

Abilene Christian University

Digital Commons @ ACU

Electronic Theses and Dissertations

Electronic Theses and Dissertations

11-2023

Developing Teachers to Teach English Language Learners (ELLs) via ELL Notebook Strategies

Ebony D. Johnson
exj20a@acu.edu

Follow this and additional works at: <https://digitalcommons.acu.edu/etd>

Recommended Citation

Johnson, Ebony D., "Developing Teachers to Teach English Language Learners (ELLs) via ELL Notebook Strategies" (2023). Digital Commons @ ACU, *Electronic Theses and Dissertations*. Paper 736.

This Dissertation is brought to you for free and open access by the Electronic Theses and Dissertations at Digital Commons @ ACU. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ ACU.

This dissertation, directed and approved by the candidate's committee, has been accepted by the College of Graduate and Professional Studies of Abilene Christian University in partial fulfillment of the requirements for the degree

Doctor of Education in Organizational Leadership

Nannette W. Glenn, Ph.D.

Dr. Nannette Glenn, Dean of
the College of Graduate and
Professional Studies

Date: November 14, 2023

Dissertation Committee:

Amy Barrios

Dr. Amy Barrios, Chair

Christie Bledsoe

Dr. Christie Bledsoe

Ana Gomez de Torres

Dr. Ana Gomez de Torres

Abilene Christian University
School of Educational Leadership

Developing Teachers to Teach English Language Learners (ELLs) via ELL Notebook Strategies

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Organizational Leadership

by

Ebony D. Johnson

January 2024

Dedication

I first must thank God, who put me on this journey, took me by His hands, and never left me. You are my Shepherd, my peace, and all I am is because of You. I will glorify You forever. I dedicate this accomplishment to my family, who have always been my rock. Thank you for never allowing me to give up and always encouraging me. To my husband, Nathaniel Johnson: You saw things in me that I could not see in myself; you pushed me to do more and be more, and whichever path I chose, you supported me completely. Thank you for your love, patience, and support in this life journey. To my mom: You are a treasured jewel; you carry us all on your back with grace and presence. You never let us give up, and you have been with me through every endeavor of my life. Thank you for always being there, thank you for praying for me, thank you for nurturing me, and thank you for loving me. Thank you both for showing me what hard work and perseverance look like to my father and stepfather in heaven. I honor you both and hope I have made you both proud. To my children—Corey, Jordan, and Jacouri—and my grandson Caellum: I hope you all will see that greatness takes hard work and that you should not fear it but run to it. You can do all things through Christ, and I love you. To my grandmother, Marie King Howard: Thank you for all of the love, strength, and family structure you have given us all. I am strong because of the strength that is in you. To my siblings: Thank you for always being positive, for telling me I could do this, and for all of the long talks on the phone to keep me awake late at night. Thank you all from the bottom of my heart. I will always be indebted to you all for your continued love and support.

Acknowledgments

I would like to acknowledge my school community, my friends, along with my dissertation chair and committee. To my school community: Thank you for the positive connection you have given me to the educational community, mentorship, and never doubting that I could make this dream a reality! I would also like to thank Dr. Amy Barrios, my dissertation chair. Without your help, this would not have been possible. Thank you for keeping me on task, listening to my frustrations, and sticking with me through this journey.

© Copyright by Ebony Johnson (2023)

All Rights Reserved

Abstract

This study explored the effect of developing teachers to teach English language learners (ELLs) through strategic professional development utilizing interactive notebooks to enhance the academic achievement of ELLs. Students trying to learn English as a foreign language need extra language support. For this reason, their teachers should be trained to teach them using various tools, such as interactive notebooks. The action research studied two focus areas dealing with ELLs, which included (a) preparing teachers to teach ELLs who face learning English and content area learning and (b) the use of interactive notebooks and their impact on ELLs' academic growth. Exploring professional development and how it enhances teachers' instruction while using these journaling methods could improve the academic performance of ELLs in reading, writing, listening, and speaking and add to the depth of educational research regarding academic advancement. Teachers who participated in the study attended two focus groups, one at the beginning of the study and one at the end, and participated in professional development training that addressed how to use interactive notebooks, classroom instruction observations, and feedback sessions with the researcher.

Keywords: ELL (English language learner), journaling, notebooks, ESL (English as a second language), curriculum, strategies

Table of Contents

Acknowledgments.....	ii
Abstract.....	iv
List of Tables	viii
List of Figures	ix
Chapter 1: Introduction	1
Statement of the Problem.....	4
Purpose of the Study	5
Research Questions	6
Definition of Key Terms	7
Chapter Summary	8
Chapter 2: Literature Review	10
Literature Research Methods	10
Theoretical Framework Discussion	11
Literature Review.....	13
Every Student Succeeds Act and ELL Proficiency Standards.....	14
Unprepared Teachers	17
ELL Teacher Preparation Programs.....	22
Planning Instruction for ELLs	24
ELL Content and Language Acquisition	26
Transformative Learning for ELLs	28
Best Practice for English-Language Classrooms	29
Sheltered Instruction Model Protocol	31
Interactive Notebook Method for Teaching ELLs	33
Interactive Notebooks in Mathematics and Science	34
Administrative Leadership Responsibility for Teacher Training Regarding ELL Students.....	37
Chapter Summary	39
Chapter 3: Research Method.....	41
Research Design and Method	41
Population	42
Study Sample	43
Teacher Training Sessions	43
Instruments.....	45
Data Collection and Analysis Procedures	46
Data Collection	46

Data Analysis	48
Ethical Considerations	51
Assumptions.....	52
Internal and External Validity	53
Limitations	53
Delimitations	54
Chapter Summary	54
Chapter 4: Results	56
Depiction of Participants.....	56
Data Summary	58
Research Question 1	60
Theme 1: ELL Certification Is Not Enough	60
Theme 2: Certification and Student Educational Gaps	61
Theme 3: Building Teaching Confidence From Other Educators	62
Research Question 2	63
Theme 1: Strategies Facilitating Reading, Writing, Listening, and Speaking	64
Theme 2: Concepts, Strategies, and Organization	67
Theme 3: Students Use and Respond to Interactive Notebooks	69
The ELEOT.....	71
Research Question 3	74
Theme 1: Student and Teacher Ownership	75
Theme 2: Opportunities to Connect the ELPs	76
Theme 3: Student Collaboration	77
Research Question 4	79
Theme 1: Know Your Audience	80
Theme 2: Need for Collaboration With Other Teachers.....	82
Theme 3: Campus Leaders Maximize Teacher Training.....	85
Chapter Summary	88
Chapter 5: Discussion, Conclusions, and Recommendations	89
Summary of the Results	89
Research Question 1	90
Research Question 2	92
Research Question 3	95
Research Question 4	98
Discussion of Findings in Relation to Past Literature	101
Constructivist Theory.....	102
Democratic Social Theory	104
Limitations	104
Potential Barriers	106
Future Recommendations	106
Conclusions.....	108
Appendix A: Interactive Notebook Process Teacher Expectations	139

Appendix B: Focus Group 1 Questions	140
Appendix C: Focus Group 2 Questions	141
Appendix D: Letter of Research Interest	142
Appendix E: Consent Form for Participating Teachers	143
Appendix F: Learning Observation Tool	144
Appendix G: Samples of Interactive Notebook	145

List of Tables

Table 1. Participant Demographics	58
Table 2. Emerging Themes	60
Table 3. Effective Learning Environments Observation Tool Observation Chart	72

List of Figures

Figure 1. Code Configuration (Research Question 3)	75
--	----

Chapter 1: Introduction

By 2025, one out of every four students in U.S. schools will be an English language learner (ELL; National Education Association [NEA], 2020). As this number increases, it will become imperative that the educational community understands the ELL scholastic battle and prepares teachers to teach ELLs using strategies that target ELL academic progress. The dearth of qualified teachers and academic support strategies needed to meet ELL students' skill levels impede academic progress (Li, 2016). In addition, students who speak a language other than English have more representation in U.S. schools (Mellom et al., 2018). With the increase of ELL students in general education classrooms, there is a need for linguistically and culturally competent teacher training, including professional development opportunities.

There is also a need for a more inclusive culture. ELL teachers require essential knowledge of the use of academic tools and strategies to make their students' content comprehensible. General classroom instructors are not adequately prepared to supply the support needed to effectively meet the needs of ELLs (Villegas et al., 2018b). Although most ELL teachers obtain standard ELL certification, research indicates that teachers' perceptions of ELL education have adverse outcomes. Many teachers have inadequate accommodations to teach ELL students due to the absence of strategic training and development (Kartal et al., 2018) needed to help ELL students meet the listening, speaking, reading, and writing standards. Studies of the preparation of teachers to teach ELL students have produced mixed results (Lucas & Villegas, 2013). This problem affects ELLs and teachers in a large, diverse district in Texas. This study was conducted on a second- through fifth-grade campus. The school had over 750 students, and the data show that 64% were ELLs and 73% were from low-income families. The campus was an excellent choice for the study because of the high rate of ELL students in the campus's

services.

Having untrained ELL teachers is a concern that may be remedied via school- and district-wide teacher training. Although professional development options may be available, teachers do not always get the information they need to teach this population of students effectively. The mechanisms for establishing ELL-focused professional development and the effectiveness of professional development at the school-wide level are understudied. A 2021 survey of teachers across eight school districts verified that the top four areas that teachers wanted to be trained in the most when it came to professional development concerning ELL students were assessing learning abilities among ELLs, supporting collaborative learning among teacher faculty, communicating with parents of ELLs, and using effective strategies and materials to teach ELL students (Vera et al., 2022). School authorities want ELLs to succeed academically, but teachers must be trained in language acquisition and strategies required to fulfill ELLs' needs in general education classes. Teachers may not expect ELLs in their classrooms; thus, many may be unprepared to help ELL students meet their academic standards (Hansen-Thomas & Cavaghetto, 2010).

Students who speak languages other than English learn academic content differently from their native English-speaking peers. However, they have unique instructional needs that must be met for them to learn successfully. There is a need for a linguistically and culturally competent teacher training program, including professional development opportunities, an inclusive culture, and effective implementation of strategies. ELLs fail to follow instructions without proper teacher training and skill development because of language barriers (Lee & Kim, 2023).

As teachers master teaching ELLs, they become more confident and available to their students, particularly those who learn comprehensive content in stories (Lucas et al., 2008).

Educators must understand second-language learners to be assets to such learners both socially and academically.

Moreover, educators must develop other necessary skills, such as understanding cultural differences and norms, developing metalinguistic awareness, and utilizing appropriate strategies to enhance student learning. Although most teachers have had some introductory professional development for teaching ELLs, studies show that attested professional development is often not incorporated into teachers' daily instructional practices. Although there is widespread agreement that good professional development may improve ELL education by changing instructors' pedagogical practices, there is little research on what constitutes successful ELL-specific professional development and classroom practices (Tong et al., 2017). In recent years, the number of ELLs enrolled in U.S. schools has risen. ELL enrollment in public schools in the United States reached 4,500,000 in the 2014–2015 school year, accounting for 9.3% of the student body (Kena et al., 2016). Teachers are now faced with a situation in which they are being forced to learn how to work with a population of students with little experience. The first step in learning to work with ELLs is to provide meaningful training to teachers, equip teachers with knowledge of ELL culture, and educate teachers about best practices for instructing ELL students. General education classroom teachers are encountering a steadily increasing percentage of English learners. Unfortunately, most general education classroom teachers are not prepared to provide the kind of aid ELLs need to learn content skills successfully. Those in leadership roles have not taken adequate measures to bring such training to their campuses (Zhang, 2017).

Leadership's effect on the educational team's achievement is critical to the organization's growth and success (Montalvo, 2022). As a result, campus administration must focus on providing training and practice development for ELL instructors to improve student

achievement. Intentionally preparing teachers to apply this teaching mode necessitates a link between leadership approving strategic means of teacher training, implementation of the journaling technique, and successful continuous practice and coaching. This study was based on the organizational leadership framework, in which people in leadership roles actively implement ELL training and development.

Statement of the Problem

Over 40% of teachers who teach ELL students need support (e.g., in the form of a mentor or coach) to understand the best strategies for teaching ELLs (Blazar & Kraft, 2015; Ingersoll & Strong, 2011; Lockwood et al., 2010). However, current appraisal and instructional practices have yet to change to encourage the conditions necessary for practical instruction for ELL students (Rodriguez-Mojica, 2019). Teachers also need to gain an understanding of how to use strategies and teaching methods geared toward teaching ELLs. Feiman-Nemser's (2018) research highlighted the need for more opportunities for instructors to grasp specialized foundational awareness of ELLs and the most effective practices for teaching ELLs. Current instructional practices do not encourage the instruction conditions necessary for a joint effort to collaboratively provide practical instruction for ELL students (Rodriguez-Mojica, 2019). To this end, Razak et al. (2016) studied various professional development platforms, including workshops, lectures, and select courses. However, these traditional platforms for development rarely involve interacting with the teachers after initial training to improve their instructional practice (Razak et al., 2016).

With the vast growth of the ELL student population in schools and the lack of qualified teachers prepared to teach them, there has been a call for campus leaders and administrators to implement development programs for ELL instructional strategies to support both teachers and

students. According to McFarland et al. (2017), 32 states report deficiencies in qualified English as a second language (ESL) teachers. Campus leaders are not satisfactorily prepared or situated to handle this diverse student populace's instructional load. Although professional development may be encouraged outside a campus or throughout a district, professional development specific to ELL strategies and linguistic content is not much focused on (McFarland et al., 2017). ELL and bilingual instructors are certified and have basic knowledge of ELLs' educational needs. Still, they are not positioned, as principals and campus leaders are, to change and implement professional development geared toward ELL learners (Brooks et al., 2010). Successful schools have a clear and consistent vision of the best ways to educate their ELLs, with a focus on teaching, learning, and professional development (Elfers & Stritikus, 2014). However, many seasoned principals and other administrators do not build that vision or provide the circumstances, opportunities, and structures necessary to satisfy these children's needs (Russell & Von Esch, 2018). If this problem is not studied, ELLs will continue to grapple with learning gaps, and teachers will remain incompetent at teaching ELLs.

Purpose of the Study

The purpose of the study was to explore the effectiveness of interactive notebook implementation in ELL classrooms after teachers have been adequately trained to use interactive notebooks in their classrooms. This study explored the implementation of interactive notebooks and their effects on teacher instruction in ELL classrooms after teachers received professional development on using and implementing them. Dunston et al.'s (2019) research shed light on an ELL classroom instructor who implemented interactive notebook learning strategies that advanced the knowledge and skills of ELL students. The NEA (2013) declared that as the number of ELL students increases in classrooms, investing in preparing teachers with quality

professional development will become imperative. Such preparation will also train teachers on the methods and strategies that meet the needs of ELLs, thereby enhancing their future education and career prospects (NEA, 2013).

Creswell and Poth (2018) recommended utilizing an exploration plan to investigate an issue, offer conversation starters, and assemble and examine information. The case study research design used to collect data included unstructured focus groups, which produced in-depth participant responses. Other qualitative data were generated through photographs of student work samples and videos of participants using recommended teaching strategies. This study used the epistemology case study technique (Nicholson et al., 2018). Epistemology is the study of how people acquire knowledge. It entails a sense of awareness of specific parts of reality and a desire to learn more about what is known and how it is known. The research implemented a nonequivalent control group to determine whether ELL interactive notebook strategies increase ELL students' proficiency and teaching practices.

Research Questions

This study explored the implementation of interactive notebooks in ELL classrooms after teachers have been adequately trained to use them in their classrooms. The predominant question was whether providing strategic professional development for teachers improves the academic performance of ELL students and increases the practice and preparedness of English language classroom teachers. The following four research questions guided this study:

RQ1: How does training teachers to implement interactive notebooks change the level of teacher preparedness for ELL students?

RQ2: How do interactive notebook methods increase the learning capabilities of ELL students in the areas of listening, speaking, reading, and writing?

RQ3: How can using interactive notebooks enhance teacher effectiveness while supporting student-centered classrooms?

RQ4: How do campus leaders focus on implementing teacher training and development to maximize ELL teacher instruction and ELL academic achievement?

Definition of Key Terms

Definitions of terms used throughout the study are presented in this section to enhance clarity.

Collaborative learning. Collaborative learning can be defined as a set of teaching and learning strategies promoting student collaboration in small groups (two–five students) to optimize their own and each other’s learning (Johnson & Johnson, 1999).

English language learners (ELLs). ELLs are students learning English as a new language for academic purposes (James, 2010). The ELL concept is being increasingly used internationally among educators and researchers because it distinguishes the programs that support ELLs’ language learning needs from ESL programs (Fredua-Kwarteng, 2005).

Instructional strategy. The instructional strategy describes a concept, guideline, approach, or central line with which to conduct, measure, and evaluate instruction (Seechaliao, 2017).

Interactive student notebooks. Instructional tools that allow students to record what they learn and personalize their work meaningfully through reflection and interpretation (Zeybek & Açıl, 2018).

Language proficiency. Language proficiency measures how well an individual has mastered a language. Proficiency is measured in terms of receptive and expressive language skills, syntax, vocabulary, semantics, and other areas that demonstrate language abilities

(Cameron School of Business, n.d.).

Organizational leadership. Organizational leadership is a management technique in which leaders assist in establishing strategic goals for an organization while inspiring members within the group to complete tasks supporting those goals (Tokar, 2023).

Professional development. Professional development is described as the following:

The process of meaningful and lifelong learning, in which teachers develop their conceptions and change their teaching practice; it is a process that involves the teacher's personal, professional, and social dimension[s] and represents the teacher's progress towards [sic] critical independent, responsible decision-making and behavior. (Valenčič Zuljan, 2001, p. 17)

Chapter Summary

This introductory chapter described this study of interactive notebooks implemented in ELL classes after instructors received professional development and used them. The study explored the disparities in the preparation of instructors to utilize strategies to teach ELLs. Teachers are currently faced with a situation in which the ELL population in their classrooms is growing, but they are not trained enough in the strategies needed to instruct these students. Teachers need innovative and effective strategies to teach ELLs. Training teachers using a traditional format for professional teacher development may no longer be sufficient to meet the needs of ELL learners. Kindergarten–12th-grade (K–12) teachers are accountable for ELLs' progress, as required by standardized tests. Thus, teachers of ELLs need appropriate training to meet their students' language and learning needs to facilitate their academic growth; however, most teachers lack this training (Samson & Collins, 2012; Tellez & Waxman, 2005). The ELL school population is predicted to continue to increase in urban schools. The need to prepare K–

12 teachers to meet their linguistic and academic needs would increase accordingly (Iddings et al., 2013). Equipping teachers with knowledge of ELL culture and best practices must become a leading concern for administrative leaders. Teachers must be given opportunities to gain experience and learn best practice strategies related to ELL students, and these opportunities must be ongoing in their instructional practice. Unfortunately, most mainstream classroom teachers are not prepared to use instructional strategies to help their ELL students make academic gains in reading, writing, and listening skills (Feiman-Nemser, 2018). The chapter also explained the problem, purpose of the study, research questions, and defined terms. Chapter 2 presents the literature review, including an introduction to the chapter, a review of existing related literature, research methodologies, theoretical frameworks, and a summary.

Chapter 2: Literature Review

This literature review reveals a significant problem to address in education for ELLs. Instructors admit they are not prepared to address the needs of ELLs (Villegas, 2018a). These admissions of inadequacy include a lack of the instructional strategy practice and development needed to implement improvement of academics in ELL classrooms. The literature also points to a lack of preparation for teachers teaching ELL students and how strategic professional development training using a specific strategy (interactive notebooks) can help to develop and support these students (Campbell, 2019). The literature also highlights the importance of administrative leadership regarding training, coaching, and development of teachers who teach ELL students (Gray, 2018). The literature points to a plan to form conceptual training into active practice to help teachers engage all learners and create powerful education opportunities for ELLs. The background of ELLs is discussed, emphasizing language acquisition and learning possibilities. The research literature provides educators with background knowledge and strategies needed to satisfy the needs of ELLs best, encourage their language abilities, and help them succeed academically. The literature centers on democratic social theory and cognitive theories.

Literature Research Methods

The Abilene Christian University library system was used to identify relevant and current literature, including the online collection of databases such as EBSCOhost, Sage, Google Scholar, Taylor & Francis, and ERIC. These resources were instrumental in helping me acquire relevant research about preparing teachers to teach ELL students, using interactive notebooks to teach ELL students, and administrative responsibilities for training teachers of ELL students. I also used the NEA website to determine the percentage rates of ELL students in U.S. classrooms.

Also, I attended a sheltered instructional training for ELLs hosted by the School District's Multilingual Department that centered on best practices for ELL students and understanding ELL language acquisition.

Theoretical Framework Discussion

In classrooms today, students must give more than a simple answer. ELL students must be proficient in writing, listening, and speaking. Integrating the curriculum using words, pictures, and collaborative activities is the best way to practice this. To do this, they must practice explaining their answers in a form that includes reading, writing, and hands-on practice. The study of interactive journals is a way to achieve this. The idea of dialogic inquiry aligns with sociocultural theories (Applefield et al., 2001; Dewey, 1997; Gardner & Rogoff, 1990; Vygotsky, 1978).

Dewey (1986) affirmed that environments (e.g., democratic social arrangements and socially formed organizations) encourage accelerated human interactions and experiences. Democratic social theory's significance lies in teams collaborating with each other to help one another guide academic learning, proving to be more successful than individual learning. Dewey (1986) referred to innovative, standard lecture rooms in which teachers no longer lead dialogue and give lectures; however, students acquire the control and accountability needed to discover learning independently. Therefore, this idea of social learning corresponds with this study of better preparing educational administrators to build curricula that include social learning for ELL learners. Also, it is essential to note that doing so would lead teachers to incorporate such practices into their instruction and teaching practice.

The case study was firmly grounded in the ideals of the constructivist theory of learning (Zane, 2009). The rules for teacher appraisal under the constructivist theory have not changed to

address ELLs. The constructivist theory proposes that academic tiers should characterize certain world activities as coordinated tasks rather than posting a progression of substance points, or decontextualized information segments, or a progression of individual decontextualized practices (Zane, 2009). The study's findings indicated that using journals connected with students positively, broadened the students' mathematical thinking skills, and increased academic vocabulary and listening skills related to using journals. Journals are authentic assessments in which students can relate concepts through their life experiences. In this way, students can make real-life connections and use them to understand an academic text in many ways, including through writing, reading, listening, and speaking. Vygotsky (1978) believed that language is the outward expression of thinking, the way one makes meaning out of one's thoughts (p. 72).

Utilizing interactive notebooks helps students relate to knowledge of the curriculum and connect to content areas across the academic spectrum; such practices make the learning process more meaningful for the student. According to Koirala (2002), journals can become an assessment source of communication between students and teachers. A teacher has a chance to provide one-on-one instructional correspondence in response to a student's understanding.

Integrating the curriculum and using interactive journals to enhance reading, writing, and listening skills work hand in hand to enhance academics (Kostos & Shin, 2010). Interactive journals help students to organize, synthesize, and learn current information. However, the precise methods of using a journal for ELL instruction and preparing teachers to implement them are still being researched.

Implicit or mindset theories center on individuals' beliefs regarding talents and abilities. For example, those possessing a fixed mindset (entity theory) believe innate abilities, which someone is born with, are stable and cannot change (Li & Bates, 2019). Others with a growth

mindset (incremental theory) believe in the brain's malleability. They believe people can grow and improve by learning from mistakes, accepting feedback, and applying effort (Gunderson et al., 2018). The implicit mindset theory captures a belief in abilities (Warren et al., 2019). Kegan and Lahey (2016) emphasized the development of individuals and their minds. Research from the United States shows that maintaining an incremental theory of intelligence, or growth mindset, aids success. In addition, mindsets have a profound impact on a person's behavior. This conduct impacts outcomes and motivates growth in academic and social areas (Passmore et al., 2017).

These theories guided the research in this study. First, the literature provides a solid understanding of implicit theories and the power a person's belief has over their behavior (Patrick & Joshi, 2019). Second, it shows that individuals' beliefs motivate them to action (Boyett, 2019). If someone believes they can learn something new or accomplish a goal with effort, an intrinsic determination kicks in, propelling them forward in their endeavors. This type of motivation supports effort and tenacity when things get complicated (Heyder et al., 2020).

The knowledge of these theories challenges thinking. It also causes a need for reflection on what kinds of mindsets teachers possess in classrooms in an immediate, at-risk school environment. It provides insight into teachers' intrinsic motivation to grow and improve their instructional practices. The insights gained will create a more profound impact on at-risk students' learning. These thoughts on implicit and self-determination theories supported the research direction of this study and aided this study's conceptual framework.

Literature Review

According to research, the inspiration for interactive notebooks came from instructional practices, including note-taking, idea mapping, information management, and brain studies of

how children learn best (Shi et al., 2022). Interactive notebooks incorporate all these components into one teaching technique. In today's classroom, ELL students must be proficient in writing, listening, and speaking. The best way to practice this is to integrate the curriculum using words, pictures, and collaborative activities (Wist, 2006). For students to do this, they must practice explaining their answers in a form that includes reading, writing, and hands-on practice. The use of interactive journals is a way to achieve this.

The reviewed articles aim to state a case for educators' effective strategies to encourage ELLs and emergent learners to use interactive notebooks and the training of teachers to implement these notebook strategies through constructive professional development. These articles highlighted helpful strategies for learning with interactive notebooks. The essential elements of these strategies are communicating with ELLs, encouraging social interaction, engaging in collaborative learning, delivering knowledge in several ways, and providing opportunities for students to learn. Too many teachers are not efficiently reaching ELL students through traditional teaching methods. How can professional development in implementing interactive notebooks enhance instructional practice while helping ELL and emergent learners achieve their academic goals? What role do administrative leaders play in providing professional development opportunities for teachers that directly affect the ELL population?

Every Student Succeeds Act and ELL Proficiency Standards

As the rigor of instruction increases, schools move away from the traditional teaching model in which the student sits and listens to the teacher. Today, schools are moving toward peer-group instruction with interactive reading and writing (August & Blackburn, 2019). This instructional model is essential for the support of ELL students. In December 2015, President Obama signed the Every Student Succeeds Act (ESSA). The act explicitly includes ELL learners

in the ELL's Position Statement. ESSA funds states and school districts to establish, implement, and sustain high-quality language instruction programs that ensure ELLs develop English language proficiency (ELP) and content proficiency in math and English, as measured against rigorous academic standards (Weingarten et al., 2019). With ESSA in place, school campuses support the development of ELL teachers and proper training to implement ELL learning strategies. ELLs face a varying number of problems with learning every day. Among these problems are unfamiliarity with the language, vocabulary, and sentence structure; difficulty understanding U.S. dialects; difficulty expressing their opinions about texts; and difficulty concluding, analyzing, and predicting outcomes. Subjects such as ELLs' oral language, proficiency, and academic results have been examined in some depth. Analysts have likewise documented viable projects and practices that guide ELLs' English capabilities (Chon & Shin, 2019). In addition, under ESSA, it states:

Each State plan shall demonstrate the State has adopted English language proficiency standards that—(i) is derived from the four domains of speaking, listening, reading, and writing; (ii) address the proficiency levels of English learners; and (iii) are connected to the challenging State academic standards. (U.S. Department of Education, 2016, p. 24)

The scope of research includes literature across the curriculum for an integrated approach to listening, reading, writing, mathematics, and science. The burden of mastering these proficiency standards cannot rest on students alone. The curriculum must meet the demands of a student's learning needs. Singh et al. (2018) conducted a study that included teachers, policymakers, and curriculum development specialists. The study focused on integrating higher-order thinking and reading comprehension skills into the writing process. Integrating the curriculum provides more opportunities to practice these skills. Research has shown that

integration of the curriculum to include reading and writing in math is used in mathematical journals. Writing deepens understanding of vocabulary concepts, problem solving, and student thinking in math and helps students unlock key concepts related to problems.

ELLs are diverse, with a wide range of linguistic backgrounds. Although ELLs have the advantage of speaking two languages, they have the obstacle of learning academic content in English while learning that language, for most students for the very first time. Despite this difficulty, ELLs are subjected to the same examination standards as English-proficient students (WestEd, 2019). ELLs benefit from ESSA in that it requires schools to make provisions in the following areas: (a) learning opportunities centered on rigorous thinking skills, (b) different measures of value, (c) asset value, and (d) evidence-based strategies and interventions. Policymakers and educational leaders can and should use each area to promote educational equity for all children (Darling-Hammond et al., 2016).

ESSA requires states to record and include statistics on how well ELLs, as a subgroup, are progressing toward English proficiency (including English language arts, math, and science). ESSA requires states to use this data to develop plans to determine which schools receive extensive help and enhancements based on student performance results, including those from student subgroups such as ELLs. Policymakers are using ESSA as an opportunity to amend existing regulations on funding, program requirements, teacher training, and other parts of school administration as states go forward with ESSA accountability plans. The school community—including parents, teachers, and school administrators—should review provisions affecting ELLs and move to effective student-centered programs and strategies that enhance ELL students' learning (Sugarman & Geary, 2018).

Unprepared Teachers

Unfortunately, most teachers are routinely working with native English-speaking students and are not equipped to meet the needs of linguistically diverse students (Pappamihiel, 2007). Turgut et al. (2016) noted that “most general education teachers report that they feel inadequate or not prepared to educate ELLs in their classroom” (pp. 292–293). There is a significant problem to be addressed within education for ELLs. Instructors are admitting they are not prepared to address the needs of ELL students. These admissions of inadequacy include a lack of the instructional strategy practice and development needed to implement improvement of academics in ELL classrooms. Santibañez and Gándara (2018) indicated in their study results that instructors did not receive preparatory sessions centered on ELL strategies and the quality of preparation needed to serve ELL students both academically and socially. Numerous instructors battle a challenge resulting from the vast range of educational levels among ELL students. Planning lessons and exercises that are scholastically suitable for many students can be challenging. The training given to ELL teachers must be tailored to the specific needs of ELL students. Educational practice and methodology should be practiced and perfected actively and effectively to succeed. It is not enough to hold one training session and then expect well-practiced strategies to be implemented. A teacher should also be able to apply ELL instructional processes to the classroom setting and be given adequate time, over and above instructional learning time, to practice and perfect them in the students’ learning environment.

Li and Peters (2020) explored improvement of the instruction of ELL teachers through innovative professional development. The study suggests that the education system is not developing as fast as ELL school demographics. K–12 instructors need successful preparation and knowledge to educate and develop ELL students successfully. Having this development in

place helps students meet academic proficiency standards for ELL students in the classroom. Initial teacher development, including a seminar with a teacher instruction guide, does not suffice to prepare K–12 instructors to teach ELLs. Teaching development training produces little academic improvement within the ELL classroom because it gives information without encouraging the active practice of implementation of the training. The study included evidence of the problem and background that showed that teachers need innovative and practical strategies to teach ELLs. This study was supported by a literature review that showed that many factors affect ELL teachers' effectiveness in their classrooms. The development of trained teachers is an essential factor, and the traditional format for professional teacher development may no longer be sufficient to meet the needs of ELL learners.

Gándara et al.'s (2005) study results indicated that not enough teachers received training sessions focused on the immediate needs of students, and the quality of training was also of concern because it did not help teachers effectively serve ELLs (Gándara et al., 2005). These figures show that the teaching workforce is not increasing at the same rate as ELL students. As a result, K–12 teachers must undergo training and preparation to effectively deal with the expanding ELL population and satisfy the unique requirements of ELLs in classrooms (Li & Peters, 2020).

Trifiro (2017) studied the importance of understanding the knowledge and practice perceptions of teachers who teach ELL students when the teachers execute professional development to support their students. Trifiro studied Teaching English Learners Academic Content. This in-service professional development strategy offers an enriched program curriculum to urban teachers who want to improve their ELL teaching techniques. Teachers' enhanced practice reflects culturally sustaining pedagogy through an integrative approach to

learning that includes learning experiences, practical activities, observational feedback, and coaching. The study made teacher participants more aware of improving teacher development and teaching practices.

A study of readiness for training involved looking at kindergarten teachers' readiness and training for teaching ELL pupils and the tactics they use in the classroom to teach this demographic segment. Data were gathered through teacher questionnaires and phone interviews. Although most instructors said they felt prepared for ELL students, they were eager to attend professional development. The studies revealed that more training was needed to prepare teachers for ELL students and that there were instructional obstacles to teachers fulfilling the requirements of helping ELL children advance academically. Furthermore, the studies revealed the need for continued professional training regarding ELL students (Hegde et al., 2016).

Turkan and de Jong (2018) explored preservice teachers' reasoning about teaching mathematics to ELL students and how they taught them. The results showed that the candidates knew some ELLs' linguistic obstacles and believed that strategic language assistance might help them. The study also revealed that ELLs had difficulty expressing their thoughts in writing and that their handwriting was often hard to comprehend or explain. Candidates noted that physical objects—such as foldables, cutouts, and vocabulary pictures—were highly beneficial resources for ELLs. The findings suggest that field experiences and teacher perceptions may impact ELLs' mathematical education. Exploring how teachers teach and how to align those methods with essential tools for the training and development of ELL teachers is essential for improving the educational environment of ELL students.

Andrei et al. (2019) completed a study on the effectiveness of a veteran ELL teacher and how she taught two ELL students language arts and writing in a general education classroom.

The research was centered on a veteran teacher with no experience teaching ELL students. The teacher relied on the reflections of other teachers who had previously taught ELL students. These reflections included teachers' planning protocols, instructional videos, and existing knowledge and skills regarding highly effective general teaching practices. The study revealed that the veteran teacher realized that she needed more professional development to teach ELLs at a higher capacity. The study also revealed that ELLs need additional instructional support to be successful. When teachers use effective practices, they are more likely to be more effective when teaching ELL students. Although this study focused on a veteran teacher, teachers still need adequate training to teach ELLs because practice and reflection on practice are essential. Reflection and practice are not new ways to improve teachers' skills and experience, and studies have proven the value of improving teaching and learning practices. Teacher introspection and active practice are widely recognized as critical components of teacher development (Clarà, 2015).

Cavazos et al. (2018) conducted a descriptive mixed methods study. The study examined the impact of job-embedded professional development in reading on teachers' content understanding and instructional practice. Nonetheless, on the 2015 National Assessment of Educational Progress, 92% of ELLs scored below proficient, compared with 62% of non-ELLs (National Assessment of Educational Progress, 2015). These findings are alarming since studies indicate that if well-qualified instructors conduct core reading instruction with fidelity, 80% of children should meet grade-level standards (Cavazos et al., 2018). With these data in mind, the study focused on promoting an urgent need for professional development to improve the core reading education of these pupils. Professional development that addresses gaps in learning and encourages instructors to adopt research-based instructional practices is an integral part of school

reform efforts and best practices for the well-being of students. The study recognized the need to develop a more comprehensive training program that would be more than just an instructional training day. However, ongoing training with components of collaborative decision-making regarding best instructional techniques, student data digs, planning meetings, and classroom observations for technique practice was included in the training program.

Many mainstream teachers report a lack of preparation for teaching ELLs, severely affecting students' academic outcomes and subsequent life opportunities. Because ELLs are learning both the English language and academic content taught in English, they require teachers to make subject matter understandable and meaningful while improving their English skills (Gupta, 2019). When teachers lack the knowledge and instructional abilities required for this endeavor, ELLs are at a significant disadvantage in their learning.

Because of teachers' lack of faith in their capacity to teach ELLs, mainstream instructors frequently delegate responsibility for these students to their bilingual colleagues, whom they perceive to have the necessary knowledge (Hutchinson, 2013). Unfortunately, when classroom teachers fail to recognize that they are accountable for teaching ELLs, they fail to make those linguistic accommodations necessary to make content comprehensible for ELLs. Teachers have little or no instructional practice with which to implement these teaching strategies. Teachers must foster the development of children's native languages and use instructional methods that promote bilingualism and biliteracy (Garrity et al., 2019).

A significant issue with mainstream instructors' lack of preparedness for linguistically diverse classrooms is that many have preconceived ideas about ELLs (Castañeda et al., 2011; Villegas et al., 2018b). ELLs' academic progress is jeopardized when teachers are not provided with opportunities to collaborate on ideas relating to ELLs and practice linguistic teaching skills

as part of their initial teacher preparation and ongoing professional learning (Lucas et al., 2018). Because of the rapid increase in the number of ELLs in classrooms, school campuses have all their teachers certified to teach ELLs. However, certification does not mean they are specially prepared to teach ELL students (Villegas, 2018a).

ELL Teacher Preparation Programs

Wissink and Starks (2019) indicated that given the growth in the ELL student population in U.S. schools, research must determine how effective teachers will be in their instruction of these students upon completing their college teacher preparation programs and teacher development programs. The number of ELL students in U.S. classrooms has increased. Because of the increase in the population of ELL students and their families in the United States, ELL students have become more common in classrooms, and the programs used to train ELL teachers do not guarantee that educators are prepared to teach ELL learners adequately. Although states have implemented ELL service programs, most of these programs fail to touch on topics such as teachers being prepared to teach students whose languages are not English effectively. How will teachers with little or no knowledge of ELLs' cultural backgrounds be able to connect their experiences with academic content? Will a program geared toward these issues help teachers prepare to instruct ELL students? Although most states only require supplemental ELL certification, investigations have proven a need for strategic teacher preparation programs targeting ELL learners. Arizona, for example, has included 90 hours of structured English immersion, a program that leans in on building word foundation and instructional techniques (Markos, 2012). ELL teachers being more aware of the background and experiences of ELL students helps them provide more culturally well-rounded instruction. The academic success of these students is limited without access to their cultural background and experiences (García et

al., 2010).

Nguyen (2018) studied how teachers felt about preservice programs and their impact on the classroom. Preservice secondary teachers revealed their concerns and problems before and after participation in student teaching in a 2-year qualitative research study (Cooper & He, 2012). In this study, teachers were observed conveying academic content to students. Participants shared that they were concerned about class management, how to present curriculum content successfully, and how to differentiate instruction to meet students' requirements. These problems stemmed from teachers' lack of self-confidence, lack of knowledge of subject areas, and lack of connections between students' life experiences and academic content (Nguyen, 2018).

A similar investigation reported preservice teachers' beliefs and the evolution of their views on language acquisition, linguistics, and language diversity. For one semester, analyzed interview data and participants' reviews illustrated the possible benefits of incorporating different linguistic features and various instructional models into the curricula of teacher education programs for both mainstream teachers and teachers of English to speakers of other languages (Barros et al., 2021). Teachers expected to include ELL-related information and skills in their courses are unprepared. Teacher preparation reform aimed at better preparing preservice teachers to work with ELLs is impossible without ELL knowledge and implementation of linguistic strategies. De Jong et al.'s (2018) research indicated that teacher educators must learn and assimilate language and culture into their disciplines to pass it on to their students. Teacher programs must train teachers to develop responsive classroom settings for all their students; teacher education programs must include language objectives, sheltered instruction methodologies, language assessments, and models that include a variety of ESL strategies (Faltis & Valdés, 2016). Studies showed that providing teachers with various alternatives for engaging

in professional learning and developing learning opportunities on themes of immediate interest is critical to the success and longevity of faculty development activities (Bradley-Levine et al., 2014).

Diarrassouba (2018) conducted a case study demonstrating that the number of ELLs has increased and that some school districts have seen significant demographic shifts. As a result of these changes, policymakers and teacher preparation programs must address accommodations for ELLs at the national, state, and local levels. These findings support implementing systematic reform to satisfy teacher development and the development of ELLs.

Planning Instruction for ELLs

A teacher is responsible for facilitating learning by providing students with a clear understanding of the expectations and goals of their learning groups and by developing and implementing strategies to improve the quality of the learning process. Gonzalez (2016) presented a research study in which teacher candidates reflected and practiced planning for ELL instruction. The study's findings indicated that teachers needed more experience using ELL tools for instruction. The study explains how domain rubrics were used to create overall lesson themes as a frame for sheltered instruction (Yendol-Hoppey et al., 2018). Likewise, a progressively longitudinal examination may be compelling in deciding how instructors utilize sheltered instruction as they change from educator readiness to administration instructing assignments. Discoveries from this exploration indicated that educational leaders should consider how instructors could become increasingly acquainted with ELLs' language capabilities and utilize instructional tools to help ELLs be academically self-sufficient. Organizational leadership must begin to take responsibility for becoming aware of the needs of ELLs and collaborating with teachers to promote change in instructional practice effectively. Komives and Wagner (2016)

paint a model of leadership that includes various connecting social skills, self-awareness, and empathy. The model explains the six pillars of the Socially Responsible Leadership Scale, including consciousness of self, congruence, commitment, collaboration, and shared purpose, which are all worth considering when seeking organizational change in education. The data showed that in an ongoing study in the United States, over 40% of all educators had ELLs in their classrooms during the 1999–2000 school year. However, 12.5% had obtained at least 8 hours of related instructional preparation (Gruber et al., 2002). Continued research on this topic is relevant because literacy development across the curriculum is challenging for ELLs in mainstream classrooms.

Support strategies should be made a part of daily instruction for these students. However, few teachers plan for extensive language development through the various curricula. Cummins (2014) explained that the Common Core State Standards related to teaching ELL students and stressed that “teaching academic language should be a central focus of all teachers across the curriculum. Content teachers should explicitly address the language demands of different subject areas in addition to language arts and English-as-a-second language (ESL) teachers” (p. 146). Thus, the research explored would help to support teachers by giving them the best possible tools and practices for teaching ELL students and helping them succeed in listening, speaking, reading, writing, and mathematics. The surveyed literature proves that various instructional techniques should be considered when educating ESL students. A careful audit of the research examined the primary need for teachers to depend on vocabulary strategies and use language expertise to improve learning for ESL students (Adesope et al., 2011).

Furthermore, the literature also indicated that further research is needed to deepen teacher training with regard to ELL students and provide practical strategies, such as interactive

notebooks. Teng (2018) suggested remedying a gap in teachers' professional development to improve their teaching practice for ELLs, but there is a need to discover the practices and teaching tools best suited to teaching ELL students. ELLs are regularly mainstreamed into content area instruction in which teachers are underprepared to accommodate their needs. Therefore, how mainstream instructors deal with ELLs with respect to their content learning and mastery of English deserves further study.

ELL Content and Language Acquisition

Gleeson and Davison (2016) researched a conflict between teaching experience and professional learning in the English language. The study explores how programs are implemented to prepare teachers to teach ELL students and why teachers are unresponsive to those programs. With growth in the number of ELL students, the need for teachers to become better equipped to teach them increases. The problem rests in the attitudes and lack of skills teachers have in relation to connecting content with strategy to teach ELL students.

Research suggests that when teachers engage students in active language acquisition, it improves their learning (De Vries et al., 2014). Giving students opportunities to engage in language involving content and sociocultural experiences encourages student academics and strengthens teacher instruction of ELL students (Hammond & Gibbons, 2005). Research also suggests that teachers develop knowledge and become certified in their content-based subjects, then perfect their craft while active in their jobs. For teachers to dig deeper beyond their certified content, they need to rigorously reflect on their current practice and expand their systems of instructional practice. This rigorous practice among ELL structures is limited to ELL specializations (Gleeson & Davison, 2016).

As students transfer from one grade to another, a consistent pattern of inconsistency relates to their appropriate grade levels. The problems encountered at the elementary level continue to be entering first grade with no knowledge of number sense and second grade with no knowledge of addition or subtraction facts. The pattern continues with entering third grade with no knowledge of multiplication. Building core competencies allows students to continue to build on previously learned knowledge. Knowing the difference between learning a concept and gaining knowledge is essential for teachers and pupils. Holding on to those core competencies means strengthening metacognitive skills and thinking critically using essential reading and writing skills to self-regulate learning. Writing, particularly journaling, gives learners an advantage in mental development, advancement, and self-expression and may increase their capacities to reflect and think critically (Hiemstra, 2002). The intervention involved in this research process included students solving problems during their mathematics class, where students kept a diary and engaged in class discussions to develop their thinking. Utilizing the diary allowed them to reflect, engage, create, and answer their questions (Hensberry & Jacobbe, 2012).

Pedagogical content knowledge may not include resources for teaching ELLs in their core subjects. As teachers teach their content areas, use tools, and teach instructional content, their knowledge must be included in their instructional practice. Although these teaching techniques are practiced regularly, most do not include strategic structures and support for ELL instruction. The study included interviews with teachers regarding ELL instruction. Teachers admitted that they might have had some form of ELL training. However, many could not recall the strategies learned or did not believe in practicing the strategies to develop ELL high-level learning. Such data suggest that teachers are not regularly practicing content strategies to extend

beyond basic content instruction and improvement of language acquisition.

Transformative Learning for ELLs

There is a need for a more inclusive culture that provides the requirements of ELLs embedded in the curriculum because traditional educational models do not meet their needs. Teachers must understand how students learn and the best teaching tools with which to improve learning in reading, writing, math, and listening skills. Autonomous learning is learning in which students hold the power to direct and control their very own learning experiences. Students are responsible for their independent learning forms. Self-sufficient learning is likewise called “self-coordinated learning.” Self-sufficient learning allows a learner to learn from their experiences and participate in experiential learning in many ways (Jaladanki & Bhattacharya, 2014).

Transformative education provides a concept of education that is uniquely individual, abstract, idealized, and grounded in connection. It is a concept that is part of the developmental process and the interpretation of the meaning of one’s experience to guide future action (Mezirow, 1991). Transformative learning explains a change in thinking about teaching and learning the knowledge needed for innovative teaching in an ELL classroom. Integrating curriculum and interactive journals can enhance reading, writing, and listening skills. The study’s findings indicated that math journals positively influenced students’ communication of mathematical thinking and vocabulary (Kostos & Shin, 2010, p. 225). Interactive journals help students organize, synthesize, and learn new information. However, the precise methods of using a journal as a tool for mathematical instruction are still being researched.

Albert (2018) researched the use of transformative learning with ELL students. Albert insisted on becoming aware of students’ academic experiences and how their cultural differences shape them. Through transformative learning, teachers use specific components to connect what

students already know and believe to new learning and new points of view. Transformative learning builds on constructivist theory because students actively construct meaning of new information built on prior knowledge, social interaction, and authentic tasks. Mezirow (2018) defined this process through four structures, including giving ELL students opportunities to elaborate on existing points of view, establishing new points of view, reflecting on or transforming a point of view, and transforming a new practice of the mind. The study suggested that instructors should adopt various approaches to the delivery of instruction. Incorporating a learner-centered experience rather than an instructor-centered one leads to a broader learning experience for students. Allowing students to take ownership of their learning, asking critical questions that support critical thinking, and allowing students to develop these questions make up a process that should be followed with the goal of engaging students in critical reflection to add to new learning (Albert, 2018).

Best Practice for English-Language Classrooms

Mainstream classroom teachers are finding a greater need to implement best instructional practices to provide the kind of aid they need to teach content skills successfully. Zhang and Stevens (2013) explained how Southwestern State University began a new program to develop best practices to prepare educators to teach ELL learners. Instructors have an enormous obligation to guarantee thorough and impartial training for all students, setting them up with the aptitudes needed to become beneficial individuals within a more extensive society (Sugarman & Geary, 2018). Instructional experts should appropriately implement educational programs that empower students to progress academically at various scholarly and psychological levels. Mathis (2017) explored a study evaluating elementary and secondary teachers' structures and ideas regarding professional development in connection with ELL students. These programs should

include teachers' awareness of language acquisition and the components influencing improving student language.

Garcia-Borrego et al. (2020), realizing the gap in reading for ELLs, researched seven administrators who devised procedures tailored to their students' specific requirements to help students struggling with reading. The research suggests that students showing signs of struggling with reading in prekindergarten and kindergarten can achieve long-term reading success. With effective classroom instruction, explicit vocabulary instruction, and systemic protocols for monitoring growth, they could achieve long-term reading success. This stage of learning is crucial, as research also implies that as students enter first grade and beyond, it becomes harder for them to catch up, especially if effective practices are not in place. Other studies have also identified these same statistics. Administrators agree that if teachers are not equipped to teach ELLs, extensive training must be provided to help meet the needs of the students and get them where they need to be in their academics. Educational policymakers and administrators must be sure not to sleep on early literacy, as this seems to be a growing tendency since these are not testing-accountability grade levels. The effects of best practices not being supported in early grades trickle down to higher grades. The teachers at these levels find it difficult to catch students up because their focus switches from foundational literacy practices to using reading to learn techniques and mastering test-taking strategies (Garcia-Borrego et al., 2020).

Studies have shown that teachers can better address their ELL students' different learning styles and requirements with the proper assistance and tools. Aguiñaga (2017) investigated how first-year teachers viewed their preparation for working with ELLs in their teacher education program. The participants in this study highlighted the relevance of instructional assistance to teacher effectiveness. The overwhelming response from teachers was that all teachers of ELL

students should use several recommended tactics to improve students' understanding and knowledge of academic content. These best practices included building background knowledge, generating connections, employing one-to-one coaching, making inferences, and phrasing content in a way that is comprehensible and meaningful to the students (Islam & Park, 2015). According to the findings, teachers require additional ELL one-on-one guidance, professional development, instructional assistance, and resources. Best practices must be implemented and adopted campus-wide and become part of the developmental culture for teachers. Doing so will foster more profound instructional practice for teachers and improve student learning.

Sheltered Instruction Model Protocol

Although much research is known in relation to science and mathematics, recent studies of the use of strategies such as interactive notebooks with ELL students are lacking with regard to classrooms and professional development. Turkan and Buzick (2016) depicted how teachers provide ELL instruction through four instrumentation strategies. These strategies include the Sheltered Instruction Observation Protocol (SIOP), student behavior observation, teacher role observation, and classroom observation measures. The study concluded that each type of instrumentation involved various learning opportunities based on how it was implemented in the classroom. However, the limitations of the four strategies were not researched long enough to effectively identify the best practices that would best prepare teachers to teach ELL students. Continued research on sheltered instruction models, teacher roles, and instructional instruments such as interactive notebooks is needed to prepare teachers to effectively teach ELL students (Turkan & Buzick, 2016). The gap in the literature indicates that further research is required to address the need to prepare teachers to teach ELLs and the strategies needed for them to be successful in reading, writing, listening, and speaking.

Jaladanki and Bhattacharya's (2014) research promoted improved critical thinking and problem-solving capabilities and highlighted using the journal method with high school students. The action in the research promoted scientific inquiry, individualized learning styles, and reinforcement of metacognition strategies. The case study reinforced research in the educational field on using interactive notebooks through formal interviews, document analysis, and participant observations. More evidence and research would be needed to reinforce this case study and outline methods of preparing teachers to use these tools to reinforce learning across the curriculum. Using the journal method with elementary ELL students, the research was used as a foundation to compare its findings with those relating to high school students. The support from these literature resources provides a basis for exploring further new research on the development of skilled teachers trained in ELL support.

Teachers cannot wait for ELLs to achieve a substantial level of English proficiency before presenting them with new material and academic content in English. Therefore, they must use a variety of protocols and techniques. Strategies for ELLs have been devised and researched. The best known is the SIOP (Echevarria & Short, 2010). The SIOP strategies include implementing pictures with words, providing sentence stems, providing structured opportunities throughout lessons for students to talk and collaborate about content, and putting synthesized thoughts on paper. The strategies of the SIOP have been created to help regular classroom teachers provide leveled instruction that allows their ELLs to understand content.

Techniques for improving teaching abilities in ESL education include sheltered instruction. According to Koura and Zahran (2017), sheltered instruction aims to provide learners with language-rich, grade-level topic area learning in English that is understandable. Sheltered instruction and professional development should be effective techniques for dealing with ELLs'

problems. Sheltered instruction is an educational strategy that uses approaches and procedures to help ELL students acquire grade-level academic material while promoting the English language acquisition process. It focuses on giving students high-quality, academically demanding content, emphasizing cooperative learning, academic cues, and critical thinking skills.

Interactive Notebook Method for Teaching ELLs

This literature review synthesizes research on preparing teachers to teach ELLs using interactive notebooks. ELL students must be proficient in writing, listening, and speaking in today's classrooms. The use of interactive journals is a way to achieve this. The articles reviewed aim to state a case for effective strategies educators have used to promote academic knowledge in ELL learners. These articles highlight valuable strategies for learning with interactive notebooks.

The essential elements of these strategies are communicating with ELLs, encouraging social interaction, delivering knowledge in many ways, and providing opportunities for students to learn. General education teachers need clarification regarding how to help ELLs acquire the English language skills needed to succeed in general education classrooms (Daniel & Pray, 2016). Seventy-five percent of the survey and interview respondents in the study described professional development in ELL instruction as inadequate. The description of inadequate professional development was consistent with those found in studies from professional literature (Lewis, 2019). This study aimed to explore whether training teachers to use journaling methods in their instruction would increase the academic performance of ELLs.

According to the National Center for Education Statistics (National Center for Education Statistics [NCES], 2015), the percentage of public school students in the United States who were ELLs was higher in the fall of 2015 (9.5%, or 4,800,000 students) than in the fall of 2000 (8.1%,

or 3,800,000 students). In the fall of 2015, the percentage of ELL public school students was 10% or more in eight states (NCES, 2015). Santibañez and Gándara (2018) conducted surveys of teachers preparing to teach ELL students. The surveys found that teachers felt least prepared to teach ELL students, where 40% disclosed they needed more preparation, and close to 40% mentioned that their preparation and structured activities for learning needed development. In addition, more than 30% felt underprepared to teach ELL students orally because of the language barrier (Santibañez & Gándara, 2018). These are significant findings because districts and states continue to receive ELL students and are expected to serve them according to their state standards. To meet the demands of these standards, ELLs and their teachers will need a great deal of support (Goldenberg, 2013). Training teachers to use tools such as interactive notebooks can help instructors meet the academic and social needs of their students and act as an organizational device for helping them have a class format that includes the use of listening, speaking, reading, and writing skills practice, a result of which is to make lessons more adaptable and meaningful to their students (Jaladanki & Bhattacharya, 2014).

Interactive Notebooks in Mathematics and Science

Much of the research regarding using interactive journals was geared toward math and science and increasing academic achievement. Researchers also did not strategically target ELL learners. Bruun et al. (2015) led the research with two fourth-grade elementary classes in which two methods of building students' ability to communicate mathematically were assessed. The methods included the turn-and-teach strategy, journal writing, and Frayer models. As students learned math vocabulary, they used their Frayer models to break down each word's meaning. Then, they would write the definition of what the word means to them in their journals. The Frayer model would be pasted to their journal entry. From here, students would turn and teach

their explanation of the word to a partner. The practice went on consecutively for 5 weeks. The study's findings indicated that both methods improved students' mathematical vocabulary knowledge based on test score data and their daily discussions with teachers and students (Bruun et al., 2015). Utilizing this source's findings would aid the generation of best practices for ELL students in all subject areas and across the curriculum. More evidence and research would be needed to reinforce this case study and outline methods of preparing teachers to use these tools to reinforce learning across the curriculum.

Instruction using interactive notebooks can be designed to help fill gaps in academic learning. The science-based study by Fajardo et al. (2019) observed the impacts of using an interactive science notebook on students' achievement and study habits, anxiety levels, and attitudes toward physics. An interactive notebook strategy was once implemented for scholar-teachers enrolled in a neighborhood university. The outcomes indicated that using an interactive science notebook significantly improved student teachers' physics achievement levels. It was also determined that their study habits, test anxiety levels, and attitudes toward physics notably improved their physics achievement levels. Interactive notebooks provide a strategic way for students to process information, much like an actual scientist. As students write, draw, and answer questions, they are given opportunities to showcase their understanding innovatively. Stocken (2021) studied mathematical achievement in elementary classrooms by using interactive notebooks. According to their progress monitoring data, the research revealed that interactive notebooks helped students understand math skills, and their testing scores increased with using notebooks. Fajardo et al. (2019) researched this learning method and noted multiple-intelligence theories. The theory of multiple intelligences released by Howard Gardner also underpins interactive science notebooks (Madden, 2001). These studies connect to the preparation of

teachers to teach using strategies and tools to foster new student learning.

When teaching mathematics, a question arising from observation is this: How do we know what students know? Have they understood the concept enough to take ownership of the idea and use it systematically in their mathematical thinking? One thing is clear: It will take more than a bubble answer sheet to answer such questions. From a constructivist approach, students construct their knowledge of a topic by experiencing and interpreting the world around them and using their schema to build and make connections to new learning (Clark et al., 2012). As students are challenged with learning new concepts daily, time must be given to allow them to explore the ideas to make learning connections. Camahalan and Young (2015) suggested that interventions consist of planned time for students to discuss and listen to each other's reasoning. Students need time to actively listen, participate in math lessons, and record their understanding of math concepts. Multiple methods of instruction allow students to practice proficiency in reading, writing, and listening, which aids in their success in mathematics (Sandilos et al., 2020).

Interactive notebooks in math and science and all content areas allow students to engage in critical-thinking conversations. One key idea is using structured peer conversations to internalize new learning. Critical thinking is an essential aspect of human intelligence that contributes to successful learning outcomes (Klein, 2011). The structure in which interactive notebooks are implemented allows teachers to implement the elements of critical thinking by having students synthesize their note-taking, analyze debates, respond to questions, draw conclusions, interact with others, and evaluate peer responses (Gedik, 2014). These elements are combined with interactive notebooks and are the central basis of mathematical problem-solving skills and scientific investigations. Garza et al. (2017) researched pedagogical differences for ELLs during a science and language intervention.

The findings suggest that teachers who concentrated on activities that promoted verbal and written interaction among students and intensive cognitive language use during science had more learning success than those who did not. Learning may be tailored to an individual's learning styles via various learning methods. Learning is aided by using interactive notebooks to address students' learning styles and differences and how their brains process information while practicing new learning. According to Kleickmann et al. (2016), teachers should pick from several instructional tactics to help students learn and target specific learning concepts for all students.

Administrative Leadership Responsibility for Teacher Training Regarding ELL Students

The number of ELL students in U.S. classrooms has increased. Educational administrators are responsible for reexamining their professional development training programs to train teachers and carefully consider ELL students' needs (Parsons & Shim, 2019). Valdez (2021) studied what principals and campus leaders can do to serve their ELL student populations better. The study indicated that campus administrators recommend training advancement and instruction methods suitable for ELL students, but they are not required. The results prove that leaders need to become more aware of ELLs' proficiency levels and implement ongoing activities to promote the academic success of services for their ELL student populations by improving teaching techniques. Innovative leaders must seek out proven research-based strategies to implement on their campuses. During observation of instructional practice, leaders use these opportunities to serve teachers with targeted coaching and development. The servant-leader is first a servant and starts with an innate desire to serve in a way equitable to all. Servant-leaders deliberately decide to lead others to accomplish their goals (Noland & Richards, 2015). Therefore, those in campus leadership positions must understand that the connection between

coaching and development leads to better teaching, which improves student and school communities. Ongoing research that can monitor the progress of trained teachers and students will edify educational literature. Song (2016) examined professional development and its impact on teachers of ELLs.

ELL training improved teachers' instructional methods and contributed to effective professional development aligned with guided organizational coaching. When adequately considering the types of training teachers need to teach ELLs, campus administrators must strategically implement purposeful and ongoing training integrated over various types of content (Padron & Waxman, 2016).

This study used the framework of organizational leadership, in which those in leadership roles actively implement training and development for ELL teacher participants and collect data based on the training put into practice in classrooms. The leadership role includes organizing training, observation, coaching, and feedback sessions for teachers. Organizational and educational development is a process used to enhance an organization's competence and its members' effectiveness through planned interventions. Training and development are organizational activities aimed at improving the performance of individuals and groups in the organizational environment. Training and skill development can be described as an educational process that includes skill development, conceptual improvement, attitude shifts, and information acquisition to increase employee performance (Para-González et al., 2018). Educational reframing of learning is a continuous process involving formal and informal learning. Educational and organizational development aims to develop skills and competencies needed for an organization's success. The impact leadership has on the success of their educational team is pivotal to the growth and success of the organization. Therefore, an effort by campus leadership

to focus on developing training and practice development for ELL teachers is critical to improving student success.

Schlaman (2019) examined three high school leaders and how they constructed programs to implement instruction and strategies for the ELL curriculum. While administrators espoused sociocultural language acquisition perspectives that stressed ELLs' integration and involvement with English-speaking peers in rigorous topic learning, the survey found that ELLs had limited access to classrooms where the schools' higher-level curricular structures were taught. Conflicting aspirations for their children and concerns about teacher staffing surfaced as two significant themes that explain the misalignment between the principals' values and the systems they put in place. While research has looked at the effects of school curricular structures on ELLs' learning, less attention has been paid to the decisions made by school leaders and their beliefs about language and literacy and how those decisions affect teacher and student development.

Chapter Summary

ELLs must use learning tools that connect content and language acquisition to the practice of reading, writing, and listening. The literature review proved that teachers must understand teaching methods to help ELLs succeed academically. Teachers also need campus administrators to implement professional development training that allows them to strengthen ELL teaching methods. A gap in the literature suggests that although professional development is given to teachers, it is not strategically developed for ELL teachers or structured for ongoing practice and coaching development. Implementing a strategic teaching method, such as the use of interactive notebooks while providing ongoing coaching and training, is imperative to help ELL students. Implementing developmental training, practice, coaching, and teachers' reactions

to this process warrant research and data collection with the aim of pinpointing student results after implementation.

Campus administrators typically endorse primary professional development training at the beginning of the year. Typically, this training is a 1–2-day session targeted at the main content subjects. He et al. (2018) suggested that teachers should be given opportunities to practice instruction methods more to understand ELLs' languages and the educational development process. Teachers should also engage in reflection on the teaching and learning experiences. The literature highlighted that training teachers to use interactive notebooks to teach ELL students offers authentic interaction between teachers and students combined with engaged peer-to-peer learning. Intentionally preparing teachers to use this method of instruction requires a connection among leadership endorsing strategic methods of training teachers, implementation of the journaling method, and effective ongoing practice and coaching.

Chapter 2 included an introduction, a description of the literature research methods, a discussion of the theoretical framework, a literature review, and a chapter summary. This chapter reviewed the literature through a thorough summary of prior research on unprepared ELL teachers, using interactive notebooks, and the role of administrative leadership in supporting teacher training and development. Chapter 3 includes an introduction and presents the research method and design, instrumentation, validity and reliability, data collection and analysis procedures, limitations, ethical issues, and a chapter summary.

Chapter 3: Research Method

This study explored the implementation of interactive notebooks in ELL classrooms after teachers have been adequately trained to use them while instructing ELLs. The research method paradigm characterizes how meaning was interpreted from the data collected and how the findings were compared with reality as imagined by the researcher. The study employed a qualitative research approach. Data were gathered in qualitative forms to allow statistical and textual analyses that enhanced the depth of the findings. The qualitative portion of this case study included Texas English Language Proficiency Assessment System testing data, including percentages measuring class proficiency levels before the study, observations, two focus groups, and student journals.

Research Design and Method

The operational research procedure included detailed methods, including data collection and examination through data analysis (Creswell, 2013). For this research study, data were gathered from ELL classes in which the teacher was trained to implement notebooks and collaborative activities to teach the academic curriculum. The epistemology case study was the most helpful method for this research. The study of knowledge acquisition is epistemology (Hannon, 2021). It entails knowing about natural phenomena and discovering them with known facts and methods. In the knowledge-gathering process, epistemology is concerned with building new models or theories superior to competing models and theories. Epistemology also considers cultural and social norms and standards, such as those defined by academic fields.

Epistemological viewpoints that support the application of natural scientific procedures to the study of social reality may be traced back to and highlighted by certain traditions in the philosophy of social sciences. An epistemological viewpoint based on the belief that a strategy

can be used to achieve a goal requires the social scientist to grasp the subjective meaning of social action (Bryman, 2003). Epistemology was the best method with which to explore questions of (a) how professional development training for ELL teachers could support ELL students and change their proficiency levels and (b) why teachers feel that their lack of knowledge hinders ELL students' success. Stake (2010) suggested that a case study is often a favored research method for science and education case studies since case studies may be epistemologically in concordance with the reader's involvement or experiences and hence could prove that an individual characteristic premise for generalization. The epistemology case study also allowed the investigation of this phenomenon inside a specific real-world setting. Within the qualitative portion of the case study, data collection included observations, focus groups, and questionnaires. For this research study, data were gathered through focus groups and using an observational tool after teachers had been trained on ways to implement interactive notebooks and collaborative activities for teaching the academic curriculum. Qualitative methods were used in this study to provide answers to the research questions and strengthen the study's analysis. Qualitative methods constitute a technique for showcasing the various components of a situation or obtaining several different forms of data (Angouri, 2018).

Population

According to Creswell (2009), the participants in a qualitative study should be purposefully selected and be the best resources available. Teachers in this study were expected to be qualified and thus most suited to addressing the research issue (Lodico et al., 2010). The target population consisted of ESL education teachers from one elementary school in, Texas. Their grade levels ranged from first to fifth grade. I anticipated recruiting at least six teachers to complete the study. Three were reading teachers, and three were math teachers. Teachers

participated voluntarily and were given a consent form explaining the goal and purpose of the study. Once they agreed, participants completed a questionnaire, focus groups, and classroom observations on scheduled and convenient dates. Participants were allowed to decline to answer some questions, decline to participate, and withdraw from participation at any time.

Study Sample

Targeted sampling is widely used in qualitative research to identify informative cases related to a phenomenon of interest. Although several different sampling strategies exist, targeted sampling is the most extensively deployed standard in implementation research (Palinkas et al., 2013). Targeted sampling corresponds to selecting those participants who are actively knowledgeable about research content and can provide insight into the research questions. Therefore, an elementary school in Texas was chosen for this research. On the campus, the students included ELL students. The campus leaders were responsible for ensuring that teachers were trained to be highly effective in their instructional practices. The participants consisted of classroom teachers who taught 17–22 students in their classrooms, over 15% of whom were ELL students. The sample consisted of teachers from grades 2 to 4. The teachers consisted of five English language arts teachers, one science teacher, and one math teacher. All participants were certified elementary teachers and held ELL certifications or had received ELL teaching waivers. Qualitative target sampling provides practical guidance for determining small samples with which to conduct rigorous qualitative research, which is prominent in research studies in education and health science (Guetterman, 2020).

Teacher Training Sessions

Teachers participated in training to implement the interactive notebooks. The training consisted of up to 3 hours a day for 2 days, while each professional development session focused

on implementing interactive notebooks and ELL strategies. The first professional development, on day 1, focused on ELL objectives and integrating ELLs into daily instruction. The second professional development focused on the interactive notebook questioning strategy. The teachers participated in collaborative discussions about using the questioning strategy and implementing the classroom notebooks. I modeled the interactive notebook process, and teachers were given multiple opportunities to practice the technique. After the training sessions, observations were conducted of the teachers' instruction to assess their implementation of the journaling process. Wang (2017) stated that instructional coaches should frequently educate, work with, and empower their teachers; together, they create the action steps and goals that drive the targeted instruction based on the data presented by the coach via observations and feedback. After the sixth week, I collected and analyzed data.

Following the training sessions, teachers implemented the interactive notebook method, which helped students plan strategies, document new learning, analyze knowledge, and correct misconceptions. An interactive journal has a very strategic setup. Students create a cover page that includes a personal reflection. The journal allows them to take ownership of their study. The notebook should also have a table of contents, numbered pages, a date, and a title. There are input and output methods for journaling, wherein the output goes on the left side and includes questions, reflections, and writing practice skills. In contrast, the input goes on the right side, including notes, handouts, vocabulary maps, graphic organizers, reading or math skill content, and foldable products (Wist, 2006). This process helps students organize their thoughts and learn strategies in an organized manner. Using the interactive journal should include practicing an approach that aids mastery of its objective. Moving toward achieving these objective goals can be well consummated with the help of the interactive notebook process (see Appendix A).

The integrative learning rubric helps measure development, capacity to integrate concepts and experiences across the curriculum, and ability to synthesize and transfer learning into new knowledge (Huber & Hutchings, 2004). With this timetable in mind, teachers and students could implement and practice these strategies, and observations were made during the fifth and sixth weeks of the study.

Instruments

The instrument used was a focus group. Focus groups are frequently employed in qualitative case studies (Mukherjee et al., 2015). The method's popularity is directly tied to the emergence of participatory research in the academic and social sciences, particularly active experimentation with focus groups. Because most individuals obtain their conceptions, mental constructs, and interpretations from their immediate surroundings and refine them through experiential knowledge, the relationship between people's perceptions and their sociocultural context is crucial (Nyumba et al., 2018). Given the increase of participatory research in conservation over the last several decades (Bennett et al., 2017), it is vital to consider the scope and remit of focus group discussion as a methodological tool. Based on the study goals, a set of questions was produced for each focus group discussion session. The study included two focus group sessions, one at the beginning of the study and one at the end. I created and formatted the questions to determine perceptions of the teachers' attitudes toward ELL instruction. Example questions were "Based on your ESL certification alone, how well do you feel prepared to teach your ELL students?" and "How would you rate the level of professional development support for ELL teachers in your school and district?" Complete lists of questions are included in Appendices B and C.

I observed teachers implementing the interactive notebook approach by using the Effective Learning Environments Observation Tool (ELEOT) as an instrument. The ELEOT is a learner-centered classroom evaluation tool with 28 items organized into seven categories. These categories align with the AdvancED (2012) standards and indicators and are based on an overview of widely used analytical tools and the most recent research on practical learning. The focus group responses were recorded and then transcribed for data analysis. The in vivo coding approach was used to code the obtained data, and the participants' precise language was used to produce codes in this scheme. The in vivo strategy is widely used in qualitative research because it engages participants' language in coding. The technique identified common themes and results, organized into categories based on the teachers' responses (J. Manning, 2017).

Data Collection and Analysis Procedures

Data Collection

This section focuses on the sources used to collect data on teachers' perceptions of their readiness to teach ELLs. I explained the purpose and method to the principals and maintained that the targeted participants were instructors with ELL students in their classrooms, each of whom would have at least 2 years of teaching experience and an ESL teacher certification. Teachers who met the criteria received a participation invitation letter (see Appendix D) along with a consent form (see Appendix E). Data collection methods consisted of two focus groups (at the beginning and end of the professional development and training session), observations of the implementation of interactive notebooks, and sharing of artifacts consisting of interactive notebook samples. These collection methods were used to gather data to answer the research questions. The study was conducted over 6 weeks. Participants were asked to participate in the focus groups and the research observations. The data from the focus groups provided a synopsis

of teachers' perceptions of instructional practice and ELL academics before implementing any strategies from the study and after the study. The data-gathering procedures used in the study are described in the following subsections.

Focus Groups. The data collection began with the completion of a focus group. A focus group is a research approach that gathers a group of individuals in a moderated setting to answer questions (Nyumba et al., 2018). Participants were asked open-ended questions to learn about their experiences, views, opinions, feelings, and knowledge concerning interactive notebooks and teaching ELLs. I created focus group questions (see Appendices B and C) that allowed participants to indicate whether they felt adequately trained and supported to teach ELL students. Information collected in the focus groups facilitated the determination of the information levels and perceptions of educators concerning how professionally qualified and prepared they felt they were to teach ELL students. The information showed teachers' thoughts about whether there was any need for improvement of teacher development, implementation of helpful learning techniques, and the viability of those methodologies regarding their ELL students. The research study permitted instructors to self-report changes in practices, perspectives, and sentiments regarding readiness for teaching ELL learners caused by implementing interactive notebook practices. After the first focus group, the teachers participated in a 2-day training on implementing the interactive notebook strategies in their classrooms. I observed the teachers as they implemented the interactive notebook process during the implementation process.

Teacher Observations. I created observational notes by utilizing the ELEOT. The ELEOT is a learner-oriented classroom evaluation tool with 28 items structured in seven settings that align with the AdvancED standards and indicators, grounded in an overview of extensively used analytical tools and the latest research on effective learning. The ELEOT provides valuable, practical,

structured, verifiable, and quantifiable data on the methods of engagement of students in activities and their patterns of demonstrating knowledge, behaviors, and dispositions that facilitate better learning. AdvancED created the ELEOT, and researchers and schools have been granted permission to utilize it in their consistent quality improvement (AdvancED, 2012). I modified the instrument to fit the development of this study (see Appendix F). I rated the students and the teachers on the ELEOT observation form during collaborative and interactive notebook instruction and activities. I aligned the observations with the appropriate indicators displayed on the ELEOT (see Appendix F). Utilizing these coded areas permitted the analyst to concentrate on identifying ELL students' commitment and execution levels, ELL strategies, and instructors' delivery of interactive notebook practices. Observation of teaching methods, reflections recorded in research notes made during data collection, Texas Education Agency (2023) exposition drafts, and reflections recorded in research journals contributed to the study's overall data analysis and conclusions. ***Data Analysis***

Data analysis was an ongoing process during and after this study's 6-week data collection period. I transcribed each qualitative focus group recording using Microsoft Word. I evaluated qualitative data more efficiently with NVivo (Version X). I entered each focus group transcript into NVivo. I could extract crucial data using NVivo's labeling and coding tools. Based on the literature review regarding instructional strategies for ELLs, I built these codes from the focus group discussions.

The investigatory instrument's primary segment centered on the teachers' perceptions of teacher development and support for teaching ELLs. The data were transcribed so I could analyze and code the text. I categorized, found patterns in, illuminated relationships in, and created meaning from the data. Transcribing the data involved assigning each participant a

number or a pseudonym. The categories selected were used to submit overall findings. As with all scientific investigations, the conclusions had to be trustworthy, defensible, and justifiable (Chyung et al., 2018).

Qualitative Analysis. The data analysis was done with MAXQDA (Version X), software for qualitative and mixed methods research compatible with Microsoft Windows. MAXQDA was chosen for this research study because it is a comprehensive program that allows researchers to build visuals and transcribe and analyze data in one place. Once the data were input, MAXQDA imported the data, transcripts, and analyzed reports. Once the data were coded and analyzed, MAXQDA created visual tools, such as charts and graphs, designed explicitly for qualitative research. The data format MAXQDA can interpret was essential to this case study because it allowed specific displays of data progression, comparison of documents, and utilization of visual data, all of which were crucial to understanding the research and its data. The focus groups and observations were coded using MAXQDA to determine how well teachers felt prepared to teach ELL students and students' journal engagement levels. These research-based instruments were the basis of actions for processing, developing, evaluating, and analyzing data to be interpreted by participants to establish the study's internal validity (Creswell & Poth, 2018). Information received from the data collection gives educators information that proved beneficial to this study. Data collection concerning teachers' perceptions of how qualified they felt to teach ELL students could improve teacher development. According to Horowitz et al. (2017), addressing the lack of implementation of helpful learning techniques and increasing the viability of those methodologies concerning ELL students and how they learn can lead to answers to the targeted questions. The observation notes included records of specific teaching strategies, collaborative structures, and student notebook entries. To maintain the validity of the

strategies' effectiveness, teachers implementing the ELL strategies must implement them consistently, which yields a baseline for data interpretation. The observation notes were organized and analyzed to identify similar themes. Once the notes had been analyzed, the coding process began. Coding is a method of data discovery in which a researcher labels units of descriptive or inferential information gathered during a study; the researcher determines the code for a unit of information by carefully examining and reflecting on primary content and meaning (Elliott, 2018). Each topic was given a color code to uncover underlying meanings from my notes. This same system was utilized throughout the study. Once coded, the data were placed in the MAXQDA qualitative data analysis system. The system aided in the data's organization into strategies implemented in class observations and nonstrategies implemented in class observations. Teacher reflective notes were analyzed, organized, and coded according to their significance. Positive words, such as the teacher reflections, are relevant to ELL academic improvement, but strategies are not relevant to ELL academic improvement. These data facilitated the construction of flexible answers that expanded and refined the research so that it became relevant to the development of teachers to teach ELL students and aid in their academic success.

To conclude the study, a focus group was held with the teacher participants. The focus group questions probed reflections on and perceptions of the effectiveness of implementing ELL strategies and developing strong ELL teachers. The questionnaire was scored and analyzed through a comparison of teacher feedback. The categories included providing professional development for ELL teachers and their impact on the implemented strategies compared to how teachers implemented instruction before the study. Teachers were able to reflect on the positive impact of utilizing the ELL strategies or the negative impact of using ELL strategies. Once all

data from the observations were gathered and coded, focus group data were dissected to provide concrete answers to the research questions. These answers can help determine ELL teachers' advanced professional development and how implementing ELL strategies can change academic outcomes for ELL students.

Ethical Considerations

Because of the nature of testing, ethical issues are bound to arise in connection with methodologies. As a researcher and an active participant in my educational community, I know that honesty and sensitivity must be considered and required. Giving thought to such ethical issues requires giving time and thought to ensure that provisions are made for implementing ethical statements and principles, particularly in case studies involving elementary children and their communities (Flewitt & Ang, 2020, p. 32). Because of the nature of the questions included in the questionnaire, the confidentiality of the participants had to be ensured. The questions could have caused participants to feel they were going against administrative loyalties in that the questions asked how participants felt about the professional development given to teachers of ELL students and how it could be improved.

Moreover, other questions in the focus groups could have caused unconformity discourse, given the opportunity for self-reflection, indicating that teachers were not necessarily putting enough effort into addressing their ELL students. Although some participants may not have wanted to discuss focus group information with their colleagues, others may have felt the need to converse about their ideas and feelings regarding the study, and there would be no way to secure such conversations during or after the study. Ethical statements within the instruments included confidentiality statements and reassurance that the intention behind the study was to edify the forward movement of educational practices to develop both teachers of ELL students and the

students themselves. The study by no means had any focus on making anyone feel uncomfortable in their practice, gaining personal information, or being used in a manner lacking respect for cultural sensitivity. These ethical issues could come about as a result of the technicalities of the study.

Preparing teachers to teach ELL students using a systematic collaborative approach in a district with a large population of ELL students could have benefitted students academically and socially. Although the study benefitted the students, teachers also benefitted from the professional development forming part of the study and implementing the strategies learned in their classrooms. In the long term, teachers will benefit from the mentoring of other teachers through their shared experiences resulting from the study.

Lastly, participants retained the sole right to discontinue their participation in the study at any time. The quasi-experimental study was entirely voluntary, and anyone not wishing to participate would have been accepted and respected by me. Those participants who completed the study were offered a mentorship program with me through which I could come in and continue the work with them and their students. In this mentorship, I would visit the classroom, inspect the strategies being implemented, conduct model lessons, conduct pullout sessions with students, and conduct feedback sessions with teachers so as to collaborate on effective practices.

Assumptions

According to White (2015), there is a need to balance suspension of preconceptions and use of one's beliefs and experiences. Knowledge must be accumulated accurately to dissect data. However, researchers must acknowledge assumptions and be aware of them. I assumed the data collected from the focus groups were accurate perceptions. I assumed that the teachers' descriptions and experiences were accurate to the best of their knowledge and that any

information shared for the study was shared in an honest effort to further the research. There was also an assumption that the results from the study would yield valuable and accurate content, providing understandable data that could be used for this case study and shared to uplift the educational community.

Internal and External Validity

Focus group questions were constructed to capture the attitudes and perspectives of the teachers fairly to ensure internal validity. These participants had had certain experiences, and they had a specific understanding of information crucial to addressing the research questions and comparing viewpoints (Lindlof & Taylor, 2017). The focus groups allowed the participants more flexibility in their responses to the questions. Another aspect of internal validity in this study was the experimental manipulation of the independent variable—in this case, the use of interactive notebooks and collaborative learning. Rather than relying on observation alone, the relationship between the use of implementation strategies with ELL students and their academic learning behaviors was evaluated.

The external validity of the findings could be verified by extending this study model into the district as part of its Elevation Program. The Elevation Program is the program that the district currently uses to improve ELL teachers' sheltered instruction capabilities. Because the district serves a high proportion of ELLs, the probability is that this model would be a positive representative, adding not only to the makeup of the teachers who teach ELL students but also to students who qualify for ELL programs, especially those in general education classrooms.

Limitations

Limitations of this study included using convenience scheduling due to teachers' schedules and teachers having to choose to participate in the study. Of the limitations noted,

nonresponse and nonparticipation were intended to be the most variable. Another research limitation was implementing the professional development for interactive notebooks and collaborative learning. The professional development could have been voluntary or brought in as part of the fall professional development, as the campus required teacher training at the beginning of the year. The case could have been made for this option because the campus is an ELL campus. Although there were several ELL classes, general education classes included a high proportion of ELL students, and those teachers could also have benefitted from learning to implement ELL strategies in their classrooms. This would have involved the prequestionnaires being given as part of the professional development process.

Delimitations

Delimitations included the sample population, consisting of certified subject-area teachers, some of whom did not speak Spanish. As a specialist in the building, I have observed teachers who have struggled with differentiated instruction for ELLs. Could this be by choice or the result of intimidation or lack of appropriate methods for instruction? The variables included teacher professional development training, inclusive ELL classrooms, interactive notebooks, collaborative methods, focus group questions, and statistical comparative data analysis.

Chapter Summary

The description of the methodology of this case study accounted for the research design, targeted population, participants, data analysis process, and establishment of internal and external validity. The observations and focus group sessions constituted a visible triangulation process with which to secure proper coding, ethical validity, and reduction of bias. Therefore, this methodology provided a thorough look at teachers' perceptions of teaching ELL students and the need for strategic training and development regarding ELL instructional practices within

the studied elementary school campus in Texas.

There is considerable research that examines the importance of teachers being knowledgeable about how to teach ELLs; only some studies note how teachers adapt instructional practices to meet the needs of ELL students after development training (Bunch, 2013; De Jong et al., 2013). Teachers often focus on their knowledge of subject-area content and seldom focus on implementing new knowledge and putting it into practice in their classrooms (Johnson, 2006). Digging deeper into how teachers learn professional techniques for teaching multilingual students and how that practice is implemented helps researchers explore best practices for educating multilingual students and aids in constructing new teaching programs in the future.

Chapter 4: Results

This study aimed to evaluate the effectiveness of interactive notebook implementation in ELL classrooms after teachers had been adequately trained to use them in their classrooms. Data collection for the research was done through qualitative focus groups, teacher training sessions, and teacher observations. Two focus group discussions were conducted, and documents and correspondence were gathered for document analysis. The data were collected and analyzed to answer the following research questions:

RQ1: How does training teachers to implement interactive notebooks change the level of teacher preparedness for ELL students?

RQ2: How do interactive notebook methods increase the learning capabilities of ELL students in the areas of listening, speaking, reading, and writing?

RQ3: How can using interactive notebooks enhance teacher effectiveness while supporting student-centered classrooms?

RQ4: How do campus leaders focus on implementing teacher training and development to maximize ELL teacher instruction and ELL academic achievement?

This chapter includes a description of the participants, focus group analysis, observation process, interactive notebook artifacts, an overview of the study findings, and a chapter summary.

Depiction of Participants

The study explored the implementation of interactive notebooks after teacher training. It assessed teachers' perceptions of growth in student proficiency through using interactive notebooks and the role of campus leadership in making teacher training available to teachers. Seven ESL teachers completed the entire participation process, including reading the recruitment letter, which explained the purpose of the study (see Appendix D); signing the letter of consent

(see Appendix E); completing the focus group questions (see Appendices B and C); and participating in teacher training and observations. Each participant was given a consent form with information about the date, time, and place of the initial focus group session. Once teachers submitted signed consent forms, they became official participants in the study.

Approximately 15 ELL elementary teachers were solicited for this study. However, seven chose to participate in the complete study, including the training sessions, the 60-minute focus groups, and the implementation and observation processes. Table 1 presents the participant demographics. ELL teachers were the targeted participants because they were ESL-certified or held ESL waivers and taught many ESL students in their classrooms. The participants were asked to answer the focus group questions honestly based on their knowledge of teaching ELL students. Participants were also assured of the confidentiality of their information. I used the qualitative interview methodology to explore the participants' implementation of interactive notebooks. After the initial focus group, participants engaged in an interactive notebook implementation training session. The session included training on setting up interactive notebooks, implementing interactive notebooks in the classroom, and using collaborative learning with interactive notebooks. Following the training sessions, participants underwent observation rotations in which each participant was observed while they used interactive notebooks. I notated observation results via the ELEOT (see Appendix F). After all the observations were conducted, the participants met for the final focus group session after I emailed them the session's time and location.

Table 1*Participant Demographics*

Teacher	Grade	Number of years teaching ELLs
1	4	2
2	3	24
3	4	2
4	4	3
5	2	1
6	3	5
7	3	1

Note. All participants were women. ELL = English language learner.

Data Summary

According to Erlingsson and Brysiewicz (2013), themes are subjective interpretations and culturally specific messages determined from data; they are threads of underlying meanings within which similar data can be connected and may explain the answers to research questions. During this study, themes were created from codes with common reference points across the research subject. The interpretation of qualitative data is critical to accurately identifying themes. The themes identified showed a continuous pattern within the data set. In two focus groups, the participants responded to questions regarding teacher training and implementing interactive notebooks. Each focus group included seven teachers. The teachers were of various grade levels: one second-grade teacher, three third-grade teachers, and three fourth-grade teachers. No fifth-grade teachers agreed to participate. The first focus group, which included a discussion of five

questions (see Appendix B), was geared toward practical teacher training regarding ELLs and implementing an interactive notebook. The second focus group, which included a discussion of five additional questions (see Appendix C), was focused on the teachers' implementations. The themes made more apparent the connections between teacher training and experiences of implementing interactive notebooks with ELL students. The data analysis indicated that implementing interactive notebooks alongside collaborative classroom activities increased students' academic understanding of various topics and improved their opportunities to practice language acquisition consistently.

During the two focus group sessions, participants reviewed and discussed student samples from the interactive notebooks. After the first focus group, each teacher had three observational sessions in which I used the ELEOT rubric to evaluate the implementation of interactive notebooks. The findings were categorized according to the research question to which they pertained. Table 2 summarizes the themes that emerged from the data analysis, arranged by research question.

Table 2*Emerging Themes*

Research question	Emerging themes
1. How does ELL certification prepare teachers to teach ELL students?	ELL certification is not enough. Certification and student educational gaps. Building teaching confidence from other educators.
2. How do interactive notebook methods increase the learning capabilities of ELL students in the areas of listening, speaking, reading, and writing?	Strategies that increase learning through facilitating reading, writing, listening, and speaking. Concepts, strategies, and organization. Students use and respond to notebooks.
3. How can using interactive notebooks enhance teacher effectiveness while supporting ELLs and academic content?	Student and teacher ownership. Opportunities to connect to the ELPs. Student collaboration.
4. How do campus leaders focus on implementing teacher training and development to maximize ELL teacher instruction?	Know your audience. Need for collaboration with other teachers. Campus leaders maximize teacher training.

Note. ELL = English language learner; ELP = English language proficiency.

Research Question 1

The objective of the first research question was to explore teachers' perceptions of the effectiveness of teaching ELL students based on their certification alone and how implementing interactive notebooks helped prepare them to teach these students. The coded data revealed that participants did not feel confident and prepared to teach ELL students based on certification alone and that the implementation of structures, such as interactive notebooks, allowed teachers to build confidence in teaching ELL students and supported students' academic development.

Theme 1: ELL Certification Is Not Enough

Instructors feeling unprepared based on their ELL certification alone was among the

themes that emerged from the focus group discussions. Five participants emphasized being unprepared to teach ELL children because they needed greater topic expertise or know-how to advance pupils along the academic continuum. Teacher 2, a fourth-grade teacher, gave the following account of her experience:

Most of what I feel prepared to teach my students was done on the job. The test is the box I had to check to get certified, but what I learned teaching, and I also learned from my mentor and the training she provided regarding ELL strategies and interactive notebooks.

The seven participants also described how becoming prepared to teach ELLs occurred primarily on the job rather than through state certification. They further reported that while clearing the state certification test helped them become certified, it did not give them the skills needed to teach their students. Teacher 4, a fourth-grade teacher, shared:

Yeah, I must agree. The test alone did not prepare me to teach my ELL students. There was no preparation, and the test itself was geared more toward a perfect world and did not prepare teachers for the social-emotional structure required to teach ELLs.

Additionally, concerning students who had had little to no previous schooling in English, which created educational gaps, the participants agreed that collaborative or relational conditions depended on the social capital present in students enrolled in the learning strategies course. When asked whether their ELL certification prepared them for teaching ELL students, the seven participants agreed that ELL certification does not give teachers the skills needed to teach ELL students effectively.

Theme 2: Certification and Student Educational Gaps

The coded data showed a total of five responses from teacher participants related to ELL certification and feelings of preparedness. The five respondents related that training other than

certification should be offered to teachers to prepare them to close the academic gap for ELLs.

The research synthesis captures teachers' perceptions of the educational and language gaps associated with teaching based on certification only, with no other skills. In one example, a participant discussed teaching a class in which some students were emergent ELLs. The teacher professed a need for skills beyond their certification to help students close academic gaps. Those students who were at least proficient in the English language were able to make some adjustments to acquire knowledge. Even then, some students displayed educational gaps because they had not attended school in either Spanish or English for some time in their home countries. Participants suggested they had to search for ways to translate specific academic content and to teach the content. They jointly felt they could make an impactful difference with students if they received effective training on how to implement interactive notebooks to help build academics and ELP effectively.

Theme 3: Building Teaching Confidence From Other Educators

Teacher participants felt that collaboration, along with the interactive notebook training, increased the likelihood of teachers utilizing interactive notebooks and giving students opportunities to use them interactively. Three out of the seven participants stated that teacher collaboration allowed teachers to establish effective strategies that worked when implementing the notebooks. Teacher 2 described how working with other teachers helped build confidence in implementation:

Last year, a community of educators supported me, and I could draw on that. I leaned on the experience of many instructors who came before me who were EL [English learner] certified and had already taught for many years. In that sense, I feel confident implementing the ELL techniques.

Two other participants stated that they felt a sense of community when learning from each other.

Teacher 5 stated:

Although we may teach the same grade level or subject content, we may teach it very differently, and having the opportunity to learn from each other helps to toss ideas back and forth. We benefit from being in this focus group as it helps instructors learn from each other. It also helps us align content as we discuss one another's grade levels, second–fourth. We can better plan and instruct our students across the curriculum based on how they are using the interactive notebooks in various grade levels. The more you share, the better everybody grows, the teachers and the students. It benefits everybody.

(Teacher 5)

Research Question 2

The second research question was aimed at understanding how interactive notebook methods increase the learning capabilities of ELL students in the areas of listening, speaking, reading, and writing. The emerging themes identified for this research question through the coding process were as follows: (a) strategies that increase learning by facilitating reading, writing, listening, and speaking are practiced with interactive notebooks; (b) implementation of interactive notebooks increases concept strategies and organization; (c) students use and respond to interactive notebooks in various ways.

Four participants mentioned reading, writing, listening, and speaking strategies and their connection with interactive notebooks. In three instances, participants talked about the written concepts being transferred into visuals and a lesson's main points being captured in student notebooks. This notebook method blends written, spoken, and visual elements using images, words, and student interaction. Students gain confidence by reading academic content and then

transferring it to their notebooks through writing and drawing. Later, they use these notebook entries as a reference for discussions with their peers. Further, there were four mentions of how strategies for implementing the interactive notebook method fostered student collaboration.

Theme 1: Strategies Facilitating Reading, Writing, Listening, and Speaking

Teacher participants discussed situations in which implementing interactive notebooks benefited their students with respect to listening, speaking, reading, and writing. Core themes emerged from the dialogue analysis and discussions of how teachers used supplemental tools with the interactive notebooks. Participants valued resources such as premade notebook inserts, miniposters, and specific ways of organizing notebooks. The participants' replies helped define the criteria for ELL-based instruction after implementing interactive notebooks.

Building students' proficiency levels requires teachers to help students build their academic language. Building academic language allows students to comprehend complex text, build and use academic sentences, and compose written responses. One way to do this is for teachers to use strategies to engage students in practicing academic content in various ways, including reading, writing, listening, and speaking (Ballantyne et al., 2008). Students moving toward English proficiency must do more than comprehend the terminology. They must classify, synthesize, and explain information orally and in writing. One teacher explained that implementing the interactive notebooks allowed her students to practice this concept. Teacher 1 said:

My students experienced growth in reading, writing, listening, and speaking. If you enter my classroom at a beginner level, I want you to leave at least intermediate. They can do that with the notebook because they are also reading and writing. They are listening in terms of what goes on in the lecture and what we are reading, and they are speaking it

back using academic language when they turn and talk with their neighbor. They use what they wrote in their notebook to help them speak using academic language. There is a strategic way they listen to the content as they take turns explaining their thinking. Someone with more English proficiency can explain using their notebook with another student, so the learning is constantly being shared. Furthermore, we used our notebooks daily. There is not a single day that goes by that we do not use our notebook in an interactive way that allows students to practice those proficiency domains. So, it is their anchor. I told them that all the time, which is their anchor in terms of “all your anchor charts are in there, you need to reference, you have everything you need in there. The only time you cannot use it is during the STAAR test, unfortunately,” but this process is one they could use to take notes even when they go to higher grade levels. (Teacher 1)

The focus group revealed that teachers fostered learning by using the interactive notebooks along with reading, writing, listening, and speaking strategies. These strategies included using a notebook as a model and a reflective guide. Teachers 2 and 3 explored using notebooks as a comprehensive model with various instructional approaches and engaged the students in notebook activity. Teacher 2 led her students to use their notebooks as guides to answering questions and using their answers in peer conversations. Both strategies provided scaffolds to support learning and language acquisition using all four parts of the ELPs. Teacher 2 commented:

Training teachers to implement interactive notebooks helps support our students in that it helps provide a model. The students write with their teachers; they are learning how to write the content. The students can also act out written content in the discussion, and their notebook becomes their visual and helps build muscle memory.

The instructional strategies used when teaching ELLs are crucial because they offer these students exposure to presentation, engagement, and academic conversation across multiple content disciplines. Specifically designed academic instruction that supports academic content knowledge includes linguistic visuals, pictures, and written components. During the research, teachers explored how interactive notebooks combine these structures to promote learning. Teacher 3 described using interactive notebooks with task cards, peer conversations, and debate strategies. Teacher 1 discussed using an interactive notebook as a pictorial reference for mathematics. Teacher 3 said:

One of the methods used in my classroom was having the students rotate with their partners. They first read the task card and discussed the answer for the task card, and they used their notebook to guide them or help them if they were unsure. And then we would share eventually, not on that same day, but we would share the answers. And then, whenever they talk to their partner, they have to discuss the reason for their chosen answer. Then, they discuss whether they agree with the answer. I always tell them, “You do not just go with whatever your partner says the answer is; what if they are wrong and you are right?” So, I always allow them time to talk and refer to their notebooks to provide their evidence. (Teacher 3)

The ELP standards include speaking and listening for language proficiency. Students should prepare to participate in conversations and collaborations with diverse partners effectively. Students must have ample opportunities to participate in various rich, structured conversations in whole group settings, small groups, and partner sharing. These structured conversations build the communication skills necessary to foster academic debates, leadership skills, and preparation for college and career readiness. One teacher described the connection

between using these communication skills and math content. Teacher 1 said:

For my class, the notebook was like an anchor for their learning. When teaching the time objective, students found it challenging to grasp the meaning of time. It helped them to have a picture of the clock in their notebook and they would often go back to reference it. That has worked with them. They can also take academic words and write what it means to them. I allowed my students to write it in their language and what it means in your language, and for that association of content understanding. It helped them not only acquire language but put it into practice. They are speaking, listening, and they are writing. It is coming together all at once. So, you are hitting on your ELP standards.

(Teacher 1)

Allowing students to practice the content in this way builds vocabulary, content knowledge, and communication skills, which help to provide a foundation for college and career readiness skills.

Theme 2: Concepts, Strategies, and Organization

An interactive notebook is an instructional tool that encourages collaborative learning as students gain knowledge. This teaching method enables students to integrate their teachers' knowledge with their own and supports a variety of learning styles. Additionally, because of its adaptability, it may be utilized in a range of content areas and grade levels. A notebook is structured and formatted in a specific way for instruction. The research data indicated that notebook setup and organization played a role in teachers' perspectives of notebook success. English language arts teachers, for example, explained that structuring notebooks according to genre allowed students to find information quickly and use tabs for specific content areas such as vocabulary and grammar. An example of such an interactive notebook is shown in Appendix G. Other teachers explained how notebooks were beneficial for teaching text features, such as the

table of contents, and were reliable resources for their students. Teacher 5 commented:

When students used their table of contents to find information in their notebooks, I knew they had the right idea about using it as a resource. If you religiously keep up with the table of contents, students learn to find information and apply previously taught text feature skills. Then I will say, “Go and find whatever,” and once someone finds it, we will shout it out and help each other. Tabs would drive me bananas because I would feel like, “Oh gosh, I only have two more pages to do this.” For me, it is like I am just all about the table of contents. Yeah, that might be one option. Try the table of contents and tie it into learning text features for one year, and then try the tabs out and see what you like better. (Teacher 5)

An interactive notebook’s general structure and organization must be considered for it to be most beneficial and efficient. Students benefit from an interactive notebook’s table of contents because it makes information, including specialized reference materials, more accessible and helps them sort specific content. Some teachers use the first few pages of a notebook as the table of contents.

Students also identified the pages in the upper right corners as a labeling technique to find and reference specific pages in their notebooks easily. It is essential to finish labeling every interactive notebook component before the formal start of teaching because this might take some time. Students were able to stay organized and have a reference to specific materials. Teacher 6 stated:

The most important part for me is they learned to use strategies to help them find sources related to the lesson. Remember when you learned; “Look for it in your table of contents and use your interactive notebook.” Then, it becomes a text feature walk, guiding

students to access prior knowledge and make connections.

The teachers would extensively model this procedure for students so that they would become proficient with notebook organization. Some easy, timesaving tips teachers shared related to notebook organization included using notebooks with prenumbered pages, photocopies of readymade tables of contents, and precut and prefilled journal entries. When using prefilled journal entries, a teacher started an entry, perhaps with sentence stems, and students, individually or in groups, completed the information as discussed during the instruction. These organization skills would be used in the class using the interactive notebook and in other content areas.

Theme 3: Students Use and Respond to Interactive Notebooks

As a tool, interactive notebooks encourage students to respond in written form and allow them to collaborate on academic content. Teacher observations from the study revealed that when teachers prepared students to write, they used think maps and journal entries to allow ELLs to write down their ideas during brainstorming sessions. The data showed how using interactive notebooks could help students responsively connect their learning objectives with visual aids that helped prepare them for their written responses. Three participants gave related responses about students benefiting from discussing topics orally with their peers and in their notebooks in written text. A notebook can help bridge the gap between understanding grade-level Texas Essential Knowledge and Skills (TEKS) and actively applying them for comprehensive learning. All teacher participants agreed that providing proper training for implementing a notebook was necessary for the tool's success. Teacher 1 said:

Students benefit from structuring the notebook and how it connects oral and written language. Students digest what they read and then use the content side of their notebook, which displays those core sets of sectional skills, and they are taught how to combine

them in the interactive notebook.

This specific kind of writing uses words and pictures to integrate written, spoken, and visual elements. Students can control the writing process if they are not yet skilled autonomous writers. The teacher may provide visuals and sentence stems to foster communication about specific learning goals or topics. Once students have opportunities to share, they are better equipped to begin written responses to questions about a topic or formulate their ideas both orally and in writing. Teacher 4 commented:

We use the notebook every day for science, but one of the things I like is writing our targets; we write them every day. Every grade cycle, we make a list of our learning targets. A student is chosen to talk about a specific objective. When they ask me what is on the test, I say, “Go back and look at your learning targets in your notebook. Do you know all these things?” We also use it as a celebration, like when we have a rough patch. I can tell my students to look at all they have learned up until now and at what they could not and can do now. Therefore, it is suitable for a review tool because, sometimes, assigning students to their target area is easier than having students do something they may be unfamiliar with. The responsibility for using the notebook falls on the students.

(Teacher 4)

For all students, especially ELL students, interactive notebooks serve as both portfolios of learning evidence and reference guides. Teachers may use interactive notebooks as an effective teaching tool for content understanding and student engagement. Students assume more accountability for their learning while using interactive notebooks, as they can more easily connect material from reading assignments, science lab work, lecture notes, and applications of math material. Teacher 2 stated:

As we add to the notebook, it begins to become filled with components geared to address those essential skills, but it has different activities that we have used in class, and when students need an example, they can refer to their notebook. One teacher expressed how using interactive notebooks effectively assists, guides, and scaffolds learning for ELL students. It also works as a transferable tool in that a teacher can take their teacher notebook with them if they transfer to another school. The same concept can be used for their students, and the same can be said for students who may transfer to another school.

Their notebooks can continue to work for them as a helpful reference. (Teacher 2)

An interactive notebook is a “living” notebook design because information is constantly being input and output. Its use to revisit referenced materials, as an archive of student learning, and as a personal organizer makes it multifunctional. Using interactive notebooks gave students various ways of processing information. Doing so supported varying creative levels and learning styles and helped students retain academic material. Additionally, interactive notebooks allow constant contact between teacher and student.

The ELEOT

I used the ELEOT to monitor teachers’ use of the interactive notebook method. A learner-centered classroom assessment instrument, the ELEOT has 28 items arranged into seven categories. Based on an overview of commonly used analytical techniques and the most recent research on practical learning, these categories align with the AdvancED standards and indicators (AdvancED, 2012). The data from recorded observations captured by the ELEOT are presented in Table 3. From these observations, it is evident that both teachers and students remained engaged in two or three of the ELPs while using the interactive notebook method.

Table 3*Effective Learning Environments Observation Tool Observation Chart*

Item	Not observed	Somewhat evident	Evident	Very evident
Student-Focused Observations				
Has differentiated learning opportunities and activities that meet his/her needs using an interactive notebook and collaborative practices.	2	3	6	2
Is engaged in rigorous coursework, discussions, and/or tasks and/or has opportunities to engage in discussions with the teacher and other students.	1	3	4	5
Is asked and responds to questions that require higher-order thinking (applying, evaluating, synthesizing).	1	1	7	4
Has ongoing opportunities to learn from their peers using interactive notebook practices.	1	1	6	5
Is tasked with activities and learning that are challenging but attainable when utilizing the interactive notebook strategies.	2	1	5	5
Teacher-Focused Observations				
Models how the lesson content should be written in the notebook and gives ample time for students to notate.	1	0	8	4
Gives a focused, guided question and allows students to say and write the question.	2	2	3	6
Allows time for student reflection (student has time to review notes, answer questions, and ask questions).	0	2	5	6
Gives students a question stem.	4	1	3	5
Allows students to interact in a collaborative activity that involves discussion, written analysis, and/or student check.	3	1	4	5

I used the ELEOT to capture the implementation of the interactive notebook experience by teachers and students. There were 10 observational components within two categories. The categories were student-focused observations and teacher-focused observations. The components within these categories included the student components, for which teachers offered differentiated learning opportunities and activities that met students' needs using interactive notebooks and collaborative practices. Activities were observed during which students were engaged in rigorous coursework, discussions, and tasks and had opportunities to converse with the teacher and other students. I also observed interactions in which students were asked and responded to questions that required higher-order thinking and synthesis of oral or written responses with ongoing opportunities to learn from peers using interactive notebook practices. For other activities, students were assigned challenging but attainable tasks when utilizing the interactive notebook strategies. The teacher-focused observations consisted of observing how a teacher modeled lesson content, how it was written in notebooks, and whether ample time was provided for students to notate the samples in their notebooks. It was imperative for the study that teachers be observed giving focused, guided questions and allowing students to say and write the questions. It was also critical to observe the time provided for student reflection, during which students had time to review notes, answer questions, ask questions, and converse with peers.

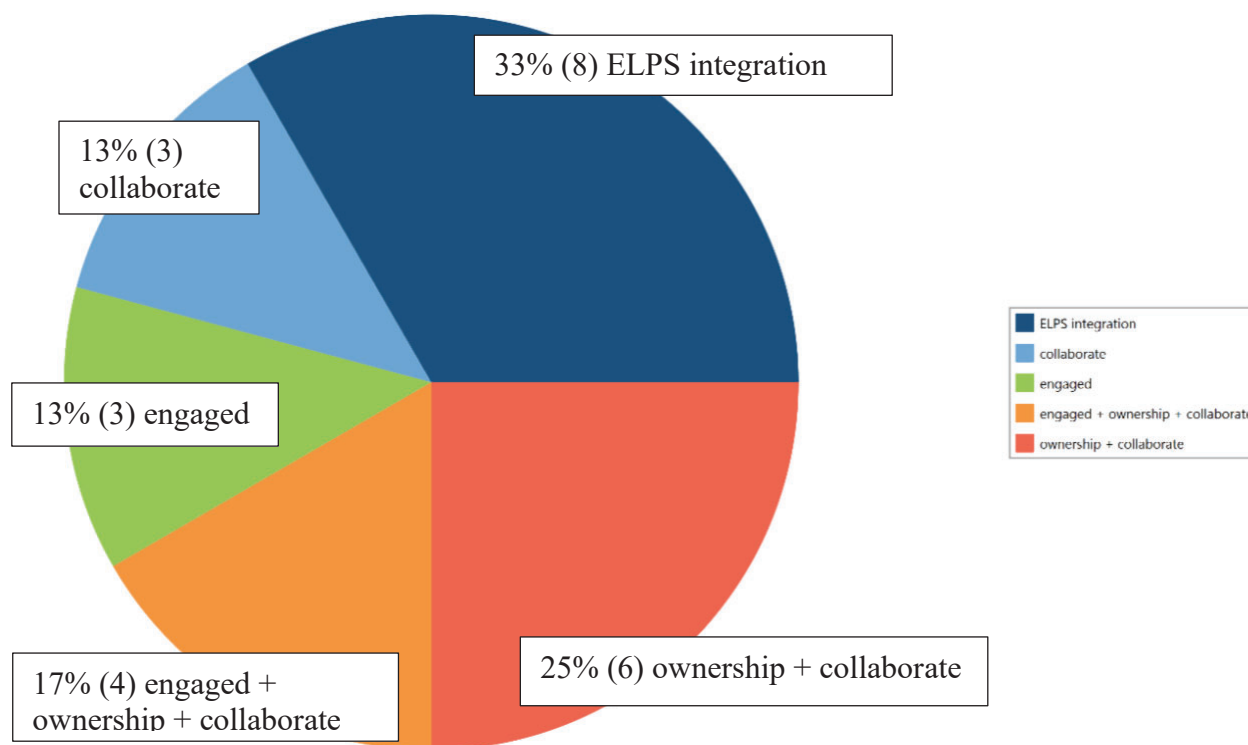
Another essential observational goal was noticing whether the teacher gave students a sentence stem when needed and allowed students to interact in collaborative activities involving discussion, written analysis, and student checks. Table 3 depicts the number of times each specific component was either not observed, somewhat evident during the implementation of interactive notebooks, evident during implementation, or very evident during implementation—

both during instruction and during student-led activities. These components were necessary for implementing interactive notebooks with fidelity and to guard the transfer process from teacher-led to student-led learning.

The observation protocol helped me obtain comprehensible input about implementing interactive notebooks in the classrooms. The list of components also helped teachers understand the focused objectives of student expectations and teacher expectations in relation to the notebooks. Using notebooks for the practical matters of understandable communication, practice, implementation, and evaluation also became observable outcomes of utilizing the notebook method. This scaffolded strategy aimed to move students from prepared whole instruction to rich activity participation and, ultimately, to extension and applications, which I observed when teachers implemented the method and students used the interactive notebooks in various ways.

Research Question 3

The third research question concerned how interactive notebooks improve teacher effectiveness and promote student-centered ELL classrooms. Most teachers agreed that interactive notebooks could support teaching and help implement ELPs through flexible teaching methods, authentic connections, and multiple response strategies. Due to the flexibility of interactive notebooks and their capacity for tailored instruction, teachers observed considerable improvements in their students' academic engagement and self-confidence. They also observed increased intellectual self-assurance, accountability, and ownership through implementing interactive notebooks. The pie chart in Figure 1 displays the coded configuration themes for the third research question.

Figure 1*Code Configuration (Research Question 3)*

Note. ELPS = English language proficiency standards.

Theme 1: Student and Teacher Ownership

Seventeen percent of the teacher participants referred to students who took ownership of their interactive notebooks. Teachers responded that students took pride in their work in their notebooks, and they shared that interactive notebooks were a strategic tool that helped to guide and scaffold learning for ELLs in all subject areas. The interactive notebook method aided students' academic development and confidence when writing in English. One teacher participant responded, "Having students write about the content and use their notebook to respond orally allowed students to respond in their way; these opportunities were important to develop both written and oral language and improve student learning" (Teacher 3). The teacher's

ability to recognize when and how to provide those opportunities during a lesson strengthened their teaching abilities while improving student academic performance. Another participant reflected:

As we planned to use interactive notebooks as teachers, we thought about how to construct the lessons, asking ourselves questions such as “How will I rebuild this lesson to ensure I meet my learner’s needs?” and “What creative ways can I build the lesson with those instructional strategies so that students engage in all the ELP components?”
(Teacher 2)

The interactive notebook facilitated the teachers’ and students’ ownership and accountability.

Thirteen percent of teacher participants addressed specific student engagements centered around using interactive notebooks in their classrooms. The teachers perceived engagement as ensuring they used engaging activities along with interactive notebooks, such as doing a gallery walk after students had made journal entries. The gallery walk would allow students to encounter and share peer thoughts on academic content. One participant stated the importance of using sentence stems to help ELLs fully engage in the notebook method:

The students were able to use sentence stems and academic vocabulary in their oral explanations as the teacher models examples; all students are engaged during interactive notebook activities. The teacher does engage the students in rigorous conversation as a group but must also allow for peer talks, and students are given multiple opportunities to allow students to use their notebooks as references. (Teacher 6)

Theme 2: Opportunities to Connect the ELPs

The data showed that teachers understood how to use interactive notebooks to help ELL students understand and gain knowledge of their objectives. Teachers stated that they used a

technique referred to as “dissecting the TEKS” to help determine the academic tasks students would engage in during a lesson. It was important that during the implementation of the interactive notebook process, the listening, speaking, reading, and writing domains and the ELPs were closely aligned to student interactive notebook tasks.

Thirty-three percent of the teacher participants responded that the correlation between the ELPs and the activities used for interactive notebooks was crucial for building opportunities for students to connect academic content with the ELPs and increase their engagement. Teachers declared that it was essential that when ELLs recorded academic English words in their interactive notebooks, it allowed them to understand the ELPs and lesson objectives better. Teachers said that they displayed an ELP’s aim on the focus wall and in students’ notebooks. They used content-based language strategies in their notebooks to integrate the ELPs more effectively. One teacher who participated in the study noted, “ELP integration is important to the lesson to address scaffolding for ELLs and using it with the interactive notebooks helps students to process and make connections with the content” (Teacher 4). The teacher offered assistance with building vocabulary and drawing links to prior understanding of objectives and texts. Students can create a word bank for their narrative by utilizing graphic organizers, either on paper or digitally (Rao & Meo, 2016). Teachers can also use this activity to help culturally and linguistically diverse students understand concepts across languages and illustrate concepts using a variety of strategies that support the academic needs of ELL students (Gomez & Diarrassouba, 2014).

Theme 3: Student Collaboration

Building collaboration within student peer groups can reduce students’ stress when they answer theoretical questions, as peer groups provide knowledge and support for students.

Learners, when progressing with learning new topics as a group, employ their sense of self and knowledge, creating a friendly environment that is imperative for learning for ELLs (Rao, 2019). Collaborative learning components include group tasks, shared knowledge, critical thinking concepts, positive reinforcements, problem solving, and active participation. The data revealed that students had numerous opportunities for engagement in these areas and that doing so increased the level of rigor in the classroom and the depth of learning knowledge for ELL students. The teachers' responses included the following:

What I saw with my students is that they were excited to take ownership of their learning; they want to do the work and enjoy working together; they are willing to share; and they get super excited when their work is displayed on the smartboard, and they are given the spotlight to explain their answers or journal entry. (Teacher 2)

Teacher 4 shared, "It is nice to see the students make different connections about each other's cultures and connect to the academic content. It allows them to show respect and admiration for each other." Further, Teacher 3 offered this insight:

It worked with them with time management. They would use the timer to complete a task in their journal. As they completed the journal entries, they shared their responses and what the content meant. Afterward, their partner was allowed to share. So, the method is structured where social skills are built in. You would hear students saying to their partners, "I like that idea," "Tell me more," or "Thank you for sharing your thoughts. What do you think about it?" They would often go back and reference their comments directly from their journals.

Teacher 1 added, "I agree they are very excited to share, and when they have a tool like the interactive notebook, they are more willing to share." I observed in several instances that

students were engaged with the interactive notebooks. Students were observed conversing with their shoulder partners, sharing responses, and responding to specific academic content. Teachers scaffolded and modeled instructions and tasks in the notebooks. Students were often observed using their notebooks as conversation starters, writing their answers in their notebooks, and using them as references. As students interacted, teachers extended student knowledge by building on their actions and allowing time for student discussions. When the interactive notebook method was practiced, all students were engaged in listening, speaking, reading, and writing.

Research Question 4

The final research question focuses on campus leadership and its responsibility to bring meaningful teacher development to school campuses that target teaching skills specific to ELL students. Lack of teacher education and the inability of schools to implement high-quality professional development to prepare effective teachers for this marginalized student population are two factors that frequently contribute to shortcomings in schools' efforts to serve English learners (Vera et al., 2022). The need for a leadership role in implementing academic methods (such as the interactive notebook method), conceptual frameworks, and interventions to help ELLs learn both literacy and content curriculum was determined from the literature review and from the data in this study. Teacher participants were asked whether the interactive notebooks model training would be a good training development practice for districts to adopt for their schools. Moreover, they were asked how leadership on campus played a part in them receiving training geared toward ELL instruction. The data showed that teachers felt that leadership should know and understand the needs of ELLs. The connecting themes that emerged for Research Question 4 included campus leaders knowing their audience, the need for collaboration with other teachers, and campus leaders maximizing teacher training. Campus leaders must present

opportunities for teachers to collaborate on best practices for ELL students and maximize teacher instruction's contribution to ELL academic achievement through training, development, and coaching.

Theme 1: Know Your Audience

Teachers perceived that it was important for campus administrators and teachers to know their students, how they learn, and what would be most effective in their classrooms when implementing interactive notebooks. Teacher participants also perceived that campus administrators should be aware of their campuses' ELL student populations and train teachers in best practices to meet the needs of students. Furthermore, campus administrators should understand the complexity of new teachers teaching ELLs and make training, mentoring, and support readily available. The following examples are indicative of the most frequent responses from the teachers identified in the data analysis. Teacher 1 stated:

Considering knowing your audience, what may be effective for a second grader may be ineffective for a fourth grader. Campus leadership can make training more beneficial by recognizing who their teachers are, their teaching style, and how that style connects with the learners. How exactly will the training transfer over to the learner more accurately? For instance, we work closely together for the fourth grade. In our professional learning communities, we encourage mutual learning, which is better for me than simply looking at and listening to a recording or on a Teams call. It all depends on how well the leadership understands their target audience, who they are communicating to, and what they want us to take from the training, implement it in our classrooms, and follow up with coaching and support.

Teachers considered their efficacy and readiness to teach ELLs in relation to their initial certifications and classroom experiences. With this consideration, teachers still felt that having significant training on targeted strategies and engaging in teacher collaborations would help ELL students learn academic requirements. Teacher 2 described her experience of tailoring training to the students:

As a teacher, you must know how to implement the notebook in your classroom. You must do more than throw it at the students and expect to get results. My mentor last year sat down and showed me exactly how he structured his notebook from the year before, the year notebook from the year before that, and he gave them all to me and said, what works best for you? Because it is not a cookie-cutter thing where what works for me will work for you. You must gear it to the population in your classroom because your students will all learn differently. So, the training helps, and it is necessary, but you also have to be proactive as the educator; you have to remember that you have to tweak it and know your students and how to tailor it for their learning.

With the implementation of mentoring and coaching during a teacher's first year, most such supports include teaching skills and classroom management techniques. Collaborative teaching partnerships are beneficial and productive for teacher development. These partnerships are most significant for ELL students' academic performance. Teacher 7 said:

I feel much more comfortable implementing interactive notebooks this year than in the last, my first year. Last year, I did not realize how to use the notebooks effectively until the second semester, and a part of that was the last year I did not get training on how to use the notebooks. I did not even know that using a notebook was a campus expectation. Going through that training, this training, and seeing how to structure the content to use it

during instruction is huge. Leadership should consider their first-year teachers and that just because we have ELL certifications does not mean we will automatically know how to use tools such as an interactive notebook to maximize instruction for our students.

(Teacher 7)

Building the environment necessary for cooperation, allocating instructional resources wisely, and offering continual opportunities for collaborative learning and growth are all implied ways to contribute to the effectiveness of teachers.

Theme 2: Need for Collaboration With Other Teachers

Education stakeholders, such as content teachers, ESL teachers, and school administrators, need to share responsibility for preparing for and teaching ESL students, for the partnership of ESL and content teachers provides a route for reaching equitable learning outcomes for ESL students. Collaboration of this sort can only begin with school leaders who can promote a collaborative environment and subject and ESL instructors who can take the initiative to create and strengthen collaborative alliances (Giles & Yazan, 2019). The data revealed the following responses, showing that teachers perceived that campus leadership plays an important role in implementing appropriate training for teacher-to-teacher ELL guidance and fostering collaboration among teachers. For teachers to effectively implement interactive notebooks, according to the data, training and collaboration were imperative. Four out of the seven collected data responses are as follows:

At least for me, we must be realistic about what we want to achieve with the training. It helped me more when I could look at what you were doing in your classroom and what Mr. R did in his classroom. He showed me his journals, people in the classroom day in and day out, and us collaborating and sharing with each other. We must do it all the time

in PLCs [professional learning communities] and school-wide because it cannot be targeted at one grade level. Just because you teach the third grade and I may teach the fourth or fifth does not mean I cannot learn from you, and it does not mean that we must bring somebody in from outside to teach what we are implementing here already. As a community, we can learn from each other and build on that. So, the administration should provide more time for us to plan and collaborate vertically. The required training from the district is more about compliance to check off a box for completion; we do that because it was, but if there is no collaborative learning happening, are we learning as a community and building consistency school-wide? (Teacher 2)

Teachers and campus leaders learn significantly from working with each other to determine best practices. It gives them a secure space in which to debate, modify, and expand on what they have learned using different teaching practices. Collaboration, in this way, drives teacher instruction and student learning.

When teachers teach teachers, mentors and mentees collaborate to accomplish objectives. The study drew attention to the need for teachers to collaborate on best practices even after engaging in training. The study also described teachers' experiences with mentors and learning from veteran teachers who have taught ELL students. Building a collaborative community cannot be done in isolation: It takes the effort of campus leadership to support these programs and find time within the school environment for them to take place.

During collaboration sessions, teachers and leaders work together to write questions, process opportunities to engage students in multiple response strategies, internalize lesson plans and notebook entries, and analyze academic data. As students create their interactive notebooks' components (notes, questions, summary, reflection, charts and tables, and processing

techniques), collaboration among teachers and leadership continues to ascertain the effectiveness of interactive notebook implementation and determine the content that should be scaffolded in this way. Teacher 3 said:

It helps us to learn from each other because even though we may teach the same subject, another teacher might teach it differently, and their students are doing well with the content because of how they use the notebook. I benefit from being in this focus group, bouncing ideas off each other. Teachers are teaching teachers, and we grow as a community as well.

Teacher collaboration and mentorship play a vital part in successfully implementing interactive notebooks. Teachers should encourage other teachers to share their notebook models and learning logs with their campus peers so that they might observe various approaches to the same content. Teacher 4 commented:

Last year, my first year, my mentor gave me his notebook and said, “Let’s figure out how this works best for you.” So, I bounced ideas off his notebook and made it my own. The collaboration between us continued throughout the year, and it played a major role in the successful implementation of interactive notebooks in my classroom.

Teachers and campus leaders should understand that implementing interactive notebooks takes time. Along with implementing collaboration and training, administrators must provide time for teachers to collaborate to make significant structures within their lessons to accommodate interactive journaling. With careful attention to teaching, learning, and professional development, successful schools have a clear and cohesive vision of how to educate their ELLs effectively (Elfers & Stritikus, 2014). Campus leaders must thoughtfully consider leveraging leadership for collaboration opportunities across grade levels and content areas.

Teacher 5 said:

The collaboration time provides opportunities to share resources. We learn what the second grade is doing with their literature content or poetry, and in the third, fourth, and fifth grades, so we can incorporate those ideas into best practices for our students. Create that vertical alignment and see if the third grade can benefit from the second or fifth. I am curious to know all the different ideas around the campus. How do you all use interactive journals? There are just—numerous ways to use them. The more you share, the better everybody grows; the teachers and the students benefit everybody.

On the teacher side, teachers must help students understand that organized learning is a process. Teachers should be strategic about including time for students to record their learning in their interactive notebooks—pace writing responses with timers, give students time to reflect on lessons and provide written responses. Interactive notebook journal responses work well as exit slips to summarize lessons learned throughout class or at the start of a session for review. Building learning capacity for teachers and students builds confidence in high-quality instruction and high expectations for students. Campus leaders would benefit from understanding that time used planning the best instruction for ELL students is time well spent.

Theme 3: Campus Leaders Maximize Teacher Training

The teachers' perspectives indicated that training teachers to combine interactive notebooks with content and workstations and training teachers how to use them effectively in multiple ways improved the ways teachers could maximize learning for their students. The data revealed that 80% of teachers responded to campus leadership efforts to maximize academic training and its importance. Teacher 1 stated:

I passionately urge leadership to require it as part of preservice training, at the very least, for the entire school. We have a large population of ELLs, and although it can work for all students, it can be personalized for ELLs. It allows them a way to acquire knowledge using newly learned language, and so yes, for sure, it is a needed tool campus-wide.

(Teacher 1)

The discussions with the teachers led to recommendations that leadership put more effort into preservice training for teachers of ELLs. Teachers also relayed that there are many ways to implement student interactive notebooks; thus, training and collaboration can help it become a valuable tool for ELL students and the entire campus. Leaders must collaborate with teachers and understand what works on their campus, how to implement it, and the resources involved to make the program successful. Teacher 2 said:

Leaders should be aware of what works for their campus. What works for one campus may not necessarily work for another. Another campus may have a different ELL population than we have, and they may require a different tool or method, but at least for this campus, it is an excellent tool for our students and our campus.

Campus leaders must also understand that they do not have to do this alone. Leaders and teachers should also collaborate and work together as a unit when understanding what will work for their population of students, the best way for it to be accomplished on campus, and how they will make it an effective practice so that it becomes the norm on their campus. Several teachers discussed their responses to implementing interactive notebooks and collaborative practices resulting from the study. Teacher 7 commented:

Not having intentional and effective training, it affected the students. At the beginning of the year, much of the content may have been more challenging for students to grasp, and

they needed a reference to go back and use. Thus, as a teacher, I would have to find time to build those foundational skills in the lesson. The interactive notebook helps to do it all at once. (Teacher 7)

Furthermore, campus leadership must be more intentional with training because teachers must teach ELLs in an intentional way—meaning that ELLs need visual supports, sentence stems, modeled writing, and student peer groups. Running a classroom with these supports may not come naturally for some teachers. Teachers mentioned that training had changed over time and that some of the change may have been due to COVID-19. Teachers admitted that campuses were still rebuilding what effective practices and training look like and how they should be monitored for consistency. Teacher 6 said:

The campus administrators or presenters would take us by grade level or content area, and they would show us the journal activities, what they wanted us to do, and how they wanted us to teach it to the kids. However, it just needed to be more consistent. So, implementation of professional development training would be more effective if they were more intentional and consistent with the training and how they wanted the content to be put in the journal, perhaps in a standardized way for each grade level.

Campus leaders recognized that building trustworthy connections with educators, principals, and other teacher leaders would be essential to advocating for and implementing instructional improvements. For instance, campus leaders facilitated grade-level meetings and staff training on this campus. In some instances, teacher leaders led these sessions. One-on-one coaching began to be implemented by modeling successful ELL instruction for teachers. The training in this study became part of that implementation. Campus leaders collaborated with educators to pinpoint practice-related issues, and they demonstrated that they were equipped to provide precise,

implementable, and evidence-based answers that teachers could use in instruction involving interactive notebooks with their students right away.

This study's findings reveal that educators seek ways to support ELLs through comprehensive teacher training and ways of differentiating to meet the academic needs of their students. It was also discovered that participants felt that campus administrators must take the lead in implementing specific methods, conceptual frameworks, and interventions to support training for teachers regarding how best to teach ELLs with respect to the acquisition of literacy and academic content areas.

Chapter Summary

This chapter provided a detailed analysis of the implementation of interactive notebooks by a specialized group of ESL teachers trained in strategies for using the notebook method in an urban city area in an elementary school. The analysis allowed a view into the perspectives of teachers who teach ELL students and how campus administrators' decisions on targeted training for teachers directly affect the way ELL students are taught. This chapter described the findings from the two focus groups, teacher observations, and researcher notes. It also displayed the emerging themes from the data analysis, which helped to answer the research questions. The findings also showed how students in a collaborative setting that included reading, writing, listening, and speaking strategies demonstrated growth in academics and self-determination. The data collected will be shared with the academic school of education to support teachers, ELL students, and leadership roles in elementary classrooms. Chapter 5 includes an overview of the findings, descriptions of initiatives for practice, suggestions for further research, and the study's overall conclusion.

Chapter 5: Discussion, Conclusions, and Recommendations

For all students, especially ELLs, interactive notebooks in the classroom can benefit them in numerous ways. Interactive notebooks can support classroom teaching methods that are genuine, student-centered, culturally relevant, and inclusive because of their flexibility and capacity for tailored instruction (Horne & Harper, 2021). Teachers may observe considerable improvements in academic performance and self-confidence when implementing interactive notebooks in the teaching of academic content (Wist, 2006). The interactive notebook method was designed to provide students with the support necessary to address academics, the ELPs, the four skills of language, and overall social skills (Hertel et al., 2017). I observed the teachers as they used the interactive notebook method and recorded some anecdotes. I learned about the experiences educators shared regarding teacher training and utilization of interactive notebooks through the focus group and observational data recorded. The data acquired throughout the study can aid appreciation of the value of ELL educational tools, such as interactive notebooks, and the significance of teacher preparation programs.

Summary of the Results

The qualitative study aimed to learn about ELL educators' perceptions of teaching ELL students based on ELL certification and the results of using interactive notebooks after receiving training; the investigation involved qualitative focus groups and observations. Chapter 5 provides an overview of the findings based on each research question. The answers are organized into themes to answer the study's research questions:

RQ1: How does ELL certification prepare teachers to teach ELL students?

RQ2: How do interactive notebook methods increase the learning capabilities of ELL students in the areas of listening, speaking, reading, and writing?

RQ3: How can using interactive notebooks enhance teacher effectiveness while supporting student-centered classrooms?

RQ4: How do campus leaders focus on implementing teacher training and development to maximize ELL teacher instruction and ELL academic achievement?

Research Question 1

The objective of Research Question 1 was to explore teachers' perceptions of the effectiveness of teaching ELL students based on their certification alone and how the implementation of interactive notebooks helped prepare them to teach this group of students. Supportive connections were established between teachers needing training and their ELL certification.

Certification Is Not Enough. Based on the viewpoints of focus group members, it was apparent that instructors felt unprepared to educate their ELL students based on their ELL certification alone. This was among the themes that emerged from the focus group discussions. Participants said they felt unprepared to teach ELL children because they needed more expertise or know-how to help these students advance along the academic continuum. The participants also described how becoming prepared to teach ELLs occurred primarily on the job rather than through state certification. It is also critical to note that some participants included in the study were those who held ELL waivers and had not completed their state certifications. These teachers were in need of support in professional development in ELL instructions as well as ELL strategies, such as the implementation of notebooks. Building high-quality teacher education programs has become more critical as the number of ELLs in American classrooms has increased. This ensures that all instructors have the resources necessary to help their students. To guarantee that ELLs are receiving excellent teaching in new-language competence that meets

content standards, national, state, and municipal laws have adopted several criteria. According to Tran (2015), research determined that training to familiarize teacher candidates with effective pedagogical techniques for working with ELLs benefited teacher education programs. The study concluded that teachers responded to practical training and coaching and emphasized the importance of implementing a constructive training plan for teachers to serve ELL students.

Teacher Preparedness and Educational Gaps. The levels of teacher preparedness, certification, and efforts to support ELL students appear to be associated with how prepared teachers are when entering the classroom after becoming ELL certified. In order to help close educational gaps among ELL students, teachers must be given opportunities to participate in professional development training courses. These trainings should be geared toward not only conveying teaching strategies but also modeling the implementation of the strategies during live instruction. These opportunities to practice the training are key to providing appropriate instruction for ELL students to allow them to make academic gains. Teachers grapple with the realities of their classrooms and schools while using the theoretical information acquired through their educational experiences and completion of their certifications. Teacher preparedness is about more than preparing context. It incorporates a variety of tasks, including teaching, providing a secure learning environment for students, ensuring that all students learn to a high standard, managing classroom behavior, and working with coworkers and principals (Caspersen & Raaen, 2014; Lindqvist, 2019). Initial teacher education programs that enhance strategies for using ELL techniques reduce teacher self-perceptions, enhance the well-being of teachers, and may help to close the gap for ELL students (Pan et al., 2023). Additionally, new teacher orientation programs, peer and leadership support, and opportunities for professional development are crucial for teachers of ELLs to become master teachers. They must be equipped

with the teaching resources they need to begin to close educational gaps (Master et al., 2016).

Evidence implies that ELL instructors need more training and development. However, especially for new and beginning teachers, Santibañez and Gándara (2018) determined that even competent instructors might struggle to satisfy the requirements of ELLs with certification and student educational gaps.

Building Teaching Confidence From Other Educators. The teachers shared various perspectives, appreciation for implementing an interactive tool, and knowledge of ELLs' difficulties. The teachers' collaboration built confidence in their capacities to instruct this group of students. The interactive notebooks proved teacher friendly and offered straightforward applications in various contexts of authentic teacher and student work. The students' descriptions were often viewed as informal evaluations of students' understanding of content. Throughout the process, teacher guidance on creating and using the notebooks included several real-world experiences that yielded opportunities for students to practice social skills and for teachers to practice ways to teach them confidently. Samples of application activities were offered at the conclusion of each focus group, which aided professional development activities and provided teachers with the confidence they needed to include authentic notebook experiences in their instruction.

Research Question 2

The second research question explored how interactive notebook methods improve ELL students' listening, speaking, reading, and writing abilities. The coded themes identified strategies that increase learning by facilitating reading, writing, listening, and speaking; concept strategies and organization; and how both teachers and students responded to using interactive notebooks as reflection and resource tools.

Strategies for Facilitating Reading, Writing, Listening, and Speaking. The coded

segments revealed that participants discussed translations of written concepts into visuals, which led to open discussion in which students were able to use multiple response strategies. Imagery, words, and student interaction combine to create a notebook method that blends written, spoken, and visual elements. As a result of this interaction, students gain confidence when reading about, writing about, and drawing academic content. Teachers should consider various instructional strategies and support the development of literacy skills. Interactive notebooks can help students practice literacy skills while gaining support from their teachers and peers. While reading and writing can be challenging for many ELL students, literacy experiences allow them to engage in written- and oral-language practices, with interactive notebooks fostering learning new knowledge. Moving into the 21st-century classroom, interactive notebooks constitute an easy-to-use tool that may aid the direction and scaffolding of learning across many subject areas. Strategies for facilitating reading, writing, listening, and speaking are crucial for ELL students mainly because inquiry-based learning has been shown to improve students' motivation (Mansfield, 1989), topic understanding, and reading comprehension. According to research (Shanahan et al., 2010), skilled readers preview and forecast, apply background information, ask and answer questions, visualize, draw conclusions, and summarize with written responses. Implementing interactive notebook strategies allows teachers to engage students in these strategies purposefully and interactively. The literacy strategies mentioned above are typically valid for all students, but according to Goldenberg (2010), "When instructed in English, ELLs require additional instructional supports" (p. 687). Connecting reading, writing, listening, and speaking with academic content is more viable for learning than a lecture approach, especially for ELL students.

Concept Strategies and Organization. The foundation for interactive notebooks

includes concepts regarding strategies that help students learn best, including note-taking, concept mapping, and organization of information. These concepts can be combined into one teaching strategy, using interactive notebooks to help students learn. Study participants made core theme connections to ways ELLs communicated academic concepts to help meet social and educational goals. These included ways ELLs conveyed knowledge, concepts, and ideas required for success in language arts, mathematics, reading, science, and the application of embedded social skills. Four out of seven participants discussed the relationship between interactive notebooks and speaking, writing, listening, and reading skills. Three times, participants discussed how the central ideas of a class were recorded in student notebooks and how written thoughts were translated into visuals. This notebook technique uses words, images, and student participation to combine written, spoken, and visual aspects. As the researcher, I observed students engaged in various structures with interactive notebooks that allowed them to practice these concepts while learning academic content and connecting the content to real-world experiences.

Students Use and Respond to Interactive Notebooks. Students gained more perceived confidence as they shared their interactive notebook entries and assisted other students, showing a vital component of how students used and responded to the notebook method. Facilitators of the interactive notebook method determined that a student would become more proficient in literacy skills when given time to read with a partner, make a written entry about a text, and then share it from their notebook. As the student became more confident in the process, they could add their peer's ideas to extend their responses. The teachers required students to speak and write in complete sentences using correct grammar. Teachers often gave students sentence stems and vocabulary lists to help students successfully complete these tasks. Students also had opportunities to explain their thinking to their peers. A student would become

the lead teacher in the classroom, during which they would show their interactive notebook on the screen and explain their outcomes in comprehensive sentences. Finally, students were provided with opportunities to develop perceived confidence and academic competence by including their own learning experiences through listening, thinking, writing, sharing, group talks, and paired writing. Combining these components with the notebooks makes the method interactive and fosters a collaborative environment in which to build confidence in student learning and teachers' instructional practices.

Research Question 3

Research Question 3 focused on how interactive notebooks enhance productivity and support student-centered ELL classrooms. Teachers using interactive notebooks concluded that they helped with instruction in multiple contexts and enhanced teacher effectiveness while supporting student-centered classrooms. Significant themes emerged among teacher participants, indicating that students benefited—academically, socially, and in terms of classroom participation—from the inclusive and collaborative educational strategies used with the interactive notebooks. Teachers noted academic improvement and a stronger feeling of community among students. As the researcher, I observed several classrooms in which students showed responsibility, ownership, and assurance when using their notebooks to explain texts or respond to guided questions.

The findings demonstrate that a collaborative atmosphere gives students the support required to prevent them from opting out while mastering objectives. According to participants' responses, teachers found that using interactive notebooks became a best practice among classrooms in different content areas. They also acknowledged that teacher training on implementing interactive notebooks would increase teachers' knowledge of teaching ELL

students, especially for new and beginning teachers.

Student and Teacher Ownership. Each classroom observed had diverse ELL students with various skills and interests. An instructor must consider students' diverse learning needs to organize tasks appropriately, carry them out, and evaluate what the students have learned. The interactive notebook method helps teachers construct lessons and apply a strategic evaluation process. When implementing the interactive notebook method, teachers began with modeling input in the notebook using strategies such as what I know, what I learned, and what I want to learn. They also established real-life connections linking their relevant experiences and students' cultural experiences with the objectives. Multicultural sensitivity, or the capacity to recognize and understand that cultures view the world differently, is a factor in teachers' success. Students are more likely to be successful when taught by teachers who foster culturally diverse environments. According to studies, students with culturally sensitive instructors are more likely to succeed than students with less sensitive teachers (Moule, 2012). A teacher expands students' knowledge by building on their questions and allows time for student discussions. I observed teachers leaning into these conversations, taking data notes on students, correcting students, and sharing students' notebook responses. These collaborations increase teacher effectiveness because they require the teacher to allow all students to become involved in learning rather than looking for a one-student response. Additionally, improving teacher effectiveness helps to address the difficulties associated with teaching the proficiency standards applicable to ELLs. Given the increasing number of ELLs and the demand to guarantee effective instructors instruct ELLs, campus leaders should monitor teacher effectiveness and collaborate with teachers to accommodate ELLs' demands.

Opportunities to Connect the ELPs. A veteran teacher noted how notebooks could be used as student portfolios of work that demonstrate growth throughout

and after the year for standards-based assessment reviews. Therefore, for students to use the notebook method in this way, teachers must understand the connection between their choices of teaching methods and strategies and their comprehension of the subject matter. Pedagogically, it is essential to deconstruct the understanding of academic standards. Increasing their proficiency in written or spoken English was essential as students became aware of how to process TEKS in a way that they could explain in their own words, either orally or through written responses. As students master objectives, they create a grade-level list of these objectives in their notebooks, which they often refer to as a way to make connections to new learning (Teacher 1). Teachers must be able to teach their subject matter in a way that will enable ELLs to communicate effectively within various content areas. Although the subject matter and standards for content areas differ, such as between math and reading, the method of using an interactive notebook is applicable to reading, writing, listening, and speaking to help ELLs make connections to the learning standards until they have mastered them.

Student Collaboration. For students to practice using notebooks in an interactive way, teachers had to allow time for students to interact with peers. I observed teams of students gathering information from text to use as text evidence to answer teacher-led questions. Students wrote this information into their notebooks and then used the information to create solutions to a unit's topic. The solutions were then shared with their classroom peers using turn-, pair-, share-, or group-discussion strategies. The findings of this study revealed that including student-centered activities within notebooks improved student participation and student accountability mechanisms. These findings also illuminated how to enhance the design and implementation of interactive notebooks in terms of instructional training and planned student-centered activities. Teachers expressed that having students interact this way did not allow students to opt out of learning. The extra assistance students (especially ELLs)

need when they struggle is perhaps the most crucial factor that demands more attention; in this study, students were able to consistently use their interactive notebooks as sources of support for learning and to increase opportunities to listen, speak, read, and write. Six out of seven participants observed students walking in pairs to showcase the anchor charts they created in their notebooks and discussing each element in small groups. While this took place, I observed the instructors acting as facilitators of learning, checking into each group and leaning into conversations to elaborate on discussions or correct misunderstandings. Knowledge development followed by discussion time for students involved listening, writing, and speaking, and it also occurred when students were asked to share their explanations with the whole group. When doing so, most students used their interactive notebooks as references.

Another significant observation was that although the interactive notebook method promotes student-centered learning, it is critical to note that teachers modeled extensively before asking the students to work in groups or to discuss their responses. To ensure that students can complete notebook entries, a teacher moves about the classroom to offer support when needed, and lessons are aligned to content objectives and connected to ELP standards. As students shared their explanations, teachers helped them connect activities to learning goals.

Research Question 4

Due to the overwhelming rise in the number of ELLs entering U.S. classrooms, teachers need access to learning strategies that foster language proficiency. School administrators face the difficult challenge of providing the professional development required to assist teachers as they learn how to execute these tactics in the classroom, a result of the need to educate in a differentiated manner. The final question in this study is focused on these efforts and teachers' perceptions of how campus leaders focus on implementing teacher training and development to

maximize ELL teacher instruction and ELL academic achievement.

Know Your Audience. The NCES (2023) states that the proportion of ELL children enrolled in public schools varied across states, from 0.7% in West Virginia to 20.1% in Texas. According to Gándara et al. (2005), general education instructors have acquired 10 hours or less of ESL professional development. A teacher's ability to improve rests heavily on the professional development they receive, how it is implemented, and who the training best supports, as specific targeted training allows educators to gain the information, abilities, and strategies required to support students. Comparably, Franco-Fuenmayor et al. (2015) discovered that staff development for ELLs was present in only 26% of schools. Research data such as these should become vital information for campus and district leaders as these students begin to enroll on their campuses. As campus and district leaders plan for the type of professional development provided on their campuses, it is imperative that they know and understand the demographics of their students and how they support them. Teachers who participated in the study summarized this as follows: Leaders must become aware of their student audience and understand how best to support them. As campus leaders consider their student audience, they should also be mindful of strategies appropriate for grade levels, which is why the interactive notebook method is such an appropriate tool: It can work effectively among many grade levels and content types. Campus leaders would benefit from knowing about the success of interactive notebooks in relation to ELL students and implementing appropriate training for their teachers that includes not only lectures but also training sessions for teacher-leader collaborations in professional learning communities that foster best practices for high-quality instruction of ELL students.

Campus Leaders Maximize Teacher Training. The seven participants underwent professional development training during the research study and attended two focus groups. After examining

the data, the findings showed teachers' perceptions of campus leadership expectations indicated that leaders should take roles as instructional leaders and content collaborators and become strategic with respect to providing focused professional development and training that would improve academic language proficiency and offer strategies to help with building students' academic performance. The perception that campus leadership should work together to strengthen understanding of how ELLs learn so that they become more intentional about the training they bring to the campus was common among the teachers. Four out of seven agreed that campus leaders setting up training was not enough; coaching and feedback became increasingly crucial to the model's implementation as teachers carried on professional conversations with the researcher and their colleagues. According to Von Esch (2021), research findings suggest that instructors could recognize their professional discord by interacting with ELL-focused instructional difficulties through the integration of professional learning into the classroom. The study demonstrated the potential of having the support of instructional leaders at the forefront of professional development for fostering a feeling of urgency and collaborative responsibility for ELL students' education, which is required for instructional improvement. To guide teachers in implementing innovation and promoting student learning, a school administrator's grasp of professional development is crucial, but how that development is implemented and monitored is also crucial. Research indicates that helping ELLs acquire literacy in certain academic areas requires specific sorts of methods, conceptual frameworks, and interventions, along with the design of strategic training and ELL-focused professional development (Vera et al., 2022).

Teacher 3 expressed that campus leadership had previously provided meaningful training but that the implementation was inconsistent, and consistency would leverage effectiveness. The teacher's comment sparked a conversation about campus leadership responsibility. Teachers

commented that campus leaders have a responsibility to join with them in learning and that this learning collaboration should be implemented school-wide so that implementation of methods such as the interactive notebook method are taught with fidelity and are aligned with academic content.

Discussion of Findings in Relation to Past Literature

Within the literature, I determined that providing teachers with the initial training needed to implement interactive notebooks and collaborative strategies helps teachers maximize their teaching skills and benefits learning by their ELLs (Giles & Yazan, 2019). However, more research is needed regarding the impact of an educator's experiences on implementing the interactive notebook method combined with collaborative strategies (Moll et al., 1992).

Investigating the experiences of educators during the implementation of interactive notebooks in their classrooms will benefit teachers and campus leaders as it will provide them with insight into exploring the best instructional practices for ELLs. As leaders and teachers collaborate on which areas to target to eliminate both instructional and language barriers that interfere with the academic success of ELL students, it will become imperative to have adequate systems in place that can be implemented throughout campuses for all grade levels.

A study revealed the relationship between teachers feeling adequately prepared to teach ELL students and their state certification, according to Hansen-Thomas et al. (2014). The study also examined how ELL in-service teachers from 10 small, rural school districts in the United States evaluated their professional development requirements. The study was based on an ESL certification test and involved collecting responses from 159 primary and secondary teachers in Texas. The findings revealed a need for more planning for the teaching of second-language learners and that teachers needed additional training besides single-state certification to teach

ELLs. The seven participants in the study concluded that more training was needed for ESL teachers, and three of those seven were 1st-year teachers who commented that while passing the state certification exam helped with their accreditation, it did not provide them with the teaching techniques needed to support ELL learners. Moreover, qualitative research corroborated this study, indicating that preservice teachers in a study away program (a) recognized the unique needs of ELLs in the classroom, (b) gained a deeper understanding of the teacher's role with respect to ELLs, (c) reevaluated their understanding of cultural differences, and (d) displayed significant gains on postassessments that measured academic growth from a baseline examination and self-efficacy to teach ESL students (Manning & Banker, 2021). Providing teacher training along with an implementation plan allows teachers to provide high-quality instruction to ELL students.

Constructivist Theory

The constructivist theory was a prominent theory within the research. The constructivist educational philosophy maintains that people actively create their knowledge and that a learner's experiences shape reality (Adams, 2006). Theorists of constructivism include those of Dewey (1986, 1997), Bruner (1961), Vygotsky (1967, 1978), Piaget (1936), Bednar et al. (1992), Von Glasersfeld (1995), and Bada and Olusegun (2015). Constructivist learning settings are active, intentional, cooperative, interactive, contextual, and reflective. The observations of implementing interactive notebooks created a learning space suitable for constructivist interactions. The interactive notebooks allowed students to interact while creating responses targeting specific learning objectives. Teacher 1 responded that the interactive notebooks allowed students to interact with each other and gave students ownership of learning, which fostered a cooperative and interactive learning community. Teacher 3 expressed that students

expressed creativity in making the interactive notebooks and enjoyed using them as reflective diaries. In constructivist education, an instructor creates opportunities that allow students to engage actively in the learning process and opportunities for active reflection through cooperative learning, written responses, and student teach-backs. According to Adams (2006), the constructivist method fosters a situation in which a student actively engages in the learning process, and an instructor helps students organize obtained knowledge. In this study, organization occurred through the interactive notebooks. The four elements of the constructivist educational approach are society, cognition, reflection, and balance of instruction, in which both teachers and students are participants (de Corte, 2010). All four social constructivist educational theory elements were present in the research.

This study mainly focused on the social constructivist educational method. The results showed that teachers saw that when students were engaged in interactive practices, learning was inclusive of all students; it provided academic support and an organizational tool. They also mentioned that training for ELL teachers regarding implementing these strategies was well received and that continued training would benefit their teaching practice and their students. Additionally, because the interactive notebook method can be used across content areas, it is a universal tool that can aid students in learning objectives in all classes. Therefore, regarding Research Questions 3 and 4, using the constructivist theory to implement interactive notebooks creates a social space in which students can practice listening, speaking, and writing, enhancing proficiency in those areas. Utilizing the social constructivist theory allowed teachers to interact in various ways with the curriculum and engage with their students, which enhanced teacher effectiveness and supported student-centered classrooms.

Democratic Social Theory

Meaningful human interaction significantly impacts language learning, particularly in ELLs' language development. According to Dewey's (1986) democratic social theory, social-cultural interactions and ideas demonstrate how they could improve learning experiences. A scathing analysis of the sociological theory contends that social concepts, social objects, and activities essentially organize human brain performance. The final product of a learner in the real world is then perceived as learning through an interactive process. When providing a comprehensive framework for ELL learners participating in various collaborative learning activities for language acquisition, it was appropriate to use the democratic social theory as a basis for this research. As teachers implemented the interactive notebooks, they embedded activities requiring social interactions, such as partner sharing, paired writing, and choral responding. Interactions through various collaborative activities that allowed students to practice reading, writing, listening, and speaking showed increased understanding of instructional material and improved language acquisition, leading to a meaningful learning experience for ELLs.

Limitations

In scientific research, various occurrences are modeled and analyzed using qualitative methods. The qualitative approach involves understanding a complex reality and the importance of actions in a particular circumstance. According to scientific researchers, studies enable the assessment of limits and potential areas for development (Llopart et al., 2018). The researchers noted that limited access to crucial locations, subjects, and data is one of the study's limitations (Glesne, 2016; Marshall & Miles, 2014). To find and choose the most qualified participants in the study, I combined deliberate and snowball sampling. I noted four limitations after the study

was finished. The sample size was the first constraint.

Nonresponse and nonparticipation were expected to be the most significant of the stated restrictions. Professional development might have been given only to those participants who agreed to participate in the study. The campus had a high proportion of ESL students. With several ELL classrooms, all teachers would benefit significantly from implementing the interactive notebook strategies and collaborating with other teachers. Another limitation that developed within the study related to scheduling requirements. Scheduling had to be intentional, as I had to observe the teachers while they were implementing the notebook process. If that scheduled time was missed, observation had to be rescheduled for that instructional block. Teachers, at times, would go into the notebook process when I entered the room, thus not creating a natural lesson flow and constructive experience.

The third limitation was the years of experience of teachers who participated in the research. Two teachers had less than 2 years of experience, while the other teachers had 3 or more years of experience, which could have contributed to their knowledge and experience of teaching ELLs. The final limitation related to differences among the teachers with regard to time, effort, and teaching style; the participating instructors saw some elements as unfavorable, such as the time and effort required for training and implementation of the interactive notebooks. During this time, the campus was implementing a new math curriculum, which made it challenging to utilize the interactive notebooks during the direct instructional block—assimilating the method and putting it into practice had to be embedded into instruction. Given that there were both veteran and new teachers participating in the observations, there were differences in teaching techniques and teaching styles, which caused the observation tool to yield different scores. Nevertheless, the participating instructors found using the notebooks to be a tool for improving

academic instruction for their students.

Potential Barriers

Every study has hurdles or barriers to overcome to achieve its goals. In this case study, three principal areas were found to be potential barriers that could hinder the improvement of the learning capabilities of ELL students in the areas of listening, speaking, reading, and writing. These include student language barriers; opportunities available for students to practice reading, writing, listening, and speaking in a way that fosters new learning; and school leadership's ability to implement professional development and training needed by teachers to teach using best practices. Teachers must have ample time to give students these opportunities, which is a mandatory requirement for the success of the interactive notebook method. This case study revealed mandatory requirements, strategic teaching planning inside and outside the school environment, and teachers' perceptions and beliefs regarding how ELLs learn as potential barriers facilitators face when designing opportunities for ELL students to obtain academic success.

Future Recommendations

I first recommend educating administrators about teachers' feelings of unpreparedness and the need for strategic training when serving ELL students. Campus leadership and teacher collaboration should help close the gap in strategic professional training and implementation of curriculum strategies as teachers face ELLs in their classrooms. This is because it is improbable that teachers will be fully prepared to teach ELLs based on their ELL certification alone.

Second, given the significance of distinguishing between the learning requirements of ELLs and the use of interactive strategies such as the interactive notebook method, it should be a continued practice in all ELL classrooms. A collaboration effort must be made between novice

teachers and more seasoned teachers so that after programs are implemented there is a system of support for all teachers to continue to practice and learn the best teaching methods for ELL students.

The following suggestions for further study are made in light of the findings. First, researchers may consider extending this study to other school campuses across the district and in Texas, where there are many ELL students. Examining this topic in many scholastic areas can advance knowledge and comprehension of best practices related to the implementation of interactive notebooks and how they can advance the academic proficiency of ELL students in reading, writing, listening, and speaking. Although using notebooks is not a new idea, what is subject to continued research is using them in an interactive way in which collaboration, written responses, and multiple response strategies are embedded into instruction using the notebooks. There are also opportunities to study teachers who have used the interactive notebook process as coaches of new and beginning teachers and how the teacher interaction changes effective teacher practices. Researchers should also continue to investigate the responsibility of campus administrators and leadership philosophies and how implementation of professional learning and training should be strategically geared toward ELL students. A dialogue that educational institutions might use to help administrators analyze their leadership as it relates to knowing how best to serve the students on their campuses could be sparked by such a study by establishing implementation plans that include monitoring and coaching for teachers.

Also included in future studies should be middle and high school teachers. I chose to study elementary school teachers who teach ELL students across different content areas. I drove the decision to use elementary school students' experiences of elementary education and access to those teachers and the campus. However, research supports the idea that middle and high

school teachers also have a high proportion of ELL students with teachers in need of ELL strategies to use in their classrooms, which require training and development (Shim & Shur, 2018). The recommended future studies can shed more light on participants' perspectives on implementing interactive notebooks, enhancing teacher practices and skills, and enhancing educational practice with respect to ELL students across grade levels.

Future studies should additionally gather comprehensive data on teaching methods and tactics that empower ELLs to create and share meaning through cooperative peer activities. It was underlined in earlier sections that instructors might help ELLs create meaning by giving them access to multimodal texts and that teachers should create links between ELLs' linguistic and cultural resources and unfamiliar literature. Future research should connect these methods with interactive notebooks to discover best practices for ELL education. The current research focused on implementing interactive notebooks after teachers had been trained to use them. Future researchers will be able to understand how these methods are used to help ELLs engage with text and create meaning while reading, writing, listening, and speaking. These initiatives should include conversations between ELL teachers and campus leaders that include implementing instruction that requires students to engage in in-depth text investigation, critical discussion of viewpoints, and written responses. Afzali and Kianpoor (2020) recommended encouraging students to communicate their knowledge of a text actively. The impact on future research would offer continuing chances for collaborative learning and growth, having research-based information that fosters the academic achievement of ELL students and instructional development for their teachers.

Conclusions

Training ELL teachers on implementing interactive notebooks and strategies proved

essential to learning across all subject areas in these classes in the areas of listening, writing, speaking, and reading. Although the efforts of becoming a certified ELL teacher are respected, the research showed that the teachers who participated in this research thought more training is necessary in conjunction with certification. Teachers need active training to maintain and implement a knowledge base to help ELLs acquire and maintain high levels of literacy proficiency. The areas of linguistics, pedagogic understanding, and collaborative techniques with interactive notebooks were addressed. The research highlighted that instructors should know the benefits of using an interactive notebook to promote English literacy abilities. Teachers and campus leaders must be aware of these strategies' potential impact on the ability of ELLs to understand academic content. Significant differences exist between terminology used in daily life, that used in generic academic contexts, and context-specific vocabulary. Because of this, ELLs need to practice proficiency skills to help them actively master academic objectives. To help ELLs make these connections, teachers implemented the interactive notebook method, contextualized significant academic vocabulary, and provided ELLs with opportunities to employ multiple response strategies with their peers.

Two areas of focus stand out as being especially crucial to helping ELLs acquire academic proficiency include (a) teacher training targeted to ELL learning strategies that include implementation of training paired with coaching and feedback, and (b) active engagement of ELLs in all areas of the ELP components of reading, writing, speaking, and listening. Regarding the first category, it was noted that teachers' training affects instruction in the classroom and that ELLs may need linguistic support to become proficient learners. It was stated that teachers must implement peer collaborative activities to expose ELLs to, and involve them in, meaning making from literary and nonliterary materials. The second aspect reflects the growing idea that teachers

should allow ELLs to practice their skills by implementing interactive notebooks as written response tools, reference tools, and organizational tools for academic content.

As it relates to this study, not all ELL subgroups and grade levels may be immediately amenable to the successful teaching strategies and supporting evidence discussed in this study. It should also be noted that there are significantly different approaches to interactive notebook implementation based on grade level, although the method can be implemented in the same way across grade levels. The rigor of activity can be differentiated as appropriate based on grade level. Additionally, a teacher's knowledge or skill set geared explicitly toward teaching ELLs may support only some of the practical teaching techniques mentioned in this study. Instead, several or any of these strategies may be helpful for any student in any academic area, and interactive notebooks can be tools for combining many best practices for ELL support based on research. Further study should examine the criteria for teacher certification for ELLs and, specifically, the benefits of ELL-appropriate educational approaches.

References

- Adams, P. (2006). Exploring social constructivism: Theories and practicalities. *Education 3–13*, 34(3), 243–257. <https://doi.org/10.1080/03004270600898893>
- Adesope, O. O., Lavin, T., Thompson, T., & Ungerleider, C. (2011, December). Pedagogical strategies for teaching literacy to ESL immigrant students: A meta-analysis. *British Journal of Educational Psychology*, 81(4), 629–653. <https://doi.org/10.1111/j.2044-8279.2010.02015.x>
- AdvancED. (2012). *EProve™ ELEOT®—The Effective Learning Environment Observation Tool*.
<https://www.collierschools.com/cms/lib/FL01903251/Centricity/domain/208/accd/ELEOT.pdf>
- Afzali, K., & Kianpoor, G. (2020, October). Teachers’ strategies used to foster teacher–student and student–student interactions in EFL conversation classrooms: A conversation analysis approach. *Journal of Applied Linguistics and Applied Literature: Dynamics and Advances*, 8(2), 119–140. <https://doi.org/10.22049/jalda.2020.26915.1192>
- Aguiñaga, V. M. (2017, December). *First year teachers’ perceptions of their preparation for teaching English Language Learners* [Doctoral dissertation, Concordia University].
Concordia University Digital Commons.
https://digitalcommons.csp.edu/cup_commons_grad_edd/140/

- Albert, A. B. (2018, April). *Transformative learning: Changing ESL students' research methods through the examination of the processes of information creation* [Doctoral dissertation, Washington University in St. Louis]. University Libraries Publications.
https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1022&context=lib_papers#:~:text=Transformative%20learning%20builds%20upon%20constructivism,role%20in%20their%20existing%20beliefs
- Andrei, E., Ellerbe, M., & Kidd, B. (2019, June). "What am I going to do?" A veteran teacher's journey of teaching writing to newcomer English language learners. *TESOL Journal*, 10(2), Article e00413. <https://doi.org/10.1002/tesj.413>
- Angouri, J. (2018, January). Quantitative, qualitative, mixed or holistic research? Combining methods in linguistic research. In L. Litosseliti (Ed.), *Research methods in linguistics* (pp. 35–55). Bloomsbury Academic.
- Applefield, J., Huber, R., & Moallem, M. (2001). Constructivism in theory and practice: Toward a better understanding. *High School Journal*, 84(2), 35–53.
<https://www.jstor.org/stable/40364404>
- August, D., & Blackburn, T. (2019). *Promoting success for teachers of English learners through structured observations*. Council of Chief State School Officers.
<https://files.eric.ed.gov/fulltext/ED597925.pdf>
- Bada, S. O., & Olusegun, S. (2015). Constructivism learning theory: A paradigm for teaching and learning. *Journal of Research & Method in Education*, 5(6), 66–70.
<https://docs.opendeved.net/lib/IRUIFW5I>

- Ballantyne, K. G., Sanderman, A. R., & Levy, J. (2008). *Educating English language learners: Building teacher capacity*. National Clearinghouse for English Language Acquisition & Language Instruction Educational Programs. <https://eric.ed.gov/?id=ED521360>
- Barros, S., Domke, L. M., Symons, C., & Ponzio, C. (2021). Challenging monolingual ways of looking at multilingualism: Insights for curriculum development in teacher preparation. *Journal of Language, Identity, and Education*, 20(4), 239–254.
<https://doi.org/10.1080/15348458.2020.1753196>
- Bednar, A. K., Cunningham, D. J., Duffy, T. M., & Perry, J. D. (1992). Theory into practice: How do we link? In T. M. Duffy & D. H. Jonassen (Eds.), *Constructivism and the technology of instruction* (pp. 17–34). Lawrence Erlbaum Associates.
- Bennett, N. J., Roth, R., Klain, S. C., Chan, K., Christie, P., Clark, D. A., Cullman, G., Curran, D., Durbin, T. J., Epstein, G., Greenberg, A., Nelson, M. P., Sandlos, J., Stedman, R., Teel, T. L., Thomas, R., Veríssimo, D., & Wyborn, C. (2017, January). Conservation social science: Understanding and integrating human dimensions to improve conservation. *Biological Conservation*, 205, 93–108.
<https://www.sciencedirect.com/science/article/pii/S0006320716305328>
- Blazar, D., & Kraft, M. (2015, December). *Teacher and teaching effects on students' academic behaviors and mindsets*. Mathematica Policy Research.
<https://www.mathematica.org/publications/teacher-and-teaching-effects-on-students-academic-behaviors-and-mindsets>
- Boyett, C. (2019). It is all in mind. *American Music Teacher*, 68(6), 22–25.
<https://www.jstor.org/stable/26815961>

- Bradley-Levine, J., Mosier, G., & Perkins, T. (2014). Perceptions of teacher leadership within the New Tech High School model. *International Journal of Teacher Leadership*, 5(1), 1–18. <https://files.eric.ed.gov/fulltext/EJ1137399.pdf>
- Brooks, K., Adams, S. R., & Morita-Mullaney, T. (2010). Creating inclusive learning communities for ELL students: Transforming school principals' perspectives. *Theory Into Practice*, 49(2), 145–151. <https://doi.org/10.1080/00405841003641501>
- Bruner, J. S. (1961). The act of discovery. *Harvard Educational Review*, 31(1), 21–32. <http://psycnet.apa.org/psycinfo/1962-00777-001>
- Bruun, F., Diaz, J. M., & Dykes, V. J. (2015). The language of mathematics. *Teaching Children Mathematics*, 21(9), 530–536. <https://doi.org/10.5951/teacchilmath.21.9.0530>
- Bryman, A. (2003). *Research methods and organization studies* (1st ed.). Routledge.
- Bunch, G. (2013). Pedagogical language knowledge: Preparing mainstream teachers for English learners in the new standards era. *Review of Research in Education*, 37(1), 298–341. <https://doi.org/10.3102/0091732x12461772>
- Camahalan, F. M. G., & Young, K. M. (2015). Using math journals to encourage students to communicate their understanding of math concepts. *Journal of Teacher Action Research*, 1(2), 38–52. http://www.practicalteacherresearch.com/uploads/5/6/2/4/56249715/camahalan_2-16.pdf
- Cameron School of Business. (n.d.). *AACSB accredited business school*. University of North Carolina, Wilmington. Retrieved November 11, 2022, from <https://csb.uncw.edu/cen/docs/determining%20language%20proficiency.pdf>

- Campbell, V. (2019). *ESOL and content teachers' instructional strategies and the impact of engagement on English language learners' academic success* [Doctoral dissertation, Northcentral University]. ProQuest LLC. <https://eric.ed.gov/?id=ED597006>
- Caspersen, J., & Raaen, F. D. (2014). Novice teachers and how they cope. *Teachers and Teaching*, 20(2), 189–211. <https://doi.org/10.1080/13540602.2013.848570>
- Castañeda, M., Rodríguez-González, E., & Schultz, M. (2011). Enhancing reading proficiency in English language learners (ELLs): The importance of knowing your ELL in mainstream classrooms. *TAPESTRY*, 3(1), Article 4. <https://stars.library.ucf.edu/tapestry/vol3/iss1/4>
- Cavazos, L., Linan-Thompson, S., & Ortiz, A. (2018). Job-embedded professional development for teachers of English learners: Preventing literacy difficulties through effective core instruction. *Teacher Education and Special Education*, 41(3), 203–214. <https://doi.org/10.1177/0888406418758465>
- Chon, Y. V., & Shin, T. (2019, February). Profile of second language learners' metacognitive awareness and academic motivation for successful listening: A latent class analysis. *Learning and Individual Differences*, 70, 62–75. <https://doi.org/10.1016/j.lindif.2019.01.007>
- Chyung, S., Swanson, I., Roberts, K., & Hankinson, A. (2018). Evidence-based survey design: The use of continuous rating scales in surveys. *Performance Improvement*, 57(5), 38–48. <https://doi.org/10.1002/pfi.21763>
- Clarà, M. (2015). What is reflection? Looking for clarity in an ambiguous notion. *Journal of Teacher Education*, 66(3), 261–271. <https://doi.org/10.1177/0022487114552028>
- Clark, D. B., Touchman, S., Martinez-Garza, M., Ramirez-Marin, F., & Skjerpings Drews, T. F. (2012, May). Bilingual language support in online science inquiry environments.

- Computers & Education*, 58(4), 1207–1224.
<https://doi.org/10.1016/j.compedu.2011.11.019>
- Cooper, J. E., & He, Y. (2012). Journey of “becoming”: Secondary teacher candidates’ concerns and struggles. *Issues in Teacher Education*, 21(1), 89–108.
<https://eric.ed.gov/?id=EJ986818>
- Creswell, J. W. (2009). Mapping the field of mixed methods research. *Journal of Mixed Methods Research*, 3(2), 95–108. <https://doi.org/10.1177/1558689808330883>
- Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). SAGE Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Cummins, J. (2014, June). Beyond language: Academic communication and student success. *Linguistics and Education*, 26, 145–154. <https://doi.org/10.1016/j.linged.2014.01.006>
- Daniel, S. M., & Pray, L. (2016, November). Learning to teach English language learners: A study of elementary school teachers’ sense-making in an ELL endorsement program. *TESOL Quarterly*, 51(4), 787–819. <https://doi.org/10.1002/tesq.347>
- Darling-Hammond, L., Bae, S., Cook-Harvey, C. M., Lam, L., Mercer, C., Podolsky, A., & Stosich, E. L. (2016, April 20). *Pathways to new accountability through Every Student Succeeds Act*. Learning Policy Institute. <http://learningpolicyinstitute.org/our-work/publications-resources/pathways-new-accountability-every-student-succeeds-act>
- de Corte, E. (2010, August). Historical developments in the understanding of learning. In H. Dumont, D. Istance, & F. Benavides (Eds.), *The nature of learning* (pp. 35–67). Organisation for Economic Cooperation and Development.

- De Jong, E. J., Harper, C., & Coady, M. (2013, April). Enhanced knowledge and skills for elementary teachers of English language learners. *Theory Into Practice*, 52(2), 89–97. <https://doi.org/10.1080/00405841.2013.770326>
- De Jong, E. J., Naranjo, C., Li, S., & Ouzia, A. (2018, March). Beyond compliance: ESL faculty's perspectives on preparing general education faculty for ESL infusion. *Educational Forum*, 82(2), 174–190. <https://doi.org/10.1080/00131725.2018.1420856>
- De Vries, S., Van de Grift, W. J., & Jansen, E. P. (2014). How teachers' beliefs about learning and teaching relate to their continuing professional development. *Teachers and Teaching: Theory and Practice*, 20(3), 338–357. <https://doi.org/10.1080/13540602.2013.848521>
- Dewey, J. (1986). Experience and education. *Educational Forum*, 50(3), 241–252. <https://doi.org/10.1080/00131728609335764>
- Dewey, J. (1997). *How we think*. Courier Corporation.
- Diarrassouba, N. (2018). No English learner left behind: How can states and teacher preparation programs support content-area practitioners? *English Language Teaching*, 11(1), 179–188. <https://doi.org/10.5539/elt.v11n1p179>
- Dunston, Y. L., Daniel, J., & Stock, S. (2019). ILLs for ELLs: Using an interactive notebook strategy to foster success for English language learners. In J. Keengwe & G. Onchwari (Eds.), *Handbook of research on assessment practices and pedagogical models for immigrant students* (pp. 249–269). Information Science Publishing.
- Echevarria, J., & Short, D. (2010, January). Programs and practices for effective sheltered content instruction. In California Department of Education (Ed.), *Improving education for English learners: Research-based approaches* (pp. 251–321). California Department of Education.

- Elfers, A. M., & Stritikus, T. (2014). How school and district leaders support classroom teachers' work with English language learners. *Educational Administration Quarterly*, 50(2), 305–344. <https://doi.org/10.1177/0013161X13492797>
- Elliott, V. (2018, November). Thinking about the coding process in qualitative data analysis. *Qualitative Report*, 23(11), 2850–2861. <https://nsuworks.nova.edu/tqr/vol23/iss11/14/>
- Erlingsson, C., & Brysiewicz, P. (2013, June). Orientation among multiple truths: An introduction to qualitative research. *African Journal of Emergency Medicine*, 3(2), 92–99. <https://doi.org/10.1016/j.afjem.2012.04.005>
- Fajardo, M. T. M., Bacarrissas, P. G., & Castro, H. G. (2019, March). The effects of interactive science notebook on student teachers' achievement, study habits, test anxiety, and attitudes towards physics. *Journal of Turkish Science Education*, 16(1), 62–76. <https://doi.org/10.12973/tused.10266a>
- Faltis, C. J., & Valdés, G. (2016). Preparing teachers for teaching in and advocating for linguistically diverse classrooms: A vade mecum for teacher educators. In D. H. Gitomer & C. A. Bell (Eds.), *Handbook of research on teaching* (pp. 549–592). American Educational Research Association.
- Feiman-Nemser, S. (2018, March). What does research tell us about educating mainstream teachers to work with ELLs? *Educational Forum*, 82(2), 227–234. <https://doi.org/10.1080/00131725.2018.1420872>
- Flewitt, R., & Ang, L. (2020). *Research methods for early childhood education*. Bloomsbury Publishing.
- Franco-Fuenmayor, S. E., Padrón, Y. N., & Waxman, H. C. (2015, December). Investigating bilingual/ESL teachers' knowledge and professional development opportunities in a large

- suburban school district in Texas. *Bilingual Research Journal*, 38(3), 336–352.
<https://doi.org/10.1080/15235882.2015.1091049>
- Fredua-Kwarteng, E. (2005). *School closures in Ontario: Who has the final say?* Canadian *Journal of Educational Administration and Policy*, 46, 1–26.
<https://files.eric.ed.gov/fulltext/EJ846727.pdf>
- 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*. Policy Analysis for California Education.
<https://eric.ed.gov/?id=ED491701>
- García, E., Arias, M. B., Harris Murri, N. J., & Serna, C. (2010). Developing responsive teachers: A challenge for a demographic reality. *Journal of Teacher Education*, 61(1–2), 132–142. <https://doi.org/10.1177/0022487109347878>
- Garcia-Borrego, R., Maxwell, G. M., & McNair, C. L. (2020, January). South Texas urban administrator perceptions of best practices for ELL literacy. *Journal of Instructional Pedagogies*, 23, 1–9. <https://eric.ed.gov/?id=EJ1241938>
- Gardner, W., & Rogoff, B. (1990). Children's deliberateness of planning according to task circumstances. *Developmental Psychology*, 26(3), 480–487.
<https://doi.org/10.1037/0012-1649.26.3.480>
- Garrity, S. M., Aquino-Sterling, C. R., & Salcedo-Potter, N. (2019, July). Head start educators' beliefs about bilingualism, dual language development, and bilingual education. *Bilingual Research Journal*, 42(3), 308–323. <https://doi.org/10.1080/15235882.2019.1624282>

- Garza, T., Huerta, M., Lara-Alecio, R., Irby, B. J., & Tong, F. (2017). Pedagogical differences during a science and language intervention for English language learners. *Journal of Educational Research*, 111(4), 487–496. <https://doi.org/10.1080/00220671.2017.1302913>
- Gedik, H. (2014). Social studies teacher candidates' critical thinking skills. *Procedia—Social and Behavioral Sciences*, 93, 1020–1024. <https://doi.org/10.1016/j.sbspro.2013.09.322>
- Giles, A., & Yazan, B. (2019, May). ESL and content teachers' collaboration. *Indonesian Journal of English Language Teaching*, 14(1), 1–18.
<https://doi.org/10.25170/ijelt.v14i1.1415>
- Gleeson, M., & Davison, C. (2016). A conflict between experience and professional learning: Subject teachers' beliefs about teaching English language learners. *RELC Journal*, 47(1), 43–57. <https://doi.org/10.1177/0033688216631221>
- Glesne, C. (2016). *Becoming qualitative researchers: An introduction*. Pearson.
- Goldenberg, C. (2010). Reading instruction for English language learners. In M. Kamil, P. D. Pearson, E. Moje, & P. Afflerbach (Eds.), *Handbook of reading research* (Vol. 4, pp. 684–710). International Reading Association.
- Goldenberg, C. (2013). Unlocking the research on English learners: What we know—and don't yet know—about effective instruction. *American Educator*, 37(2), 4–11.
<https://eric.ed.gov/?id=EJ1014021>
- Gomez, M. N., & Diarrassouba, N. (2014). What do teachers need to support English learners? *English Language Teaching*, 7(5), 89–101.
<https://files.eric.ed.gov/fulltext/EJ1075746.pdf>

- Gonzalez, M. M. (2016). Preparing teacher candidates for the instruction of English language learners. *Networks: An Online Journal for Teacher Research*, 18(2), 821–831.
<https://doi.org/10.4148/2470-6353.1005>
- Gray, J. A. (2018, December). Leadership coaching and mentoring: A research-based model for school partnerships. *International Journal of Education Policy and Leadership*, 13(12), 1–17. <https://journals.sfu.ca/ijepl/index.php/ijepl/article/view/844/191>
- Gruber, K. J., Wiley, S. D., Broughman, S. P., Strizek, G. A., & Burian-Fitzgerald, M. (2002, May). *Schools and staffing survey, 1999–2000: Overview of the data for public, private, public charter, and Bureau of Indian Affairs elementary and secondary schools* [Data set]. National Center for Education Statistics.
<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2002313>
- Guetterman, T. C. (2020, February). *Qualitative, quantitative, and mixed methods research sampling strategies*. Oxford University Press.
- Gunderson, E. A., Park, D., Maloney, E. A., Beilock, S. L., & Levine, S. C. (2018). Reciprocal relations among motivational frameworks, math anxiety, and math achievement in early elementary school. *Journal of Cognition and Development*, 19(1), 21–46.
<https://doi.org/10.1080/15248372.2017.1421538>
- Gupta, A. (2019). Principles and practices of teaching English language learners. *International Education Studies*, 12(7), 49–57. <https://eric.ed.gov/?id=EJ1220844>
- Hammond, J., & Gibbons, P. (2005, April). Putting scaffolding to work: The contribution of scaffolding in articulating ESL education. *Prospect*, 20(1), 6–30.
https://neilwhitfield.files.wordpress.com/2008/11/20_1_1_hammond.pdf
- Hannon, M. (2021, July). Recent work in the epistemology of understanding. *American*

- Philosophical Quarterly*, 58(3), 269–290. <https://doi.org/10.2307/48616060>
- Hansen-Thomas, H., & Cavagnetto, A. (2010). What do mainstream middle school teachers think about their English language learners? A tri-state case study. *Bilingual Research Journal*, 33(2), 249–266. <https://eric.ed.gov/?id=EJ896191>
- Hansen-Thomas, H., Dunlap, K., Casey, P. J., & Starrett, T. (2014, May). Teacher development: De facto teacher leaders for English language learners. *International Journal of Learning, Teaching and Educational Research*, 5(1), 35–47. <https://www.ijlter.org/index.php/ijlter/article/view/62>
- He, Y., Journell, W., & Faircloth, J. (2018). Preparing teachers for English learners: Integrating academic language and community service projects. *Social Studies*, 109(1), 13–26. <https://doi.org/10.1080/00377996.2017.1403874>
- Hegde, A. V., Hewett, B., & Terrell, E. (2016). Examination of teachers' preparedness and strategies used to teach English language learners in kindergarten. *Early Child Development and Care*, 188(6), 774–784. <https://doi.org/10.1080/03004430.2016.1237513>
- Hensberry, K. R., & Jacobbe, T. (2012). The effects of Polya's heuristic and diary writing on children's problem solving. *Mathematics Education Research Journal*, 24, 59–85. <https://doi.org/10.1007/s13394-012-0034-7>
- Hertel, J. D., Cunningham, C. M., & Kelly, G. J. (2017). The roles of engineering notebooks in shaping elementary engineering student discourse and practice. *International Journal of Science Education*, 39(9), 1194–1217. <https://doi.org/10.1080/09500693.2017.1317864>
- Heyder, A., Weidinger, A. F., Cimpian, A., & Steinmayr, R. (2020, February). Teachers' belief that math requires innate ability predicts lower intrinsic motivation among low-achieving

- students. *Learning and Instruction*, 65, 1–10.
<https://doi.org/10.1016/j.learninstruc.2019.101220>
- Hiemstra, R. (2002, February). Uses and benefits of journal writing. *New Directions for Adult and Continuing Education*, 2001(90), 19–26. <https://doi.org/10.1002/ace.17>
- Horne, J. L., & Harper, R. (2021). Using interactive notebooks to help ELL students find confidence in writing. *Language Arts Journal of Michigan*, 36(2), Article 5.
<https://doi.org/10.9707/2168-149X.2272>
- Horowitz, S. H., Rawe, J., & Whittaker, M. C. (2017). *The state of learning disabilities: Understanding the 1 in 5*. National Center for Learning Disabilities.
<https://www.colorincolorado.org/research/state-learning-disabilities-understanding-1-5>
- Huber, M. T., & Hutchings, P. (2004). *Integrative learning: Mapping the terrain. The academy in transition*. Association of American Colleges and Universities.
<https://eric.ed.gov/?id=ED486247>
- Hutchinson, M. (2013, March). Bridging the gap: Preservice teachers and their knowledge of working with English language learners. *TESOL Journal*, 4(1), 25–54.
<https://doi.org/10.1002/tesj.51>
- Iddings, A. C. D., Combs, M. C., & Moll, L. C. (2013). English language learners and partnerships with families, communities, teacher preparation, and schools. In H. R. Milner, IV, & K. Lomotey (Eds.), *Handbook of urban education* (pp. 226–234). Routledge.
- Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research*, 81(2), 201–233. <https://doi.org/10.3102/0034654311403323>

- Islam, C., & Park, M.-H. (2015). Preparing teachers to promote culturally relevant teaching: Helping English language learners in the classroom. *Multicultural Education*, 23(1), 38–44. <https://eric.ed.gov/?id=EJ1090370>
- Jaladanki, V. S., & Bhattacharya, K. (2014). Exercising autonomous learning approaches through interactive notebooks: A qualitative case study. *Qualitative Report*, 19(27), 1–25. <https://doi.org/10.46743/2160-3715/2014.1208>
- James, M. A. (2010, December). An investigation of learning transfer in English-for-general-academic-purposes writing instruction. *Journal of Second Language Writing*, 19(4), 183–206. <https://doi.org/10.1016/j.jslw.2010.09.003>
- Johnson, D. W., & Johnson, R. T. (1999). Making cooperative learning work. *Theory Into Practice*, 38(2), 67–73. <https://doi.org/10.1080/00405849909543834>
- Johnson, K. E. (2006, March). The sociocultural turn and its challenges for second language teacher education. *TESOL Quarterly*, 40(1), 235–257. <https://doi.org/10.2307/40264518>
- Kartal, O., Guler, N., & Guler, D. (2018). Teaching mathematics to elementary ELL students. In N. Guler (Ed.), *Optimizing elementary education for English language learners* (pp. 141–157). Information Science Reference.
- Kegan, R., & Lahey, L. L. (2016, March). *An everyone culture: Becoming a deliberately developmental organization*. Harvard Business Review Press.
- Kena, G., Hussar, W., McFarland, J., de Brey, C., Musu-Gillette, L., Wang, X., Zhang, J., Rathbun, A., Wilkinson-Flicker, S., Diliberti, M., Barmer, A., Bullock Mann, F., & Dunlop Velez, E. (2016, May). *The condition of education 2016*. National Center for Education Statistics. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2016144>

- Kleickmann, T., Tröbst, S., Jonen, A., Vehmeyer, J., & Möller, K. (2016). The effects of expert scaffolding in elementary science professional development on teachers' beliefs and motivations, instructional practices, and student achievement. *Journal of Educational Psychology, 108*(1), 21–42. <https://doi.org/10.1037/edu0000041>
- Klein, G. (2011). Critical thoughts about critical thinking. *Theoretical Issues in Ergonomics Science, 12*(3), 210–224. <https://doi.org/10.1080/1464536x.2011.564485>
- Koirala, H. P. (2002). *Facilitating student learning through math journals*. Proceedings of the Annual Meeting of the International Group for Physiology of Mathematics Education, Norwich, England, July 21–26, 2002. <https://eric.ed.gov/?id=ED476099>
- Komives, S. R., & Wagner, W. (2016). *Leadership for a better world: Understanding the social change model of leadership development* (2nd ed.). John Wiley & Sons.
- Kostos, K., & Shin, E. (2010, April). Using math journals to enhance second graders' communication of mathematical thinking. *Early Childhood Education Journal, 38*(3), 223–231. <https://doi.org/10.1007/s10643-010-0390-4>
- Koura, A. A., & Zahran, F. A. (2017, July). The impact of sheltered instruction observation protocol model on student teachers' teaching skills and self-efficacy. *Journal of Language Teaching and Research, 8*(4), 704–714. <https://doi.org/10.17507/jltr.0804.09>
- Lee, S. Y., & Kim, J. (2023). Teacher perception of language differences: Challenging the normative futurity and native speakerism. *Language, Culture and Curriculum, 36*(4), 406–421. <https://doi.org/10.1080/07908318.2023.2212171>

- Lewis, T. (2019). Examining the response to intervention for multilingual learners. *Illinois Reading Council Journal*, 48(1), 28–40.
https://www.illinoisreadingcouncil.org/index.php?option=com_content&view=article&id=138:ircj481201928&catid=20:site-content
- Li, N. (2016). *Teaching ELLs across content areas: Issues and strategies*. Information Age Publishing.
- Li, N., & Peters, A. W. (2020). Preparing K–12 teachers for ELLs: Improving teachers' L2 knowledge and strategies through innovative professional development. *Urban Education*, 55(10), 1489–1506. <https://doi.org/10.1177/0042085916656902>
- Li, Y., & Bates, T. C. (2019). You can't change your basic ability, but you work at things, and that is how we get hard things done: Testing the role of growth mindset on response to setbacks, educational attainment, and cognitive ability. *Journal of Experimental Psychology: General*, 148(9), 1640–1655. <https://doi.org/10.1037/xge0000669>
- Lindlof, T. R., & Taylor, B. C. (2017). *Qualitative communication research methods*. SAGE Publications.
- Lindqvist, H. (2019). Strategies to cope with emotionally challenging situations in teacher education. *Journal of Education for Teaching*, 45(5), 540–552.
<https://doi.org/10.1080/02607476.2019.1674565>
- Llopart, M., Serra, J. M., & Esteban-Guitart, M. (2018). Teachers' perceptions of the benefits, limitations, and areas for improvement of the funds of knowledge approach. A qualitative study. *Teachers and Teaching*, 24(5), 571–583.
<https://doi.org/10.1080/13540602.2018.1452729>

- Lockwood, J. R., McCombs, J. S., & Marsh, J. (2010). Linking reading coaches and student achievement: Evidence from Florida middle schools. *Educational Evaluation and Policy Analysis*, 32(3), 372–388. <https://doi.org/10.3102/0162373710373388>
- Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2010). *Methods in educational research: From theory to practice*. John Wiley & Sons.
- Lucas, T., Strom, K., Bratkovich, M., & Wnuk, J. (2018). Inservice preparation for mainstream teachers of English language learners: A review of the empirical literature. *Educational Forum*, 82(2), 156–173. <https://doi.org/10.1080/00131725.2018.1420852>
- Lucas, T., & Villegas, A. M. (2013). Preparing linguistically responsive teachers: Laying the foundation in preservice teacher education. *Theory Into Practice*, 52(2), 98–109. <https://doi.org/10.1080/00405841.2013.770327>
- Lucas, T., Villegas, A. M., & Freedson-Gonzalez, M. (2008). Linguistically responsive teacher education: Preparing classroom teachers to teach English language learners. *Journal of Teacher Education*, 59(4), 361–373. <https://doi.org/10.1177/0022487108322110>
- Madden, M. (2001). *Improving student achievement with interactive notebooks*. Arlington County Public Schools.
- Manning, D. K., & Banker, D. A. (2021). Preservice teachers and experiential ESL learning in the classroom and community. *Journal of Behavioral & Social Sciences*, 8(2), 133–152. <https://openurl.ebsco.com/EPDB%3Agcd%3A3%3A3880915/detailv2?sid=ebsco%3Aplink%3Ascholar&id=ebsco%3Agcd%3A156166906&crl=f>
- Manning, J. (2017, November). In vivo coding. In J. Matthes, C. S. Davis, & R. F. Potter (Eds.), *The international encyclopedia of communication research methods* (pp. 518–540). Wiley-Blackwell.

- Mansfield, B. (1989). Students' perceptions of an integrated unit: A case study. *Social Studies*, 80(4), 135–140. <https://doi.org/10.1080/00377996.1989.9957463>
- 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. <https://eric.ed.gov/?id=EJ986815>
- Marshall, C., & Miles, M. B. (2014). *Designing qualitative research*. SAGE Publications.
- Master, B., Loeb, S., Whitney, C., & Wyckoff, J. (2016, December). Different skills? Identifying differentially effective teachers of English language learners. *Elementary School Journal*, 117(2), 261–284. <https://doi.org/10.1086/688871>
- Mathis, D. L. (2017). *Elementary and secondary teachers' attitudes and efficacy for teaching English language learners in the mainstream classroom* [Doctoral dissertation, University of Nebraska at Omaha]. ProQuest. <https://eric.ed.gov/?id=ED578149>
- McFarland, J., Hussar, B., de Brey, C., Snyder, T., Wang, X., Wilkinson-Flicker, S., Gebrekristos, S. Zhang, J., Rathbun, A., Barmer, A., Bullock Mann, F., & Hinz, S. (2017, May). *The condition of education 2017*. National Center for Education Statistics. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2017144>
- Mellom, P. J., Straubhaar, R., Balderas, C., Ariail, M., & Portes, P. R. (2018, April). “They come with nothing:” How professional development in a culturally responsive pedagogy shapes teacher attitudes towards Latino/English language learners. *Teaching and Teacher Education*, 71, 98–107. <https://doi.org/10.1016/j.tate.2017.12.013>
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. Jossey-Bass.
- Mezirow, J. (2018). Transformative learning theory. In K. Illeris (Ed.), *Contemporary theories of learning* (pp. 114–128). Routledge.

- Moll, L., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice*, 31(2), 132–141. <https://doi.org/10.1080/00405849209543534>
- Montalvo, E. (2022). *Elementary and middle school administrators' decisions about professional development for bilingual educators* [Doctoral dissertation, Walden University]. ProQuest Dissertations Publishing.
<https://www.proquest.com/openview/5a28f150b9853a253841083e7624de5d/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Moule, J. (2012). British Columbia's full day kindergarten program guide: A critical race analysis. *Canadian Children*, 37(1), 12–20.
<https://journals.uvic.ca/index.php/jcs/article/view/15186>
- Mukherjee, N., Hugé, J., Sutherland, W. J., McNeill, J., Van Opstal, M., Dahdouh-Guebas, F., & Koedam, N. (2015, April). The Delphi technique in ecology and biological conservation: Applications and guidelines. *Methods in Ecology and Evolution*, 6(9), 1097–1109.
<https://doi.org/10.1111/2041-210X.12387>
- National Assessment of Educational Progress. (2015). *Wisconsin 4th grade reading results on the 2015 National Assessment of Educational Progress*.
https://www.schoolinfosystem.org/pdf/2016/01/wi_4th_grade_naep2015.pdf
- National Center for Education Statistics. (2015). *The condition of education 2015*. U.S. Department of Education. <https://nces.ed.gov/pubs2015/2015144.pdf>
- National Center for Education Statistics. (2023, May). *English learners in public schools*. U.S. Department of Education, Institute of Education Sciences.
<https://nces.ed.gov/programs/coe/indicator/cgf>

- National Education Association. (2013, March). *An NEA policy brief: Professional development for general education teachers of English language learners*.
<https://ncela.ed.gov/resources/journal-professional-development-for-general-education-teachers-of-english-language>
- National Education Association. (2020, July). *English language learners*.
<https://www.nea.org/resource-library/english-language-learners>
- Nguyen, H. (2018). Teacher preparation programs in the United States. *International Journal of Progressive Education*, 14(3), 76–92. <https://doi.org/10.29329/ijpe.2018.146.6>
- Nicholson, J., Kuhl, K., Maniates, H., Lin, B., & Bonetti, S. (2018). A review of the literature on leadership in early childhood: Examining epistemological foundations and considerations of social justice. *Early Child Development and Care*, 190(2), 91–122.
<https://doi.org/10.1080/03004430.2018.1455036>
- Noland, A., & Richards, K. (2015). Servant teaching: An exploration of teacher servant leadership on student outcomes. *Journal of the Scholarship of Teaching and Learning*, 15(6), 16–38. <https://doi.org/10.14434/josotl.v15i6.13928>
- Nyumba, T. O., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018, January). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*, 9(1), 20–32. <https://doi.org/10.1111/2041-210x.12860>
- Padron, Y., & Waxman, H. (2016, July). Investigating principals' knowledge and perceptions of second language programs for English language learners. *International Journal of Educational Leadership and Management*, 4(2), 127–148.
<https://doi.org/10.17583/ijelm.2016.1706>

- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2013, November). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- Pan, H.-L. W., Chung, C.-H., & Lin, Y.-C. (2023). Exploring the predictors of teacher well-being: An analysis of teacher training preparedness, autonomy, and workload. *Sustainability*, 15(7), 5804–5818. <https://doi.org/10.3390/su15075804>
- Pappamihel, E. (2007, June). Helping preservice content area teachers relate to English language learners: An investigation of attitudes and beliefs. *TESL Canada Journal*, 24(2), 42–60. <https://doi.org/10.18806/tesl.v24i2.138>
- Para-González, L., Jiménez-Jiménez, D., & Martínez-Lorente, A. R. (2018). Exploring the mediating effects between transformational leadership and organizational performance. *Employee Relations*, 40(2), 412–432. <https://doi.org/10.1108/er-10-2016-0190>
- Parsons, M. W., & Shim, J. M. (2019). Increasing ELL parental involvement and engagement: Exploration of K–12 administrators in a rural state. *English Language Teaching*, 12(10), 29–43. <https://doi.org/10.5539/elt.v12n10p29>
- Passmore, H. A., Howell, A. J., & Holder, M. D. (2017, November). Positioning implicit theories of well-being within a positivity framework. *Journal of Happiness Studies*, 19(8), 2445–2463. <https://doi.org/10.1007/s10902-017-9934-2>
- Patrick, S. K., & Joshi, E. (2019). “Set it in stone” or “willing to grow”? Teacher sensemaking during a growth mindset initiative. *Teaching and Teacher Education*, 83, 156–167. <https://doi.org/10.1016/j.tate.2019.04.009>

- Piaget, J. (1936). *Origins of intelligence in the child*. Routledge.
- Rao, K., & Meo, G. (2016). Using universal design for learning to design standards-based lessons. *SAGE Open*, 6(4), 1–12. <https://doi.org/10.1177/2158244016680688>
- Rao, P. S. (2019, March). The importance of speaking skills in English classrooms. *Alford Council of International English & Literature Journal*, 2(2), 6–18.
<https://www.scirp.org/reference/referencespapers?referenceid=2938389>
- Razak, R. A., Kaur, D., Halili, S. H., & Ramlan, Z. (2016). Flipped ESL teacher professional development: Embracing change to remain relevant. *Teaching English with Technology*, 16(3), 85–102. <https://eric.ed.gov/?id=EJ1135693>
- Rodriguez-Mojica, C. (2019, March). “I don’t get it. I need help”: Emergent bilinguals seeking and receiving help from peers in language arts. *Literacy Research and Instruction*, 58(2), 105–121. <https://doi.org/10.1080/19388071.2019.1585492>
- Russell, F. A., & Von Esch, K. S. (2018). Teacher leadership to support English language learners. *Phi Delta Kappan*, 99(7), 52–56. <https://doi.org/10.1177/0031721718767862>
- Samson, J. F., & Collins, B. A. (2012). *Preparing all teachers to meet the needs of English language learners: Applying research to policy and practice for teacher effectiveness*. Center for American Progress. <https://eric.ed.gov/?id=ED535608>
- Sandilos, L. E., Baroody, A. E., Rimm-Kaufman, S. E., & Merritt, E. G. (2020). English learners’ achievement in mathematics and science: Examining the role of self-efficacy. *Journal of School Psychology*, 79, 1–15. <https://doi.org/10.1016/j.jsp.2020.02.002>
- Santibañez, L., & Gándara, P. (2018). *Teachers of English language learners in secondary schools: Gaps in preparation and support*. Civil Rights Project–Proyecto Derechos Civiles. <https://escholarship.org/uc/item/6c95c6bx>

- Schlaman, H. (2019). Designing structures and pathways to support language development and content learning for English learners: Dilemmas facing school leaders. *International Multilingual Research Journal*, 13(1), 32–50.
<https://doi.org/10.1080/19313152.2018.1531675>
- Seechaliao, T. (2017). Instructional strategies to support creativity and innovation in education. *Journal of Education and Learning*, 6(4), 201–208. <https://doi.org/10.5539/jel.v6n4p201>
- Shanahan, T., Callison, K., Carriere, C., Duke, N. K., Pearson, P. D., Schatschneider, C., & Torgesen, J. (2010, September). *Improving reading comprehension in kindergarten through 3rd grade: IES practice guide* (NCEE 2010-4038). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.
https://ies.ed.gov/ncee/WWC/Docs/PracticeGuide/readingcomp_pg_092810.pdf
- Shi, Y., Yang, H., Dou, Y., & Zeng, Y. (2022, March). Effects of mind mapping-based instruction on student cognitive learning outcomes: A meta-analysis. *Asia Pacific Education Review*, 24, 303–317. <https://doi.org/10.1007/s12564-022-09746-9>
- Shim, J. M., & Shur, A. M. (2018). Learning from ELLs’ perspectives: Mismatch between ELL and teacher perspectives on ELL learning experiences. *English Language Teaching*, 11(1), 21–32. <https://doi.org/10.5539/elt.v11n1p21>
- Singh, C., Singh, R., Singh, T., Mostafa, N., & Mohtar, T. (2018). Developing a higher order thinking skills module for weak ESL learners. *English Language Teaching*, 11(7), 86–100. <https://doi.org/10.5539/elt.v11n7p86>

- Song, K. H. (2016, December). Systematic professional development training and its impact on teachers' attitudes toward ELLs: SIOP and guided coaching. *TESOL Journal*, 7(4), 767–799. <https://doi.org/10.1002/tesj.240>
- Stake, R. E. (2010). *Qualitative research: Studying how things work*. Guilford Press.
- Stocken, C. K. (2021). *Impact of using interactive notebooks on math achievement in an elementary classroom* [Doctoral dissertation, Wilmington University]. ProQuest Dissertations Publishing. <https://www.proquest.com/openview/f7fa964044fcc5ddf9a6a30b9a14e0d2/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Sugarman, J., & Geary, C. (2018, August). *English learners in select states: Demographics, outcomes, and state accountability policies*. Migration Policy Institute. <https://eric.ed.gov/?id=ED587803>
- Tellez, K., & Waxman, H. (2005). *Quality teachers for English language learners: A review of the research*. Laboratory for Student Success (LSS), The Mid-Atlantic Regional Educational Laboratory. <https://eric.ed.gov/?id=ED508447>
- Teng, Y. (2018). *Teacher's management of classroom interactions with English language learners: A case study of a mainstream teacher's practices and beliefs* [Doctoral dissertation, Michigan State University]. ProQuest. <https://eric.ed.gov/?id=ED592913>
- Texas Education Agency. (2023). *TELPAS educator guide*. <https://tea.texas.gov/student-assessment/testing/student-assessment-overview/2023-2024-telpas-educator-guide.pdf>
- Tokar, S. (2023, October). *What is organizational leadership?* <https://www.snhu.edu/about-us/newsroom/business/what-is-organizational-leadership>

- Tong, F., Luo, W., Irby, B. J., Lara-Alecio, R., & Rivera, H. (2017). Investigating the impact of professional development on teachers' instructional time and English learners' language development: A multilevel cross-classified approach. *International Journal of Bilingual Education and Bilingualism*, 20(3), 292–313.
<https://doi.org/10.1080/13670050.2015.1051509>
- Tran, Y. (2015). ESL pedagogy and certification: Teacher perceptions and efficacy. *Journal of Education and Learning*, 4(2), 28–42. <https://doi.org/10.5539/jel.v4n2p28>
- Trifiro, A. J. (2017, June). Transforming teachers' practice through professional development: Culturally sustaining pedagogical changes in support of English language learners. In *Culturally sustaining and revitalizing pedagogies: Language, culture, and power* (pp. 269–287). Emerald Publishing. <https://doi.org/10.1108/s1479-368720150000029021>
- Turgut, R., Sahin, E. A., & Huerta, M. (2016, January). Changes in preservice teachers' perceptions of preparedness to teach English language learners (ELLs) in mainstream classrooms. *Journal of Ethnographic & Qualitative Research*, 10(4), 291–305.
<https://www.researchgate.net/profile/Refika-Turgut-2/publication/305502080>
- Turkan, S., & Buzick, H. M. (2016). Complexities and issues to consider in the evaluation of content teachers of English language learners. *Urban Education*, 51(2), 221–248.
<https://doi.org/10.1177/0042085914543111>
- Turkan, S., & de Jong, E. J. (2018). An exploration of preservice teachers' reasoning about teaching mathematics to English language learners. *Teacher Education Quarterly*, 45(2), 37–60. <https://www.jstor.org/stable/90020314>
- U.S. Department of Education. (2016, September 23). *Non-regulatory guidance: English Learners and Title III of the Elementary and Secondary Education Act (ESEA), as*

amended by the Every Student Succeeds Act (ESSA).

<https://www2.ed.gov/policy/elsec/leg/essa/essatitleiiiguidenglishlearners92016.pdf>

Valdez, A. (2021, February). *Exploring actions toward supporting English language learners in a rural remote secondary setting* [Doctoral dissertation, Abilene Christian University].

Digital Commons @ ACU.

<https://digitalcommons.acu.edu/cgi/viewcontent.cgi?article=1321&context=etd>

Valenčič Zuljan, M. (2001). The conception of knowledge with future teachers. *Studies in Adult Education and Learning*, 7(2), 16–23. <https://doi.org/10.4312/as.7.2.16-23>

Vera, E. M., Heineke, A., Israel, M., Hill, M., Goldberger, N., Hook, K., & Anderson, B. (2022). Learning about English learners: Teachers' and leaders' perceptions of effective professional development. *International Multilingual Research Journal*, 16(2), 93–112.

<https://doi.org/10.1080/19313152.2021.1971474>

Villegas, A. M. (2018a, March). Introduction to “preparation and development of mainstream teachers for today’s linguistically diverse classrooms.” *Educational Forum*, 82(2), 131–137. <https://doi.org/10.1080/00131725.2018.1420848>

Villegas, A. M., Saizde LaMora, K., Martin, A. D., & Mills, T. (2018b, March). Preparing future mainstream teachers to teach English language learners: A review of the empirical literature. *Educational Forum*, 82(2), 138–155.

<https://doi.org/10.1080/00131725.2018.1420850>

Von Esch, K. S. (2021). Identifying professional dissonance: Teacher learning in job-embedded contexts and English-learner (EL)-focused teacher leadership. *Language and Education*, 35(4), 337–356. <https://doi.org/10.1080/09500782.2021.1877299>

Von Glasersfeld, E. (1995). A constructivist approach to teaching. In L. P. Steffe & J. Gale

- (Eds.), *Constructivism in education* (pp. 3–15). Lawrence Erlbaum Associates.
- Vygotsky, L. S. (1967). Play and its role in the mental development of the child. *Soviet Psychology*, 5(3), 6–18. <https://doi.org/10.2753/rpo1061-040505036>
- Vygotsky, L. S. (1978). *Mind in society*. Harvard University Press.
- Wang, S. (2017). “Teacher centered coaching”: An instructional coaching model. *Mid-Western Educational Researcher*, 29(1), 20–39. <https://eric.ed.gov/?id=EJ1136711>
- Warren, F., Mason-Apps, E., Hoskins, S., Devonshire, V., & Chanvin, M. (2019, August). The relationship between implicit theories of intelligence, attainment, and socio-demographic factors in a U.K. sample of primary children. *British Educational Research Journal*, 45(4), 736–754. <https://doi.org/10.1002/berj.3523>
- Weingarten, R., Johnson, L., & Ricker, M. C. (2019). *AFT recommendations for the higher education act reauthorization*. American Federation of Teachers. https://www.aft.org/sites/default/files/media/2019/aft-hea-recs2019_complete.pdf
- WestEd. (2019). *Implementing the Spirit of Formative Assessment*. <https://csaa.wested.org/resource/case-reviews-implementing-the-spirit-of-formative-assessment/>
- White, C. (2015, March). *Critical qualitative research in social education*. Information Age Publishing.
- Wissink, B., & Starks, S. (2019, May). Elementary teachers’ perceptions of preparedness to teach English language learners. *Educational Research and Reviews*, 14(10), 349–357. <https://doi.org/10.5897/err2019-3734>

- Wist, C. (2006). *Putting it all together: Understanding the research behind interactive notebooks* [Master's thesis, College of William and Mary].
https://knilt.arcc.albany.edu/images/d/d0/Interactive_Notebooks_Research.pdf
- Yendol-Hoppey, D., Jacobs, J., & Burns, R. W. (2018, September). Improving teacher practice-based knowledge: What teachers need to know and how they come to know it. In S. J. Zepeda & J. A. Ponticell, *The Wiley Handbook of Educational Supervision* (pp. 509–532). John Wiley & Sons.
- Zane, T. W. (2009, February). Performance assessment design principles gleaned from constructivist learning theory (Part 1). *TechTrends*, 53(1), 81–90.
<https://doi.org/10.1007/s11528-009-0242-5>
- Zeybek, Z., & Açıl, E. (2018). Investigating seventh-grade students' mathematical communication skills: Student journals. *Turkish Journal of Computer and Mathematics Education*, 9(3), 476–512. <https://turcomat.org/index.php/turkbilmat/article/view/185/170>
- Zhang, S., & Stephens, V. (2013). Learning to teach English-learners in mainstreamed secondary classrooms. *Teacher Education and Practice*, 26(1), 99–116.
<https://eric.ed.gov/?id=EJ1002366>
- Zhang, Y. (2017). Supporting English language learners in social studies: Language-focused strategies. *Social Studies*, 108(5), 204–209.
<https://doi.org/10.1080/00377996.2017.1354808>

Appendix A: Interactive Notebook Process Teacher Expectations

The teacher first models how the lesson content should be written in the notebook and gives ample time for students to notate the content and make notes. The teacher gave a focused, guided question and allowed students to say and write the question. Next, the teacher allows time for student reflection (Students have time to review notes, answer questions, and ask questions). The teacher gives students a question stem. Giving students a question stem helps guide the discussion and the written dialogue and helps students have an outlet when they do not know what to say or have a starting point. Finally, the teacher allows students to interact in a collaborative activity that involves discussion, written analysis, or student check. Students also could make corrections during this time.

Student Expectations

Students use their notes and strategies to help them answer reading comprehension questions or solve math problems. After the entry, students must write an evaluation statement explaining how they used the strategy to obtain their answers. Teachers help students by giving a sentence stem. For example, I used context clues to answer the reading question because

_____. The students complete the question stem in their own words.

After students are given time to create their evaluation statements, they are given opportunities to share their reflections with a reading partner, chair partner, or shoulder friend. It is called collaborative student talk. Teachers give students a limited amount of time to discuss and a creative way to start the discussion. The student that is not sharing is the listener. After the first minute, the listener now becomes the speaker. In the third minute, they pair up with a new partner to check, edit, or revise their answers.

Appendix B: Focus Group 1 Questions

1. Based on your ESL certification alone, how well do you feel prepared to teach your ELL students?
 2. Overall, how would you rate the level of professional development support for ELL teachers in your district?
 3. Overall, how would you rate the level of professional development support for ELL teachers in your school?
 4. How would you feel about the implementation of ELL strategies in your classroom and your confidence in their implementation? Why?
 5. Do you feel that implementing ELL strategies such as interactive notebooks and collaborative learning would help your students reach academic proficiency levels?
- The researcher will create a list of emergent ideas, create connection graphs, and discover terms respondents frequently use to indicate significant themes.

Appendix C: Focus Group 2 Questions

1. Now that you have used the interactive notebook method, explain how you feel about being prepared to teach your ELL students using this method.
2. When you think of effective teaching, what does it look like, and what does it sound like? How effective was your teaching practice after being trained and using this method?
3. Do you feel the interactive notebook process would be worthwhile school-wide? District-wide? Why or why not?
4. What were some obstacles or successes you faced with implementing the interactive notebook method?
5. How did students respond to interactive notebooks? (Tell a story) Bring the notebooks as artifacts of evidence.

Appendix D: Letter of Research Interest

Dear Teacher,

Date _____

A study to learn about teachers' preparedness to teach English Language Learners in the regular classroom and implement interactive journal instruction in elementary classrooms will be conducted on our campus. Participation in this study will involve completing a 2-day instructional training and two focus group sessions with fellow participants. All the data collected will be kept confidential. Your participation will be strictly voluntary, and you may discontinue your involvement at any time. If you consent to participate in this study, please indicate your approval below and return this letter to me in the enclosed envelope with the completed information so I can contact you. If you need clarification or have any concerns, the researcher can be contacted by email at xxxxx@adu.edu. Thank you in advance for your consideration to assist in educational research. Upon participation approval, you will be contacted by the researcher.

Sincerely,

X_____

____ Yes, I have an ESL certification.

____ I am currently on an ESL certification waiver.

I consent to participation in the study described above.

_____ Participants Name (please print)

_____ Participants Signature

_____ Participants Email

Appendix E: Consent Form for Participating Teachers

Principal Investigator: Ebony Johnson, Doctoral Student Abilene Christian University, Dallas, TX

Email: xxxxx@acu.edu

Title of Study: Developing Teachers to Teach ELL Students Using ELL Notebook Strategies

This study will add to the body of research about mainstream teachers' perceptions of educating the English language learner (ELL). If you participate, you will be asked to complete a questionnaire, agree to researcher observations, and participate in two focus group sessions with other participants.

By signing this form, I acknowledge the following:

1. My participation is strictly voluntary, and I understand that I may choose to respond to any, all, or none of the questions asked while in the study.
2. I have been assured that my responses and identity will remain strictly confidential.
3. I understand the research requirement that focus groups and observations may be recorded and that no identifying information will be associated with individuals in the study. I also understand that the journal I maintain will also be used as a source of data for this study, and its contents will be kept confidential.
4. I understand that I will not receive any direct personal rewards from participating in this study, and my participation will not affect my occupational standing.
5. I have the opportunity to see the results of this study if I so request.

Participant's Signature _____ Date _____

Print Participant's Name _____

By signing below, I agree to include the above-named participant in the research, and I attest that the participant has been fully informed of his or her rights as a participant.

Investigator's Signature _____ Date _____

Appendix F: Learning Observation Tool


Effective Learning Environments Observation Tool (ELEOT)

The purpose of this tool is to help identify and document observable evidence of classroom environments that are conducive to utilizing interactive notebook with collaborative strategies to increase student learning. Results of the observations will be used to corroborate information obtained from interviews, artifacts and student performance data. The circled number corresponds with the observation skill of each learning environment item descriptor below.

Date _____ School _____ City _____ State or Province _____ Country _____ Grade Level _____

Time In _____ Time Out _____ Check ALL that apply: Lesson Beg. _____ Lesson Middle _____ Lesson End _____ Subject Observed _____ Observer Name _____

Student-focused Observations		Very Evident	Evident	Somewhat Evident	Not Observed
A. Student Interactive Note booking					
1. Has differentiated learning opportunities and activities that meet her/his needs using interactive notebook and collaborative practices		4	3	2	1
2. Is engaged in rigorous coursework, discussions, and/or tasks and or has opportunities to engage in discussions with teacher and other students		4	3	2	1
3. Is asked and responds to questions that require higher order thinking (e.g., applying, evaluating, synthesizing)		4	3	2	1
4. Has ongoing opportunities to learn from their peers using interactive notebook practices.		4	3	2	1
5. Is tasked with activities and learning that are challenging but attainable when utilizing the interactive notebook strategies.					
B. Teacher Expectations:					
Teacher-focused Observations					
1. Teacher modeled how the lesson content should be written in the notebook and gave ample time for students to notate.		4	3	2	1
2. Teacher gave a focused guided question and allowed students to say and write the question.		4	3	2	1
3. Teacher allows time for student reflection (Student has time to review notes, answer question, and ask questions)		4	3	2	1
4. Teacher gave students a question stem.		4	3	2	1
5. Teacher allows students to interact in a collaborative actively that involves discussion, written analysis, and or student check.		4	3	2	1

© 2012  AdvancED®

NOTES:

Appendix G: Samples of Interactive Notebook

