom: A review of the literature. *International Multilingual Research Journal, 5*(2), 123-147.

Pohan, C. A., & Aguilar, T. E. (2001). Measuring educators' beliefs about diversity in personal and professional contexts. *American Educational Research Journal, 38*(1), 159-182.

Ramanayake, S., & Williams, C. (2017). "I don't know why I'm learning this": Preservice English teachers' engagement in a language development course. *International Journal of Teaching and Learning in Higher Education*, *29*(3), 447-457.

Rance-Roney, J. (2009). Best practices for adolescent ELLs. *Educational Leadership, 66*(7), 32-37.

Roessingh, H. (2006). BICS-CALP: An introduction for some, a review for others. *TESL Canada Journal, 23*(2), 91-96.

Schoenfeld, A. H. (2011). Toward professional development for teachers grounded in a theory of decision making. *ZDM*, *43*(4), 457-469.

Shim, J. (2017). Self-identified linguistic microaggressions among monolingual pre-service teachers: Why they matter for English language learners. *Multicultural Learning and Teaching*, *12*(2).

Smith, S. U. (2014). Frameworks shaping an online professional development program for K–12 teachers of ELLs: Toward supporting the sharing of ideas for empowering classroom teachers online. *TESOL Journal*, *5*(3), 444-464.

Staehr Fenner, D. (2016) Fair and square assessments for ELLs. *Educational Leadership, 73*(5). Retrieved from http://www.ascd.org/publications/educationalleadership/feb16/vol73/num05/Fair And-Square-Assessments-for-ELLs.aspx

Taylor, R., Yeboah, A. K., & Ringlaben, R. P. (2015). Pre-service teachers' perceptions

      towards multicultural education and teaching of culturally and linguistically

      diverse learners. *International Journal of Innovation Education and*

      Research, *3*(9).

Tazi Morell, Z., & Aponte, A. (April 2016). Right from the start: A protocol for

      identifying and planning instruction for emergent bilinguals in universal pre-

      kindergarten (UPK). *Educator's Voice IX*, 12- 25. Video Interview at

      http://www.nysut.org/resources/all-listing/2016/april/educatorsvoice-ix/educators-

      voice-ix-ch02

TESOL (2018). In *Cambridge advanced learner's dictionary and thesaurus* online.

      Retrieved from https://dictionary.cambridge.org/dictionary/english/tesol

TESOL International Association. (2016). *English learners and ESSA: What educators*

      need to know [Brochure]. Alexandria, VA: TESOL Press.

TESOL International Association. (2019). The 6 principles for the exemplary teaching of

      English learners. Retrieved June 11, 2019, from https://www.tesol.org/the-6-

      principles

The National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the*

      educational success of children and youth learning English: Promising futures.

      National Academies Press. Retrieved from https://www.nap.edu/resource/24677/

      DLL.pdf

The National Academies of Sciences, Engineering, and Medicine. (2017, February).

      Report highlights: Promoting the educational success of children and youth

learning English: Promising futures. Retrieved from https://www.nap.edu/ resource/24677/DLL.pdf

The National Academies of Sciences, Engineering, and Medicine, Division of Behavioral and Social Sciences and Education and Health and Medicine Division. (2017b, February 28). *Children and youth learning English require better support for academic success: New report calls for improvements to instruction and training for their care and education providers* [Press release]. Retrieved from http://www 8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=24677

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of educational research*, *68*(2), 202-248.

Turkan, S., Croft, A., Bicknell, J., & Barnes, A. (2012). Assessing quality in the teaching of content to English language learners. *ETS Research Report Series*, *2012*(1), i-74.

Unruh, L. E., & McCord, D. M. (2010). Personality traits and beliefs about diversity in pre-service teachers. *Individual Differences Research*, *8*(1), 1-7.

Vandeven, M. (2015). Educating linguistically diverse students: Requirements & practices (Handbook). Jefferson City, MO: Missouri Department of Elementary and Secondary Education.

Villegas, A. M. (2018, April). Introduction to "Preparation and development of mainstream teachers for today's linguistically diverse classrooms". *The Educational Forum, 82*(2), 131-137. Routledge.

Villegas, A. M., & Irvine, J. J. (2010). Diversifying the teaching force: An examination of major arguments. *The Urban Review*, *42*(3), 175-192.

Villegas, A. M., SaizdeLaMora, K., Martin, A. D., & Mills, T. (2018, April). Preparing

    future mainstream teachers to teach English language learners: A review of the

    empirical literature. *The Educational Forum, 82*(2), 138-155. Routledge.

Walker-Dalhouse, D., Sanders, V., & Dalhouse, A. D. (2009). A university and middle-

    school partnership: Preservice teachers' attitudes toward ELL students. *Literacy

    Research and Instruction*, *48*(4), 337-349.

Who said "the only thing constant is change"? (2019). Retrieved from https://www.

    reference.com/world-view/said-only-thing-constant-change-d50c0532e714e12b.

Wright-Maley, C., & Green, J. D. (2015). Experiencing the needs and challenges of

    ELLs: Improving knowledge and efficacy of pre-service teachers through the use

    of a language immersion simulation. *Cogent Education*, *2*(1), 1030176.

Zainuddin, H., & Moore, R. (2004). Engaging preservice teachers in action research to

    enhance awareness of second language learning and teaching. *Teacher Education

    & Practice, 17*(3), 311-327.

Appendix A

Focus Group Questions

Post 1: Before this course, what was your prior experience with English learners, either personally or professionally?

Post 2: What are some things you have learned about English learners from the course materials (videos, text, articles, and discussions)? How will you use this information in your future classroom?

Post 3: What course assignment, activity, video, etc. do you find to be the most valuable for your teaching? If you could share a course assignment, activity, video, etc. with a friend or colleague, which one would it be, and why?

Post 4: What do you think are the most important things to do as a teacher to help English learners be successful throughout the school year?

Post 5: If you have input about who will be in your class of students, would you choose to have English learners in your classroom, or would you request to not have them? Why, or why not?

Post 6: Do you think you will use SIOP® again? Why or why not?

Post 7: Do you feel that you are adequately prepared to teach English learners after taking this course? If not, what improvements or additions would you recommend? If yes, please explain why you feel adequately prepared.

Post 8: What additional information do you want to learn in this course or in future courses about English learners?

Appendix B

Perceptions of Preservice Teachers Survey

Please enter a unique Word or 4-digit pin of your choosing. Please keep this pin safe to use for the post survey at the end of the course. Please do NOT use "Lindenwood". This will help the researcher link the pre- and post-surveys, but the survey responses will not be linked to any personal information. This pin is optional. Thank you for your participation.

Q1 All English learners (ELs) are born in another country.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q2 English learners should be taught all day in a self-contained class with other English learners.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q3 English learners take instructional time away from other students in the classroom.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q4 English learners cannot contribute to the classroom community.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q5 If an English learner can carry on a conversation, they can complete grade level work on their own.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q6 English learners cannot complete grade level work, because they do not read, write, or speak English.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q7 English learners are disruptive in the classroom.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q8 English learners are passed to the next grade level without completing grade level work.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q9 English learners have different levels of English proficiency.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)

o   Disagree (2)
o   Strongly disagree (1)

Q10 English learners should only speak or write in English at school.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q11 English learners are incapable of keeping up with the required rigor in regular classrooms.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q12 I can teach English learners content, such as math or science.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q13 I can help English learners improve their English proficiency.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q14 I can teach vocabulary.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)

o   Disagree (2)
o   Strongly disagree (1)

Q15 I use a variety of teaching strategies in my class.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q16 I encourage student participation in my classroom.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q17 I allow students to talk about their learning with each other.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q18 I can differentiate instruction for English learners of different English proficiency levels.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q19 I am confident in my ability to write content objectives.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)

o   Disagree (2)
o   Strongly disagree (1)

Q20 I am confident in my ability to write language objectives.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q21 I need more professional development to prepare for English learners in my class.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q22 If you agreed in the previous question that you need more professional development to prepare for English learners, what type of PD do you want? (Box will expand as you type)

Q23 Pre-service teachers should be required to take a course for teaching English learners.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q24 This course should be available in other formats. Select ALL that apply.
o   Online only
o   Hybrid-Online and Seated on Campus
o   Seated on Campus only
o   This course should not be required.
o   Full Semester-16 Weeks
o   8 Week Course
o   With a practicum option (classroom experience)

Q25 I am currently
o   an undergraduate student

o   a graduate student with no classroom teaching experience
o   a graduate student with classroom teaching experience (employed as a teacher)

Perceptions of Preservice Teachers Survey (Post Only Questions)

Q26 This TESOL methods course has increased my knowledge of English learners.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q27 This TESOL methods course has increased my skills to teach English learners.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q28 After completing the TESOL methods course, I feel prepared to teach English learners.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q29 This course has increased my confidence in my ability to teach English learners.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)
o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Q30 This course met my needs as a learner.
o   Strongly Agree (7)
o   Agree (6)
o   Somewhat agree (5)

o   Neither agree nor disagree (4)
o   Somewhat disagree (3)
o   Disagree (2)
o   Strongly disagree (1)

Research Question 1: Perceptions of ELs	Q 1,2,3,4,5,6,7,8,10, 11
Research Question 2: Knowledge of ELs	Q 1,9,10,11,23 and Post-only Q 26
Research Question 3: Pedagogical Skill	Q 12,13,14,15,16,17,18,19,20,21, Post-only Q 27
Research Question 4: Self-Efficacy	Q 12,13,14,18,19,20,21, Post-only Q 28, 29
Andragogy: Self-directedness	Q 24
Andragogy: Prior Experiences of Learner	Q1,9,10,11,12,13,14,15,16,17,18,19,20,21, 23
Andragogy: Readiness to learn	Q 21, 22

Appendix C

Initial Reaction Questionnaire Assignment   Name:

Please respond with your first reaction to each of the questions.

1. When you hear the words "English Language Learner" what comes to mind?

2. What are some of the best ways to learn a second language?

3. If you moved to a non-English speaking country and were in school, or had a child in school, what support or services would you expect?

4. What's the best way to teach content to a student who doesn't understand English?

5. Should English language learners be required to take annual state content area assessments (like the MAP)? Why or Why not?

6. Some states require that English be used as the language of instruction in the classroom. Should voters decide on the language of instruction in K-12 classrooms? Why or why not?

Mid-Term Initial Reaction Questionnaire - Go back to your IRQ and reread your response to question #1: "When you hear the words, ELL, what comes to mind?" Describe how your response to this question (question #1) has evolved. You will want to use Chapter 1 from the text to support your response, specifically the ideas on pages 8-19 regarding the diversity of the ELL population:

A. Explain what you originally wrote and what experiences you drew on from your life to answer the question initially.

B. Next, explain how your thinking on this question has evolved. This could include how your original ideas/thoughts have been strengthened, changed, etc.

Final Initial Reaction Questionnaire

Listed below are the IRQ questions. Considering what you have experienced this semester, choose any question (except Question 1) that you feel you have evolved in during this course. You may go back to your original IRQ responses to review what you wrote and how you have evolved.

1. When you hear the words "English Language Learner" what comes to mind?

2. What are some of the best ways to learn a second language?

3. If you moved to a non-English speaking country and were in school, or had a child in school, what support or services would you expect?

4. What's the best way to teach content to a student who doesn't understand English?

5. Should English language learners be required to take annual state content area assessments (like the MAP)? Why or Why not?

6. Some states require that English be used as the language of instruction in the classroom. Should voters decide on the language of instruction in K-12 classrooms? Why or why not?

A. State the IRQ question you are revisiting. Explain what you originally wrote and what experiences you drew on from your life to answer the question originally.

B. Next, explain how your thinking on this question has evolved. This could include how your original ideas/thoughts have been strengthened, changed, etc.

Appendix D

Course Announcement

Dear Students,

My name is Daisy Skelly. Dr. Michelle Sencibaugh and I are the instructors this semester for TESOL Methods 44000 and TESOL Methods 54000. I am working to complete my doctoral degree in Educational Leadership here at Lindenwood University, and so I am conducting research during this course. I want to learn about how students enrolled in this course are learning about English learners, so that Dr. Sencibaugh and I can continue to improve this course to meet the needs of pre-service teachers. As a student enrolled in this course, I invite you to complete the consent form. While participation in the study is voluntary, and you may leave the study at any time during the semester, I would encourage you to participate. You will NOT need to do any additional work; all data gathered will be from assignments already embedded in the course. Also, I will not know who is participating in the study until after grades are posted in May; therefore, please know that your grade will not be affected in ANY way based on your participation or non-participation. I really need your help to complete my degree, and I appreciate your willingness to participate. Here are the next steps:

1. Download and print the attached consent form.
2. Sign it.
3. Email a scanned copy or photo of the signed form or mail the scanned form to the outside observer, Dr. Robert Steffes. His email address is: rsteffes@lindenwood.edu or address: Dr. Robert Steffes, 209 S. Lindenwood, Upstairs Warner Hall, St. Charles, MO 63301. If you are on campus, you could return it to his office in Warner Hall.

Thank you for your consideration. If you have any questions, you may contact me directly.
Sincerely,

Professor Daisy Skelly
dskelly@lindenwood.edu

Course Announcement 2

I would like to again invite you to participate in my doctoral research study and focus group. Due to confidentiality, I do not know who is a participant and who is not; however, I do want you to know that I value ALL of your participation and feedback in this course. I would really appreciate it if you would consider completing the consent form and/or joining the focus group. It's not too late!
Please email Dr. Steffes, rsteffes@lindenwood.edu, if you are interested! Thanks so much! Professor Skelly

Appendix E

Focus Group Description Page

The purpose of this focus group is for the primary researcher to gain information about what students are learning in the TESOL Methods course and how they are learning. This information will be used to make improvements to the course content, as well as triangulate the data used in the dissertation. Please respond as openly and honestly as you feel comfortable. It would also be beneficial to respond to at least two of your peers to continue the discussion for each question. You may participate in as few or as many discussion questions as you wish. Your name and personal information will be wiped from all responses prior to being given to the researcher. To begin, open the MODULES tab to find the Discussions. You may navigate through the discussions by clicking the "Next" button on each discussion page, returning to the Module page, or by clicking the Discussion tab. As a thank you for participating, participants will be mailed a thank you card and gift after the semester has ended. If you have questions, please ask Dr. Robert Steffes, rsteffes@lindenwood.edu

Focus Group Thank You Post

Thank you for taking the time to participate in this focus group. You may re-visit the discussion board as many times as you wish to respond to comments or add to your comments. The discussion board will close to comments approximately one week after the close of the semester. When you have finished your participation, please email Dr. Steffes the address where you would like your thank you card and gift sent.

Appendix F

SIOP Lesson Plan Scoring Guide *SOURCE: The SIOP MODEL Appendix A (p. 288-293)*

LESSON PREPARATION	5-4	3-2	1-0	POINTS EARNED
	Content objectives clearly defined, displayed and reviewed with students	**Content objectives** for students implied	No clearly defined **content objectives** for students	
	Language objectives clearly defined, displayed and reviewed with students	**Language objectives** for students implied	No clearly defined **language objectives** for students	
	Content concepts appropriate for age and educational background level of students	**Content concepts** somewhat appropriate for age and educational background level of students	**Content concepts** inappropriate for age and educational background level of students	
	Supplementary materials used to a high degree, making the lesson clear and meaningful (e.g. computer programs, graphs, models, visuals)	Some use of **supplementary materials**	No use of **supplementary materials**	

BUILDING BACKGROUND	5-4	3-2	1-0	POINTS EARNED
	Links explicitly made between past learning and new concepts	**Few links made** between past learning and new concepts	**No links made** between past learning and new concepts	
	Key vocabulary emphasized (e.g., introduced, written, repeated, and highlighted for students to see)	**Key vocabulary** introduced, but not emphasized	**Key vocabulary** not introduced or emphasized	

COMPREHENSIBLE INPUT	5-4	3-2	1-0	POINTS EARNED
	Clear explanations of academic tasks	**Unclear** explanation of academic tasks	**No** explanation of academic tasks	
	A variety of techniques used to make content concepts clear (e.g., modeling, visuals, hands-on activities, demonstrations)	Some **techniques** used to make content concepts clear	No **techniques** used to make concepts clear	
STRATEGIES	5-4	3-2	1-0	POINTS EARNED
	Ample opportunities provided for students to use **learning strategies**	Inadequate opportunities provided for students to use **learning strategies**	No opportunity provided for students to use **learning strategies**	
	Scaffolding techniques consistently used, assisting a supporting students understanding (e.g. think alouds)	**Scaffolding techniques** occasionally used	**Scaffolding techniques** not used	
INTERACTION	5-4	3-2	1-0	POINTS EARNED
	Frequent opportunities for **interaction** and discussion between teacher/student and among students, which encourage elaborated responses about lesson concepts	**Interaction** mostly teacher-dominated with some opportunities for students to talk about or question lesson concepts	**Interaction** teacher-dominated with no opportunities for students to talk about or question lesson concepts	
	Grouping configurations support language and content objectives of the lesson	**Grouping configurations** unevenly support the language and content objectives	**Grouping configurations** do not support the language and content objectives	
PRACTICE & APPLICATION	5-4	3-2	1-0	POINTS EARNED

	5-4	3-2	1-0	
	Hands-on materials and/or manipulatives provided for students to practice using new content knowledge	Few **hands-on materials and/or manipulatives** provided for students to practice using new content knowledge	No **hands-on materials and/or manipulatives** provided for students to practice using new content knowledge	
	Activities provided for students **to apply content and language knowledge** in the classroom	Activities provided for students **to apply** either **content or language knowledge** in the classroom	No activities provided for students **to apply content and language knowledge** in the classroom	
	Activities integrate all **language skills** (i.e., reading, writing, speaking, and listening)	Activities integrate some **language skills**	Activities do not integrate **language skills**	
LESSON DELIVERY	**5-4**	**3-2**	**1-0**	**POINTS EARNED**
	Content objectives clearly supported by lesson delivery	**Content objectives** somewhat supported by lesson delivery	**Content objectives** not supported by lesson delivery	
	Language objectives clearly supported by lesson delivery	**Language objectives** somewhat supported by lesson delivery	**Language objectives** not supported by lesson delivery	
REVIEW & ASSESSMENT	**5-4**	**3-2**	**1-0**	**POINTS EARNED**
	Comprehensive **review of key vocabulary**	Uneven **review of key vocabulary**	No **review of key vocabulary**	
	Comprehensive **review of key content concepts**	Uneven **review of key content concepts**	No **review of key content concepts**	
	Assessment of student comprehension and learning of all lesson objectives (e.g. spot checking, group	**Assessment of student comprehension and learning** of some lesson objectives	No **assessment of student comprehension and learning** of lesson objectives	

	response) throughout the lesson			

TOTAL SCORE: _____/100 points

Appendix G

Dear School of Education Faculty,

Hello. My name is Daisy Skelly. I am an Ed.D student and adjunct professor at Lindenwood University. I am preparing to conduct a study using the TESOL Methods course, EDU 44000/54000. Students enrolled in this course will be requested to read about the study and consent to participate, if they are willing. Study data will be collected following the posting of final course grades, so participation in the study remains completely voluntary.

This mixed-methods study is an investigation of the knowledge, skill, and self-efficacy levels of pre-service teachers and their perceptions of English language learners while enrolled in an online TESOL teacher training course. The study will also explore the application of the principles of andragogy to an online teacher training course.

Study participants will be asked to complete all course assignments. Volunteers will be recruited to participate in an optional focus group discussion. Participation in the study is voluntary, and participants may withdraw at any time. All personal information will be kept strictly confidential and not used in any future publications or presentations.

If you or your student advisees have any questions regarding the study, please contact me, dskelly@lindenwood.edu or Dr. Robert Steffes, rsteffes@lindenwood.edu for more information.

Thank you for your assistance,

Daisy A. Skelly

dskelly@lindenwood.edu

Appendix H

Dear Students,

Hello. My name is Daisy Skelly. I am an Ed.D student and adjunct professor at Lindenwood University. This semester I am conducting a study using the TESOL Methods course, EDU 44000/54000. As a student enrolled in this course this semester, I would like to tell you about my study and invite you to participate. Study data will be collected following the posting of final course grades, so participation in the study remains completely voluntary and will not affect your grade at all.

This mixed-methods study is an investigation of the knowledge, skill, and self-efficacy levels of pre-service teachers and their perceptions of English language learners while enrolled in an online TESOL teacher training course. The study will also explore the application of the principles of andragogy to an online teacher training course.

Through an announcement on Canvas, you will be invited to complete a consent form and email it to Dr. Robert Steffes, rsteffes@lindenwood.edu. Dr. Steffes will keep all consent forms in a locked file on his computer until after final grades are posted for the semester. The study will not require any additional work, except the consent form. Study participants will be asked to complete all regular course assignments. Volunteers will be recruited to participate in an optional focus group discussion by an email invitation from Dr. Steffes. The focus group discussion will be held through another Canvas course specifically for this focus group, and only the invited students and Dr. Steffes will have access to it until after final grades are posted.

Participation in the study is voluntary, and participants may withdraw at any time by sending an updated consent form to Dr. Steffes. All personal information will be kept strictly confidential and not used in any future publications or presentations.

If you have any questions regarding the study, please contact me, dskelly@lindenwood.edu or Dr. Robert Steffes, rsteffes@lindenwood.edu for more information.

Thank you for your assistance,

Daisy A. Skelly

dskelly@lindenwood.edu

Appendix I

LINDENWOOD

Research Study Consent Form

A Mixed-Methods Study of Applying Andragogical Practices to an Online TESOL
Teacher Training Course at a Midwestern University

Before reading this consent form, please know:

- Your decision to participate is your choice
- You will have time to think about the study
- You will be able to withdraw from this study at any time
- You are free to ask questions about the study at any time

After reading this consent form, we hope that you will know:

- Why we are conducting this study
- What you will be required to do
- What are the possible risks and benefits of the study
- What alternatives are available, if the study involves treatment or therapy
- What to do if you have questions or concerns during the study

---

Basic information about this study:

- We are interested in learning about ways to improve curriculum and instruction in an online teacher training course.
- You will complete all regular assignments, including a pre- and post-survey, pre-, mid-, and post questionnaire, and optional focus group discussions.
- Risks of participation include identifying cultural biases and discovering lack of knowledge and skills as they relate to English learners.

LINDENWOOD

Research Study Consent Form

A Mixed-Methods Study of Applying Andragogical Practices to an Online TESOL
Teacher Training Course at a Midwestern University

You are asked to participate in a research study being conducted by Daisy A.
Skelly under the guidance of Dr. Robert Steffes at Lindenwood University. Being
in a research study is voluntary, and you are free to stop at any time. Before you
choose to participate, you are free to discuss this research study with family,
friends, or a physician. Do not feel like you must join this study until all of your
questions or concerns are answered. If you decide to participate, you will be
asked to sign this form.

Why is this research being conducted?
We are doing this study to learn about ways to improve curriculum and
instruction in an online teacher training course. We will be asking about 7 other
people to answer these questions.

What am I being asked to do?
Participants will complete an anonymous pre-survey through Qualtrics.
Participants will complete all required course assignments, including a pre-, mid-,
and post questionnaire and reflective journaling. In addition, volunteers will be
requested to join a separate Canvas shell to participate in an online focus group
discussion led by an outside observer. The researcher will not have access to
this Canvas shell discussion. Data gathered in the discussion will be wiped of all
identifiable information prior to being shared with the researcher and will occur
after the posting of final grades. Course assignments will be graded throughout
the semester by the instructor, but the assignments will not be analyzed for study
purposes until after final grades have posted. Finally, participants will complete a
post-survey through Qualtrics.

How long will I be in this study?

The study will last the length of one semester of the TESOL Methods course.

What are the risks of this study?

- Privacy and Confidentiality:

We will be collecting data that could identify you, but each focus group response will receive a code so that we will not know who answered each survey. The code connecting you and your data will be destroyed as soon as possible.

We are collecting data that could identify you, such as audio/video responses, written responsive journaling, pre-, mid- and post-questionnaires, and other course assignments. Every effort will be made to keep your information secure. Only members of the research team will be able to see any data that may identify you.

We will be collecting data from you using the internet. We take every reasonable effort to maintain security. The survey will be collected online using Qualtrics. It is always possible that information during this research study may be captured and used by others not associated with this study.

What are the benefits of this study?

You will receive no direct benefits for completing this survey. We hope what we learn may benefit other people in the future.

What if I do not choose to participate in this research?

It is always your choice to participate in this study. You may withdraw at any time. You may choose not to answer any questions or perform tasks that make you uncomfortable. If you decide to withdraw, you will not receive any penalty or loss of benefits. If you would like to withdraw from a study, please use the contact information found at the end of this form.

What if new information becomes available about the study?

During the course of this study, we may find information that could be important to you and your decision to participate in this research. We will notify you as soon as possible if such information becomes available.

How will you keep my information private?

We will do everything we can to protect your privacy. We do not intend to include information that could identify you in any publication or presentation. Any information we collect will be stored by the researcher in a secure location. The only people who will be able to see your data are: members of the research team, qualified staff of Lindenwood University, representatives of state or federal agencies.

How can I withdraw from this study?

Notify the research team immediately if you would like to withdraw from this research study.

Who can I contact with questions or concerns?

If you have any questions about your rights as a participant in this research or concerns about the study, or if you feel under any pressure to enroll or to continue to participate in this study, you may contact the Lindenwood University Institutional Review Board Director, Michael Leary, at (636) 949-4730 or mleary@lindenwood.edu. You can contact the researcher, Daisy A. Skelly directly at 636-219-2744 or dskelly@lindenwood.edu. You may also contact Dr. Robert Steffes, rsteffes@lindenwood.edu.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.

_____
_____
Participant's Signature   **Date**

_____
Participant's Printed Name

_____
_____
Signature of Principle Investigator or Designee   **Date**

_____
Investigator or Designee Printed Name

Appendix J

Activity

English Language Learners: Understanding Sheltered Instruction
Est. Time: 30 Minutes

Objective

1) To understand how sheltered instruction can be used to support English language learners (ELLs), and 2) to understand that the ability of ELL students to comprehend new information may be significantly reduced when teachers fail to provide the necessary supports they may need in and out of the classroom.

Overview

Through sheltered content instruction, teachers utilize instructional techniques to help ELLs understand demanding lesson content. Instructors teach content objectives that correspond to grade-level standards, while also planning and teaching language objectives that enrich ELLs' receptive and expressive skills. When teachers use additional supports, such as hands-on demonstrations, graphics, and real objects (known as *realia*), they make the instruction less abstract and easier for students to comprehend. Such supports can also help ELL students make connections with their prior knowledge, something that may help them understand new information that they are required to learn.

Activity, Part 1

Follow the link to view Video #1. Write down five things the teacher talked about during the lesson. http://iris.peabody.vanderbilt.edu/mcontent/sheltered-video-1/

Activity, Part 1: Questions/Discussion Topics

1. Were you able to identify five things the teacher talked about during the lesson? If so, what were they? If not, why not?
2. How did you feel as you were trying to understand the teacher during the lesson? Explain.
3. For how long was the teacher able to hold your full attention?
4. What could the teacher have done to help you to better understand the lesson?

Activity

English Language Learners: Understanding Sheltered Instruction
Est. Time: 30 Minutes

Activity, Part 2

Follow the link below to view Video #2. Write down five things the teacher talked about during the lesson. http://iris.peabody.vanderbilt.edu/mcontent/sheltered-video-2/

Activity, Part 2: Questions/Discussion Topics

1. This lesson presented the same content as in Video #1. What were you able to write down this time? Were you able to identify more information from Video #2 than from Video #1? Why or why not?

2. List or discuss things the teacher did differently in this lesson that made it easier for you to understand. Explain why they made a difference.

3. Was the teacher able to hold your attention for a longer period than in Video #1? Explain.

Activity, Part 3

Again, follow the link below to view Video #3. Write down five things the teacher talked about during the lesson. http://iris.peabody.vanderbilt.edu/mcontent/sheltered-video-3/

Activity, Part 3: Questions/Discussion Topics

1. Compare the number of things you were able to write down from Video #3 to your answers from Videos #1 and #2. From which lesson were you able to glean the most information? Why do you think this was the case?

2. Did you have any prior knowledge of this lesson's content? If so, did it help you to understand the lesson? Why or why not?

3. Could the teacher have done anything else during the lesson to help you understand the information? Explain.

4. Discuss how you will improve your teaching (current or future) with ELL students as a result of completing this activity.

Vitae

DAISY SKELLY

Daisy Skelly holds bachelor of science degrees in elementary and middle school education from the University of Central Missouri, Warrensburg, Missouri, master of arts with an emphasis in early childhood education, and an anticipated doctorate (2019) in instructional leadership with an emphasis in andragogy from Lindenwood University, St. Charles, Missouri.

Daisy Skelly began her teaching career as an eighth grade teacher in Wentzville, Missouri. For several years, she was a Parents As Teachers parent educator and ESOL paraeducator with the Francis Howell School District in St. Charles, Missouri, prior to her current role as the ESOL coordinator and teacher for Wright City Schools in Wright City, Missouri. She is trained as a WIDA trainer of trainers in Missouri, and is an adjunct instructor with the School of Education at Lindenwood University.