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ENHANCING ENGLISH LEARNERS' ACADEMIC RESILIENCE: A
PROFESSIONAL DEVELOPMENT/LEARNING DESIGN STUDY

By
Mabel Eliana Lamprea Altuve

A Dissertation Submitted to the
Gardner-Webb University School of Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

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2020

Approval Page

This dissertation was submitted by Mabel Eliana Lamprea Altuve under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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Abstract

ENHANCING ENGLISH LEARNERS' ACADEMIC RESILIENCE: A PROFESSIONAL DEVELOPMENT/LEARNING DESIGN STUDY. Lamprea Altuve, Mabel Eliana, 2020: Dissertation, Gardner-Webb University.

This professional development/learning design study sought to create, evaluate, and refine a learning experience for English language learning (ELL) teachers that provided them with additional instructional tools to support improvement of Multilingual Learners and English Learners' (MLs/ELs) academic resilience. MLs/ELs are one of the fastest growing groups of students in U.S. schools with one of the lowest academic performance and graduation rates. These students are also a vulnerable and resilient population that could have been exposed to distressing and adverse experiences. ELL teacher preparation has concentrated on fostering language and literacy development; still, MLs/ELs' achievement gap fails to close significantly, and their resilience abilities are not effectively transferred to academics. Research shows that improving emotional intelligence skills benefits all areas of life. The integration of emotion education and language development offers a more comprehensive approach to MLs/ELs' learning for its impact to academics, relationships, performance, decision-making, and health. This study used educational design-based research (DBR) and conjecture mapping to produce and validate theoretical and pragmatic outcomes—the conceptual framework, *Enhancing MLs/ELs' Academic Resilience*, and a suggested table of contents for ELL teacher preparation in emotional intelligence education with social-emotional learning, brain-based learning, self-efficacy, trauma-informed care, and language development evidence-

based practices—to strengthen ELL teacher learning and MLs/ELs’ attributes of personal resilience and academic achievement.

Keywords: English learners, multilingual learners, academic resilience, professional learning, professional development, English language learning teachers, emotional intelligence, design-based research, conjecture mapping

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Chapter 1: Introduction

Approximately one in 10 K-12 students in the United States is a Multilingual Learner or English Learner (ML/EL), which is nearly five million of these students in American schools (U.S. Department of Education, n.d.b). Still, English Learners (ELs) only have a 4-year adjusted cohort graduation rate of 68%, 17 points lower than the U.S. rate (National Center for Education Statistics, 2018); and, in North Carolina, the 4-year cohort graduation rate is 86.5% for all students and 71.4% for ELs (NC Department of Public Instruction, 2019). It is estimated that by 2030, approximately 40% of school children will speak English as a second language (ESL).

U.S. Census Bureau (2017) data show that almost 22% of the population (66.5 million) speak a language other than English at home, including more than 350 languages. In 2015, 60% of those speakers of other languages were fully proficient in English, and the 40% who were Limited English Proficient (LEP) comprised more than 25.9 million people (Batalova & Zong, 2016). “The overall LEP population (immigrant and U.S. born) was less educated and more likely to live in poverty in 2015” (Batalova & Zong, 2016, para. 6). In 2017, approximately 48% (21.2 million) of 44.2 immigrants were LEP. Of all LEP speakers, 82% are immigrants and 18% are U.S. native-born (Zong et al., 2019). The number of children with at least one immigrant parent more than doubled in the last few decades. That number rose from eight million children in 1990 to 18 million in 2017, according to the Migration Policy Institute (n.d.). Based on the U.S. Census Bureau’s (2016) American Community Survey, 72% of LEP public school students ages 5 to 12 years old were U.S. born. “Around a third (32%) of limited English proficiency students in grades 6-12 are noncitizens, compared with 17% of students in

grades K-5” (Bialik et al., 2018, para. 10).

Data debunk the common assumption that the majority of ELs are immigrants. Based on the numbers above, most current ELs are American citizens and children of immigrants. However, or maybe due to it, there is a huge gap between ELs’ academic achievement and the other students’ subgroups, especially with the highest performing Asian and White students. According to the NC State Plan for the ESSA (2020), ELs are one of the lowest performing student groups in most state tests (Appendix A).

Poverty, immigration, adverse childhood experiences (ACEs), trauma, limited schooling, and low expectations among other risk factors may have an impact on ELs’ ability to perform at school and, ultimately, to graduate (Romero et al., 2018; Zacarian et al., 2017). In general, one third of high-risk children become competent, confident, and caring adults (Werner & Smith, 1989). To overcome risk factors or life stressors that may end in negative outcomes, resilient individuals learn to develop and rely on personal and external protective factors or traits, conditions, and situations that help them alter defeatist predictions. Personal or dispositional protective factors include social competence, autonomy, problem-solving skills, and sense of purpose and future. External or environmental protective factors include family, peers, school, and community (Benard, 1991). When resilience results in academic achievement, it is named academic resilience. Resilient children who are successful academically have to learn to navigate educational institutions where the culture is completely different from their own (Morales, 2008). Educators, especially English Language Learning (ELL) teachers, are expected to guide ELs through obstacles to successful school outcomes. Their challenge is to create learning environments where students develop positive behaviors that lead

them to academic success.

Statement of the Problem

ELL educators are usually the frontline professionals who serve ELs while also supporting general education teachers who work with these students. ELL teachers need to be highly qualified in English Language Development (ELD) standards and strategies in order to teach ELs. Language and literacy instruction is their primary role. However, ELs bring to the classroom multiple needs in addition to the necessity to be proficient in a new language. Thus, ELL teachers become their students' advocates, guides, counselors, psychologists, and social workers without being formally prepared for those roles.

Although ELs' needs are acknowledged, teacher preparation programs for ELL educators primarily focus on language acquisition and literacy development. In the current standards-based era, teachers are asked to help ELs develop social and cultural English language proficiency (ELP) as well as proficiency in the academic language of every class subject. In that sense, standards and professional learning programs for teacher preparation address language instruction, socio-cultural awareness, and even teacher collaboration (Casteel & Ballantyne, 2010; National Board for Professional Teaching Standards [NBPTS], 2010; National Education Association [NEA], 2011; TESOL, 2019). Specific instructional designs to teach ELs also concentrate on language and literacy development and academic achievement (Calderón, 2007, 2011; Echevarría et al., 2000; Walqui & van Lier, 2010). The U.S. Department of Education's (2017a) EL Tool Kit provides guidelines for an English learning program and effective teaching of ELs that emphasizes language development, academic English, and cultural diversity.

The licensure requirements to work with ELs vary from state to state. In a few

states, preservice teachers need to complete some college-level coursework; and the ELD standards may just be used by ELL teachers, not by general education teachers (Staehr Fenner, n.d.). According to the North Carolina Department of Public Instruction (n.d.), educators can apply for an Initial Professional License or a Continuing Professional License in any subject area. The Initial Professional License is issued to teachers with fewer than 3 years of experience or more experienced teachers who have to complete all the requirements. Educators need a bachelor's degree in education or a bachelor's degree and a teacher preparation program certificate, besides a passing score on the licensure examination. ELL teachers need to pass the Praxis II: English to Speakers of Other Languages exam with a qualifying score of 155 (ETS Praxis, n.d.). The Continuing Professional License is issued to educators with 3 or more years of teaching experience and the required passing score.

If the purpose of school is to educate the whole child, teacher preparation initiatives should offer educators the tools to go beyond merely addressing students' cognitive skills, especially when working with at-risk students. Social and Emotional Learning (SEL) seems to provide that "missing piece" in education.

In the face of current societal economic, environmental, and social challenges, the promotion of these nonacademic skills in education is seen as more critical than ever before with business and political leaders urging schools to pay more attention to equipping students with skills such as problem solving, critical thinking, communication, collaboration, and self-management – often referred to as *21st Century Skills*. (Schonert-Reichl et al., 2017, p. 5)

In the last few years, new SEL programs have highlighted the value of a more

comprehensive vision of classrooms where students get prepared for both school and life success. According to the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2015), SEL supports adults and children in the development of dimensions or competencies in the areas of self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.

In a study concerning teacher preparation and SEL, Schonert-Reichl et al. (2017) found that an average of 40 U.S. states include teacher certification in supporting students' responsible decision-making, relationship skills, and self-management. Self-awareness—the ability to identify one's own feelings, strengths, and weaknesses—and social awareness—the ability to empathize with or take perspective of people from different backgrounds—get less attention with 22 and 26 U.S. states respectively with certification requirements. In regard to preservice teacher preparation programs, social awareness is the most addressed with presence in 44 U.S. states; in contrast to self-awareness in three states and self-management in one state. On the other hand, certification requirements address teacher SEL in all 50 U.S. states and the District of Columbia, but only 10 states demand four of the five competencies in teacher learning to identify their own SEL dimensions. The lowest addressed SEL competencies were self-awareness with nine states and self-management with two states. In other words, in spite of the national necessity to prepare teachers to help students understand and manage social and emotional skills in order to strengthen academics as well as to grow their own social-emotional abilities as teachers, there is still disparity in programs and practices needed for both students and teachers. Actually, Schonert-Reichl et al.'s (2017) study only reports one preservice teacher preparation course regarding SEL in California. A

recent initiative, the Reaching English Learners Act – H.R. 1153, 116th Congress (Congress.Gov, 2019), was introduced in the House of Representatives on February 13, 2019 to amend the Higher Education Act of 1965 in order to provide grants for postsecondary education institutions that improve preparation of teacher candidates looking to serve ELs. Upon its approval, the Reaching English Learners Act would enforce education of preservice teachers on supporting ELs' high academic levels and English proficiency development; recognizing and addressing ELs' social and emotional needs; properly identifying and meeting needs of ELs with disabilities; and promoting parent, family, and community engagement in EL programs.

With limitations in preservice ELL teaching preparation, there is a huge need for in-service professional learning that complements preservice programs,

because English language teachers should take into account the social-psychological situation of the students they teach, they must be sensitive to the effects of traumatic stress among learners...without experiencing some measure of healing from trauma, children will be frustrated in their language learning.

(Medley, 2012, p. 1)

Besides SEL components that help students cope with emotions and feelings, ELL teachers should be knowledgeable of ELs' possible trauma, violence, or chronic stress due to past experiences that may also impact their performance at school (Zacarian et al., 2017) and how the involvement in traumatic events may show symptoms that provoke physiological changes in body and mind (Society for Neuroscience, 2018). There is little professional literature about those topics concerning ELs and much less information that embeds SEL, trauma-informed practices, and brain-based learning to inform teachers of

ELs on the creation of comprehensive and holistic learning environments for students that enhance academics.

“Educating the mind without educating the heart is no education at all” (Purkey & Stanley, 1991, p. 7) is a quote vastly attributed to Aristotle, the Greek philosopher. Based on my experience, ELs are resilient individuals who usually work hard to overcome multiple obstacles and are willing to succeed in school. Mawi Asgedon, a former EL, explained it like this, “I share my story with you, ... to illustrate that any English Learner can grow in unimagined ways regardless of their starting point. With your help they can unlock their potential and make your school, our country, and our world better” (Asgedon & Even, 2017, p. 2). Asgedon became the founder of Mawi Learning and understood firsthand the importance of SEL. He escaped at the age of 3 from the seventh worst genocide in modern history—a civil war in Ethiopia. Asgedon lived in a refugee camp for 3 years, came to the U.S. without speaking English, was almost expelled from first grade, was constantly bullied, was raised by an illiterate mother and a legally blind father who valued education, and still graduated from Harvard. Mawi Learning has promoted academic and social-emotional growth by educating over a million students in several countries and preparing hundreds of teachers to serve ELs more effectively in many districts of the United States. Due to ELs’ life experiences that may interfere with their academic success, ELL teachers should be adequately prepared to support ELs’ education of the heart as the way to strengthen their academic achievement. Through this study, I intended to design, evaluate, and improve a conceptual framework for teacher and student learning and a curricular experience for ELL teachers that provided them with tools to enhance their students’ education of both heart and mind.

Purpose of the Study

As they enter school, ELs are placed in a language development setting. They may be part of pull-out services, sheltered instruction, or a dual-language/bilingual program. In every situation, their case managers are ELL teachers who work to ensure ELs receive services and support in accordance with their individual needs. ELL teachers accommodate students depending on their age, schooling, special education necessities, and/or language proficiency level. They also need to know their students' story, background knowledge, and learning strengths and weaknesses in order to facilitate instruction and support their general education teachers. To be prepared for the students' diverse needs, ELL teachers should be given an education that includes practices to develop the whole child, not just their language and literacy learning. ELs are strong children with innate and learned skills that help them overcome challenges. However, this resilience may not be easily translated into academic situations.

The purpose of this mixed methods study was to design, evaluate, and refine a Professional Development/Learning (PD/L) intervention and its corresponding conceptual framework for teacher and student learning that provided ELL teachers with tools to help their ELs become more academically resilient. Specifically, this study examined emotional intelligence in terms of SEL, brain-based learning, trauma-informed approach, and self-efficacy evidence-based practices that promote resilience in educational settings, or academic resilience. Those concepts, theories, and strategies were framed by the Resilience Cycle, a theoretical construct proposed by Morales (2008) as "an antidote to the current disproportionate focus on failure that characterizes most discussion of the academic performance of at-risk students" (p. 23). For the purpose of

this study, I complemented Morales's (2008) construct with the examined theories and practices in order to serve specifically ELs through a modified conceptual framework, *Enhancing MLs/ELs' Academic Resilience*. A failure or deficit mindset that usually accompanies the discourse about minority and at-risk learners was replaced by the WIDA (2019a) asset approach and Can Do Philosophy that builds on student strengths for growth and improvement.

I measured ELL teacher perceptions and use of practices that support ELs' academic resilience and SEL, which in turn informed the design of a professional learning module that was evaluated by the teachers through an electronic survey and a focus group discussion. The anticipated outcomes of this study were the improved professional learning intervention and conceptual framework that informed more in-depth professional learning opportunities regarding the components suggested to enhance MLs/ELs' academic resilience. In addition, the module assisted ELL teachers in acknowledging symptoms of compassion fatigue—the state of worry and tension experienced by those people that help others who are suffering or in distress, like students who have gone through trauma, violence, or adverse situations— and the self-care habits they should develop to identify and regulate their own emotions before attending their students' necessities.

Definition of Terms

In education, terms and acronyms are often used in different ways based on the situation. The following definitions are provided to operationalize these common terms within the context of this study.

Academic Resilience

Undoubtedly, ELs become resilient individuals as they survive and overcome life adversities; however, they may need support in sharpening those abilities to strive, grow, and succeed in educational settings. “The resilience of an individual to maintain wellness in academics and academic related aspects can be termed as academic resilience” (Rajan et al., 2017, p. 507).

ACEs

When traumatic events of abuse, family or household challenges, and neglect occurred before the age of 18, they are considered ACEs. They impact all ethnic groups despite geographical location or socioeconomic status. Forty-six percent of American children have experienced at least one ACE. The eight ACEs that most impact children in the U.S. are poverty, divorce, a parent’s death, a parent’s incarceration, living with someone with mental health issues, living with an addict to alcohol or drugs, domestic violence, and community violence (Romero et al., 2018).

Brain-Based Learning

“Brain-based learning involves acknowledging the brain rules for meaningful learning and organizing teaching with those rules in mind” (Caine & Caine, 1994, p. 4). The learner’s brain constantly searches for connection, so it is the educator’s job to organize learning experiences where students can extract understanding. Meaningful learning and teaching happen when the brain is exposed to multiple complex and concrete experiences. Effective brain-based education designs and orchestrates proper, enriching real-life experiences and ensures that learners process those experiences in a way that increases comprehension.

Compassion Fatigue

People who work with victims of physical, sexual, or psychological trauma may manifest compassion fatigue's symptoms in the form of depression, anxiety, stress, and hopelessness. "Compassion fatigue, also known as secondary or vicarious trauma, is an individual's gradual decline in feelings of compassion" (Romero et al., 2018, p. 13). Individuals affected by compassion fatigue should be aware of their condition and utilize self-care strategies that attend their own needs before focusing on others.

ML/EL

ML is the most current and inclusive term to refer to ELs. This study considers both expressions as ML/EL or just EL in the most general definition described by the Elementary and Secondary Education Act of 1965 (2015):

(20) ENGLISH LEARNER.—The term "English learner," when used with respect to an individual, means an individual—

(A) who is aged 3 through 21;

(B) who is enrolled or preparing to enroll in an elementary school or secondary school;

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

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

(II) who comes from an environment where a language other than English has had a significant impact on the individual's level of English language proficiency; or

(iii) who is migratory, whose native language is a language other than English, and who comes from an environment where a language other than English is dominant; and

(D) whose difficulties in speaking, reading, writing, or understanding the English language may be sufficient to deny the individual —

(i) the ability to meet the challenging State academic standards;

(ii) the ability to successfully achieve in classrooms where the language of instruction is English; or

(iii) the opportunity to participate fully in society (Elementary and Secondary Education Act, 1965).

Moreover, WIDA (2019b) defined MLs as,

all children and youth who are, or have been, consistently exposed to multiple languages. It includes students known as English language learners (ELLs) or dual language learners (DLLs); heritage language learners; and students who speak varieties of English or indigenous languages. (p. 1)

Emotional Intelligence

The term emotional intelligence was first used by Salovey and Mayer (1990), who defined it as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them, and to use this information to guide one’s thinking and actions” (p. 189). A few years later, Goleman (1996) popularized the concept in his best-seller *Emotional Intelligence: Why It Can Matter More Than IQ*. Since then, multiple studies and authors have expanded its application to areas that go from behavioral psychology to business leadership.

PD/L

Professional development has been used interchangeably with professional learning, in-service, training, or staff development. It refers to the coursework, conferences, and other learning opportunities that help school professionals improve their work with students. “Ideally, their skills, knowledge, and attitudes should assure the intellectual, physical, emotional, and social development and well-being of each student within the school, regardless of their linguistic, cultural, economic, or national background” (Casteel & Ballantyne, 2010, p. 5).

Self-Efficacy

It is an individual’s belief in his or her ability to achieve tasks and goals successfully. It influences thoughts, feelings, and behavior as well as determines people’s effort, time, and persistence when facing obstacles and adversities. In learners, high self-efficacy impacts aspirations, interest in academic activities, and academic accomplishments. Teachers with high levels of self-efficacy create learning environments that foster cognitive development and have an effect on student motivation and performance (Bandura, 1982, 1994).

SEL

SEL is emotional intelligence education applied to learning settings. Social-emotional skills are critical to become a productive student, citizen, and worker and to avoid risky behaviors intentionally. Through SEL, children and adults acquire and properly use knowledge, attitudes, and abilities to understand and control emotions, relate to others, build positive relationships, and make adequate decisions in the classroom, at school, at home, and in the community (CASEL, 2015).

Standards for Professional Learning

“Standards for Professional Learning are designed to set policies and shape practice in professional learning” (Learning Forward, 2011, p. 55). By using the term professional learning, the standards center the attention on the educators’ active role to continuously improve their own learning in order to effectively support student performance at higher levels. The seven standards for professional learning work in synergy and describe three areas of focus: context, processes, and content. The context standards—learning communities, leadership, and resources—identify the essential conditions for professional learning. The processes standards—data, learning designs, and implementation—define quality and effectiveness in educator learning. Finally, outcomes is the content standard that describes the essential content of professional learning.

Trauma-Informed Approach

Practices to approach trauma have been named trauma-aware, trauma-sensitive, trauma-invested, or trauma-informed. These practices acknowledge the effects of trauma in the ability to identify, express, and manage emotions. A trauma is a psychological, emotional, or physical response to a stressful or disturbing experience. The three classic symptoms of trauma are hyperarousal or high anxiety provoked by the thought of the traumatic experience, re-experience of the event, and avoidance of any reminder of the situation. The effects of a traumatizing event lie on the individual’s capacity to cope or their resilience (Medley, 2012). SEL integrates trauma-informed strategies where students can feel safe and supported while they learn to face and understand their emotions. Schools should assess student ACEs, select appropriate trauma-informed practices for their students and staff, and provide ongoing PD/L for teachers to embed

SEL activities and other strategies in their classes.

Research and Guiding Questions

As this PD/L design study used conjecture mapping as the primary investigation method, there was just one principal research question supported by four guiding questions.

Research Question

What are the characteristics of an effective in-service program that provides ELL teachers with tools to enhance ELs' academic resilience?

Guiding Question 1

What empirical and research-based practices do ELL teachers use to support ELs' academic achievement?

Guiding Question 2

What empirical and research-based practices do ELL teachers use to support ELs' social-emotional development?

Guiding Question 3

To what extent does the designed professional learning intervention support ELL teachers' learning?

Guiding Question 4

To what extent does the designed professional learning intervention support ELs' academic resilience?

Summary

This first chapter served as an overview of the problem that inspired the study, the state of the available research concerning academic resilience development in ELs, and

the significance of this investigation. Also, the key terms and the research questions for the study were introduced. In the next chapter, I examine the published literature about academic resilience and its relationship with emotional intelligence, self-efficacy, SEL, and brain-based and trauma-informed learning. Additionally, the characteristics and roles of ELL teachers and the investigation methods selected for the study are described.

Chapter 2: Literature Review

Resilience is a phenomenon that has been studied for decades. It is the ability to bounce back from adversities. Social scientist Bonnie Benard (1991) developed the Resiliency Framework to describe the four attributes of a resilient child—social competence, problem-solving skills, autonomy, and a sense of purpose and future—and to explain how protective factors nourish resilience in the midst of risk factors. “Risk factors are (usually) environmental issues that place students in potential danger” (Morales & Trotman, 2011, p. 5) or at risk. They could be parental problems like addictions or lack of attention, poverty, violence, or low-performing schools. Protective factors are those dispositional or personal attributes and strengths mentioned above and the external individuals or groups that can help the youth mitigate their risk factors. The resiliency approach requires “the shifting of our personal perspective, our paradigms, from a focus on risks and deficits to a focus on protections and strengths” (Benard, 1993, p. 35). It also entails the creation of educational systems that promote and support students instead of hinder and suppress their learning, opportunities, and assets. This idea lays the foundation for academic resilience as the ability of an individual to be successful in educational environments. MLs/ELs and other at-risk minority students have traditionally faced academic settings where their strengths have been overshadowed by their limitations.

In this chapter, I review an asset-oriented approach, the Can Do Philosophy (WIDA, 2019a), that uses a positive tone to build on ELs’ capacities. The chapter continues with the examination of the concept of academic resilience and the Resilience Cycle construct. Later, I describe the components of the Resilience Cycle in conjunction with theories and evidence-based practices concerning emotional intelligence, self-

efficacy, SEL, brain-based learning, and trauma-informed approach in order to explicate how this study's conceptual framework, *Enhancing MLs/ELs' Academic Resilience*, may boost academic resilience in ELs. Later, an exploration of professional learning programs for ELL teachers and the concept of compassion fatigue are provided. Chapter 2 concludes with the description of design-based research (DBR) as the chosen methodology to conduct the investigation.

Asset-Oriented Approach and Can Do Philosophy

There is an overall tendency, from the public and educators, to focus on what is not working in the school system; and in many occasions, low socioeconomic and minority students get the blame or are relegated. This kind of deficit discourse has inundated the literature where at-risk populations' obstacles to learning have been presented as deficiencies or inadequacies. Sharma and Portelli (2014) defined deficit thinking as complicated and often unconscious where well-intentioned teachers fail to relate to their students, and “differences from the norm are immediately seen as being deprived, negative and disadvantaged.... It discourages the teachers and administrators from recognizing the positive values of certain abilities, dispositions, and actions” (p. 255).

To compensate the deficiencies, those students are usually offered remediation, which addresses basic skills in a low-level manner and widens the student achievement gap. Dudley-Marling (2015) described remediation as the most dangerous consequence of deficit thinking because remedial practices provide less learning in a slower manner. Under the deficit mindset, ELs may be subjected to continuous remediation activities in order to help them overcome their limitations. ELs are often faulted for falling behind

due to academic limitations, lack of motivation, or different social behavior (Suárez-Orozco & Suárez-Orozco, 2015; Valenzuela, 1999). “The deficit model may falsely portray ELLs as adversarial or reluctant learners, when in fact many are eager and driven to succeed” (Neugebauer, 2008, para. 3). Because of social stereotypes, teachers might make assumptions about their students and their future performance. Boser et al. (2014) stated that secondary teachers have lower expectations for high-poverty, African American, and Latinx students and consider them to be less likely to graduate from college.

Contrarily, the analysis of success has potential to provide another lens to the issues (Morales, 2008). While the deficit disposition is present in ELs’ academic lives, more positive approaches have been evolving. Studies have demonstrated that practices like the Pygmalion Effect show significant results (Boser et al., 2014). In 1968, Harvard psychologist Robert Rosenthal led a study at an elementary school where teachers’ positive expectations of selected low-performing students helped those kids see themselves differently and eventually perform significantly better than the other kids. The Pygmalion Effect, named after the George Bernard Shaw’s play, explains that teacher expectations impact student intellectual performance. They have the potential to raise learning outcomes and have long-term effects on students. For example, teacher expectations of preschoolers’ abilities support future high school GPAs, high school students whose teachers have higher expectations tend to graduate from college, and rigorous college preparation programs are high predictors of college graduation rates. All in all, teacher expectations have been found to be more powerful predictors of higher education success than expectations from parents and students.

Positive approaches towards student achievement seem to have an origin in Bronfenbrenner's (1977) Ecology of Human Development, which highlights the importance of going beyond the immediate context and stop focusing exclusively on the individuals to observe change over time and across settings. Rather than concentrating on student deficiencies, the ecological framework provides a wider and different perspective of how student learning and outcomes are influenced by contextual factors and settings like their families, schools, communities, institutions, and social and political environments.

In that sense, the former World-class Instructional Design and Assessment Consortium now just known as WIDA (Gottlieb, 2013) found their work upon the Can Do Philosophy and the 10 Guiding Principles of Language Development. North Carolina, 39 other states, territories, and federal agencies have adopted the WIDA ELD Standards as their framework. WIDA (2019a) believed that "everyone brings valuable resources to the education community. Linguistically and culturally diverse learners, in particular, bring a unique set of assets that have the potential to enrich the experiences of all learners and educators" (p. 1). In that sense, the term ML is becoming more generally used to refer to ELs because it acknowledges these students' potential to navigate two or multiple languages and cultures.

Based on the asset-oriented approach of the Can Do Philosophy, language students learn that their cultural, linguistic, experiential, and social emotional differences contribute to the education systems and they are not empty vessels when they go to schools. Additionally, in the WIDA (2019b) Guiding Principles of Language Development (see the whole list in Appendix B), Principle 1 states, "Multilingual

learners' languages and cultures are valuable resources to be leveraged for schooling and classroom life; leveraging those assets and challenging biases help develop multilingual learners' independence and encourage their agency in learning" (p. 1). The first guiding principle relates to Gottlieb's (2013) first Essential Action for Academic Language Success that referred to the need to capitalize on ELs' resources and experiences in order to improve their academic language. By building asset-oriented schools and classrooms, language learners feel respected because their linguistic and cultural identities are recognized and validated at school.

It is the teachers' role to study and understand student cultural practices instead of assuming what the practices look like based on the students' ethnicity, race, socioeconomic status, or other factors (WIDA, 2018). The WIDA Can Do Philosophy and its components bring a positive perspective to the valuable cultures, native languages, and experiences ELs bring to schools and communities. They also highlight these students' potential at using their background knowledge as the starting point to build on their education. The Can Do Philosophy serves as the foundational tone for this study where ELs are portrayed as learners with holistic possibilities to develop and grow.

Academic Resilience Development

Initially, resilience or resiliency was mostly described as a psychological trait that allowed certain persons to overcome significant challenges or tragic experiences. Defined as an "innate, self-generated ability to spring back from adversity and adapt to change, resiliency is a perspective on life rather than a program" (Oddone, 2002, p. 274). Thus, resilience was presented as a special characteristic only a few people have. Although the term referred mostly to how a few individuals responded naturally to adversity, it

eventually became more inclusive and was defined as a learned response that resulted from the interactions with others, social contexts, and opportunities (Rigsby, 1994).

Hence, it can be stated that everyone has the ability to develop resilience.

According to Konrad and Bronson (1997), resilient people have the talent to view things in an alternative way and with a sense of humor; are able to get distance from challenges or dysfunctional environments; have a sense of identity and good prosocial coping skills; are independent and in control of their environment; display a sense of purpose and high expectations; and do not let feelings of failure, uselessness, or alienation get the best of them. In that sense, resilience refers to the exposure to a threat or adverse situation and the positive overcoming to it by using personal skills.

In terms of education, resilience can be further defined as academic resilience, or “the heightened likelihood of success in school and in other life accomplishments, despite environmental adversities brought about by early traits, conditions, and experiences” (Wang et al., 1994, p. 46). Just like resilience, academic resilience can be built and developed by focusing on assets and competencies and by learning from modeling and structured opportunities and practices (Konrad & Bronson, 1997; Wang et al., 1994). In addition, Morales (2008) suggested that to develop resilience in academia, it is essential to focus on emotional intelligence, evaluate student needs, consider protective factors, and enhance internal strengths.

Protective Factors

Research has identified two main types of protective factors—personal or dispositional and external or environmental—that are often missing in students who experience difficulties in their academic lives. Dispositional protective factors are intra-

personal attributes linked to resilience, such as self-efficacy, high self-esteem, strong self-concept, social competence, problem-solving skills, autonomy, sense of purpose, effective goal setting, and greater engagement in academic activities (Benard, 1993; Borman & Overman, 2004; McMillan & Reed, 1994). The personality traits used by a person to increase the academic success are not innate or occasional. They are the consequences of the interactions with other individuals and the environment (Fallon, 2010; McMillan & Reed, 1994; Wang et al., 1994).

External protective factors refer to environments that influence child development. The family is presented by Benard (1991) as “a powerful predictor of the outcome for children and youth” (p. 6). Having opportunities for participation in the family as well as a caring and supportive relationship from a complimentary and authoritative parent who shows high expectations, a strong work ethic model by a mother, academic role models from siblings, and an influential grandmother result in protective effects (Benard, 1991; Morales & Trotman, 2011). Similarly, caring school personnel (K-12/college), state/federal-funded programs/scholarships or school-sponsored tutoring services, attendance at an out-of-district/diverse school, or participation in church/community-sponsored activities foster resilience in students (Benard, 1991; Morales & Trotman, 2011), even in children with limited individual protective factors.

Resilience researchers consistently mention the need of caring and supportive teachers (Benard, 1991; Morales & Trotman, 2011; Wang et al., 1994). Students need teachers who have high expectations of them, find a way to develop strong relationships with them, and allow them to get engaged and have roles of responsibility within the

school (Benard, 1991; Pianta & Walsh, 1998). However, teachers may hold negative stereotypes of minority students that can impact their ability to bond with them or to have high expectations for them (Valenzuela, 1999). When the teacher-student bond “is not established or fully developed, students resist teachers...become detached from school, and consequently are less likely to succeed at school” (Fallon, 2010, p. 44).

Although more than 3 decades have passed from the time Noddings (1988) wrote the following words, teachers and schools are still facing the same struggles:

My guess is that when schools focus on what really matters in life, the cognitive ends we now pursue so painfully and artificially will be achieved somewhat more naturally...it is obvious that children will work harder and do things--even odd things like adding fractions--for people they love and trust. (para. 5)

Besides the value in developing strong relationship with their teachers, resilient students need to rely on community and caring peers or friends. Motivated by the high expectations in and out of school friends and community have in them, academically resilient adolescents develop strong networking skills that support their success and inspire them to become contributing members of the society (Benard, 1991; Clark, 1991).

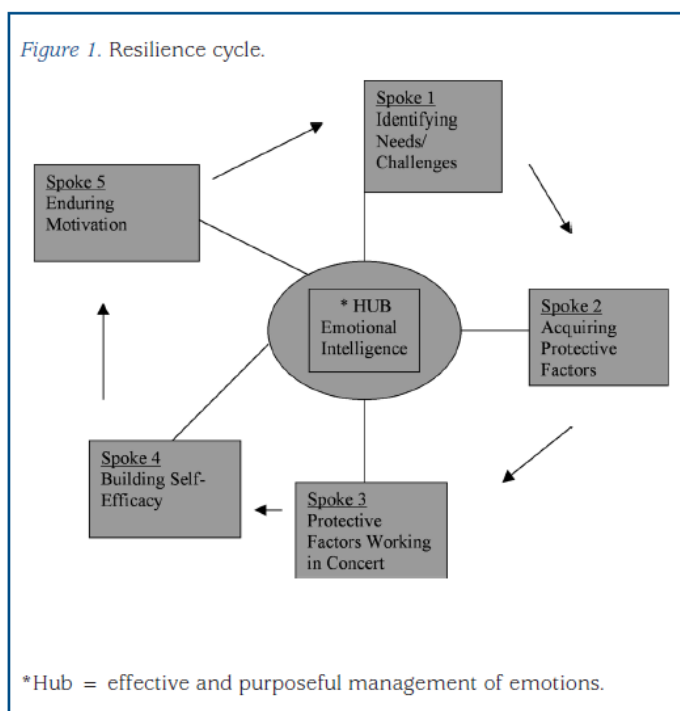
The Resilience Cycle

The Resilience Cycle had its origin in Morales’s (2008) study conducted with 50 academically resilient college students who came from ethnic minorities and families with limited educational and low socioeconomic backgrounds. The students were interviewed and their stories were examined to determine similar patterns in personal and academic journeys. Morales’s (2008) Resilience Cycle is an organic evolving representation of those students’ resilience process (Figure 1). It challenged the

dichotomy between thinking and emotion through the description of learning centered in the development of emotional intelligence.

Figure 1

Resilience Cycle



Note. It represents the educational experience process at-risk students should follow to improve resilience in academic settings (Morales, 2008, p. 24).

“The Resilience Cycle is an original theoretical framework that captures major sequential steps in the process of exceptional academic achievement of statistically at-risk students” (Morales & Trotman, 2011, p. 16), where needs and multiple dispositional and environmental protective factors are presented in the form of five spokes that radiate from “the hub” or emotional intelligence. The five spokes of the wheel refer to identifying needs and challenges, acquiring protective factors, protective factors working in concert, building self-efficacy, and enduring motivation.

Emotional intelligence in school settings is known as SEL. In the words of Brackett (2019),

SEL is the universal life jacket, keeping students afloat and open to learning...[it] must be grounded in a larger context of equity and justice efforts to ensure *all* children, especially the most marginalized, have the opportunity to thrive and take greater control over the direction of their lives. (p. 217)

By working in coordination, all the components of the Resilience Cycle—the hub and the five spokes—support academic resilience in at-risk students (Morales, 2008; Morales & Trotman, 2011) and their emotional intelligence development.

Spoke 1—Identifying Needs/Challenges. “The student realistically recognizes her or his major risk factors” (Morales & Trotman, 2011, p. 20). Academically resilient students identify, understand, and appreciate the obstacles and inequalities they were born into, reflect on them honestly, and are willing to work on acquiring effective protective resources. Most of the participants in Morales’s (2008) study showed high levels of *street smarts*, understood their trials, and demonstrated a strong work ethic. They believed that their challenging origins were a stimulus for their accomplishments; studied and improved their own learning processes; and used persistence, a strong future orientation, and self-motivation to counter risk factors (Morales & Trotman, 2011).

Spoke 2—Acquiring Protective Factors. “The student manifests and/or seeks out protective factors that have the potential to offset or mitigate negative effects of the risk factors” (Morales & Trotman, 2011, p. 30). All participants in Morales’s (2008) research did well in school in spite of parental absence; undiagnosed learning disabilities; low-performing schools; language barriers; racism; homelessness; poverty; violence; or

physical, verbal, and sexual abuse. They displayed varied dispositional protective factors such as persistence, willingness to move up in academic and social class, sense of obligation to own family, high self-esteem, and internal locus of control. They were likeable, positive, and energetic, so they could attract helpful assistance and multiple protective resources.

Spoke 3–Protective Factors Working in Concert. “The student manages his or her protective factors in concert to propel her or himself toward high academic achievement” (Morales & Trotman, 2011, p. 38). Resilient students learn to rely on their endogenous or dispositional protective factors and operate them in concert with exogenous environmental protective factors to succeed in an academic world that is usually new to them. Because academically resilient students are affable and optimistic and know themselves, they are capable of mastering their emotions, delaying gratification, exercising self-control, and reading and responding adequately to people and situations around them (Morales, 2008). Their strong future orientation and desire to class jump are supported by caring school personnel who share their cultural capital or knowledge about academia, validate and encourage the students’ commitment to move up in social and academic class, and model high expectations and rigor (Morales & Trotman, 2011).

Spoke 4–Building Self-Efficacy. “The student recognizes the effectiveness of the protective factors and continues to refine and implement them” (Morales & Trotman, 2011, p. 58). After using the protective factors frequently and effectively, resilient students become mindful of what they do can impact and influence their future lives. They understand how their internal locus of control helps them assess an outcome based

on their internal protective factors rather than the external ones. The locus of control in conjunction with repeated success and the strength of desire to get a particular outcome lead to realistic expectations of achievement (Rotter & Hochreich, 1975). “The student expects to achieve academically because he or she has built up a track record of success through hard work, skill building, and previous achievement” (Morales, 2008, p. 29). Along with that idea, Bandura’s (1982) self-efficacy describes the individual’s self-competence and willingness to put forth more effort after working hard and experiencing success.

Spoke 5–Enduring Motivation. “The constant and continuous refinement and implementation of protective factors, along with the evolving vision of the student’s desired destination, sustain the student’s progress” (Morales & Trotman, 2011, p. 63). This step refers to the students’ continuous will to refine their academic strategies by using adequate protective factors, defining concrete aspirations and a clear destination, sustaining self-motivation, and strengthening habits and personal skills for success. Their academic resilience connects to positive self-perceptions about their academic strengths, high educational goals, strong internal locus of control, and optimistic expectations for their future (Rajan et al., 2017). The range of outcomes that a resilient student experiences will depend on the balance between risk factors, challenging life experiences, and the skillful use of protective factors (Werner & Smith, 1989).

According to Morales (2008), “The basic elements of the Cycle may be core ingredients for promoting resilience and achievement for statistically at-risk students nationwide” (p. 30). The Resilience Cycle could serve as a personalized academic counseling tool for students, an instrument for prevention, or a guide to support academic

interventions.

Academic Resilience in MLs/ELs

ML/EL is a generic expression used to refer to students who are learning English, so their ELP is lower than their English-speaking peers in age and grade level. Additionally, ELs can be classified in different groups depending on their time in the ESL or ELD program, their country of birth and time in the United States, or the presence of a disability. In spite of the differences, all ELs form one of the subgroups included in school accountability systems and are expected to grow continuously in all academic areas.

Approximately 26 million people in the U.S. are LEP and more likely to live in poverty (Batalova & Zong, 2016). The Grantmakers for Education's (2013) report added, The vast majority of ELLs are from families that are struggling economically and have parents with disproportionately low schooling levels. In every state, nearly 60 percent of ELs live in families whose income falls below 185 percent of the federal poverty line. (p. 7)

Close to half of the 44 million immigrants are LEP, and more than 80% of the LEP speakers are immigrants (Zong et al., 2019). In regard to schools, 10% of the K-12 students are ELs, and 72% of ELs between ages 5 and 12 are U.S. born (U.S. Census Bureau, 2016) compared to 32% of secondary school students who are noncitizens (Bialik et al., 2018). Also, "in 2015-2016, approximately 10 percent of the 6 million students eligible for special education services across the country were also identified as ELs" (National Council on Disability, 2018, p. 17).

Although the majority of ELs come from poor environments with limited

education, there are other factors that classify them in different groups with diverse needs: Dual identified students are ELs with a disability and an Individualized Educational Plan (IEP). Newcomers are immigrant or foreign-born students who have recently arrived in the U.S. (U.S. Department of Education, 2017b). Students with Limited or Interrupted Formal Education (SLIFE) are unschooled or under-schooled students due to multiple factors such as constant migration and farm working, war or internal conflicts in their native countries, gang or political persecution, life as refugees, poverty, a need to work at a young age, and a disability, among others. Most of these students “are enrolled in grades 6-12 and are faced with increasingly challenging academic content and standardized testing requirements” (Salva & Matis, 2017, p. 13). Long-Term English Learners (LTEL) have been in an ELD program for 5 or more years, so they are usually secondary students. Their limitations in academic language, especially in the reading and writing domains, have not allowed them to exit the ELD program through the required state test.

There is no doubt that ELs have to become resilient in order to overcome the numerous risk factors they may have to face. However, an average of 40% of them (McFarland et al., 2018) lack the academic resilience skills that would help them graduate from high school and even pursue higher education. Research indicates that being an ethnic minority from a household where neither parent went to college makes it unlikely for a student to excel in higher education (Edmonds & McDonough, 2006). That is where ELL teachers—who usually serve as these students’ first responders—have a definite role in supporting ELs’ academic growth and achievement by guiding them to sharpen their resilience abilities in order to increase their academic resilience. “The

academic resiliency phenomenon is complex, idiosyncratic, multidimensional, and understudied” (Morales, 2008, p. 25); and through this PD/L design study, I intended to provide support for ELL teachers in enhancing their ELs’ academic resilience.

Self-Efficacy in MLs/ELs

Self-efficacy is an element of Morales’s (2008) Resilience Cycle, and its relationship with other components—motivation and protective factors—are presented in this section. The concept of self-efficacy was developed by Bandura (1982, 1994) in his Social Cognitive Theory which described it as an individual’s thoughts and emotions of belief in his or her own capabilities before and during any performance or situation. Self-efficacy is the best predictor of behavior and achievement, and it is based on four principal sources of information: “performance attainments; vicarious experiences of observing the performances of others; verbal persuasion and allied types of social influences that one possesses certain capabilities; and physiological states from which people partly judge their capability, strength, and vulnerability” (Bandura, 1982, p. 126).

In terms of learning, self-efficacy determines how students approach a task based on their previous successful or failed experiences, the observation of peer performance during the task, the motivation and encouragement received from others, and the acknowledgement of their own abilities and skills. According to Bandura (1982), initial performance is affected by self-perceived efficacy, and endurance during performance is influenced by socially induced self-perceptions of efficacy. In that sense, material and verbal positive incentives for task mastery promote interest and motivation and boost self-efficacy. Learners with a high sense of self-efficacy possess strong identities and agency, set challenging goals, and understand how to motivate themselves even after

failure. Identity and agency help students make decisions on effective motivation strategies or learning tools to use in different learning environments (Collett, 2018).

Self-efficacy is one of the most influential factors for second language learning (Rajan et al., 2017; Raoofi et al., 2012). Low self-efficacy language learners tend to attribute failure to low ability, a factor that is initially beyond their control, which may affect their motivation and learning. ELs' academic self-efficacy is determined by interests and attitudes towards the new language, past experiences, task difficulty, and classroom environment (Daemi et al., 2017). The relationship between academic achievement, locus of control, and self-efficacy is essential for success in language learning (Rajan et al., 2017).

Brain-Based Learning and SEL in MLs/ELs

Traditionally, education and academic achievement have focused on elements of cognition like learning, memory, attention, motivation, and decision-making. However, neurobiology has found that in humans, learning is affected by emotions, social interactions, and relationships. By asking students to concentrate on the cognitive abilities and detach emotionally, student learning would be limited and knowledge would not be properly applied to real-world situations (Immordino-Yang & Damasio, 2007).

Brain research has explicated how language is a complex cognitive ability that involves several areas of the brain such as the posterior parietal cortex and parts of the temporal lobe and the prefrontal cortex where words are encoded, the Broca's area that supports speech production, or the parietal cortex that participates in reading (Society for Neuroscience, 2018). Brain-based learning in language integrates learning styles (auditory, visual, and kinesthetic) as well as multiple intelligences, multicultural

strategies, receptive and productive language skills, and cooperative learning activities; in addition to a multitude of techniques and supports like visuals and graphic organizers, manipulatives, read-alouds, varied vocabulary activities, think-pair-share, reader's theater, and social language conversations, among others (Lombardi, 2008).

Caine and Caine (1994) identified 12 principles of brain-based learning, and Lombardi (2008) applied them to ELL and teaching as follows:

1. *The brain is a complex adaptive system*—The brain uses and comprehends language in multiple ways simultaneously and continually shifts activities like attending to the four language domains (listening, speaking, reading, writing) or the learning styles.
2. *The brain is a social brain*—The brain responds to social engagement like games, interactive activities, and cooperative learning.
3. *The search for meaning is innate*—Understanding the rationale and value of learning helps the brain make sense of it. ELs can use life-relevant and thematic experiences, collaboration, community engagement, and kinesthetic projects to improve understanding and memory.
4. *The search for meaning occurs through patterning*—The brain naturally organizes and categorizes information to create meaning. Effective ELL teachers utilize front-loading—pre-teaching, modeling, rehearsing key terms, concepts, and skills—prediction strategies, discovery, inquiry, thematic teaching, and interdisciplinary teaching to promote patterning.
5. *Emotions are critical to patterning*—“What we learn is influenced and organized by emotions and mind sets based on expectancy, personal biases

and prejudices, degree of self-esteem, and the need for social interaction”

(Caine & Caine, 1994, p. 82). Cognitive and affective domains are

intertwined, so feelings and attitudes will always be present in learning. For

successful learning, ELL classrooms need to be supportive, respectful, and

engaging in order to encourage effective communication and metacognition.

6. *The brain processes parts and wholes simultaneously*—Both sides of the brain should be embedded in any language experience. ELs need both logic and creative brain hemispheres to process language from understanding words and grammar and to use them in genuine communicative situations.
7. *Learning involves both focused attention and peripheral attention*—The brain absorbs direct information as well as subtle stimuli in the context. ELL teachers need to be aware of the messages apparently irrelevant things send, such as their own demeanor, attitude, and enthusiasm, or the intentionality of the visuals in the classroom and how frequently they are changed to reflect learning focus.
8. *Learning always involves both conscious and unconscious processes*—The signals perceived peripherally affect learners unconsciously and inform motivation and decision-making. Effective ELL teachers utilize strategies that encourage reflection and metacognition to help ELs find meaning and value in their learning experiences.
9. *We have at least two ways of organizing memory*—Memorization of isolated pieces of information, like words or grammar rules, is important and useful as long as it accompanies transferring to more purposeful learning. ELL teachers

support short- and long-term memory “by organizing activities into meaningful parts, placing ideas in context, and infusing a range of learning styles and multiple intelligences into classroom practice” (Lombardi, 2008, p. 221).

10. *We understand and remember best when facts and skills are embedded in natural, spatial memory*—Experiential learning to engage real-life, skits to practice vocabulary, story-telling for grammar and writing improvement, social media and other technology resources to enhance language domains, and other strategies that target internal processes and social interaction can provide ELs with natural and ordinary situations that help them acquire the new language meaningfully.

11. *Learning is enhanced by challenge and inhibited by threat*—Portions of the brain function less efficiently in the presence of danger or risk. ELL classrooms need to provide a safe atmosphere that is high in challenge and low in threat.

12. *Each brain is unique*—To facilitate optimal brain functioning, ELL classes must offer varied choices and learning experiences that address individual needs and allow students to express their uniqueness.

Although the Resilience Cycle (Morales, 2008) did not specifically include brain-based approaches, research has shown that effective learning—especially, language learning and development—cannot happen when cognition and emotion are targeted separately. The five spokes of the Resilience Cycle radiate around a hub that is described as the effective and purposeful management of emotions and is defined as emotional

intelligence. In 1990, Salovey and Mayer coined the concept of emotional intelligence through three mental processes that involved emotional information: “a) appraising and expressing emotions in the self and others, b) regulating emotions in the self and others, and c) using emotions in adaptive ways” (pp. 190-191). Accurate appraisal, skillful regulation, and thoughtful utilization of emotions and moods vary among individuals and influence problem-solving strategies such as flexible planning, creative thinking, redirected attention, and motivation.

Goleman (1996) defied the narrow view of intelligence in the concept of IQ—intelligence quotient—and disseminated the term as skills that included “self-control, zeal and persistence, and the ability to motivate oneself” (p. iii). Goleman described the Self Science curriculum, a model for teaching emotional intelligence that had been used at schools for about 20 years. The components of the Self Science course included self-awareness of own feelings, personal decision-making, managing feelings and monitoring self-talk, handling stress, empathy, communication of feelings, self-disclosure to build trust in relationships, insight to identify emotional patterns, self-acceptance, personal responsibility, assertiveness to state concerns and feelings without anger or passivity, group dynamics and cooperation, and conflict resolution. Eventually, Salovey and Mayer’s (1990) and Goleman’s (1996) emotional intelligence was embraced by educators under the name of SEL.

Since then, multiple SEL approaches and programs have emerged, and the ones that remain have evolved with society’s needs by integrating spaces and strategies that support students and adults to reflect on varied issues such as gender, race, or equity. High-quality, evidence-based SEL programs promote personalized learning and help

students increase a growth mindset, self-efficacy, agency, a sense of belonging, and academic tenacity (Beyer, 2017). The best SEL approaches are systemic, proactive, integrated into the curriculum for skill building of all students, and attentive to outcomes (Brackett, 2019). Two of the most successful SEL approaches are CASEL and RULER.

CASEL (2015) defined SEL as,

The process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. (p. 5)

CASEL's (2015) theory is grounded on five core cognitive, affective, and behavioral competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.

The founding director of the Yale Center for Emotional Intelligence, Marc Brackett (2019), asserted that everyone should become an emotion scientist instead of an emotion judge in order to be successful at home, school, and work. Emotions arise from the interpretation of internal or external stimuli. They live shortly, include a physiological reaction, are expressed automatically, are accompanied by a personal experience, and mobilize individuals into action in the form of approach or avoid or fight or flee. Emotion judges look to validate or negate other people's feelings and punish their behavior instead of helping them regulate emotions. Brackett identified the areas in everyday life that are driven by emotions: (a) attention, memory, and learning; (b) decision-making; (c) social relations; (d) mental and physical health; and (e) creativity, effectiveness, and performance. Emotion scientists think and act smartly—they understand the origin of their

feelings and prevent them from taking over their actions, and they help others understand and regulate their emotions. To educate students, teachers, families, and leaders on the science of emotions, the Yale Center for Emotional Intelligence created the RULER framework (Yale University, 2020). RULER is an acronym that stands for:

- Recognizing emotions in oneself and others
- Understanding the causes and consequences of emotions
- Labeling emotions with a nuance vocabulary
- Expressing emotions in accordance with cultural norms and social context
- Regulating emotions with helpful strategies

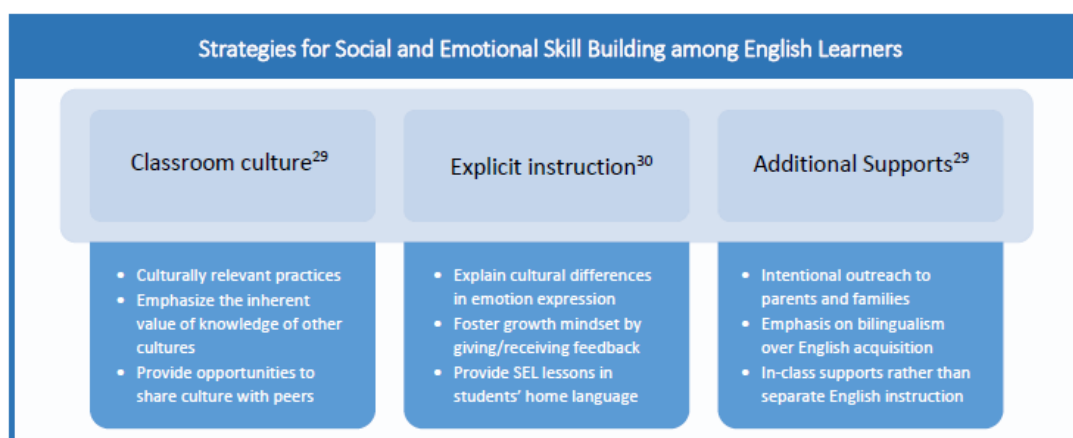
Traditionally underserved students—children with disabilities, justice-involved youth, and ELs—are more likely to experience negative environments which limits their social-emotional development. As immigrants, refugees, adoptees, or US-born children of non-English speaking immigrants, ELs face barriers that include isolation, communication difficulties, discrimination, acculturation issues, structural inequalities, misunderstanding of social practices, and disparate cultural and academic expectations (Beyer, 2017; Niehaus & Adelson, 2014; Zacarian et al., 2017). However, “unlike special education, ELL-serving programs rarely focus on students’ self-efficacy, social inclusion, and independence. Instead, the emphasis is on English acquisition, with instruction often carried out in segregated classrooms” (Beyer, 2017, p. 10), where students cannot develop the sufficient higher order skills, communication abilities, and cultural awareness necessary to succeed in the global economy and society (Zacarian et al., 2017).

Although research supports that social and emotional abilities are linked to academic success and that specific ELL practices can build social-emotional skills, there

is a lack of comprehensive studies that evaluate the impact of SEL practices on ELs' academic achievement. Figure 2 illustrates how Beyer (2017) identified only three dissimilar and original lines of thought for ELL instruction that foster SEL. The three initiatives—intentional changes to classroom culture, explicit SEL instruction, and implementation of ELL best practices in school and curriculum—are being used separately by school districts and organizations in the U.S., differ in approach, and lack investigation of their impact.

Figure 2

Strategies for Social and Emotional Skill Building Among ELs



Note. Beyer (2017, p. 10).

The concepts of brain-based learning, emotional intelligence, and SEL and their suggested practices for student achievement are used in this study to support its theoretical framework. All of them serve to explicate the protective factors ELs can potentially develop to improve their academic resilience.

Trauma-Informed Approach and the English Learning Classroom

When an individual faces a threat, the heart rate increases, the blood pressure rises, and there is an instinctive reaction to find safety. In this situation, the limbic

system—the part of the brain that responds to fear—activates, and more developed parts of the brain that do reasoning and regulation of emotions and thoughts are put on hold. If the individual has been chronically exposed to trauma or ACEs, some areas of his or her brain like the prefrontal cortex or the amygdala may be altered or impaired and his or her mind may live in fear and survival mode (Romero et al., 2018). Executive functions and higher level cognitive processes such as planning, decision-making, long-term goal actions, problem-solving, and self-control take place in the prefrontal cortex. The amygdala is responsible for memory, emotions, and survival instinct. Consequently, victims of ACEs or trauma may have an exaggerated response to situations of fight, flight, and freeze. They may have cognitive development delays or difficulties with attachment and self-concept; and they may be impulsive, defiant, aggressive, anxious, depressed, or withdrawn (Kataoka et al., 2012; Romero et al., 2018).

Brackett (2019) added,

One in five American children is experiencing a mental health issue such as depression or anxiety, and over half of all seventeen-year-olds report having either experience trauma directly, ranging from neglect or abuse, or witnessed it at least once as a child. (p. 192)

Zacarian et al. (2017) stated there is little professional literature about trauma, violence, and chronic stress and the therapeutic support needed; and there is less information about one of the fastest growing population of students in U.S. schools, ELs who experience those situations. In their work, Zacarian et al. (2017) reported statistics about diverse groups of ELs. In 2013, 60% of ELs' families had incomes 185% lower than the poverty level; in 2015, 69,933 refugees were admitted into the U.S. and 107,000

undocumented minors between 0 and 17 years of age were apprehended in the border with Mexico; and, in 2016, 4.1 million U.S.-born children had at least one undocumented parent. In all these cases, ELs may have been exposed to trauma from abuse, persecution, or trafficking; violence from gangs or domestic abuse; or chronic stress from isolation, economic deprivation, or fear of deportation. According to the National Child Traumatic Stress Network (2015), immigrants have to face separation, loss, and change, which challenge their identity. Many of them experience “ambiguous loss” or physical separation and constant communication with loved ones left behind in their native countries, which cause unresolved feelings of grief and loss. In addition, unaccompanied immigrant children are especially vulnerable to exploitation, abandonment, or abuse during their journey to the U.S.; and their reunification with family members, even parents, they only know virtually may be complicated. Traumatic stressors may be added to these minors during the detention, process, and placement in the foster care system when they cannot be reunified with a relative. When immigrant children enter the American schools, they may not only face the challenges of a new language and culture, but they also join age-based classes that may not correspond to their schooling or academic knowledge.

In the school setting, trauma and ACEs affect each student in different ways. They can display the classic symptoms of traumatic stress: involuntary re-experiencing or reliving of the event, avoidance of any reminder or emotion that triggers the memory, and hyperarousal symptoms of Post-Traumatic Stress Disorder–PTSD (Medley, 2012). It is estimated that only 4% to 6% of young people in the U.S. are diagnosed with PTSD (Kataoka et al., 2012). Medley’s (2012, p. 114) summarized children’s responses to

trauma are listed in Table 1.

Table 1

Responses of School-Aged Children to Emotional Trauma

Emotional	Cognitive	Behavioral
Fear	Loss of interest in school	Aggressiveness towards others
Moodiness	Trouble with memory and poor concentration	Hypervigilance/hyperarousal
Anger		Withdrawal/isolation
Depression	Possible desire to understand why the trauma occurred or thoughts about death	Attention-seeking behaviors
		Difficulty trusting others or loss of trust in others
		Participation in high-risk or illegal behaviors (e.g. substance abuse)–adolescents

“Trauma lies not in the event itself but in the response of the person” (Medley, 2012, p. 112). Anxiety is common in academic situations as well as difficulties to focus and remain seated, understand directions and multi-step processes, recall information and content, and make and carry out plans (Romero et al., 2018). Additionally, these students may show a decrease in reading ability, motivation, grades, and school attendance (Kataoka et al., 2012). Therefore, teachers should be prepared to understand student responses and to create learning environments that address the needs of trauma-affected youth. In the language learning classroom, ELL teachers should utilize pedagogical strategies that include multiple intelligences (bodily-kinesthetic, musical, spatial, naturalistic, interpersonal, intrapersonal, etc.), language instruction, and content-based language instruction that encourage self-expression, exploration of social skills, and trauma healing process (Medley, 2012).

ELL teachers should ensure student-needed emotional safety by maintaining a predictable routine, using gradual release of responsibility to introduce individual

performance and assessment after choral reading or group correction, and building a reward system or a set of positive incentives for effort and performance. To redevelop trust, language learners should be part of a classroom culture where language is used to build community and to encourage each other with words and acts of kindness. Students should be exposed to storytelling opportunities where they can use the target language to reflect on their experiences and to share them in order to mourn their trauma by talking about it. ELL teachers can design writing and speaking assignments where ELs can use their new language to document their experience, use intrapersonal intelligence, and reconstruct the meaning of what they lived. They can also use the language to negotiate and solve problems in the classroom and learn about conflict transformation. ELs should also be encouraged to use the language of forgiveness that will support them to leave the survivor/victim cycle and to step away from the possibility of self-harm and revenge.

According to Medley (2012),

Integrating language instruction with self-expression and exploration of social relationships creates a safe environment and supportive community in which all learners thrive and the trauma-affected among them learn to trust others and regain self-efficacy. Incorporating content-based language instruction related to conflict transformation and forgiveness can fortify students' resilience while facilitating language learning. (p. 120)

Trauma-Informed Approach has a place in the Resilience Cycle (Morales, 2008) due to it informs the identification of student needs and challenges and the necessary practices to support protective factor development. By understanding possible ELs' exposure to ACEs and trauma, ELL teachers can be better prepared to design educational

plans and look for external services for their students. This knowledge can also support teachers in identifying signs of compassion fatigue and looking for proper interventions, which are explained in the upcoming section.

The ELL Teacher

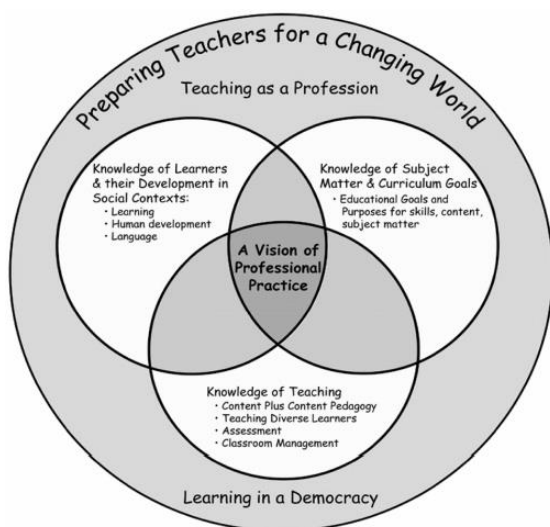
ELL teachers are ELs' first responders. Due to their regular contact with ELs, ELL educators have the unique role to translate the social, cultural, educational, and personal demands placed on their students. ELL teachers become a vital and first component of a network of helpers for ELs. ELL educators are listeners, mediators, providers, facilitators, and teachers (Lucey et al., 2000). They listen to their students' experiences, thoughts, and feelings; mediate between students' old and new cultures; provide or look for information about services and resources; facilitate and create a safe environment for students; and teach them the language they need to communicate. "Research shows that having just one caring adult can make the difference between whether a child will thrive or not" (Brackett, 2019, p. 36). In the case of unaccompanied minors and other ELs under risky conditions, their ELL teacher might be the only caring adult these students can count on.

According to Bandura (1994), teacher talents and high efficacy in their teaching capabilities as well as their positive feedback enhance student motivation, confidence, autonomy, self-efficacy, and academic resilience. The school is the primary setting for students to cultivate and validate problem-solving skills, decision-making abilities, and cognitive and social competencies. Teacher efficacy is one of the few teaching characteristics consistently correlated with student achievement (Bandura, 1995; Fallon, 2010; Gordon, 2011).

Morales and Trotman (2011) confirmed the impact of self-efficacious influential teachers on academic resilient students. These teachers make their students feel academically special and positively unique, they are particularly rigorous and demanding and have high expectations, and they are available to the students beyond the classroom. Those educators' academic rigor promotes major protective factors in the students such as "high intelligence, a strong work ethic, internal locus of control, and intellectual curiosity" (Morales & Trotman, 2011, p. 50).

Teacher efficacy can be impacted by teacher preparation and professional learning (Darling-Hammond, 1998). Effective professional learning should feature content-focused, active learning utilizing adult learning theory, collaboration, models and modeling of effective practice, coaching and expert support, opportunities for feedback and reflection, and sustained duration (Darling-Hammond et al., 2017). As adults, teachers are motivated to learn when the learning satisfies their needs and interests; is active and connects to life situations and experience; provides the opportunity for self-direction, reflection, and inquiry; and allows them to receive input and make changes to their practice (Darling-Hammond et al., 2017; Kelly, 2017).

In regard to the core concepts and skills a teacher's curriculum should have, Darling-Hammond (2006) shared a visual of the framework for teacher education presented by the National Academy of Education Committee of Teacher Education (Figure 3). The framework visualizes educators as professionals who have knowledge of the subject and its goals, their students and their developmental stages, and the pedagogy of teaching.

Figure 3*A Framework for Understanding Teaching and Learning*

Note. Darling-Hammond (2006, p. 5).

The Standards for Professional Learning (Learning Forward, 2011) provided rigorous guidance to design teacher preparation curricula. The standards “enumerate the conditions, processes, and content of professional learning to support continuous improvement in leadership, teaching, and student learning” (Learning Forward, 2011, p. 6). The relationship between professional learning and student achievement is explicated as the changes in student results depend on the changes in educator practice, which in turn are derived from changes in educator knowledge, skills, and dispositions that are based on the professional learning standards. The seven standards have three areas of focus: context, processes, and content. Learning communities, leadership, and resources present the context or essential conditions for effective PD/L. Data, learning designs, and implementation define the processes. The last standard is outcomes, which specifies the essential content for PD/L. Although the seven standards should be part of every professional learning initiative, for the purposes of this PD/L design study, I targeted the

processes as they define the quality and effectiveness of professional learning and describe the attributes of teacher learning processes. The professional learning standards and their core elements are shown in Appendix C.

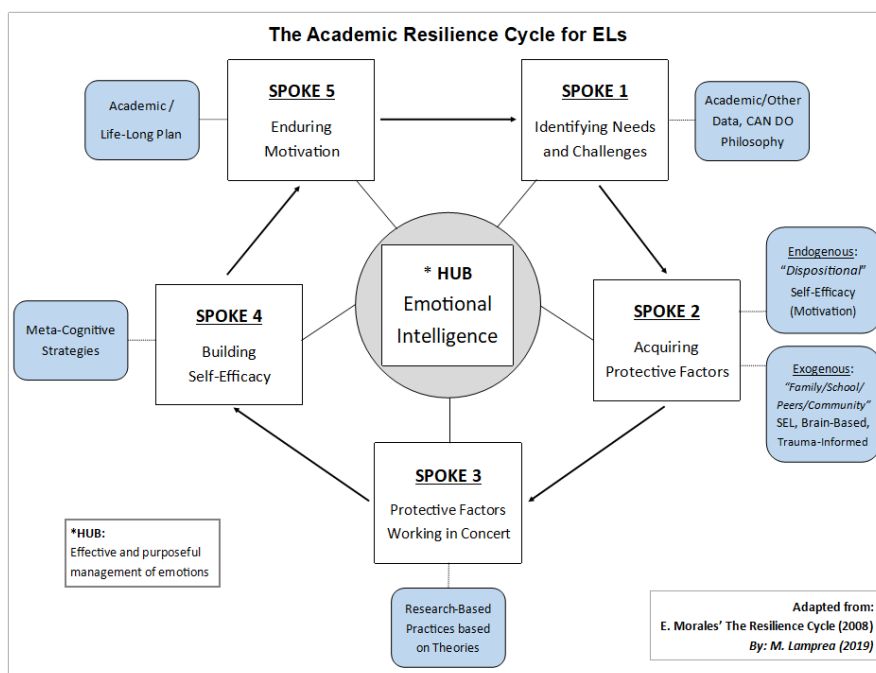
In previous sections, practices and strategies ELL teachers can use with ELs have been explicated. ELL teaching methods and PD/L initiatives mainly concentrate on language development and/or how to teach ELs. As an example, a well-known model is Sheltered Instruction Observation Protocol, which supports ELL and subject area teachers to make content more accessible to linguistically diverse learners while promoting ELD (Echevarría et al., 2000).

Additionally, as first responders, ELL teachers need to put on their own oxygen mask before helping their ELs. ELL teachers care about the students and know their stories and challenges; therefore, these teachers need to observe the impact of their work on their hearts, minds, and bodies. Their closeness to possible victims of trauma and ACEs makes them vulnerable to vicarious trauma or compassion fatigue. “Compassion fatigue is the physical and mental exhaustion and emotional withdrawal professionals experience when working with distressed children, adults, or families over extended periods of time” (Romero et al., 2018, p. 12). ELL teachers need to be aware of symptoms like depression, hopelessness, and high levels of stress and anxiety in order to find self-care interventions. These teachers could build resiliency capacity by developing daily habits to decompress; learning to remain calm, assertive, and nonreactive; or finding friends or therapists they can speak with about their own feelings and emotions. Any PD/L for ELL teachers needs to provide them with tools to take care of themselves first.

Conceptual Framework

Although resilience cannot be imposed, “there are myriad interventions that could support, encourage, or promote (i.e., ‘facilitate’) those who have the desire and necessary talent to achieve more than what has been statistically portended as a result of their background” (Morales & Trotman, 2011, p. 68). Using Morales’s (2008) Resilience Cycle as the foundation, I added concepts and theories from the literature review to create a conceptual framework that served as a foundation on which to design teacher preparation for ELL educators and instruction for ELs’ academic resilience development.

A conceptual framework “is a series of sequenced, logical propositions which purpose is to ground the study and convince readers of the study’s importance and rigor” (Ravitch & Riggan, 2017, p. 5). I initially coined the framework as the Academic Resilience Cycle for ELs, as illustrated in Figure 4, which I used during the study’s data collection. The Academic Resilience Cycle for ELs intended to explicate an intentional process where classroom practices integrate language and language development instruction with evidence-based strategies that support the enhancement of ELs’ resilience in educational settings. This conceptual framework meshed what I knew about the Resilience Cycle and ELs’ instructional needs. It eventually evolved to *Enhancing MLs/ELs’ Academic Resilience* and became one of the research outcomes described in Chapter 4.

Figure 4*Initial Conceptual Framework – Academic Resilience Cycle for ELs*

The cycle started with the identification of student needs and challenges. In the case of ELs, this examination may be done by studying available academic, demographic, and other data in an environment where assets and strengths are recognized and valued, as described in the WIDA Can Do Philosophy. The next phase is the acquisition of protective factors. Resilient individuals have to rely on their internal and external factors to go through challenging situations. In academics, learners may need intentional support to use selected and/or designed practices and strategies in order to build or develop personal and external protective factors. ELs' protective factors could be improved through the use of language development activities that incorporate ideas from the theories of self-efficacy, emotional intelligence and SEL, brain-based learning, and trauma-informed approach. Self-efficacy strengthens personal or dispositional protective abilities like confidence, autonomy, motivation, and goal-setting; and SEL, trauma-

sensitive, and brain-based strategies used in a context of language learning can contribute not only to the improvement of dispositional factors but also to empower students in their interaction with family, peers, school, and community. Continuing with the following phases, the chosen strategies should be implemented, assessed, and revised to support the development or improvement of ELs' characteristics and abilities. Practices and activities have the purpose to guide the students to become more self-aware of their strengths and weaknesses and to work on them in a way that supports their success at school. Ultimately, the process should increase ELs' motivation, persistence, and endurance while working on their academic and life-long goals.

It is necessary to clarify that the sequence will not occur exactly as illustrated. This is an organic process that should be adjusted to student needs. The conceptual framework is mainly a visual representation of the relationship of elements that potentially empower ELL teachers in designing and implementing curriculum and instruction to support ELs' personal and educational growth and achievement.

DBR

According to the Design-Based Research Collective (2003), DBR is “an emerging paradigm for the study of learning in context through the systematic design and study of instructional strategies and tools” (p. 5). A more specific definition is “Design-based research is not so much *an* approach as it is a series of approaches, with the intent of producing new theories, artifacts, and practices that account for and potentially impact learning and teaching in naturalistic settings” (Barab & Squire, 2004, p. 2). DBR studies the design and testing of educational interventions as well as the identification of local or specific theories about teaching and learning and the relationship among those theories,

the designed instruments, and the practice. DBR relies on tools and techniques used in both quantitative and qualitative paradigms to examine validity and reliability of its empirical research.

Collins et al. (2004) stated design research was developed to study issues of learning, and it can be carried out in diverse ways and contexts. Their guidelines were provided to show the vastness of the design research community's responsibility, and they described how to implement a design, modify a design, analyze the design in multiple ways, measure dependent or independent variables, and report on design research.

History

Instructional design that supports learning theories started in the former Soviet Union, but it was first named design research in 1992 with Ann Brown and Alan Collins (Cobb et al., 2015). It differed from traditional empirical research by going beyond the specification of new hypotheses to the creation of design principles through a pragmatic, iterative process. Design experiments used formative research to evaluate and improve educational settings based on principles originated in former research (Collins et al., 2004). Historically, DBR has been challenging to define, conceptualize, and replicate authentically due to the proliferation of approaches and names it has received, such as design experiments, design research, formative research, developmental or development research, and design-based implementation research. The names have also varied according to the educational subdisciplines like curriculum, learning and instruction, media and technology, and teacher education (Christensen & West, 2013). In the last 3 decades, several concepts and models of DBR have been presented (Anderson &

Shattuck, 2012; Bannan-Ritland, 2003; Brown, 1992; Collins, 1992; Reeves, 2006).

The term educational design research has been closely related to the creation of educational technologies, but nowadays it is used in diverse education and learning settings that may or may not involve technology (Sandoval, 2013). Each discipline has attempted to define DBR for its own purpose in more theoretical terms than in pragmatic ways. The primary concern in classroom experiments has been the refinement of explanatory constructs instead of the development and improvement of instructional designs (Cobb et al., 2015). DBR's biggest deficit remains in the lack of a consistent and consensual argumentative grammar, the unique and specific logic that guides methodology and data use. In more recent years, investigators have tried to develop better tools at conducting DBR studies, such as specific *modes of inquiry* in educational psychology and learning science research (Penuel & Frank, 2015) and elements of conjecture mapping in educational design research (Sandoval, 2014).

Characteristics

The Design-Based Research Collective (2003) proposed five characteristics of any DBR methods that have not changed throughout the years: (a) The design of learning environments and the development of theories of learning go hand in hand; (b) continuous cycles of design, enactment, analysis, and redesign need to be used; (c) the theories and their important implications obtained from the study should be shared with other practitioners and educational designers; (d) documentation of success, failure, and interactions is essential in order to understand authentic learning issues that occurred during the study; and (e) the methods, processes of enactment, and outcomes of interest should be connected and documented. In other words, design research is interventionist

due to it happens in real contexts; iterative because it uses cycles of design, evaluation, and revision; process oriented as it intends to understand and improve interventions; utility oriented considering its practical application in real contexts; and theory oriented with at least partial design on theories and a field-testing that supports theory building (van den Akker et al., 2006).

DBR studies are both pragmatic and theoretical (Design-Based Research Collective, 2003). They are pragmatic because they implement, evaluate, and improve an intervention; and they are theoretical because the implementation process produces a local theory in learning and teaching that becomes the rationale for design (Cobb et al., 2015). Using both approaches, DBR aims to construct a local instructional theory with conjectures about a possible learning process and conjectures about possible ways to support that learning process (Gravemeijer & Cobb, 2006).

Purpose

Through DBR, “practitioners and researchers work together to produce meaningful change in contexts of practice (e.g., classrooms, after-school programs, teacher on-line communities)” (Design-Based Research Collective, 2003, p. 6). Three outputs are pursued in design research: the knowledge produced by the study, the contribution to society with the design by developing or refining curricular products or programs, and the professional learning of participants during the reflection and collaboration process (McKenney et al., 2006). DBR findings cannot be generalized to a larger universe, but the design principles generated in the study can be generalized to a broader theory. DBR interventions are designed to be practical and relevant in the real world, and its professional learning is based on the collaboration among practitioners and

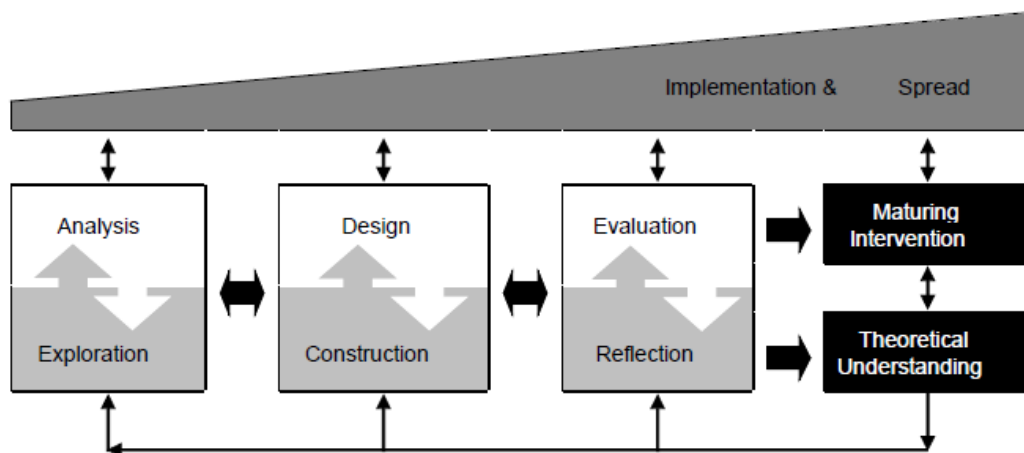
researchers (van den Akker et al., 2010).

Phases

Design-based studies should follow the four criteria for high-quality interventions: relevance, consistency, practicality, and effectiveness. A study is relevant or content valid when the intervention is needed and its design is rooted in science. It is consistent or construct valid when the intervention is designed logically. It is practical when it can be used in the real settings that it intends to serve; and it is effective when it produces the desired outcomes (van den Akker et al., 2010). After studying existing models, McKenney and Reeves (2012) laid out a generic model for educational design research.

Figure 5

Generic Model for Conducting Educational Design Research



Note. McKenney and Reeves (2012, p. 14).

This model highlights the iterative process of the design research in education where every step is built in the former stage and feeds the next one. The three core elements or stages of the iterative process—analysis, design, and evaluation—create or refine a theory-based intervention that goes constantly through exploration, construction,

and reflection. Design research is also described “as research that iterates through a cycle of design, enactment, analysis, and revision” (Sandoval, 2013, p. 388).

Types

Design studies cover a broad range that vary in type and scope. Among many others, there are DBR studies based on the number of participants such as the one-on-one design studies that focus on one investigator and the learning process of a small group of students; organizational design studies that involve an investigation team and diverse stakeholders to inform instructional improvement; classroom design studies that investigate the process of student learning in a particular topic and the search is led by a teacher who could be part of a research team; and professional development design studies that concentrate on supporting a group of practicing teachers in improving their instructional practices (Cobb et al., 2015). Because the purpose of the current investigation was to support ELL teachers, I chose the professional development design study as the educational DBR model for the design. As described in the Standards for Professional Learning (Learning Forward, 2011), the term professional learning is more appropriate than professional development due to the educator’s active role during the learning process. I only use the expression professional development when I refer to the original name of this type of DBR study. In all other cases, including this investigation, I use PD/L or professional learning.

PD/L Design Study

As a professional in teaching of mathematics, Paul Cobb’s (Cobb et al., 2003; Cobb et al., 2015; Gibbons & Cobb, 2017; Gravemeijer & Cobb, 2006; Jackson & Cobb, 2012) work has concentrated on his area of expertise and has illuminated the

development of DBR, especially in both classroom design studies and professional development design studies. The term professional development refers to intentionally designed activities that support teacher learning (Cobb et al., 2015). Professional development design studies focus on improving domain-specific instructional theories that target student learning goals and demonstrate means of supporting their learning. The conjectures about teacher learning can examine multiple and different elements that are part of the implementation of particular instructional practices, such as observable aspects of teaching in techniques to ask questions, specific types of knowledge as student ways for reasoning on a topic, and particular beliefs like student capabilities in a specific area (Cobb et al., 2015).

The preparation for a PD/L design study should specify goals for teacher learning, document instructional starting points, delineate an envisioned learning trajectory, and place the study in a theoretical context. In addition, since PD/L design studies concentrate on making the research relevant to teacher classroom practice, the investigator needs to intentionally pay attention to explicate teachers' particular school settings and the learning environment where the PD/L design study takes place in order to avoid erroneous assumptions (Cobb et al., 2015).

According to Gibbons and Cobb (2017), high-quality professional learning must have the following characteristics: (a) learning opportunities are intensive and ongoing; (b) learning focuses on educators' day-to-day problems; (c) it also helps teachers concentrate on student thinking; (d) learning promotes the improvement of professional communities where educators develop a common professional discourse regarding student learning and instructional practice; and (e) professional learning activities

encourage teachers to investigate or enact the practices and routines studied. Gibbons and Cobb (2017) examined approximately 20 professional learning activities that could be used with educators to see if they satisfied the five characteristics of high-quality professional learning, and they found that six of them were potentially productive activities. Four of the activities helped teacher preparation that involved groups of teachers, and the other two could be used in personalized coaching or mentoring. The four potentially productive activities for groups of teachers were engaging in the discipline by providing educators the opportunity to do professional inquiry in their discipline; examining student work to understand student thinking and improve instruction; analyzing classroom video to promote discussion of practices and student learning; and engaging in lesson study to support teacher collaboration in lesson planning and peer observation. The individual potentially productive activities were coteaching and modeling instruction.

Conjecture Mapping

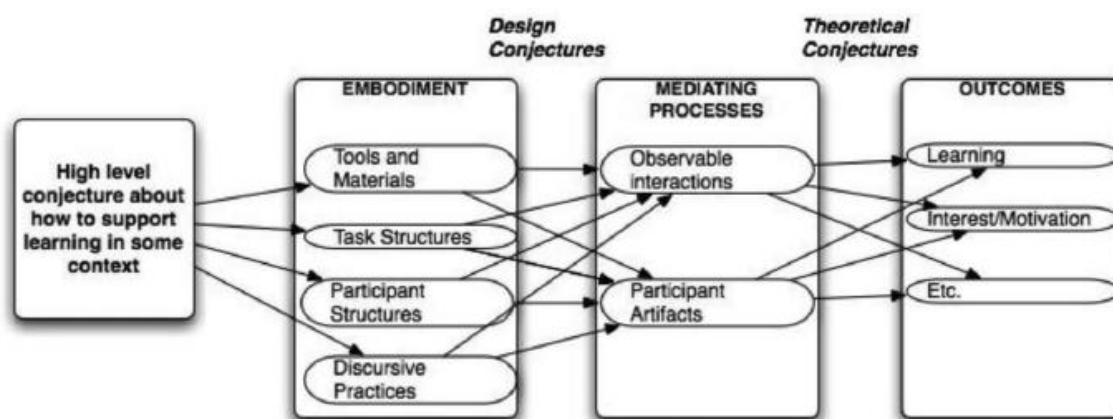
After years of confusion and criticism about educational design research's lack of clear investigation methods and its limitation to simultaneously produce design evaluation and theory building, Sandoval (2014) proposed conjecture mapping as a technique to conceptualize design research. Conjecture mapping is

a means of specifying theoretically salient features of a learning environment design and mapping out how they are predicted to work together to produce desired outcomes. Mapping the conjectures guiding a design can guide the systematic test of particular conjectures about learning and instruction in specific contexts. (Sandoval, 2014, p. 19)

Through conjecture mapping, educational research-based design can be more systematic in the production of instructional designs and theories of learning, due to the connection of design conjectures and theoretical conjectures that illustrate the hypothesized learning trajectory (Cobb et al., 2003) in a designed learning environment with explicit means of support. Sandoval (2014) defined conjecture as “the usually highly provisional nature of the ideas we have about how to design a learning environment at the start of a design research project” (p. 22). Figure 6 shows the connection of the six major elements of a conjecture map and their relationships.

Figure 6

Generalized Conjecture Map for Educational Design Research



Note. Sandoval (2014, p. 21).

The learning environment design starts with a high-level conjecture or “theoretically principled idea of how to support some desired form of learning, articulated in general terms and at too high level to determine design” (Sandoval, 2014, p. 22). The high-level conjecture originates in the initial problem analysis. Then the embodiment step presents the specific design features in terms of resources, learner activities, participant responsibilities and roles, and discursive practices. How the

embodiment generates mediating processes are the design conjectures. The mediating processes explicate the observable interactions among participants and the designed environment as well as the artifacts produced by the participants during the activities. Those artifacts illustrate the participants' engagement and thinking. The explanation of how the mediating processes produce desired outcomes are the theoretical conjectures. The outcomes can be diverse as the ways to gather evidence.

Consequently, "conjecture maps for particular designs should be as specific as possible about what the desired outcomes are" (Sandoval, 2014, p. 24). Differentiating the conjectures supports investigators in distinguishing how a design functions from how learning is produced. "Conjecture maps are intended to organize design research by focusing researchers' attention on the aspects of a designed learning environment considered theoretically salient" (Sandoval, 2014, p. 27).

Samples of Studies Using DBR

Finding theoretical documentation about educational DBR is quite an easy task as well as finding ideas about how to apply it. However, finding studies or actual dissertations that have used DBR as their methodological framework is a challenge. I only found three studies that used DBR and conjecture mapping in their methodology. The first study used DBR in a reading intervention with fourth and fifth graders to scaffold learning from informational texts (Bergeson, 2016). In the second study, DBR and social network analysis methodologies were used to examine the support preservice teachers get during practicum experience and how technology could improve that support (Hougan, 2014). The target population in the last study was high school long-term ELs, and its investigator examined the connected learning theoretical framework and other

language scaffolds to create an intervention that helped students create video letters (Elizalde, 2018).

Although none of the studies I found really resembled a PD/L design study for in-service ELL teachers, all of them provided elements for reflection. They all used conjecture mapping to organize the design research or to show the findings. The first study was the only one that used more than one conjecture map—it actually used five to describe the interventions. The second study used the conjecture map to illustrate the findings. Due to the target population, ELs, the third dissertation is the closest to the needs of this particular study. The conjecture mapping presented by Elizalde (2018) provided a sample of conceptualization of the investigation and a clear model of how to structure the study. Also, two of the studies confirmed Sandoval's (2013) statement about how DBR has often been linked to educational technology.

Need for Further Research

Based on the previous literature review, there is a gap between the instruction offered to ELs and the complexity of their needs. These students are more vulnerable than other populations, though they are more personally resilient. Therefore, they require consistent support in how to hone their strengths and build skills that help them become more academically resilient. However, the frontline professionals who serve these learners, ELL teachers, mainly receive learning opportunities that concentrate on language instruction. This PD/L research design study aimed to evaluate a model of professional learning for ELL educators that targeted ELs' needs in a more comprehensive way by reviewing academic resilience from theoretical and pragmatic perspectives.

Summary

In this chapter, I started by describing how the asset approach sets the tone needed to educate ELs and introduced the WIDA Can Do Philosophy as the asset approach for this study. Moving from a deficit mindset to a positive one that builds upon these learners' abilities, Morales's (2008) Resilience Cycle is presented as the theoretical construct that grounds the conceptual framework used in the study to support ELs' academic resilience development. By exploring brain-based learning, emotional intelligence and SEL, trauma-informed care, and self-efficacy as theories and practices, I intended to explicate the components of the Resilience Cycle in a way that supports ELL teachers. The chapter ended presenting Design-Based Research Collective's (2003) professional development design study and conjecture mapping (Sandoval, 2014) as the methodological means of investigation for this investigation. In the upcoming chapter, the research methodology for the PD/L design study is described in depth. I present the rationale, setting, participants, research questions, data collection and analysis, limitations, and delimitations of the PD/L design study.

Chapter 3: Methodology

MLs/ELs encounter numerous obstacles. Migrant ELs face difficulties with the new language and with social challenges such as immigration stress, family separation, isolation, and cultural shock (Nguyen et al., 2015). Also, between 30% and 86% of refugees experience post-traumatic stress symptoms (Gordon, 2011). Descendants of immigrant parents or grandparents, most ELs are U.S. born and attend schools carrying life problems like poverty, trauma, violence, and chronic stress from abuse, family challenges, and neglect (Romero et al., 2018; Zacarian et al., 2017). In addition, only 63% of all ELs graduate from high school. Consequently, professional learning for ELL educators should provide them with tools to help empower ELs' success at school and challenge life adversities. In other words, professional learning for ELL teachers should prepare them to support ELs' academic and personal resilience development effectively. Furthermore, working with possible victims of trauma and adversity may cause ELL teachers to experience anxiety, helplessness, or anger, a condition known as compassion fatigue or "vicarious traumatization" (Massachusetts Advocates for Children, 2009, p. 58). Thus, teacher preparation for ELL professionals should guide them to recognize their own compassion fatigue symptoms and to employ self-care techniques.

This PD/L study aimed to design, evaluate, and refine a teacher preparation intervention for practicing ELL educators that furnished theoretical and pragmatic tools to support ELs' academic resilience. There is limited literature on how to develop academic resilience, and literature is scarcer in supporting ELL teachers to help ELs cope with adversities that may restrict their academic achievement. ELL educators, besides supplementing their students' English learning, serve as their first responders, advocates,

counselors, social workers, therapists, and even parental figures. Due to ELL teacher preparation programs mainly addressing language and literacy development, there is a need for professional learning opportunities that embrace ELs as whole children whose multiple necessities may inhibit their success in educational settings.

This chapter introduces the setting, participants, and research and guiding questions of the PD/L design study. It describes how educational DBR and conjecture mapping were used as the research methodology and technique; and it presents the designed PD/L intervention and the research design and process. The chapter concludes with the anticipated limitations and delimitations of the investigation.

Setting

The school district where the study took place is located in North Carolina and serves a very diverse and contrasting population. Its 33 schools comprised 13 elementary schools, nine middle schools, nine high schools, and two alternative schools. In the spring of 2019, the district had 18,247 students, close to 1,800 teachers, and 10,000 employees. The student population was formed by 35.68% White, 35.46% Black, 23.47% Hispanic, and 5.39% of other races. Seventy-two percent of the students were eligible for free or reduced lunch. More than 2,300 students in the district were ELs. Approximately 1,500 of them were U.S. born, and the rest of them were mainly originally from Guatemala, Haiti, Yemen, Honduras, and Mexico. The most spoken language other than English was Spanish, with 1,760 Spanish-speaking students, followed by Haitian Creole and Arabic.

Participants

The district's professional learning team consisted of 34 ELL teachers, including me. There were six male and 28 female teachers. Ten teachers were Caucasian, three

were African-American, three were Asian, and the other 15 were Hispanic. Eight teachers were in their first year in the county, but only two of them were in their first year of teaching.

I invited the members of the district's ELL team (N=33) to participate voluntarily in the 3-step data collection of the study. Eleven teachers responded to Step 1, nine teachers participated in Step 2, and three teachers were part of Step 3. The latter step required previous participation in Step 2, but Steps 1 and 2 were independent of each other and Step 2 did not require prior participation. Since the answers to the first and second steps were provided anonymously, there were no identifiable markers of the respondents.

The research instruments used in the 3-step data collection process consisted of an initial open-ended electronic questionnaire, an individual electronic evaluation of the PD/L intervention or online module, and a focus group. After approval from the school district's federal programs department, I informed the ELL teachers via email about the study as shown in Appendix D. The letter of informed consent was enclosed in the electronic message as well as information regarding the digital questionnaire, PD/L module, and survey to evaluate the module. The participants signed electronically the informed consent to respond to the initial digital open-ended questionnaire (Appendix E) and/or to review and evaluate the online module through a digital survey (Appendix F).

The electronic PD/L module was researcher authored; and in order to be easily accessible for the participants, it was located in the Canvas site managed by the North Carolina Department of Public Instruction's ESL/Title III department. The digital intervention or module elaborated on the components introduced in the Initial Conceptual

Framework–Academic Resilience Cycle for ELs (Figure 4). The evaluation survey ended with the invitation to take part in the focus group, which gave the participants an opportunity to discuss the pertinence and usefulness of the PD/L intervention, ask questions, and provide additional suggestions. Appendix G lists the questions used to guide the focus group conversation.

Research and Guiding Questions

This PD/L design study used conjecture mapping as a DBR technique. For this reason, the study had only one research question accompanied by four guiding questions. The research question, “What are the characteristics of an effective in-service program that provides ELL teachers with tools to enhance ELs’ academic resilience,” explicated the main purpose of the study and informed the high-level conjecture.

To determine participant prior knowledge concerning the research question and through the lenses of the initially proposed conceptual framework and the PD/L intervention draft, Guiding Questions 1 and 2 were used.

Guiding Question 1. What empirical and research-based practices do ELL teachers use to support ELs’ academic achievement?

Guiding Question 2. What empirical and research-based practices do ELL teachers use to support ELs’ social-emotional development?

To evaluate and refine the design of the PD/L intervention and improve the conceptual framework at the end of the study, Guiding Questions 3 and 4 were used.

Guiding Question 3. To what extent does the designed professional learning intervention support ELL teachers’ learning?

Guiding Question 4. To what extent does the designed professional learning

intervention support ELs' academic resilience?

Rationale for Methodology

This study focused on the design, analysis, evaluation, and improvement of a PD/L intervention for ELL teachers that provided them with a conceptual framework and evidence-based practices to support ELs' academic resilience. DBR laid out the methodology of the investigation. DBR is defined as “the systematic study of designing, developing, and evaluating educational interventions” (van den Akker et al., 2010, p. 9). It utilizes a mixed methods approach to examine and improve the designed and implemented intervention (Design-Based Research Collective, 2003). Educational design research intends to find local solutions or instruction theories to explain learning logically (Penuel & Frank, 2015; van den Akker et al., 2010) in both pragmatic and theoretical ways (Design-Based Research Collective, 2003). Unlike classroom design studies, professional development design studies develop a specific theory that ends in particular forms of instructional practice and shows ways to support the learning process (Cobb et al., 2015).

Design researchers are compared by Gravemeijer and Cobb (2006) to *bricoleurs* due to their work style. In French, “a bricoleur is an experienced tinker/handy person, who uses as much as possible those materials that happen to be available” (Gravemeijer & Cobb, 2006, p. 51). In designing an intervention, the investigator should adopt ideas from diverse sources and adapt them in construing an instructional sequence. To outline this PD/L design study, I used the generic model of educational design research (McKenney & Reeves, 2012) in the shape of a conjecture map (Sandoval, 2014). The Resilience Cycle (Morales, 2008) served as the model for the conceptual framework that

sustained the professional learning intervention, in which a number of the characteristics of high-quality professional learning (Gibbons & Cobb, 2017), effective professional learning (Darling-Hammond et al., 2017), and the Standards for Professional Learning were embedded (Learning Forward, 2011).

The PD/L Intervention

As aforementioned, a PD/L design study aims to develop a local instructional theory that takes the form of an instructional practice to support a learning process. As the study's local instructional theory, I introduced the initial conceptual framework, the Academic Resilience Cycle for ELs. It originated from the elements of the Resilience Cycle (Morales, 2008) to which I further added research-based theories and evidence-based practices in order to explicate ELs' personal and academic resilience development. The instructional practice of the study was a PD/L intervention for ELL educators. I created an online professional learning module that explicated the rationale of the Academic Resilience Cycle for ELs' theoretical and pragmatic components. The PD/L module's purpose was to support ELL teacher learning and offer them additional tools to help their students enhance their academic resilience.

The online learning module was designed to be completed asynchronously or utilized independently at the participants' chosen time or desired pace. Canvas, the virtual management system used for North Carolina teacher professional development, was utilized as the online platform. Table 2 shows the content and organization of the PD/L module and the learning objectives for ELL teachers.

Table 2*PD/L Intervention Outline*

Section	Components	Learning objectives for ELL teachers
1. Introduction	The Academic Resilience Cycle for ELs	Participants can list and define the components of the Academic Resilience Cycle for ELs.
2. Identifying Needs and Challenges	<ul style="list-style-type: none"> • ELs' Data • Asset-Approach & the WIDA Can Do Philosophy 	Participants can discuss how an asset-approach supports ELs' academic resilience.
3. Acquiring Protective Factors	<ul style="list-style-type: none"> • Dispositional (Personal/ Internal): Theory of Self-Efficacy • Familial and Environmental (External– Family, School, Peers, Community): Theories of SEL, Brain-Based Learning, Trauma-Informed Approach 	<p>Participants can explain how self-efficacy supports learners' personal protective factors.</p> <p>Participants can name ways how SEL, Brain-Based Learning, and Trauma-Informed Approach support students' external protective factors.</p>
4. Protective Factors Working in Concert	<p>Samples of activities and practices that can be embedded into language instruction:</p> <ul style="list-style-type: none"> • SEL– Mindfulness/Group Sharing • Brain-Based– EL Protocols • Trauma-Informed– Critical Friend 	Participants can give examples of evidence-based practices that support ELs' protective factors and language development.
5. Building Self-Efficacy	<p>Samples of activities and practices that can be embedded into language instruction:</p> <ul style="list-style-type: none"> • Self-efficacy– Journaling/Storytelling • Meta-cognition– Think-Pair-Share 	Participants can identify and explain self-efficacy practices to be used along with ELs' language instruction.
6. Enduring Motivation	<ul style="list-style-type: none"> • Life-long plan • Academic goals 	Participants can design strategies that help ELs' endure motivation and enhance academic resilience.
7. Compassion Fatigue in ELL Teachers	<ul style="list-style-type: none"> • Symptoms • Self-care practices 	Participants can describe compassion fatigue and self-care practices.
8. Reflection	<ul style="list-style-type: none"> • Self-assessment & professional goals 	Participants can explain the rationale and components of the Academic Resilience Cycle for ELs and plan ways to use it in their instruction.

The PD/L module had the characteristics of an effective intervention due to it was content focused; it activated learning using adult learning theory; it modeled effective

practice; and it promoted collaboration, feedback, and reflection (Darling-Hammond et al., 2017). It also had the characteristics of a high-quality PD/L (Gibbons & Cobb, 2017) by providing an intensive learning opportunity for ELL teachers, focusing on ELL educators' day-to-day problems about ELs' emotional and learning issues, promoting the development of a common professional discourse regarding academic resilience, fostering reflection and further investigation of practices to enhance academic resilience, and helping ELL teachers concentrate on student learning.

Moreover, the PD/L module reflected the seven Standards for Professional Learning (Learning Forward, 2011) as follows:

- *Learning Communities*—Continuous improvement for practicing EL teachers, alignment and accountability in teaching and learning standards for ELs
- *Leadership*—EL professional learning advocacy, structure, and support system for teachers of ELs
- *Resources*—Use of technology and evidence-based practices
- *Data*—Reflection on ELs' and ELL teacher data, evaluation of professional learning
- *Learning Designs*—Inclusion of learning theories, research, and models; use of DBR as study design; introduction of learning framework to support ELs
- *Implementation*—Teacher engagement in critical examination and constructive evaluation of the intervention
- *Outcomes*—A refined virtual PD/L module for ELL teachers with theoretical and pragmatic ideas to support ELs' academic resilience and achievement

Research Design

A mixed methods approach was used in this PD/L design study. According to Creswell and Plano Clark (2018), mixed methods researchers collect and analyze qualitative and quantitative data rigorously to respond to questions and hypotheses; integrate the data and the results; organize the procedures into specific, logical research designs; and frame the procedures within philosophy and theory. Accordingly, this design study collected both qualitative and quantitative data at three moments of the process:

- ELL teacher open-ended questionnaires—Qualitative data were gathered from teacher responses regarding theories and practices they used to foster academic resilience and social-emotional development in their ELs.
- PD/L intervention survey—Quantitative and qualitative feedback were collected from ELL teachers after examining and evaluating the online module that explicated the theoretical and pragmatic framework to assist ELs' academic resilience.
- Focus Group—Qualitative responses were generated from teacher reflection and discussion concerning the effectiveness of the theoretical and pragmatic ideas presented in the module and how its design engaged and attended to adult learner needs.

Based on the Generic Model for Conducting Educational Design Research (McKenney & Reeves, 2012), presented in Figure 6, this mixed methods PD/L design study followed an iterative process of analysis, design, and evaluation where the conceptual framework used to create the PD/L intervention was refined through sustained exploration, construction, and reflection. To move from a generic model to a concrete

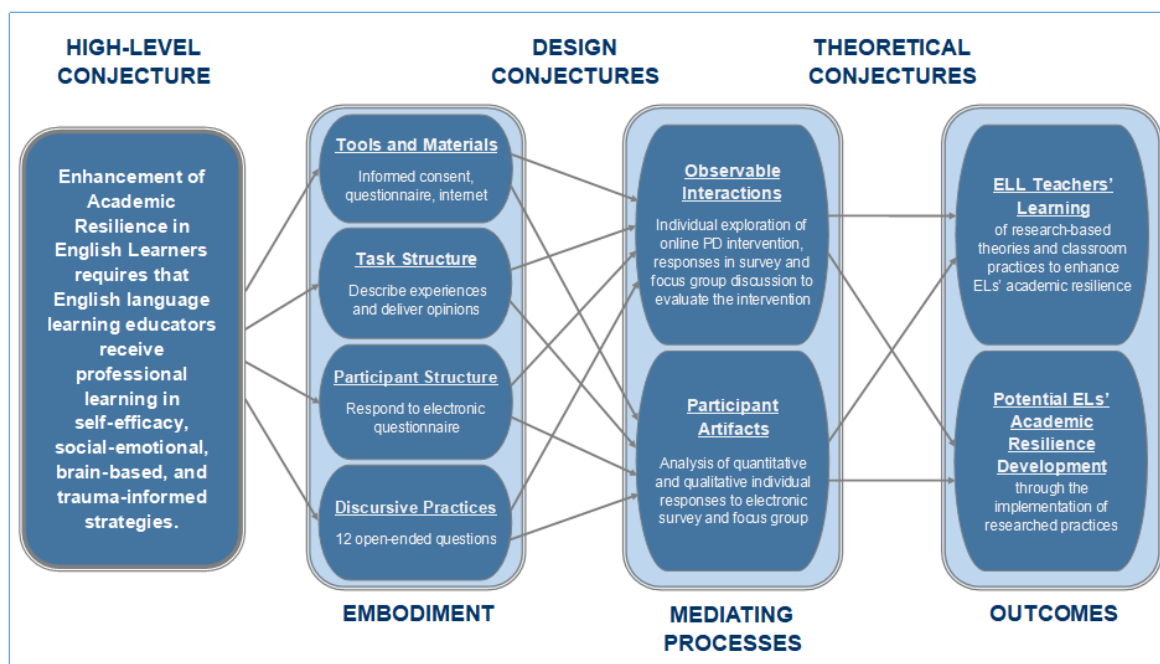
design, this study drew on conjecture mapping (Sandoval, 2014).

The Conjecture Map

According to Sandoval (2014), “Design learning environments embody conjectures about learning and instruction, and the empirical study of learning environments allows such conjectures to be refined over time” (p. 213). The use of a conjecture map in DBR tries to illustrate the intended trajectory of a study. As illustrated in Figure 7, this design research began with a high-level conjecture that stated, “Enhancement of Academic Resilience in ELs requires that ELL educators receive professional learning in self-efficacy, social-emotional, brain-based, and trauma-informed strategies.” Since a conjecture is a hypothesis that needs to be evaluated, I attempted to verify the validity of the statement throughout the study.

Figure 7

PD/L Design Study Conjecture Map



During the research, design conjectures and theoretical conjectures about this

PD/L design study on ELs' academic resilience were analyzed, redesigned, and evaluated at three different stages:

Embodiment. I started this investigation by inviting the ELL teachers in the district to respond to an anonymous open-ended questionnaire. The purpose of the questionnaire was to explore ELL teacher perceptions, practices, and theories regarding ELs' social-emotional needs and the development of academic resilience. The data obtained from the questionnaires were expected to support the reviewed literature and the proposed high-level conjecture. This phase connected the literature review with the actual ELL teacher practices and perceptions and the design conjectures—the anticipated ideas I used to create the professional learning intervention. The components of the embodiment, or first stage were

- *Tools and materials*—Informed consent to participate in the study, electronic questionnaire, internet
- *Task structures*—ELL teachers described experiences and delivered opinions about professional learning and classroom practices
- *Participant structures*—ELL teachers responded to the electronic questionnaire
- *Discursive practices*—Twelve open-ended questions

Mediating Processes. This second stage corresponded to the analysis and evaluation of the professional learning intervention. According to the design study's conjecture map, the elements of the mediating processes were

- *Observable interactions*—Individual exploration of online professional learning intervention and evaluation of the module through electronic survey
- *Participant artifacts*—Analysis of ELL teacher quantitative and qualitative

responses to the electronic evaluation survey

This phase of the study started by refining the professional learning module and informing the effectiveness of the theoretical conjectures that led to the PD/L design.

Outcomes. This last phase of the PD/L design study included the focus group discussions about the PD/L materials and their relevance to support ELs' enhancement of academic resilience. The outcomes expected in the last stage of the study were

- *ELL teacher learning*—A reviewed PD/L instrument to study evidence-based practices that could be used in language development classes to enhance ELs' personal and academic resilience
- *Potential ELs' academic resilience development*—A revised conceptual framework that incorporated evidence-based practices (emotional intelligence, SEL, brain-based learning, self-efficacy, trauma-informed approach) to support the development of personal and academic resilience of ELs

The data collected through the exploration and examination of the professional learning intervention helped determine at what degree the theoretical and pragmatic resources presented in the module supported ELL educators and their students. Then, the PD/L module was improved accordingly.

In summary, as suggested by Cobb et al. (2015), the preparation for this PD/L design study included (a) specific goals for teacher learning or the theoretical conjectures and outcomes; (b) documentation of instructional starting points or the ELs' data and the responses to the questionnaire; (c) an envisioned learning trajectory or the conjecture map; and (d) a theoretical context for the study or the proposed conceptual framework, the Academic Resilience Cycle for ELs.

Data Collection and Analysis

Data were collected through an open-ended questionnaire, a quantitative/qualitative survey, and a focus group. Table 3 aligns the data collection and analysis procedures with the research question and the guiding questions.

Table 3

Research Methodology

Research question	Guiding questions	Phase	Procedure	Product
What are the characteristics of an effective in-service program that provides ELL teachers with tools to enhance ELLs' academic resilience?	Guiding Question 1: What empirical and research-based practices do ELL teachers use to support ELLs' academic achievement?	Qualitative Data Collection	<ul style="list-style-type: none"> Open-ended questionnaire Expert Sampling n= 11 	<ul style="list-style-type: none"> Themes
	Guiding Question 2: What empirical and research-based practices do ELL teachers use to support ELLs' social-emotional development?	Qualitative Data Analysis	<ul style="list-style-type: none"> Coding and thematic analysis – Quirkos software Revision of conjecture map and PD/L intervention 	<ul style="list-style-type: none"> Initial designed intervention: An online PD/L module for ELL teachers about academic resilience in ELLs
	Guiding Question 3: To what extent does the designed professional learning intervention support ELL teacher learning?	Quantitative Data Collection	<ul style="list-style-type: none"> PD/L evaluation survey Sample n= 9 	<ul style="list-style-type: none"> Responses to digital survey after PD/L analysis Results
	Guiding Question 4: To what extent does the designed professional learning intervention support ELLs' academic resilience?	Qualitative Data Collection	<ul style="list-style-type: none"> Focus Group Sample n= 3 	<ul style="list-style-type: none"> Transcription
		Qualitative Data Analysis	<ul style="list-style-type: none"> Coding and thematic analysis of survey and focus group – Quirkos software 	<ul style="list-style-type: none"> Validated and refined PD/L intervention and conceptual framework

To collect participant perceptions and feedback in order to respond to the research question and guiding questions, I used three research instruments as follows.

Open-Ended Questionnaire

The questions in Table 4 elicited the ELL teacher reflections regarding empirical

and theory or evidence-based practices they used to support the development of ELs' resilience and social-emotional skills (Appendix E).

Table 4

Open-Ended Questionnaire

Background and guiding questions	Open-ended questions
Teacher preparation and professional learning	<ol style="list-style-type: none"> 1. As an ELL professional, what type of teacher preparation have you received to work with your ELs? 2. What specific professional development or other type of support have you received to work with the age group of your students (elementary, middle, high)?
Guiding Question 1: What empirical and research-based practices do ELL teachers use to support ELs' academic achievement?	<ol style="list-style-type: none"> 3. What specific challenges do your ELs have in terms of academics? 4. What strategies or research-based practices do you use to manage your students' academic challenges? 5. What specific academic strengths do your ELs have? 6. What strategies or research-based practices do you use to help them build on their academic strengths?
Guiding Question 2: What empirical and research-based practices do ELL teachers use to support ELs' social-emotional development?	<ol style="list-style-type: none"> 7. What specific challenges do your ELs have in terms of social-emotional needs? 8. What strategies or research-based practices do you use to manage your students' social-emotional challenges? 9. What specific social-emotional strengths do your ELs have? 10. What strategies or research-based practices do you use to help them build on their social-emotional strengths?
Expected professional learning	<ol style="list-style-type: none"> 11. What additional support would you need to work more effectively with your ELs?
Compassion fatigue awareness	<ol style="list-style-type: none"> 12. How do you take care of yourself after dealing with your ELs' struggles?

The ELL teacher responses were used to answer Guiding Questions 1 and 2 of the PD/L design study. Those responses also informed the PD/L module, which was adjusted accordingly.

PD/L Evaluation Survey

After examining the online PD/L module, nine participants responded to a survey

to assess the intervention's effectiveness, content, and design (Appendix F). Table 5 shows the sections, topics, and questions of the survey. Items 1 through 19 collected quantitative information through a 10-point Likert scale between 1 (*not at all*) and 10 (*a great deal*) for agreement with each attribute. They also had an open question for additional comments that served as qualitative data. Question 20 was an open-ended question and it did not ask for the numeric evaluation.

Table 5*PD/L Evaluation Survey*

Topic	Questions
<i>Content</i>	
Section 1: Introduction	1. To what extent does section 1 inform the need to have to have a framework to support ELs' academic resilience?
Section 2: Identifying needs and challenges	2. How well does section 2 describe ELs' needs? 3. How well do the asset-approach and WIDA Can Do philosophy provide adequate background information for teachers of ELs?
Section 3: Acquiring protective factors	4. How well does the information about Self-Efficacy describe individuals' personal strengths? 5. To what extent do the theories about SEL, Brain-Based Learning, and Trauma-Informed Approach explain individuals' external protective factors?
Section 4: Protective factors working in concert	6. To what extent do the activities, practices, and resources exemplify how to support the development of external protective factors in ELs?
Section 5: Building self-efficacy	7. To what extent do the activities, practices, and resources exemplify how to support the development of personal protective factors in ELs?
Section 6: Enduring motivation	8. How well do the activities, practices, and resources exemplify how to encourage ELs to pursuit college/career goals and plan for their future?
Section 7: Compassion fatigue in ELL teachers	9. How well does section 7 help you as an educator to understand the topic, identify the symptoms, and look for healing/protective practices?
Section 8: Reflection	10. How effective is section 8 as a conclusion for the PD/L online module?
<i>Design</i>	
	11. How well does the module vary the presentation of theories and resources and appeal to adult learners and multiple learning modalities?
	12. To what extent is the language used in the module user-friendly, engaging, clear, and considerate of cognitive load?
	13. How well do the materials in the module provide opportunities for classroom use or further study?
	14. How effectively are white space, graphic elements, and alignment used to organize the information in the module?
	15. To what extent are graphics related to the goals of the module, are of high quality, and enhance reader's interest or understanding?
	16. How well do the links allow the teacher to navigate the different areas of the module?
	17. To what extent are the layout and design visually striking and the module of high-quality?

(continued)

Topic	Questions
<i>Effectiveness</i>	18. To what extent would the professional development module potentially support ELs' academic resilience? 19. How effective would this professional development module be for other ELL teachers? 20. In general, what is your opinion about the Academic Resilience for ELs online professional learning module?

Participant responses informed the content of the PD/L intervention, its appropriate design for adult learners, and its potential effectiveness to target ELL teacher preparation in order to boost ELs' academic resilience. Frequency distribution analysis was used to obtain quantitative conclusions. The qualitative results originated in coded themes supported by the literature review. The collective findings of the survey and the focus group answered Guiding Questions 3 and 4 of the design study.

Focus Group

Four evaluators of the PD/L module signed up electronically for the focus group. Three of them could attend the conversation to discuss the PD/L intervention through the following semi-structured interview (Appendix G):

1. At the beginning of the study, you may have responded to a questionnaire that asked you about PD/L opportunities for ELL teachers and the type of support you need to work more effectively with your ELs. Do you think the online PD/L module, "Academic Resilience for ELs" responded to your needs and supported your instruction and practice with ELs? If yes, how did it do it? If not, why?
2. What elements of the online PD/L module, "Academic Resilience for ELs" were strong and useful for you as ELL teachers? What parts of the module did you find the most interesting?

3. What elements of the module were weak and not very useful or interesting for you as ELL teachers? What needs to be improved or removed?
4. How do you think your new learning would help your ELs improve their academic resilience? What needs to be done to help you work more effectively with your ELs?
5. Let us look at the results of the survey per section of the online module. You will be asked for comments, suggestions, or clarification when needed. (Use of Survey results here)
6. In what topics would you need further PD/L or support?

The ELL teacher in-depth conversation not only helped answer Guiding Questions 3 and 4, but in conjunction with the survey results, they also responded to the central research question. The findings obtained from the iterative research process determined the relevance of the initial hypothesis or high-level conjecture and the validity of the conceptual framework on which this PD/L design study was based. Consequently, the findings explicated the characteristics of an effective in-service program for ELL teachers that could help them enhance academic resilience in their ELs.

To verify the content validity of each data collection instrument, I conducted field-testing of the questionnaire, survey, and focus group questions with two ELL professionals who were not part of the study. They were asked to explain how they understood each question to identify what questions were confusing, unnecessary, or redundant. Field-testing or pilot testing allowed me to determine if the instrument measured what it intended to measure, if it represented the content and the population, and if it was comprehensive enough to address the research questions (Radhakrishna,

2007). The respondents also supported face validity by conducting subjective and superficial evaluation of the instruments and stating if they appeared to be effective for the study. This pilot testing helped improve questions, format, and scales of the data collection instruments before they were actually used in the study (Creswell, 2014).

Limitations

The scope of this study was limited to ELL educators due to a couple of reasons. Initially, I considered incorporating piloting of class activities in the research. However, the sensitive themes of the study like social or emotional issues, trauma, and ACEs could have exposed students to unnecessary identification. Therefore, I focused the study on researching the potential effectiveness of the conceptual framework in teacher and student learning throughout the participants' expertise shown in their evaluation of the professional learning module. The module included samples of activities to use with students.

On the other hand, the data collection began at the end of the school year activities and continued over the summertime. Although I invited the district's ELL teachers in person during a team meeting, I had to rely on their disposition to volunteer some hours of their vacation time to participate in the designed activities.

Delimitations

This PD/L design study focused on teacher perceptions of effectiveness of the proposed model on ELL teacher learning and eventually on their students' learning. A PD/L design study targets a specific local context for the creation and examination of a local instructional theory. Thus, the target population of the study was ELL teachers with experience in the classroom who had already acquired knowledge on language

instruction. The investigation considered ELD the main means to acquire ELs' academic resilience development. Therefore, the study results should be replicated with teams of in-service or practicing ELL teachers with similar characteristics to the participants of the study. However, the expectation was that the conclusions of the study showed findings that could be at least partially generalized and applicable to other groups of teachers.

Summary

Chapter 3 described the setting and participants of the PD/L design study, its research questions, rationale for the research methodology, procedures for data collection and analysis, and limitations and delimitations. DBR and conjecture mapping were also described as the methodological elements that shaped the design study. In addition, the outline of the professional learning intervention in academic resilience for ELs that concentrated efforts of design and evaluation was introduced as well as the three research instruments and their relationship with the research and guiding questions.

Chapter 4 reports the collection and analysis of the data described in the preceding chapter. The results from the qualitative and quantitative phases of the research are segregated and displayed. To end, Chapter 5 presents my conclusions based on the findings in the study and the suggestions for future research.

Chapter 4: Results

The purpose of this mixed methods, PD/L DBR study was to design, evaluate, and refine a curricular intervention for ELL teachers that could potentially enhance MLs/ELs' academic resilience. ELL teachers traditionally receive professional learning that mainly targets ELs' language development and skips or superficially covers other elements like cultural awareness and social-emotional competencies (Calderón, 2007, 2011; Casteel & Ballantyne, 2010; Echevarría et al., 2000; NBPTS, 2010; NEA, 2011; Schonert-Reichl et al., 2017; TESOL, 2019; U.S. Department of Education, 2017a; Walqui & van Lier, 2010). Starting with Morales's (2008) Resilience Cycle for at-risk students, I broadened the theoretical construct's components with research-based theories and evidence-based practices to support ELs' academic achievement. I utilized that initial conceptual framework, the Academic Resilience Cycle for ELs (Figure 4), as the basis to author an electronic professional learning module for ELL teachers.

This PD/L design study, a type of DBR investigation, intentionally focused on a group of practicing ELL teachers in order to support their learning and instructional practices (Cobb et al., 2015). I also planned it to be an interventionist, iterative, process-oriented, utility-oriented, and theory-oriented journey (van den Akker et al., 2006). It was interventionist because it affected English learning contexts and utility oriented for its pragmatic application in those ELL environments. It was iterative in its analysis, design, evaluation, and revision cycles. It was process oriented in the comprehension and refinement of the online intervention as well as theory oriented for its field-testing and contribution to theory building. In addition, I appealed to conjecture mapping (Sandoval, 2014) as the technique to conceptualize the design research study.

This educational design study trajectory, as shown in the conjecture map in Figure 7, initiated with the high-level conjecture, a provisional and theoretical statement of how to support the expected learning in a context and presented in terms that do not specify design (Sandoval, 2014). The high-level conjecture informed the purpose of the study and the research question that guided it: “What are the characteristics of an effective in-service program that provides ELL teachers with tools to enhance ELs’ academic resilience?” In this study, ELL teachers participated as experts and evaluators throughout the 3-phase research process. The confidentiality of the participants was maintained during the study to insure they would feel comfortable answering the questions on the investigation instruments. ELL educators provided responses, comments, and suggestions regarding learning, their students, and the designed intervention.

In the first phase of the data collection, the embodiment in the conjecture map, ELL educators responded to an anonymous electronic open-ended questionnaire. It served to answer Guiding Questions 1 and 2: “What empirical and research-based practices do ELL teachers use to support ELs’ academic achievement” and “What empirical and research-based practices do ELL teachers use to support ELs’ social-emotional development?” The qualitative data collected and analyzed through this step helped refine the design conjectures represented in the online PD/L module and the Academic Resilience Cycle for ELs model.

The mediating processes consisted of the ELL teachers’ individual exploration of the designed professional learning electronic module, their anonymous evaluation of the intervention through an electronic survey, and the participation in a focus group conversation. The quantitative and qualitative data from the survey and focus group

responded to Guiding Questions 3 and 4: “To what extent does the designed professional learning intervention support ELL teachers’ learning” and “To what extent does the designed professional learning intervention support ELs’ academic resilience?” The results gathered during this step informed the theoretical conjectures explicated in the conceptual framework and clarified in the PD/L module.

The learning expected in the high-level conjecture is described in the outcomes. The examination of the data gathered from the survey and focus group determined the extent of support to ELL teacher learning and potential ELs’ academic resilience development provided by the theoretical and pragmatic resources in the PD/L module and the conceptual framework. Accordingly, the findings also helped revise and improve those resources and answer the research question.

This chapter contains the report on the findings from the PD/L design study. The chapter begins with a demographic profile of the sample per research instrument, followed by the data collection, analysis and results to each of the four guiding questions, the evaluation of the findings in regard to the research question, and a conclusion.

Participants

A professional development DBR study requires the researcher to intentionally describe the particular settings and environment where the study occurs (Cobb et al., 2015) due to its purpose of producing a local instructional theory. This design study focused on exploring theories and practices for in-service ELL educators that supported them to improve their ELs’ academic performance and achievement. The investigation took place in a school district in eastern North Carolina. The district ELL team comprised 34 educators, including me, who served more than 2,300 ELs in 33 schools. I invited the

other ELL teachers to participate voluntarily in the investigation.

Questionnaire and Survey Participants

Of the 33 educators invited to join the study, 11 teachers responded to the questionnaire, nine teachers filled in the evaluation survey, and three teachers participated in the focus group. The data collection lasted almost 8 weeks due to coinciding with the educators' summer break, thus its completion required twice the planned time. The questionnaire had a window of 2 weeks, followed by 2 weeks of data analysis and PD/L refinement. The module revision and evaluation survey needed more than 3 weeks and several reminder emails. The survey analysis took less than 2 weeks before the scheduled focus group, which was 1 hour and 28 minutes long.

At the beginning of the electronic questionnaire and survey, the participants were asked to provide professional information that aimed to explore their teaching experience, their students' language proficiency levels, and their teaching preparation in order to determine if the feedback collected in the design study addressed all kinds of ELL teachers and students' needs. Table 6 shows the demographic information of the participating ELL educators.

Table 6*Demographic Profile of Participants*

Research instrument	Participant	Years as ELL teacher	Grade levels teaching	ELs' proficiency levels	EL population
Questionnaire	T1	2-3	9-12	1, 2-3, 4-5	Dual, SLIFE, LTEL
	T2	16-20	K, 1, 2-3, 4-5	1, 2-3, 4-5	Dual, SLIFE
	T3	1	1, 2-3, 4-5, 6-8	1, 2-3	Dual
	T4	11-15	9-12	1, 2-3	SLIFE
	T5	>20	K, 1, 2-3, 4	1, 2-3, 4-5	Dual
	T6	4-10	K, 1, 2-3, 4	1, 2-3, 4-5	Dual, SLIFE, LTEL
	T7	11-15	9-12	1, 2-3	SLIFE
	T8	16-20	5, 6-8	1, 2-3, 4-5	Dual, SLIFE, LTEL
	T9	>20	5, 6-8	1, 2-3, 4-5	LTEL
	T10	>20	6-8	1, 2-3, 4-5	Dual, SLIFE, LTEL
	T11	>20	9-12	1, 2-3, 4-5	Dual, SLIFE, LTEL
Survey	T1	>20	K, 1, 2-3, 4	1, 2-3, 4-5	Dual
	T2	4-10	K, 1, 2-3, 4	1, 2-3, 4-5	Dual, SLIFE, LTEL
	T3	1	K, 1, 2-3, 4-5	1, 2-3, 4-5	Dual, SLIFE, LTEL
	T4	1	1, 2-3, 4-5, 6-8	1, 2-3	Dual
	T5	2-3	9-12	1, 2-3, 4-5	SLIFE, LTEL
	T6	>20	K, 1, 2-3, 4-5	1, 2-3, 4-5	Dual, SLIFE
	T7	11-15	9-12	1, 2-3	SLIFE
	T8	1	K, 1, 2-3, 4-5, 6-8	1, 2-3, 4-5	Dual, SLIFE, LTEL
	T9	16-20	5, 6-8	1, 2-3, 4-5	Dual, SLIFE, LTEL

Each participant was coded with a T and a number that showed the order in which they submitted their answers to each of the instruments. A total of 20 teachers responded to both electronic research tools. Teaching experience ranged from 1 year to more than 20 years as ELL teachers in grade levels K to 12, and all EL language proficiency levels and special group of students were covered. Table 7 illustrates the analysis of the demographic responses.

Table 7*Demographic Analysis*

Research instrument	Years as ELL teacher	Grade levels teaching	ELs' proficiency levels	EL population
Questionnaire	>20 – 4 T (36.4%)	1 st – 4 T (36.4%)	1 – 11 T (100%)	Dual – 8 T (72.7%)
	11-15 – 2 T (18.2%)	2 nd -3 rd – 4 T (36.4%)	2-3 – 11 T (100%)	SLIFE– 8 T (72.7%)
	16-20 – 2 T (18.2%)	4 th – 4 T (36.4%)	4-5 – 8 T (72.7%)	LTEL – 6 T (54.5%)
	1 – 1 T (9.1%)	5 th – 4 T (36.4%)		
	2-3 – 1 T (9.1%)	6 th -8 th – 4 T (36.4%)		
	4-10 – 1 T (9.1%)	9 th -12 th – 4 T (36.4%)		
		K – 3 T (27.3%)		
Survey	1 – 3 T (33.3%)	1 st – 6 T (66.7%)	1 – 9 T (100%)	Dual – 7 T (77.8%)
	>20 – 2 T (22.2%)	2 nd -3 rd – 6 T (66.7%)	2-3 – 9 T (100%)	SLIFE– 7 T (77.8%)
	2-3 – 1 T (11.1%)	4 th – 6 T (55.6%)	4-5 – 7 T (77.8%)	LTEL – 5 T (55.6%)
	4-10 – 1 T (11.1%)	K – 5 T (55.6%)		
	11-15 – 1 T (11.2%)	5 th – 5 T (55.6%)		
	16-20 – 1 T (11.2%)	6 th -8 th – 3 T (33.3%)		
		9 th -12 th – 2 T (22.2%)		

Eight of the 11 responders to the questionnaire (72.7%) had more than 10 years of ELL teaching experience. In contrast, three of the nine participants (33.3%) in the survey were in their first year as ELL teachers, and other two teachers (22.2%) had more than 20 years teaching ELs. Nonetheless, all stages of ELL teaching experience were present in the two investigation instruments. The grade clusters resembled the WIDA Standards used by the North Carolina EL program: kindergarten, first, second through third, fourth through fifth, sixth through eighth, and ninth through 12th. However, I separated the fourth- through fifth-grade level cluster in the instruments due to most of the district's

elementary schools served until Grade 4. Consequently, most middle schools also taught fifth grade. Responses about grade levels were almost equally balanced in both research tools. Although only two high school teachers took the survey, a total of five teachers represented secondary education (55.5%).

In regard to the students, only an average of 75% of the teachers served the highest language proficiency levels, with all of them focusing on ELs' first three levels that pertain to students in need of the biggest support in language development. That result related to the information about special groups of ELs. Besides serving students with regular cognitive and learning characteristics, ELL educators might work with Dual Identified ELs who also receive special education services, SLIFE, and Long-Term ELs (LTELs), students who have been in the ELL program for 5 years or more.

Approximately 75% of the participating educators taught Dual Identified and SLIFE who require most of the language support, and only 55% of ELL teachers also work with LTELs who are generally fluent in the language but need help with their literacy skills.

In addition, ELL educators provided information regarding their preparation to work with ELs. Table 8 illustrates the 11 participants' responses to the questionnaire about their formal higher education programs and in-service professional learning.

Table 8*ELL Teacher Preparation*

Categories	Teacher preparation	Details	
Higher education	Lateral entry	– 3 T (27.2%)	Certification from a university teaching program
	Bachelor’s degree	– 4 T (33.3%)	Teaching program degree
	Master’s degree	– 4 T (33.3%)	M.Ed. in a content area with concentration in ESOL, ESL/TESOL master’s program
	Doctoral classes	– 1 T (9.1%)	Some doctoral coursework
In-service professional learning	School PD/L	– 1 T (9.1%)	School-based PD/L –working with GenEd teachers
	District PD/L	– 9 T (81.8%)	WIDA, ACCESS testing, PLC sessions, focused on newcomers/SLIFE/LTEL/ Dual Identified, software use
	State PD/L	– 3 T (27.2%)	NCDPI EL department, ESL symposium (NC State University) –enhancing academic vocabulary, brain research
	Other organizations	– 4 T (33.3%)	TESOL, WIDA, NCTE, TALGS, UNCW – language acquisition

ELL teachers may have responded to one or more options in both categories. Since every ELL educator in North Carolina is required to pass the Praxis II exam, all of the participants had some kind of formal preparation in working with ELs, and at least one third of them had a graduate degree. In regard to professional learning, the highest response was PD/L offered by the school district. Specifically, six teachers mentioned training in WIDA topics, and four teachers recalled preparation for the ACCESS test. One fourth of the teachers had participated in state PD/L sessions. The remaining PD/L topics related to serving specific groups of ELs, collaborating with other teachers, and mostly language development teaching. None of the teachers mentioned professional

learning opportunities about ELs' social, emotional, or cultural competencies.

Focus Group Participants

Besides revising the PD/L module and responding to the survey, three ELL educators were also part of the focus group. T1 had 13 years of ELL teaching experience, T2 was in her second year, and T3 was in her first year. However, T3 had 27 years of teaching experience as a regular elementary educator before joining the ELL program. T1 was Canadian, T2 was American, and T3 was Filipino. T2 was bilingual and biliterate in Spanish and her native language was English. T3's native language was Tagalog and she additionally spoke five regional dialects. T1 and T2 taught in high school, and T3 served elementary and middle school. T1 and T3 worked with students in language proficiency Levels 1 to 3, and T2 taught all five language levels. Besides regular ELs, T1 worked with SLIFE, T3 served Dual Identified students, and T2 taught Dual Identified, SLIFE, and LTEL. The focus group lasted about an hour and a half due to the participants' rich and diverse personal perspectives and experiences regarding learning a second language, ELL teaching experience, grade levels, types of ELs and their needs, teacher preparation, and school and district strengths and weaknesses of the ELL program.

The purpose of establishing a demographic and teacher preparation profile of the participants was to determine if the information collected represented all kinds of ELL teaching experience, all grade and language proficiency levels of students, and all special groups of ELs. The findings showed contribution of ELL educators in all of the provided variables in spite of only having a sample of about a third of the invited teachers to participate.

Embodiment: Guiding Questions 1 and 2

This PD/L design study began with the high-level conjecture that stated, “Enhancement of Academic Resilience in ELs requires that ELL educators receive professional learning in self-efficacy, social-emotional, brain-based, and trauma-informed strategies.” It introduced the first stage of the data collection and analysis, embodiment, to determine the preparation level of ELL teachers regarding the components of the study’s initial conceptual framework, the Academic Resilience Cycle for ELs (Figure 4). In this first qualitative phase of the investigation, the information was collected using an open-ended electronic questionnaire. The responses from the 11 participating ELL teachers were examined through coding and theme analysis and served to answer Guiding Questions 1 and 2. The findings aimed to inform both design conjectures, the theoretical framework and the researcher-authored module.

Coding and Thematic Analysis

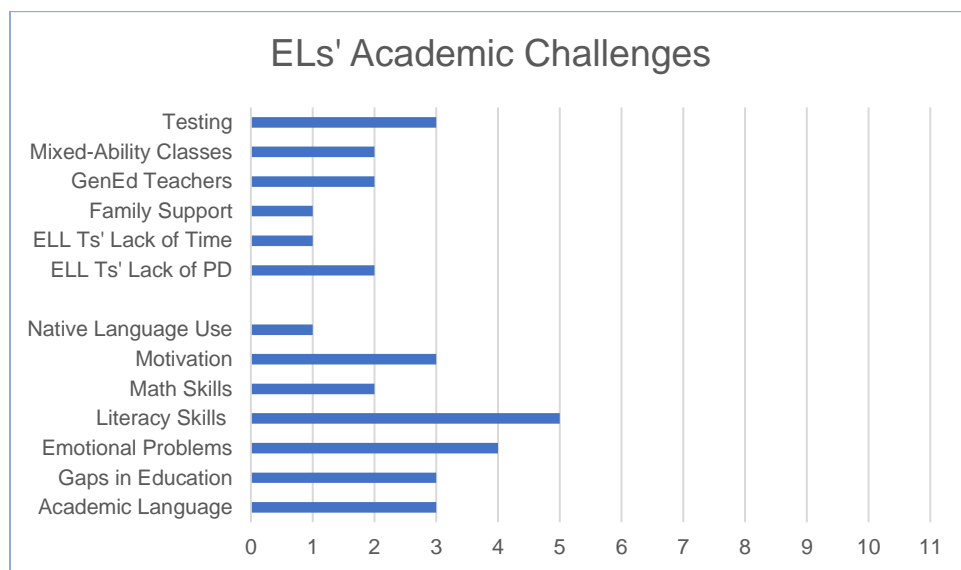
I used Nowell et al.’s (2017) Step-by-Step Approach for Conducting a Trustworthy Thematic Analysis, a six-step pragmatic, qualitative method to identify, analyze, describe, and report themes extracted from a data file. After familiarizing with the data, the coding started as an inductive process to identify similarities and differences in the questionnaire responses and to name small units such as words or phrases given by the participants. Creswell and Plano Clark (2018) defined coding as “the process of grouping evidence and labeling ideas so that they reflect increasing broader perspectives” (p. 214).

At first, the analysis was conducted manually with comments and annotations in the margins of the printed data that led to draft codes and themes. Subsequently, the

labeled data were organized using Microsoft Excel in search for more connections. To review the themes, I used Quirkos 2.3.1 (Quirkos Limited, 2020), a software program that helped clarify the themes, code layout, and questionnaire codebook (Appendix H). A codebook is an organized list of themes and codes (Creswell & Plano Clark, 2018) complemented with definitions or samples from the data. During the last part of the analysis using the software, I decided to rename the initial inductive themes and most codes to deductive concepts that emerged from the prior literature review, which in turn consolidated the codebook. Last, I produced the report on the findings.

Findings to Guiding Question 1

Guiding Question 1 was, “What empirical and research-based practices do ELL teachers use to support ELs’ academic achievement?” Before naming the practices for academic achievement, the 11 participating ELL educators identified ELs’ academic challenges and strengths they had observed during their classes. I intentionally asked these two questions to guide the identification of practices. Also, based on my training and experience as an ELL teacher, I hypothesized that the ELL teachers would point to student difficulties before considering their abilities. Eventually the data analysis confirmed that assumption. The presentation of results mirrors the order of the items in the questionnaire: academic challenges, academic strengths, and teaching practices. Figure 8 illustrates ELs’ academic challenges.

Figure 8*ELs' Academic Challenges*

The ELs' academic challenges (n=32) mentioned by the ELL teachers were classified in seven types of dispositional risk factors and six kinds of environmental risk factors (Benard, 1991, 1993). Figure 8 showed dispositional risk factors or personal characteristics or behaviors that increase the chances of ELs to fail academically: difficulties in reading and writing, emotional problems, limited knowledge of academic language and content, interrupted formal education that leaves these students further behind their peers, low motivation to stay at school to graduate and/or pursue career or college goals, limited math skills, and excessive use of native language due to fear of making mistakes in English.

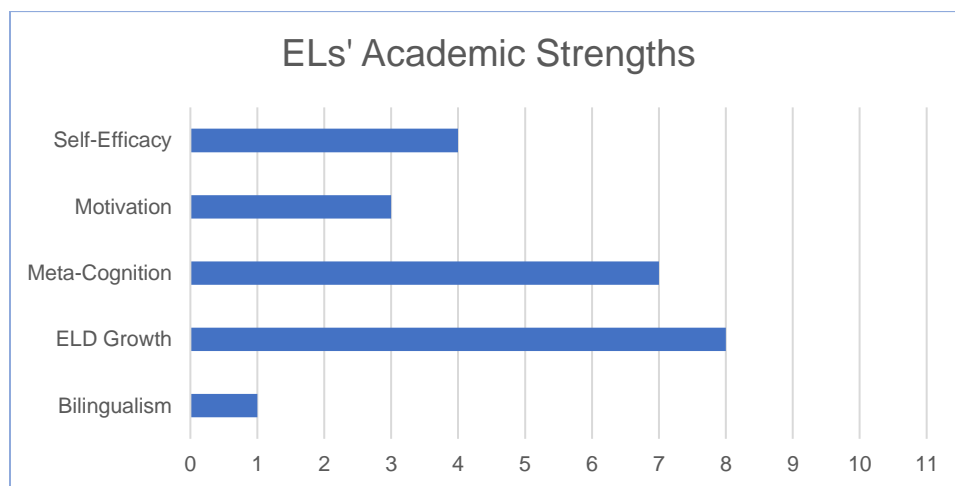
The other six academic challenges in the graph related to environmental risk factors or external conditions that limit ELs' academic success: high demands in state and local testing that surpass ELs' abilities, limited professional learning opportunities for ELL teachers, general education teachers who are not prepared to work with ELs and

serve their needs, ELL classes with students in various proficiency levels, limited support from families, and scarce time for ELL teachers to make content accessible for ELs and/or collaborate with general education and other teachers. The most relevant finding in this section was the second highest response that showed four of the 11 teachers referring to the learners' emotional issues as social-emotional elements that affect academic performance, in addition to three teachers who mentioned motivation.

The results of the questionnaire also specified ELs' academic strengths (Figure 9). In all cases, the responses (n=23) related to dispositional or personal protective factors (Benard, 1991, 1993) that help ELs overcome academic challenges; and a response in one of the five categories also referred to external supports or protective factors.

Figure 9

ELs' Academic Strengths



ELD growth was the highest strength mentioned by eight of the 11 ELL educators: ELs showed strong skills in the language domains of listening and speaking; many of them were at higher language proficiency levels; some of them had strong academic content knowledge in their native language that was transferred to new settings;

and as an external protective factor, their families' level of education and support influenced their commitment to school. The second strength referred to multiple ways ELs were aware of their own learning and used metacognitive abilities, such as goal setting, self-assessment, identification of weaknesses and strengths, request of help, search of resources and learning opportunities, and utilization of learning strategies like story-telling, socio-cultural awareness, and use of cognates and context clues. The other three ELs' strengths were self-efficacy or belief in their capacity to achieve goals, motivation and desire to learn, and their ability to recognize language patterns in two or more languages. In this case, two social-emotional abilities—self-efficacy and motivation—were also acknowledged as factors that impact academics.

In addition, ELL educators enumerated the practices they incorporated in teaching, instruction, and assessment to compensate challenges and build on strengths of ELs. Table 9 summarizes and organizes ELL teacher practices in terms of academics.

Table 9*ELL Teacher Practices to Support ELs' Academic Development*

	Practice type	Resources and strategies
Instructional supports	Sensory	Audio reading literature – 1 Demonstrations/modeling – 3
	Graphic	I-SEE chart – 1 Visuals – 4
	Interactive	Routines – 1 Short lessons that integrate movement – 1 Small grouping – 3 Technology/software use – 4
Scaffolding practices	Focus on academic language, literacy, and vocabulary	7-Steps Exc-ELL vocabulary strategy – 1 Cognates – 2 Effective lesson planning – 3 Language domain integration – 1 Phonics instruction – 1 Pre-teaching key concepts – 3 Reading strategies (predict, infer, context clues) – 3 Writing strategies – 2 Self-assessment/teacher-made tests – 2
	Link background knowledge and culture to learning	Acknowledgement of ELs' culture – 1 Background knowledge activation – 4 Story-telling (own stories) – 3
	Increase comprehensible input and language output	Differentiation – 7 Guided practice – 1 Relevant content – 2 Sentence starters/frames – 1
	Promote classroom interaction	Cooperative learning strategies – 5 Focus on productive domains (speaking/ writing) – 3
	Stimulate higher order thinking skills and the use of learning strategies	Display of learning targets/objectives – 1 Goal-setting – 3 Multiple intelligences – 1 Teacher's high expectations – 1 Use of data (ACCESS, other tests) – 3
	Other services	After-school tutoring – 1

Because of the multiple responses given by the 11 ELL teachers who responded to the questionnaire, I chose to organize the listed academic practices for language development based on themes derived from the WIDA (2018) theory: instructional

supports and scaffolding practices. Table 9 lists the resources and strategies in alphabetical order under each category, and the numbers beside them represent the times each practice was identified by the participants.

According to Gottlieb (2013), instructional supports (n=18) are “Sensory, graphic, and interactive resources embedded in instruction and assessment that assist students in constructing meaning from language and content” (p. 71). Modeling of techniques or strategies and use of audios were the sensory resources mentioned by the teachers. The graphic supports were visuals and graphic organizers like the I-SEE chart. The third instructional support, interactive, included activities that kept students engaged like the integration of technology and software programs, student grouping, kinesthetic activities, and routines.

Scaffolding practices (n=54) are “Careful shaping of the supports (e.g., processes, environment, and materials) used to build on students’ already acquired skills and knowledge to support their progress from level to level of language proficiency” (Gottlieb, 2013, p. 73). These strategies could be better understood and identified through the Five Principles of Instruction for ELs that guided The GO TO Strategies (Levine et al., 2013), a document well-known by ELL educators. I used the five principles to classify the scaffolding practices listed by the participating educators:

- *Principle 1*—Focus on academic language, literacy, and vocabulary: strategies that support language teaching and language skill development, necessary to promote content learning. ELL teachers listed strategies to learn general and academic vocabulary, improve the four language domains (listening, speaking, reading, writing), and guide lesson planning and assessment.

- *Principle 2*–Link background knowledge and culture to learning: strategies that explicitly engage ELs in using their prior knowledge and experiences for language development. Schema activation and identity building activities were named by ELL teachers.
- *Principle 3*–Increase comprehensible input and language input: strategies that use instructional supports to make meaning clear and provide ELs with opportunities for language production. ELL teachers mentioned differentiation of resources and expected outcomes according to learner needs and the use of relevant content and guided practice for comprehension as well as sentence starters/frames for oral and written production.
- *Principle 4*–Promote classroom interaction: strategies to encourage ELs to use English in completing academic tasks. ELL teachers referred to the inclusion of cooperative learning and speaking/writing activities to engage students.
- *Principle 5*–Stimulate higher order thinking and the use of learning strategies: strategies that help ELs improve their thinking skills and become independent learners. ELL teachers stated they supported students to set goals, utilized multiple intelligence strategies and testing data to guide self-reflection, and displayed learning objectives and high expectations to model learning strategies.

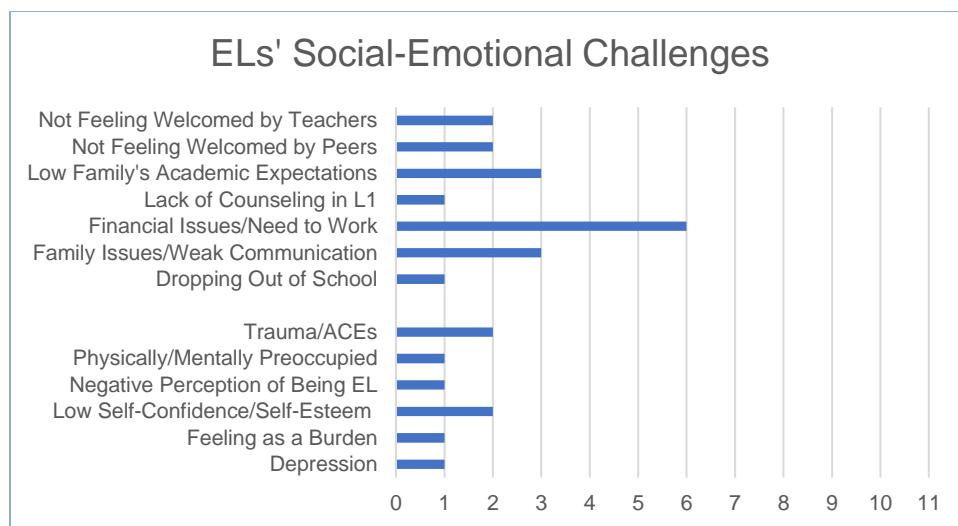
Findings to Guiding Question 2

Guiding Question 2 was, “What empirical and research-based practices do ELL teachers use to support ELs’ social-emotional development?” As in the former section, the 11 participating educators specified obstacles or risk factors their students had faced

and the students' strengths or protective factors before mentioning teaching practices they employed to support ELs' social-emotional needs and traits. Figure 10 summarizes ELL teacher observations.

Figure 10

ELs' Social-Emotional Challenges



ELs' social-emotional difficulties (n=26) were divided into personal and external conditions or risk factors that negatively impact student performance in academic settings. They are presented in Figure 10 in two groups and are organized in alphabetical order. The ELL teacher responses to this area were more concise and diverse than for the academics. Six personal, social-emotional risk factors were listed: low self-confidence and low self-esteem due to diverse reasons such as language barrier, traumas and ACEs; signs of depression; feeling like a burden to their host family, who in many cases are not the ELs' parents or close relatives; feeling a negative connotation of the EL designation, especially by LTELs; and carrying mental preoccupation and physical exhaustion that affected ELs' engagement in academic activities.

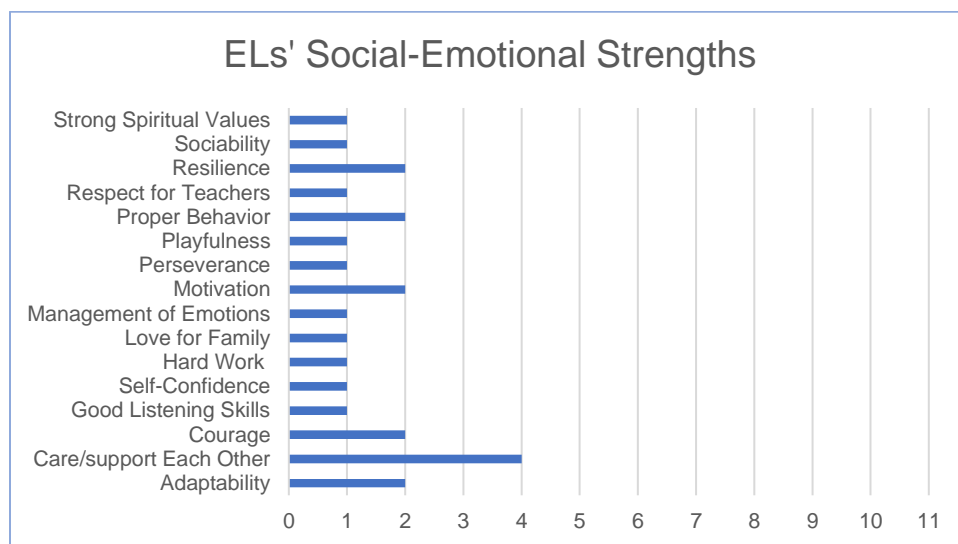
The external social-emotional risk factors that challenged ELs were financial

issues faced by families that required students to find a job after school or late at night; diverse family problems and parents unaware of what happened in students' lives, many students did not live with their immediate relatives; low academic expectations and/or lack of academic role-models in families; students not feeling comfortable in general education classes; lack of counselors who spoke the students' native language; and imminent dropping out of school from students who got too overwhelmed by their life or school situations.

ELL educators also enumerated their students' social and emotional strengths (n=24) as shown in Figure 11. All of the comments referred to dispositional characteristics ELs developed throughout their lives and demonstrated in their interaction with teachers and classmates.

Figure 11

ELs' Social-Emotional Strengths



According to their teachers, ELs supported and cared for each other, especially beginning ELs who had been in the U.S. longer and were the most helpful to the most recently arrived students. ELs were brave and resilient, and they adapted and behaved

properly in new contexts. They were also good listeners, self-confident, hardworking, motivated, perseverant, playful, and sociable. They compartmentalized their emotions in order to move forward. They loved their families, respected their teachers, and displayed strong spiritual values.

ELL teachers also shared SEL practices used in their classes. To organize the strategies, I resorted to CASEL's (2015) five areas in which children and adults develop social-emotional competencies:

- *Self-awareness*—“The ability to accurately *recognize* one's emotions and thoughts and their influence on behavior” (p. 5).
- *Self-management*—“The ability to *regulate* one's emotions, thoughts, and behaviors effectively in different situations” (p. 5).
- *Social awareness*—“The ability to *take the perspective of and empathize* with others from diverse backgrounds and cultures, to understand social and ethical norms for behavior, and to recognize family, school, and community resources and supports” (p. 5).
- *Relationship skills*—“The ability to *establish and maintain healthy and rewarding relationships* with diverse individuals and groups” (p. 6).
- *Responsible decision-making*—“The ability to *make constructive and respectful choices* about personal behavior and social interactions based on consideration of ethical standards, safety concerns, social norms, the realistic evaluation of consequences of various actions, and the well-being of self and others” (p. 6).

Table 10 lists the teaching and instructional practices utilized by ELL educators to help their students socially and emotionally.

Table 10*ELL Teacher Practices to Support ELs' Social-Emotional Development*

	Practice type	Strategies and activities
Dispositional protective factors	Self-awareness	Being enthusiastic – 2 Demonstrating care – 5 Having high expectations – 1 Helping ELs identify strengths/dispositional traits – 6 Using Growth Mindset activities – 1
	Self-management	Leading motivational activities/chats – 3 Studying stories of success – 1 Using storytelling/journals to reflect on own story – 3
	Social awareness	Celebrating success/culture/bilingualism/athletic or artistic skills and academic achievement – 6 Identifying resources for individual needs – 5 Praising – 3
	Relationship skills	Practicing how to listen and ask questions – 2 Serving ELs as a parental figure, counselor, etc. – 2
	Responsible decision-making	Discussing/sharing resources for future plans – 3 Providing financial education to ELs – 1
Environmental protective factors		Educating/communicating with families about ELs' academics and opportunities – 4 Facilitating resources for families – 2 Supporting general education teachers/administrators – 2
Teacher self-care practices	Emotional	Chatting/collaborating with colleagues – 5 Praying – 3 Reading – 3 Not sure of how to do it – 2
	Physical	Doing nails – 1 Exercising – 1 Getting counseling – 1 Journal writing – 1 Taking a massage – 1

Three of the participants acknowledged their difficulty to recognize social and emotional strategies and expressed their need of professional learning about this topic. The strategies and activities named by the ELL educators were distinguished between dispositional and environmental protective factors. The dispositional or personal factors that denoted teacher behaviors and actions to guide ELs were in turn classified into the

five core competencies of SEL. The numbers accompanying the strategies refer to the times each practice was named. Strategies related to self-awareness (n=15) and social awareness (n=14) were the most mentioned, whereas relationship skills (n=4) and responsible decision-making (n=4) were the least identified. The external practices showed how, in order to help ELs, ELL teachers also supported the school community: families, colleagues, and administrators (n=8). Additionally, participants reflected on the self-care practices they used to decompress after working with ELs (n=16). Two of them acknowledged they were unsure how to practice self-care, and it was challenging for them to disconnect from school experiences due to their love for the profession and the students.

Summary of Findings for Guiding Questions 1 and 2

Guiding Questions 1 and 2 asked for the identification of empirical and evidence-based practices used by ELL teachers to support ELs' academic achievement and social-emotional development. The total of practices named was 125. Regarding academic practices that supported ELs' academics, participating educator responses were numerous (n=73, 58.4%) and denoted knowledge of evidence-based activities and strategies. Conversely, the teaching practices for SEL (n=52, 41.6%) were mostly empirical and intuitive; and teacher responses did not seem as confident as they were for academic practices, even when they were questioned about their self-care practices. This reinforced the need for intentional professional learning in social-emotional practices for teachers and students.

Another relevant finding obtained from the data was the number of responses about ELs' challenges (n=58, 55.2%) in contrast to ELs' strengths (n=47, 44.8%).

Although the difference is not too broad, it shows how ELL teachers still need support in moving from a deficit mindset that concentrates on their students' limitations to an asset approach that highlights their ELs' qualities, potential, and prior knowledge. For the longest time, ELL teacher preparation and high-stakes tests have pointed to ELs' deficits and needs instead of celebrating and validating their experiences, talents, culture, language, and other valuable traits.

The findings to the first two guiding questions of the study informed the design conjectures: (a) The proposed conceptual framework, the Academic Resilience Cycle for ELs, was verified as it demonstrated the need to intentionally add types of evidence-based instruction for ELL educator professional learning that went beyond ELL instruction and included teacher necessity to be aware of their own self-care; and (b) the corresponding professional learning module in academic resilience was refined to include more specific conceptual and practical information for teachers on how to incorporate the new theories and approaches in their language development teaching.

Mediating Processes: Guiding Questions 3 and 4

After determining the ELL teachers' level of preparation in the components of the Academic Resilience Cycle for ELs and revising the professional learning module, the second iteration of the PD/L design study took place. In this phase of the research, the mediating processes in the conjecture map, the participants evaluated the content, design, and potential effectiveness of the electronic professional learning intervention. They also identified their needs on professional learning and support. The information was collected through two instruments, a survey and a focus group that furnished quantitative and qualitative data. The survey's quantitative responses of the nine teachers who reviewed

and assessed the module were examined using frequency distribution. The qualitative responses from the survey and the comments from the three teachers in the focus group were examined through coding and thematic analysis. The findings aimed to inform the theoretical conjectures concerning ELL teacher learning and potential ELs' academic resilience development.

Frequency Distribution

The anonymous survey was completed by nine participants. It assisted to gain information about the content, design, and potential effectiveness of the PD/L module and was made up of 20 questions. The first 19 items provided numeric information through a 10-point Likert scale. Those items were also followed by the option to add qualitative feedback. The last item, Question 20, only collected qualitative information and was included in the coding and theme analysis. On the Likert scale, choosing 1 meant that the section, topic, or resource did *not at all* respond to the question, and 10 meant it was *a great deal*. Table 11 displays the distribution and frequency of the numeric responses in the survey.

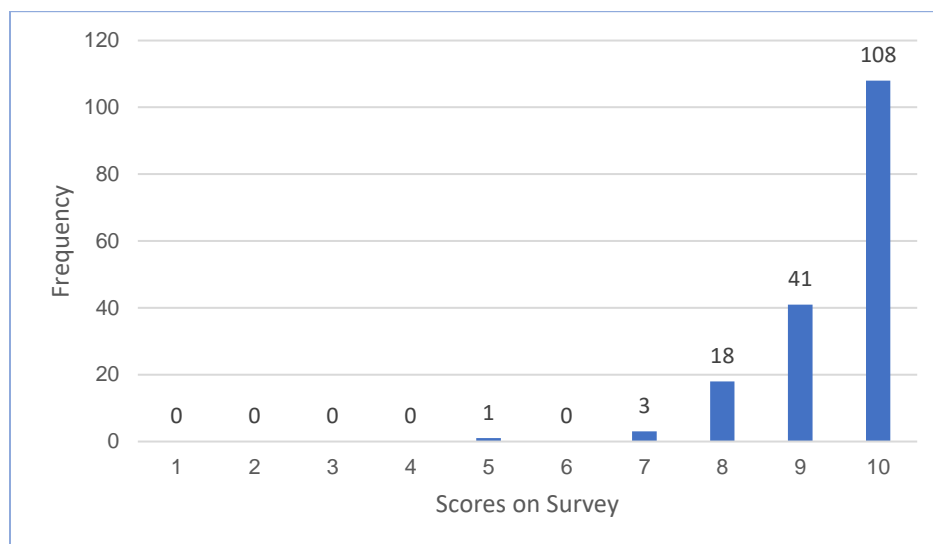
Table 11*Frequency Table of Scores on Survey*

Survey questions	Frequency									
	1	2	3	4	5	6	7	8	9	10
<i>PD/L content</i>										
1. To what extent does Section 1- “Introduction” inform the need to have to have a framework to support ELs’ academic resilience?	0	0	0	0	0	0	0	2	3	4
2. How well does Section 2- “Identifying Needs and Challenges” describe ELs’ needs?	0	0	0	0	1	0	0	2	1	5
3. In Section 2- “Identifying Needs and Challenges,” how well do the asset-approach and WIDA Can Do Philosophy provide adequate background information for teachers of ELs?	0	0	0	0	0	0	0	2	2	5
4. In Section 3- “Acquiring Protective Factors,” how well does the information about Self-Efficacy describe individuals’ personal strengths?	0	0	0	0	0	0	0	1	2	6
5. In Section 3- “Acquiring Protective Factors,” to what extent do the theories about SEL, Brain-Based Learning, and Trauma-Informed Approach explain individuals’ external protective factors?	0	0	0	0	0	0	1	1	3	4
6. In Section 4- “Protective Factors Working in Concert,” to what extent do the activities, practices, and resources exemplify how to support the development of external protective factors in ELs?	0	0	0	0	0	0	0	0	5	4
7. In Section 5- “Building Self-Efficacy,” to what extent do the activities, practices, and resources exemplify how to support the development of personal protective factors in ELs?	0	0	0	0	0	0	0	1	3	5
8. In Section 6- “Enduring Motivation,” how well do the activities, practices, and resources exemplify how to encourage ELs to pursue college/career goals and plan for their future?	0	0	0	0	0	0	2	0	1	6
9. How well does Section 7- “Compassion Fatigue in ELL Teachers” help you as an educator to understand the topic, identify the symptoms, and look for healing/protective practices?	0	0	0	0	0	0	0	1	1	7
10. How effective is Section 8- “Reflection” as a conclusion for the PD/L online module?	0	0	0	0	0	0	0	2	2	5

(cont.)

Survey questions	Frequency									
	1	2	3	4	5	6	7	8	9	10
<i>PD/L Design</i>										
11. How well does the module vary the presentation of theories and resources and appeal to adult learners and multiple learning modalities?	0	0	0	0	0	0	0	2	1	6
12. To what extent is the language used in the module user-friendly, engaging, clear, and considerate of cognitive load?	0	0	0	0	0	0	0	0	3	6
13. How well do the materials in the module provide opportunities for classroom use or further study?	0	0	0	0	0	0	0	0	3	6
14. How effectively are white space, graphic elements, and alignment used to organize the information in the module?	0	0	0	0	0	0	0	3	1	5
15. To what extent are graphics related to the goals of the module, are of high quality, and enhance reader's interest or understanding?	0	0	0	0	0	0	0	0	4	5
16. How well do the links allow the reader to navigate the different areas of the module?	0	0	0	0	0	0	0	0	1	8
17. To what extent are the layout and design visually striking and the module of high-quality?	0	0	0	0	0	0	0	0	2	7
<i>PD/L Effectiveness</i>										
18. To what extent would the PD/L module potentially support ELs' academic resilience?	0	0	0	0	0	0	0	1	2	6
19. How effective would this PD/L module be for other ELL teachers?	0	0	0	0	0	0	0	0	1	8

Items 1-10 served to evaluate the content of the PD/L intervention. Questions 11-17 assessed its design, and the last two questions in the table tested its potential effectiveness. To illustrate the responses, I created Figure 12 which shows the frequency distribution, or the number of times each score (from 1-10) was selected. There was a total of 171 scores chosen by the nine ELL educators.

Figure 12*Frequency Distribution of Scores on Survey*

The majority of the ELL teachers in the sample chose numbers 9 and 10 on the response scale, which made it a negatively skewed distribution. Scores of 9 and 10 indicated the teachers thought the components of the professional learning intervention answered the questions at a high level. However, the unique outlier with 5 and the other 7 and 8 scores provided relevant feedback for revising the module. The distribution of scores produced the statistics in Table 12.

Table 12*Sample Statistics from Survey*

	Content	Design	Effectiveness	PD/L Intervention
Sample population	9	9	9	9
Questions #	1 - 10	11 - 17	18 - 19	1 - 19
Responses	90	63	18	171
Mean	9.32	9.60	9.72	9.47
			ELL Ts = 9.89	
			ELs = 9.56	
Range	10 - 5 = 5	10 - 8 = 2	10 - 8 = 2	10 - 5 = 5

The general scoring of the module is shown in the last column on the right in Table 12. The other three columns contain the analysis of the survey sections. The sample population was the same group of nine ELL teachers who reviewed the PD/L intervention and evaluated it throughout the survey. Since the average scores or means were quite high, 9 of a possible 10, the additional comments on the survey and the conclusions from the focus group were essential to determine specific steps to refine the theoretical conjectures.

Coding and Thematic Analysis

In addition to the quantitative data described, the qualitative responses were examined using the procedures of coding and thematic analysis introduced for Guiding Questions 1 and 2. Following the Step-by-Step Approach for Conducting a Trustworthy Thematic Analysis (Nowell et al., 2017), first I familiarized myself with the responses and data provided by the survey and transcribed focus group discussion, and then I assigned codes by question. Later, I defined five themes based on the survey and focus group topics: PD/L content, PD/L design, PD/L potential effectiveness for teachers, PD/L potential effectiveness for ELs, and additional PD/L support needed by ELL teachers. Finally, I produced the reports for Guiding Questions 3 and 4 using both the quantitative and qualitative data.

Findings to Guiding Question 3

Guiding Question 3 was, “To what extent does the designed professional learning intervention support ELL teachers’ learning?” All participants were specific about what they, as ELL experts, would expect to see in a PD/L module. The quantitative results of the evaluation survey indicated an average satisfaction with the PD/L module of 9.47 of

10. The survey respondents revised and evaluated the module and produced 171 numeric scores and 174 suggestions and comments. The teachers in the focus group discussed the results of the survey analysis and added to it, which corresponded to Question 5 of the group interview. Consequently, I examined the comments and suggestions by research tool—survey and focus group—to obtain a more detailed assessment of the professional learning tool. To start, Table 13 summarizes the feedback per question and instrument about the content of the PD/L module. The numbers beside each comment of the survey correspond to the teachers who mentioned it.

Table 13*Comments and Recommendations about PD/L Intervention's Content*

Module sections	Survey	Focus group
1- "Introduction"	Explain briefly why Morales's framework was chosen – 1 Add an example of academic resilience – 1 No comments – 7	Good suggestions No more changes needed
2- "Identifying Needs and Challenges"	Summarize needs and challenges in chart – 1 Add WIDA Guiding Principles – 1 Name other asset-approaches – 1 No comments – 7	Do not add the chart, it would be too much information Make some data more visual
3- "Acquiring Protective Factors"	Add how to determine low confidence and low self-esteem – 1 Separate Trauma-Informed concepts from information of ELs – 1 Find a newer video of unaccompanied minors' difficulties – 1 No comments – 7	Good first two suggestions I could not find a more current video A lot of media used was amazing
4- "Protective Factors Working in Concert"	Add a diagram labeling the links/content covered in the resourceful literature and media page – 1 No comments – 8	Suggestion is not clear, and unnecessary
5- "Building Self-Efficacy"	Be more specific about the difference between personal and external protective factors – 1 No comments – 8	Good suggestion
6- "Enduring Motivation"	Add how to motivate students to attend college, information about financial aid for students, student- led project-based learning – 1 No comments – 6	Suggested ideas/resources: Financial education, job searching and soft skills, college/career opportunities for undocumented ELs, stories of successful former ELs, life plan
7- "Compassion Fatigue in ELL Teachers"	No comments – 9	Never thought about this topic before Teachers may know what to do but do not find the time for self-care It may be a financial challenge for teachers
8- "Reflection"	Not sure – 1 No comments – 8	Appropriate section

Questions 1-10 targeted the module content and its eight sections. This component of the learning intervention received the majority of the teachers' suggestions (n=18), which correlated with the lowest average of its three parts (9.32). It also contained the lowest scores in the survey—one 5 and three 7s. In addition, the focus group participants made comments while they revised the results from the survey. As presented in Table 13, the suggestions were very specific and led to detailed improvement of the PD/L module. Section 6 got the most survey comments and the longest discussion in the group conversation regarding ideas to support ELs to remain motivated to graduate from high school and pursue a technical and professional career. The strongest recommendations were to offer varied resources for ELs and to start a plan in elementary school that engages parents and community and progresses along the student's school life. The lack of suggestions in Section 7 emphasized teacher necessity to identify and use consistent self-care strategies to deal with compassion fatigue. In the next part of the PD/L evaluation, the participants focused on the module design that is summarized in Table 14.

Table 14*Comments and Recommendations about PD/L Intervention's Design*

Question	Survey	Focus group
11. Theories and resources appealed to adult learners and multiple learning modalities	Varied activities – 5 Addressed all learning styles – 3 Interactive activities (graphics, videos) – 2 Plenty of resources to explore – 1 Theories/resources supported reflection – 1 Useful for ELL and GenEd teachers – 1	Very relevant Not too much of anything
12. Language was user-friendly, engaging, clear, and considerate of cognitive load	No cognitive overload – 2 Professional content-based – 2 Adequate explanation of vocabulary – 1 Appropriate headings and descriptions – 1 Engaging language – 1	Go back to the conceptual framework often to reinforce its components
13. Materials provided opportunities for classroom use or further study	Opportunities for classroom use – 6 Opportunities for further study – 4 Provide framework for teachers – 1	Resources were appropriate and encouraged individual use and study
14. Effective use of white space, graphic elements, and alignment to organize the information	Visually appropriate – 3 Well-organized – 3 Convenient font size – 1 Graphics/charts/videos aligned to objectives – 1 Some graphics need to be centered – 1	All the links should have a short description of the source
15. Graphics related to the goals were of high quality, and enhanced reader's interest or understanding	Appropriate quality graphics – 8 Thought provoking/relevant graphics – 4 Possibility to use graphics as anchor charts – 1 Some graphics took extra time to load – 1	Very well-organized module, and graphics supported clear illustration of topics
16. Links allowed the reader to navigate the different areas of the module	Easy to navigate – 7 User friendly – 4 Needed option for reader to save/organize the links per category – 1	Smooth transition between sections Add a downloadable document with resources
17. Layout and design were visually striking and the module was of high-quality	Clear/well-designed layout – 4 Engaging/visually striking design – 3 Layout and design allow to focus attention on content – 1	Very well-designed

The design of the module was initially evaluated through Questions 11-17 of the survey and later discussed in the focus group. This component of the PD/L intervention received the second highest score (9.60) and 83 comments that were mostly positive feedback (n=77) with a few suggestions (n=6). The recommendations stated (a) the need

to maintain a consistent review of the conceptual framework throughout the module, (b) the revision of the layout and loading time of some graphics, and (c) the possibility for the teachers to retrieve a list of organized links and resources used in the module.

The last two questions of the survey asked for the effectiveness of the professional learning intervention in regard to ELL teacher learning (Table 15). The remaining item, Question 18, elicited responses about the potential effectiveness of the PD/L intervention in terms of ELs' development of academic resilience and achievement. Therefore, its analysis is presented with the findings for Guiding Question 4.

Table 15

Comments and Recommendations about PD/L Intervention's Effectiveness on ELL Teachers

Question	Survey	Focus group
19. Effectiveness of the PD/L module for other ELL teachers	Huge impact as PD/L – 3 Helpful to ELL teachers – 2 Equips teachers to better take care of themselves – 1 Helpful to GenEd teachers – 1 To be used at the beginning of the year – 1 Wanted permission to use sections of module in the district – 1	Effective for all teachers to be clearer about ELs' real experiences Participating and accessing the module is crucial for all teachers
20. General opinion about the Academic Resilience for ELs online PD/L module	A tool of great quality with useful resources – 9 Much needed professional learning – 5 Recommended to other teachers (ELL, GenEd, Admin) – 4 Connects theory and practice – 2 Helps ELL teachers improve classroom practice – 2	Meaningful, relevant, and successful PD/L

The highest score per section (9.72) was given to the general effectiveness of the module for both groups, ELL educators and their students. Specifically, Question 19 asked for scores and comments about the PD/L intervention's effectiveness concerning ELL teacher learning. Eight responses had a score of 10, and one was a 9 that resulted in the highest of all means, an average of 9.89 of 10 for the module effectiveness for ELL teachers. Question 20 asked for an open-ended response; and as Table 15 shows, both questions obtained only positive comments. The evaluating teachers noted that the module would not only be useful for them but also for other ELL teachers and general education teachers. Moreover, the focus group participants conversed about the strongest and weakest elements of the module. Table 16 summarizes their ideas.

Table 16

Additional Comments and Recommendations from Focus Group

Question	Focus group
2. Strong, useful, and most interesting elements of the module	<p>ELs' facts/data and needs and how to use strategies to help them</p> <p>Compassion fatigue put in language the feeling of carrying ELs' trauma/life experiences</p> <p>Reasons to learn/use specific strategies and actions to comprehend ELs' life experiences and their impact on ELs</p> <p>The sequence and progress of the module were very well laid out, even in the reflection part</p>
3. Elements of the module to be improved or removed	<p>The links need to be organized in a different way – e.g. adding a brief description or a sticky note</p> <p>Allow links to resources to be downloaded</p>

At least 2 weeks passed since the educators revised and assessed the PD/L tool. Questions 2 and 3 were asked to the focus group before the detailed revision of the survey responses (Question 5). In this part of the conversation, I had the intention to

identify the remaining impression of the module in the ELL teachers. They remembered ELs' data and needs, teaching strategies, compassion fatigue and teacher self-care, and a friendly user module. They also recalled the links required a different organization and requested the resources list to be downloadable or printed. The encouraging high scores and positive feedback were valuable, and the constructive recommendations guided the improvement of the final version of the professional learning intervention.

Besides examining the assessment results of the professional learning module, the focus group discussed the needs of ELL professionals, a topic that they had already been asked about in the questionnaire. Table 17 synthesizes the ideas described by the teachers in both research instruments.

Table 17

Comments About ELL Teacher Learning and Support

Question	Professional learning	Other support
<i>Questionnaire Q11. Additional support needed to work more efficiently with ELs</i>	PD/L in social-emotional development – 5 PD/L in language development – 4 More consistent, relevant, and meaningful PD/L for ELL teachers – 3 PD/L in instruction/assessment of SLIFE – 3 PD/L for GenEd teachers to support ELs – 2	The district needs a clear path or curriculum for ELs – 3 More instructional materials (new textbooks/supplies) – 3 Better district plan/program for SLIFE – 2 More family engagement PD/L – 2 Access/information about mental health resources – 1 More ELL teachers/tutors – 1
<i>Focus Group Q6. Further PD/L or support are needed</i>	Financial literacy, especially for undocumented students Symptoms and behaviors of at-risk students, and mental health information Effective language development practices for newcomers, especially SLIFE Effective support for GenEd teachers	Know needs of ELs in the district and the details of the support plan Creation of a vertically aligned curriculum for ELs in the district District and state available resources to encourage ELs to graduate and choose a career/college path

The numbers in the questionnaire section of the table correspond to the ELL professionals who mentioned each statement. There were 11 respondents to the questionnaire and three participants in the focus group. The questionnaire was the first research instrument of the PD/L design study and was used to determine educator points of view and background knowledge about the investigation themes. In contrast, the focus group was the third and last means for data collection and contributed to the conclusions of the study. Some ELL teacher requests, concerning needs in professional learning and support, were present in both sets of responses: (a) more regular and effective professional learning opportunities in language instruction and assessment practices, in particular about newcomers and SLIFE; (b) professional learning in supporting general education teachers who serve ELs; (c) information about the school district's plan that responds to ELs' needs; (d) a district-wide, consistent curriculum for the EL program; and, (e) professional learning in mental health that included identification of at-risk students' symptoms and behaviors. The latter topic was one of the recommendations to be included in the refined version of the PD/L module.

Other comments only appeared in one of the investigation tools: additional professional learning opportunities in family engagement strategies and financial education, more instructional resources and materials, and information about career and college available options for ELs. The most repeated request in the questionnaire, noted by five of the 11 participants, referred to the necessity to receive professional learning in social-emotional development. It related to the first question in the focus group where the participants were asked if the professional learning module had answered their need of knowing SEL strategies that supported ELL classes and students. The teachers affirmed

that the PD/L intervention provided tangible social-emotional strategies in areas such as motivation, discipline, being socially responsible, among others that they could actually use to support ELs during language instruction. They added that the module would help all teachers, not only ELL teachers, to understand their students' cultures, strengths, and needs as well as they would be able to resort to appropriate strategies to connect with their learners.

Findings to Guiding Question 4

Guiding Question 4 was, "To what extent does the designed professional learning intervention support ELs' academic resilience?" The remaining part of the analysis related to the potential effectiveness of the online module to enhance academic resilience and, consequently, academic achievement in ELs. Table 18 shows educator opinions concerning the possible impact of the professional learning experience on their students. The questions are identified by the number and research tool. The survey questions were answered by nine participants and commented on by the three teachers in the focus group. The table shows the number of teachers who mentioned each survey statement and the comments added by the focus group. The last question in Table 18, Question 4, was asked only to the focus group. I labeled the responses by the teacher who introduced the comment; however, the other participants elaborated on each idea. Each comment synthesizes and paraphrases the group's conversation.

Table 18*Comments About PD/L Intervention's Effectiveness on ELs*

Question	Comments
<i>Survey Q18.</i> Potential support of PD/L module on ELs' academic resilience	<p><i>From Survey</i> Very helpful to support ELs' academic resilience – 4 Helps understand ELs' needs/experiences – 4 Easy to put content into practice – 1</p> <p><i>From Focus Group</i> Potential high impact on ELs' academic resilience development Clear and practical implementation of strategies</p>
<i>Survey Q20.</i> General opinion about the Academic Resilience for ELs online PD/L module	<p><i>From Survey</i> Useful for upper grade and younger ELs – 1</p> <p><i>From Focus Group</i> Meaningful and relevant PD/L module that guides ELL teachers in supporting ELs</p>
<i>Focus Group Q4.</i> How new learning would help ELs improve resilience/ What needs to be done to help ELL teachers work more effectively with ELs	<p>T3– By acknowledging ELs are intelligent and can contribute, instead of only looking at their limitations, teachers will connect with them emotionally and socially better</p> <p>T2– ELs may not want to address certain personal topics in a conversation at first, but they would write about them</p> <p>T3– If ELs are capable to identify and name their own academic difficulties and their own emotional state, teachers will differentiate and motivate them accordingly. Students will feel more accepted and supported, and will act more confidently</p> <p>T2– Knowing the theory behind the practice gives teachers tools to implement more adequate teaching strategies and to adjust their own behavior. e.g. Research has proven teachers' high expectations support student achievement</p> <p>T1– Teaching practices might be different, more creative</p> <p>T1– When teachers take the time to build relationships with their students, it shows in their work, even in writing exercises</p>

The observations in Table 18 validated that targeting ELL teacher learning about academic resilience development will probably affect ELs' academic achievement in positive ways: better knowledge of student needs and potential, improved student-teacher

relationships, higher teacher expectations, more personalized and creative classroom practices, student awareness of own SEL abilities and use of strategies, and language skills improvement. ELL teachers also agreed that the professional learning intervention taught them strategies and practices that will be easy to implement in all grade levels. By knowing the theory behind the evidence-based practices, educators will be more confident using them in their classes, because they will be more accurate in identifying ELs' strengths and ways to address their limitations. ELs will potentially have a more confident attitude and behavior and be more openly willing to contribute orally and in writing; activities that will eventually help students improve their language skills. Teachers and students could also learn to recognize, understand, and regulate their own emotions more efficiently, which could lead to improvement of their relationship and the class dynamics.

Summary of Findings for Guiding Questions 3 and 4

The professional learning electronic module obtained five times more positive comments (n=130) than suggestions for improvement (n=24). The majority of the recommendations addressed the module content, and six of them referred to its design. ELL teachers also expressed their necessity of sustained and diverse PD/L as well as a clearer curriculum for their district's ELL program. Since Guiding Questions 3 and 4 asked for the extent of support from the PD/L intervention in terms of ELL professional learning and ELs' academic resilience, the feedback gathered from the data collection tools served to confirm and improve the theoretical conjectures and the final outcomes of the study. In other words, the results of the data analysis determined the validation and

refinement of the conceptual framework and the components of a suggested PD/L module for ELL educators in ELs' Academic Resilience Development.

Outcomes: Research Question

The research question was, "What are the characteristics of an effective in-service program that provides ELL teachers with tools to enhance ELs' academic resilience?"

The purpose of this mixed methods PD/L design study was to create, evaluate, and refine a PD/L intervention that helped ELL teachers learn theories and strategies and improve practices to enhance MLs/ELs' academic resilience and achievement. I started the research with the creation a conjecture map (Figure 7) based on the literature review. Conjecture mapping is a technique used to conceptualize and illustrate the iterative research process of the design-based investigation. The analysis of the collected data proved the initial high-level conjecture—Enhancement of Academic Resilience in ELs requires that ELL educators receive professional learning in self-efficacy, SEL, brain-based learning, and trauma-informed strategies in the following improved outcomes:

- ELL teacher learning of emotional intelligence evidence-based practices and related theories can enhance academic resilience and achievement in ELs.
- ELs' academic resilience development occurs through the implementation of theories and practices of emotional intelligence, SEL, brain-based learning, and a trauma-informed approach intertwined with ELD instruction.

The outcomes are the validated results of the theoretical conjectures that explained how the learning or mediating processes derived in the final products.

Theoretical Conjectures

Using educational DBR as the study's methodology entailed the production of an

instructional intervention for practical application and a local instructional theory in learning and teaching. My adaptation of Morales's (2008) theoretical construct in terms of academic resilience for ELs constituted the learning and teaching theory of the study, which in turn originated the instructional intervention for ELL teachers. The module was designed, assessed, and improved throughout the investigation. The evaluation process generated (a) a suggested table of contents for an effective professional learning intervention on academic resilience development for practicing ELL teachers, and (b) the refined and final conceptual framework, *Enhancing MLs/ELs' Academic Resilience*.

Table of Contents: Academic Resilience in MLs/ELs. Table 19 details a suggested professional learning intervention for ELL teachers grounded in evidence-based instruction that will potentially lead to ELs' academic achievement.

Table 19*Suggested Table of Contents: Academic Resilience in MLs/ELs*

Academic Resilience in MLs/ELs	
1.	<i>Academic Resilience in MLs/ELs</i>
1.1.	General Information
1.2.	Learning Goals for English Language Learning Educators
2.	<i>Introduction</i>
2.1.	Resilience and Academic Resilience – e.g. Rigsby (1994), Wang et al. (1994)
2.2.	Emotional Intelligence – Goleman (1996), Salovey and Mayer (1990)
2.3.	E. Morales’s Resilience Cycle (2008) – Morales and Trotman (2011)
2.4.	Enhancing MLs/ELs’ Academic Resilience – Lamprea (2020)
3.	<i>Recognizing Reality: Identifying Needs and Challenges</i>
3.1.	ELs’ Statistics: Academic and Other Data – e.g. U.S. Census Bureau, USDOE
3.2.	Asset-Approach vs. Deficit Approach – e.g. Dudley-Martin (2015), WIDA (2018)
3.3.	ELL Philosophy – e.g. Can Do Philosophy (WIDA, 2019a)
4.	<i>Manifesting Help: Acquiring Protective Factors</i>
4.1.	Dispositional and Environmental Protective Factors – Benard (1991)
4.2.	Dispositional or Personal Protective Factors
4.2.1.	Emotional Intelligence Approach – e.g. Brackett (2019), CASEL (2015)
4.2.2.	Self-Efficacy – Bandura (1982, 1994, 1995)
4.2.3.	Motivation – e.g. Bandura (1982, 1994, 1995), Morales and Trotman (2011), Salovey and Mayer (1990)
4.3.	Environmental or External Factors
4.3.1.	Brain-Based Learning & School/Family/Community – Caine & Caine (1994), Lombardi (2008)
4.3.2.	SEL & School/Family/Community – Brackett (2019)
4.3.3.	Trauma-Informed Approach & School/Family/Community – Romero et al. (2018), Zacarian et al. (2017)
5.	<i>Synthesizing Resources: Protective Factors Working in Concert</i>
5.1.	ELD & Social-Emotional Practices – e.g. edutopia.org
5.2.	ELD & Brain-Based Practices – e.g. brainresearch.us
5.3.	ELD & Trauma-Informed Practices – e.g. rulerapproach.org
6.	<i>Evaluating and Enhancing: Building Self-Efficacy</i>
6.1.	Self-Efficacy & ELs – e.g. Rajan et al. (2017)
6.2.	Meta-Cognitive Strategies – e.g. spencerauthor.com/metacognition
6.3.	Mindfulness & Growth Mindset – e.g. Asgedom (2017), teachingenglish.org.uk/article/mindfulness
7.	<i>Developed Habits and Goals: Enduring Motivation</i> – e.g. lincs.ed.gov/programs/eslpro
7.1.	Career and College Paths
7.1.1.	Career and Technical Opportunities
7.1.2.	College and Financial Aid
7.2.	Life-Long Plan Resources
7.2.1.	Soft Skills and Job Searching
7.2.2.	Financial Education
8.	<i>Emotional Intelligence and ELL Professionals</i>
8.1.	The Roles of the ELL Teacher
8.2.	Emotion Regulation Strategies – e.g. Brackett (2019), RULER (Yale University, 2020)
8.3.	Compassion Fatigue Awareness – e.g. Romero et al. (2018)
8.4.	Self-Care Practices
8.4.1.	Emotional Intelligence Approach – e.g. RULER (Yale University, 2020)
8.3.2.	Professional Learning Networks – e.g. my.tesol.org/communities
9.	Reflection and Next Steps Plan
10.	Evaluation of the Professional Learning Experience

I crafted a first version of a professional learning module on Academic Resilience development for ELL teachers (Figure 4) using the reviewed literature, focusing on ELs' needs, and following the elements of the Resilience Cycle (Morales, 2008). The draft was improved based on respondent comments to the questionnaire. The updated module was revised and evaluated through a survey by a second group of participants and a focus group who discussed the survey's results and added to the evaluation. The findings from the latter research instruments and my continuing review of recent literature served to refine the final version of the professional learning intervention and its suggested themes.

The table of contents lists the recommended components of a professional learning course for ELL educators that will potentially support ELs to become more academically and personally successful. It also includes samples of resources per topic such as evidence-based learning instruction and practices, authors and researchers, or websites that could be used as guidance to tailor professional learning for specific groups ELL teachers. The 10 sections and themes of the PD/L model remained consistent from the learning intervention assessed by the research participants. The following are the changes and additions made to the module based on the findings:

- 2.2.—More intentional explanation of the significance of emotional intelligence as the center of the academic resilience enhancement process
- 3.2.—Change of WIDA Can Do Philosophy to a broader ELL philosophy and addition of other samples of asset approaches
- 4.2.1.—Explication of various emotional intelligence approaches that help improve personal or dispositional protective factors
- 6.3.—Addition and comparison of mindfulness and growth mindset as

evidence-based practices for ELL instruction

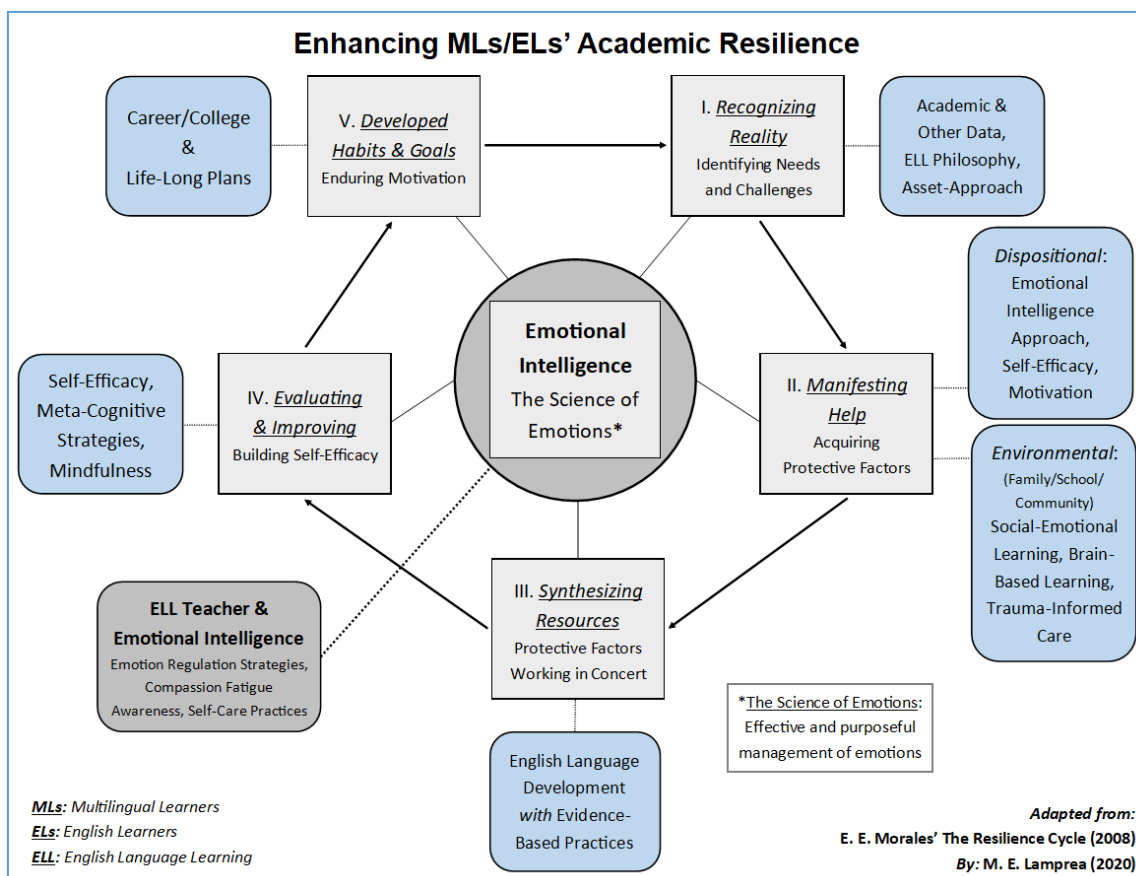
- 7.1. & 7.2.–Separation of career/college goals from lifelong plan and addition of details
- 8.2. & 8.4.–Additional social-emotional practices for ELL teacher learning
- Other minor changes in content and design formerly listed in Tables 13 and 14

The refinement of the table of contents and the professional learning intervention models led to improvement of the theory of learning and teaching tested along the study.

Enhancing MLs/ELs' Academic Resilience. Figure 13 illustrates the revised and final version of the conceptual framework proposed in Figure 4 that was used to initiate this PD/L design study.

Figure 13

Enhancing MLs/ELs' Academic Resilience



The visual of the conceptual framework evolved from the reflection on the results obtained along the study journey and the detailed suggestions that helped modify the suggested table of contents. I decided to make the visual more intentionally explicit on its components and their relationships. I removed the words hub and spoke and modified the inner names of the stages in a way that remained loyal to the Resilience Cycle (Morales, 2008). I added the definition of emotional intelligence as “the science of emotions” to highlight the importance of this theoretical framework. I wanted to implicitly show its evolution and the necessity of systematic study and practice as any science requires. Keeping the original design of a cycle (Morales, 2008) and updating the “mechanical”

terms to dynamic verbs (Morales & Trotman, 2011), the graph shows the sequential phases of the process. The original inner components address ELs in terms of goals and active roles throughout the process. The outer components display the topics, researched theories, and evidence-based practices that ELL educators should master to support their students.

In order to help ELs enhance academic resilience and achievement, ELL teachers should study and learn the science of emotions, emotional intelligence. “An emphasis on these [social and emotional] capacities is not the sacrifice of rigor; it is a source of rigor. While many elements of a child’s life improve along with the cultivation of these skills, one of the main outcomes is better academic performance” (The Aspen Institute, 2019, p. 7). After examining their ELs’ academic and personal data from the perspective of an ELL philosophy and an asset mindset, ELL teachers should feel comfortable integrating an evidence-based emotional intelligence approach into ELD curricula. A solid emotional intelligence approach should promote growth of dispositional or personal protective factors such as self-efficacy, self-motivation, and metacognition as well as provide tools to support environmental or external protective factors. Hence, this approach should embed well with SEL, brain-based learning, trauma-informed approach, or mindfulness evidence-based practices. More importantly, ELL teachers should be capable of use topics and practices during their English language instruction. Because of the topics and practices relate to student lives, they should be capable of using topics and practices during their language instruction. Because the topics and practices relate to student lives, they should be more comfortable using the target language to explore concepts, share experiences, and discuss ideas orally and in writing. Furthermore, ELL professionals

should be able to guide ELs to design well-informed lifelong and career or college plans. Finally, ELL educators should be aware of their own emotional intelligence process, know about compassion fatigue, and practice self-care. As ELs' first responders and resource, ELL teachers should be role models of a healthy regulation of feelings, relationship building, and decision-making (Brackett, 2019).

Summary

In Chapter 4, I described the rationale for the PD/L design study and explicated the research method and technique—DBR and conjecture mapping. I offered a detailed profile of the participants, presented the used research instruments, explained the data gathered on each step of the investigation, and elucidated a thorough analysis of the results and findings. I concluded by introducing the refined theoretical and pragmatic outcomes of the research. The next chapter summarizes the research process and lists the implications and recommendations based on the findings.

Chapter 5: Discussion

Aristotle noted that “Educating the mind without educating the heart is no education at all” (Purkey & Stanley, 1991, p. 7); even so, education has traditionally concentrated on cognition. Under the current testing and accountability era, statistically disadvantaged students are especially prone to academic failure due to their low social and economic backgrounds, disabilities, or limitations to communicate effectively in English. After decades of gearing numerous resources and efforts into improving student, teacher, and school performance, disparities between student subgroups continue to increase. Lack of improvement makes the loudest call to shift the educational paradigm and prioritize hearts and emotions while addressing learning and minds.

The Research Problem

Approximately 10% of the student population in U.S. schools are MLs/ELs, who have one of the lowest academic achievement and graduation rates (National Center for Education Statistics, 2018; U.S. Department of Education, n.d.a). Despite the majority of these students being American-born, their school performance is impacted by multiple life and family risk factors such as poverty, ACEs, trauma, limited schooling, and immigration (Migration Policy Institute, n.d.; National Child Traumatic Stress Network, 2015; Romero et al., 2018; U.S. Census Bureau, 2016; Zacarian et al., 2017). Based on these circumstances, ELL teachers should be equipped to support ELs and their needs in a comprehensive way; however, ELL teacher preparation has mainly targeted ELD. Besides the necessity to navigate academic environments using the target language properly, as particularly vulnerable learners, ELs should learn to manage the feelings and emotions caused by their specific situations. Research indicates that improving social-

emotional skills influences learning, positive relationships, self-efficacy, attention, creativity, decision-making, and academic performance, among many other personal and academic attributes. “The promotion of social, emotional, and academic learning is not a shifting educational fad; it is the substance of education itself” (The Aspen Institute, 2019, p. 6). In consequence, ELL teachers require professional learning opportunities that increase their theoretical knowledge and pragmatic teaching practices to address ELs’ needs in a holistic way that goes beyond language development and makes a positive difference in their students’ personal and academics lives.

A Review of Key Literature

As a researcher, I sought to understand why ELs who display resilience skills in so many facets of their lives are one of the most unsuccessful groups in U.S. academic settings, and how it relates to my role as an ELL professional. I also wanted my study to help other ELL teachers learn to serve their students more effectively. At the early stages of the research process, while I was exploring the characteristics and standards for high-quality professional learning, the literature review led me to the key theories that gave structure to my investigation: the Resilience Cycle (Morales, 2008), educational DBR (Cobb et al., 2003; Design-Based Research Collective, 2003), and conjecture mapping (Sandoval, 2014). Although research that connected the three theories was unavailable, I found three dissertations that used DBR and conjecture mapping related to reading protocols to improve comprehension (Bergeson, 2016), the role of feedback to student teachers during practicum experience (Hougan, 2014), and the effects of a connected learning curriculum on LTELs (Elizalde, 2018). The theories and sample dissertations informed my decisions about how to plan, design, and execute my research.

Morales's (2008) Resilience Cycle—and its later detailed explanation (Morales & Trotman, 2011)—cemented this study's conceptual framework and created a path to demonstrate Aristotle's quote. The Resilience Cycle is a theoretical construct that originated from the examination of the academic resilience development process of 50 minority college students who overcame diverse risk factors and remained academically successful.

The Research Methodology

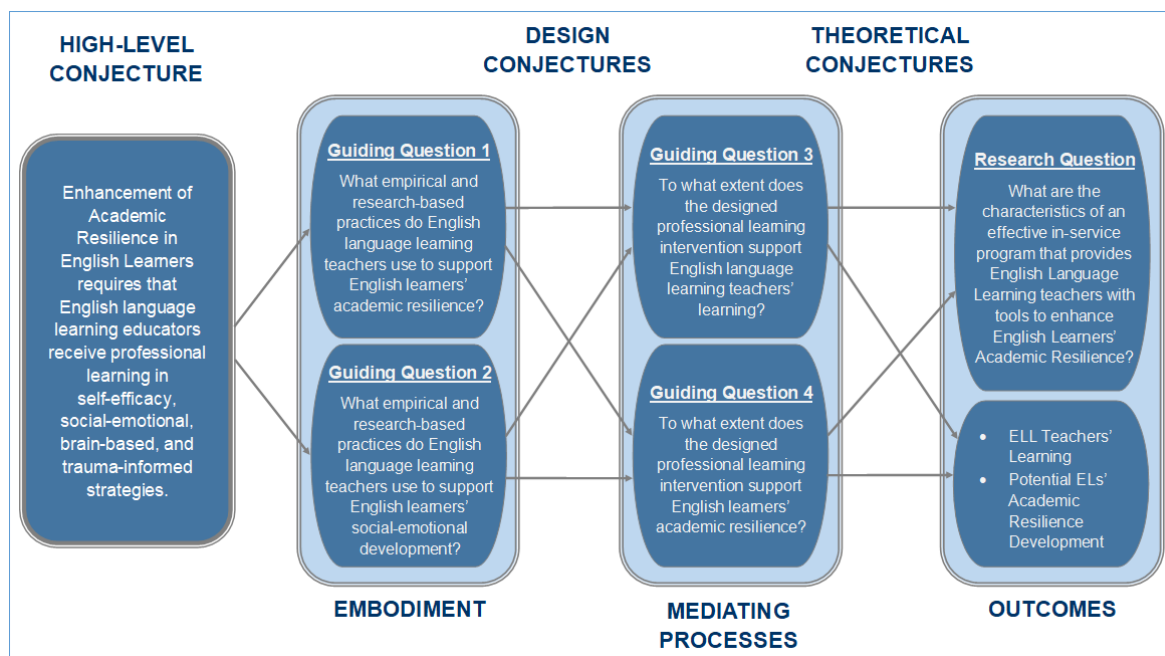
Initially, I adapted and complemented the Resilience Cycle with evidence-based practices that potentially supported ELL teacher learning and ELs' academic resilience and achievement. Then, I authored an electronic professional learning online course that mirrored the Resilience Cycle's stages. Being mindful of the Standards for Professional Learning (Learning Forward, 2011), I entwined interactive learning activities for instruction, discussion, assessment, and reflection with information concerning ELs' data, ELL philosophy, asset approach, ELD practices, risk and protective factors, SEL, brain-based learning, trauma-informed approach, self-efficacy, motivation, meta-cognition, mindfulness, growth mindset, goal-setting processes, and more importantly, emotional intelligence. Later in the research journey, as I was working on the conclusions, I found Brackett (2019) and the Yale Center for Emotional Intelligence's work to affirm the outcomes of my search.

This PD/L design study was a mixed methods investigation that used educational DBR as methodology. DBR expects the symbiotic creation of a local instructional theory and an instructional intervention to support teaching and learning (Gravemeijer & Cobb, 2006), as well as it promotes collaboration between educators and investigators (Design-

Based Research Collective, 2003). DBR follows an iterative process of design, enactment, analysis, and redesign that should be documented to identify learning issues and successes, and whose findings and implications should be shared with other teachers and researchers. To shape the research process, I selected the DBR type called professional development design that supports a group of in-service teachers to improve instruction (Cobb et al., 2015). I purposefully named my study PD/L to highlight the educators' necessary transition from receiving information passively to "taking an active role in their continuous improvement" (Learning Forward, 2011, p. 13); and as a result, teacher learning intentionally reflects upon and focuses on student learning.

Figure 14

Research and Guiding Questions in the PD/L Study's Conjecture Map



To carry out the DBR study, I chose conjecture mapping to delineate the sequence of activities, interactions between the elements, and expected outcomes (Sandoval, 2014).

Figure 7 showed in detail the steps and components of the study's conjecture map. Figure

14 illustrates the specific moments in the investigation process when the research and guiding questions were answered.

Research Question

The high-level conjecture stated a supposition of the outcomes and served as the starting point of the research process as depicted in Figure 14. Since a conjecture map focuses on one hypothesis, the study only had one research question to be answered at the end, “What are the characteristics of an effective in-service program that provides ELL teachers with tools to enhance ELs’ Academic Resilience?” The research question was supported by four guiding questions.

Guiding Questions 1 and 2

In the first phase of the design study, embodiment in the conjecture map, the responses of 11 ELL teachers to an open-ended questionnaire looked to answer the first two guiding questions. Participants were asked about ELs’ limitations and strengths in academics and social-emotional skills and the pragmatic and evidenced-based practices they as ELL teachers used to support students in both areas. Concentrating on Guiding Questions 1 and 2 (Figure 14), I analyzed the qualitative data obtained in the questionnaire that helped me explore participant prior knowledge regarding academic resilience development and the topics of the conceptual framework. The findings guided the revision and improvement of the design conjectures—the draft of the professional learning online module and the initial conceptual framework, “ELs’ Academic Resilience Cycle” (Figure 4).

Guiding Questions 3 and 4

The second phase, mediating processes, required the use of two research

instruments, a survey and a focus group. In a role of instructional design experts, nine participants examined and evaluated the electronic module titled “Academic Resilience in ELs” using a digital survey. I examined the quantitative and qualitative survey data, and the results were discussed by the three participants of the focus group. These ELL teachers also commented about the learning they experienced from their interaction with the module, their ELs’ potential learning after teacher implementation of the new knowledge, and the additional needs they had. Guiding Questions 3 and 4 (Figure 14) guided the evaluation of the online module which helped me finalize the refinement of the theoretical conjectures—the conceptual framework or local instructional theory and the structure of a professional learning course model or instructional intervention. The last phase, outcomes, referred to the answers to the study’s research question and final products, which concluded the study with validation of the high-level conjecture.

Discussion of Findings

The most definitive findings of this PD/L design study responded in detail to the research question asking for the characteristics of an effective in-service program that provided ELL teachers with theoretical and pragmatic tools to help improve their ELs’ academic resilience and achievement. Those results are synthesized in the two study outcomes: the refined conceptual framework, *Enhancing MLs/ELs’ Academic Resilience* (Figure 13); and the Suggested Table of Contents: Academic Resilience in MLs/ELs (Table 19), a detailed list of topics that translates the conceptual framework into instructional learning.

The research was an iterative, reflective journey that led to the expected conclusions—the theoretical and pragmatic outcomes. Notwithstanding, my biggest

realizations occurred during the group conversation, when some statements of the participants helped me become more aware of substantial nuances presented in the gathered data, the examined results, and their words. Based on the findings from this study, it is important for PD/L regarding academic resilience for ELs to include (a) a focus on emotional intelligence, (b) self-care guidelines for ELL teachers who may experience compassion fatigue as a byproduct of their everyday jobs, (c) an asset-approach to instruction, and (d) relevant strategies that move theory into practice.

A Focus on Emotional Intelligence

The most eye-opening insight I gained from this study occurred with the realization that during the interaction with the PD/L module, ELL teachers had missed the importance of emotional intelligence as “The Hub” (Morales, 2008; Morales & Trotman, 2011) that sustained resilience development in personal and academic situations. The visual of this design study’s conceptual framework titled *Enhancing MLs/ELs’ Academic Resilience* shows the main components of the learning process in a symbiotic relationship with the “science of emotions” or emotional intelligence, placed at the center of the process (Figure 13). The rest of its elements explicate each of the main steps in terms of concepts and evidence-based practices. Unbeknownst to Brackett (2019), he construed the rationale of this conceptual framework as, “if we grew up acquiring emotional skills, they would make us better learners, decision makers, friends, and parents, better able to maintain our health and well-being, deal with life’s ups and downs, and achieve our dreams” (p. 197).

As I revised the PD/L intervention and the responses to the survey and focus group, I observed that participants made several comments about new concepts like

Morales's (2008) framework (x1), academic resilience (x5), asset-approach (x1), risk and positive factors (x2), motivation (x3), trauma-informed (x3), brain-based (x1), compassion fatigue (x2), and relationship building (x3); however, no one mentioned emotional intelligence. They understood its significance, but the responses pointed to the usefulness of the evidence-based practices as Focus Group T3 answered, after being asked for the strongest or most useful elements of the module:

The practices. They give us knowledge about how to use them.... It's like an eye opener for us to have a PD that explains them in that way, that using these strategies help to protect and build their [students'] confidence. The connection was unclear until now.

ELL teachers had only looked at the module for a couple of hours to evaluate it, so it was certainly impossible for them to learn all the new information without studying and implementing it. In any case, I realized that although emotional intelligence development was explicated in the PD/L module as the piece that connects all theories and practices, it had to more intentionally become the paramount idea throughout the intervention.

Based on feedback from the ELL teachers and data founded in current research about challenges ELs may face, I envisioned school opportunities for every student to embrace emotional intelligence in all aspects of their lives and the impact it would have on their academic performance, their relationships, and their future lives. Plato said, "All learning has an emotional base" (Brackett, 2019, p. 27), to which research agrees and expands by explaining essential social-emotional competencies and demonstrating that emotions and how people deal with them reflect on every decision, performance, relationship, health state, and learning experience (CASEL, 2015; Yale University,

2020). In order to have more accomplished and balanced human beings, all students should be taught to identify, comprehend, and regulate their emotions—especially vulnerable students like ELs who may have been through chronic stress, trauma, or violence. “Emotion skills are the key to unlocking the potential inside each one of us” (Brackett, 2019, p. 241).

Compassion Fatigue and Self-Care Awareness

Table 13 (Section 7) and Table 16 (Question 2) show examples of how my colleagues were almost completely unaware of both the concept of compassion fatigue or secondary trauma and the conscious self-care practices they should regularly use to maintain their own well-being. T2 during the focus group commented,

I remember the first year in the classroom just feeling like, why do I feel like I'm carrying all these issues that are not mine? So, it [the module] put in language to that knowing that it wasn't just me that feels that way. We have compassion fatigue.

ELL teachers are vulnerable to compassion fatigue or vicarious trauma caused by their interaction with ELs' issues and life experiences. Romero et al. (2018) stated, “Compassion fatigue is the physical and mental exhaustion and emotional withdrawal professionals experience when working with distressed children, adults, or families over extended periods of time” (p. 12). Since teaching and learning are a relational experience where educators are called to remain calm and be assertive, teachers should learn to reflect on their own stories of possible trauma or ACEs to detect their own triggers and biases and to identify the effects of compassion fatigue on their physical, social, and emotional health.

Secondary or vicarious trauma leads to a decline in feelings and compassion, high levels of stress and anxiety, hopelessness, depression, and overreactive responses. For this reason, self-care becomes an emotional and professional survival skill for teachers who should learn about self-care strategies like exercising, meditating, journaling, or networking with other educators to decompress from negative emotions. In order to be resilient, students need resilient role models in their teachers and other adults. Emotional intelligence education should start by teacher preparation on emotion awareness, regulation, and skill development.

The Need for an Asset-Approach

To the focus group question concerning how the new learning would help ELs enhance their academic resilience, T1 answered,

If we were to acknowledge that they've been through some kind of adversity, we have to acknowledge their feelings and that they can contribute, that they're bright and intelligent, and we would have to see them in a different way. We need to build relationships. The way we teach has to motivate them by connecting with them emotionally and socially, so I wouldn't make them feel as worthless because many students feel like a burden in other classes, like I'm never gonna get this or this teacher is not gonna want me in their class or whatever.

This educator verbalized the sentiment of a caring teacher who wants to be successful and make a difference in student lives, while addressing the usability of some elements in the module. Yet what I found most relevant in this comment is the negative perception of ELs and the need to see them through different lenses. Accordingly, this study's data showed participants being more confident at identifying ELs' challenges than pointing to

their strengths. In the questionnaire, there was a total of 105 descriptors where 58 (55.2%) referred to ELs' difficulties or deficiencies and 47 (44.8%) were qualities these students display personally or academically. Similarly, there were 36 descriptions of ELs during the focus group in which 24 (66.7%) were weaknesses and limitations and 12 (33.3%) mentioned strengths and capacities.

These numbers might have originated in the need for teachers to focus on deficits during the regular examination and interpretation of student data, where ELL statistics mostly indicate low academic performance. Under a deficit mindset, at-risk students' obstacles to learning are seen as deficiencies and inadequacies that can lead to lowered or limited expectations for them. The WIDA Can Do Philosophy, the asset approach used in this research, "believes that an educator's role is to craft instruction that capitalizes on and builds upon [students'] assets [because] all students bring to their learning cultural and linguistic practices, skills, and ways of knowing from their homes and communities" (Gottlieb, 2013, p. v). ELL teachers are aware of the necessity to have an asset mindset regarding ELs and the research that supports it; however, these professionals have not been adequately prepared to engrain it in every interaction with their students and other teachers and stakeholders. An asset approach is a language that ELL teachers need to learn to use fluently.

From Theory to Practice

As I learned from participant feedback, I noticed consistent comments on how the PD/L module presented useful resources and strategies (Table 18–Question 18) that helped them put theory into practice (Table 15–Question 20, Table 16–Question 2). During the focus group, T3 explained,

For me, professionally and personally, this is very beneficial as an elementary ESL teacher, because it's not only about understanding the ELs, but how they feel. Especially when they arrive here and they don't have any background about the language. In that way, we can make connections with them through these strategies.

Besides emphasizing content or theory, professional learning opportunities frequently lack follow-up activities due to their short duration (Darling-Hammond et al., 2009) which will not allow change in day-to-day practice, as T1 described in the focus group conversation:

In [school district], we have done a lot. They've focused more on technology and kind of the expectations through WIDA and its standards, but there isn't much on how to deal daily in our classrooms – tangible strategies and things that we can actually do to help students.

I designed the PD/L intervention as a 10-hour online course that used EL data and rationale of evidence-based theories and practices in relation to strategies that could be implemented in the ELL classroom and supported language development. In their role as content experts and evaluators, participants interacted with the online module for up to a couple of hours. They explored it, focusing on its content, design, and potential learning effectiveness. Table 20 lists a few of the evidence-based practices included in the module. In such a short time, ELL educators could not do the whole learning process themselves, much less implement the strategies. They will have access to the finalized version of the online module through the North Carolina Department of Public Instruction ESL/Title III website. I expect the conceptual framework to become inclusive

ELL curricula—for ELs, teachers, and stakeholders—where cognitive and social-emotional EL needs get addressed and emotional intelligence and ELD evidence-based practices work hand in hand.

Table 20

Samples of Evidence-Based Practices for PD/L Module

Topic	Practices	Sources
SEL: Integration in class	Using literature, collaborative learning, and teachable moments	ASCD In Service (2018)
Self-Efficacy: How it impacts agency, self-regulation, perseverance, and growth mindset	Importance of self-efficacy (videos) “You know how and so you can!” “Embrace the Stress” (If-Then statements)	Self-Efficacy Toolkit (LaRoca, 2017)
Emotional Intelligence: Apps	Mood Meter Stop, Breath & Think Character Playbook	Lynch (2017)
Brain-Based Learning: Building students’ cognitive flexibility	Open-Minded Vision Divergent Thinking Transfer Opportunities	Willis (2016)
Trauma-Invested Practices: The new 3 Rs	Relationship: Whisper-wish Responsibility: Say ‘yet’ Regulation: Offer brain breaks	Souers and Hall (2019)
Reaching students with interrupted or minimal education (SLIFE)	Intake/Pre-Assessment Form 5 Ways to Develop Growth Mindset Social Contract Student Interview: Educational History Timeline	Salva and Matis (2017) Suárez-Orozco et al. (2018)
Mindfulness: Tips for teachers (visual)	5-3-1 Traffic Light Standing Meditation	Finley (2019)

Implications

Inspired by the findings, I intentionally redesigned the conceptual framework

graph (Figure 13) and wrote its corresponding suggested table of contents for ELL teacher preparation (Table 19) in a very methodical, theory-grounded, evidenced-based, and explicit way. Both study's outcomes—the conceptual framework, *Enhancing MLs/ELs' Academic Resilience*, and the content model for professional learning—led my reflection on possible implications for diverse groups of professionals in education: ELL teachers, professional learning developers and researchers, educational leaders, and other stakeholders.

Implications for ELL Teachers

The *Enhancing MLs/ELs' Academic Resilience* conceptual framework offers a comprehensive approach for ELs' academic achievement by empowering their emotion and language abilities through the preparation of their ELL teachers. A few reasons uphold the urgency for clear-cut education on emotions at schools and pertain to ELL teachers.

Student Learning. Participants in this study identified 32 academic and 26 social-emotional challenges that hinder ELs' opportunities for academic success, such as gaps in schooling, literacy difficulties, mental preoccupation or chronic stress due to former or current adverse experiences, and need to work that impedes attendance or graduation, among others. Children raised in stressful environments learn to compartmentalize their emotions and show toughness. Research demonstrates that expressing emotions supports mental and physical well-being; and high development on emotion skills proves that (Brackett, 2019) (a) young kids who display a few behavior problems, adjust better and perform well at school; (b) teenagers with less depression, anxiety, and suicidal behaviors have higher creativity, higher scores and grades, and

better abilities to get along with others; and (c) adults with better relationships with friends, parents, and romantic partners display better workplace performance and health.

Emotions control three of the most important learning skills: attention, focus, and memory. Helping ELs acknowledge and comprehend their feelings gives them power over emotions generated by current or past life adversities that distract them from school. It also shows them how to become more autonomous and responsible regarding their own academic formation. ELs, who have one of the highest dropout rates and the lowest graduation and performing rates in U.S. schools, as the rest of the students, would get more benefits from an education that targets their individual needs. “For decades, evidence has shown that personalized learning is the most effective way to develop deeper cognitive skills” (Microsoft Education, 2018, p. 16). Accordingly, ELL teachers should create personalized environments where social, emotional, and academic learning is encouraged and where ELs can become self-regulated students who thrive at school and display higher motivation and self-efficacy (The Aspen Institute, 2019; Brackett, 2019).

Emotions also influence performance, creativity, and decision-making. By 2030, “the fastest growing occupations will require higher-level cognitive skills in areas such as problem solving, critical thinking, and creativity, and 30 to 40 percent of jobs will require explicit social-emotional skills” (Manyika, Chui et al., 2017, as cited in Microsoft Education, 2018, p. 4); and 50% of U.S. existing jobs could be replaced by automation which would reduce up to 11.5 million occupations that permit lower educational levels (Manyika, Lund et al., 2017, as cited in Microsoft Education, 2018). Since the school purpose—in conjunction with families and communities—is to prepare future productive

citizens who contribute to society, education services should grant opportunities to students to develop and test social-emotional and leadership skills that equip them to careers that may not exist yet. Besides English language and social-emotional development and opportunities for personalized learning and considering that ELs may be immigrants or come from impoverished contexts with limited resources, these students should be exposed to learn through new technologies that give them access to future jobs. “The class of 2030 will work together on interactive, visually rich experiences that build skills and deepen understanding while leveraging social-emotional skills as they collaborate, develop presentations, and test and refine their thinking, all while engaging with technologies” (Microsoft Education, 2018, p. 24).

Teaching. In a study conducted with more than 5,000 teachers, 70% of the reported emotions were negative. “Teachers who experience more negative emotions are also more likely to have sleep problems, anxiety and depression, be overweight and burned out, and have greater intentions to leave the profession” (Brackett, 2019, p. 191). Also, “Teachers who are stressed offer less information and praise, are less accepting of student ideas, and interact less frequently with students” (Brackett, 2019, p. 191). Becoming experts at emotional intelligence development benefits teachers’ professional and personal lives. In that sense, ELL professionals should request their school district receive professional learning experiences that help enhance their own emotion skills, because “students watch their teachers closely, paying attention to each facial expression, every gesture, the rise and fall of their voices. They’re constantly picking up information on how teachers feel about the topic, about teaching, about them as students” (Brackett, 2019, p. 204).

As other stakeholders' resources and support, their ELs' advocates, and leaders in emotional intelligence development, ELL educators have to support other teachers who work with ELs as well as with the students' families. ELL teachers could prepare for this role by cooperating in curriculum design or by modifying and applying the outcomes of this design study. With other teachers or by themselves, ELL educators could create or pilot activities and programs that support the development of social-emotional skills where students work collaboratively, regulate their emotions during negotiation and decision-making, practice self and social awareness, and explore identity and self-efficacy (Microsoft Education, 2018). Teachers could also invite guests to their schools, or ask colleagues to join them in external programs. A trending way to get more prepared in varied topics and receive support from colleagues and specialists is through professional learning networks. Individual authors or researchers and associations offer ways to connect virtually with them and other professionals using their websites or social media accounts, where they have live events, archived videos, and other resources. In many cases, participants can get credits for teaching license renewal.

“The role of the educator will continue to rise in importance, as education is predicted to be one of the occupations to grow across the next decade” (Microsoft Education, 2018, p. 8). ELL teachers who embed emotion learning in language development instruction could (a) open additional possibilities for student participation and engagement in activities and boost language domains development, especially in writing and speaking; (b) model for ELs how to deal better with lingering feelings attached to life challenges and prior experiences; and (c) help improve relationships with their ELs.

Self-Care. In a survey sponsored by Microsoft and conducted with more than 1,000 beginning and student teachers in 10 different countries, just 26% of participants said they had been prepared to manage stress and burnout, one of the principal causes of teacher shortage (The Economist Intelligence Unit, 2020). The ELL educators participating in the study expressed lack of knowledge of the concept of compassion fatigue, and a couple of them were unsure of how to practice self-care. As any other educators who work with vulnerable students, ELL teachers are susceptible to compassion fatigue—a set of symptoms of emotional and physical exhaustion caused by exposure to other people’s challenging life experiences. Romero et al. (2018) explicated those issues:

Today’s educators are working directly, and over extended periods of time, with students and families who are under duress. As a result, educators are prone to developing compassion fatigue, which can lead to burnout. In this state, they are no longer able to perform their jobs well. Being in this state may impact their personal lives as well. (p. 31)

By recognizing that compassion fatigue leads to diminished mental abilities to work effectively and think clearly, teachers should be aware of symptoms like anger or irritability; sadness; anxiety; headaches; feelings of inadequacy; withdrawal; reduced empathy; self-blame; or difficulties to sleep, concentrate, or make decisions, among others. Then they should purposefully adopt self-care strategies such as meditation, exercise, quality social support, humor, and proper sleeping and healthy eating habits; and resort to emotional intelligence approaches like RULER (Yale University, 2020) or CASEL competencies (CASEL, 2015) to find their psychological, social, and physical

well-being.

Implications for Professional Learning Developers and Educational Researchers

This PD/L design study sought to contribute to the fields of ELL, ELL teacher preparation, EL academic achievement, and educational research by developing a pathway to integrate emotional intelligence and ELD into teaching and learning. In that sense, the study provides applicable ideas for developers of ELL professional learning and a tested protocol to conduct professional learning investigation for educational researchers.

Professional Learning. Regarding ELL professional learning, this design study presented a holistic approach to social-emotional teaching and learning embedded into ELD and technology use. The research findings supported the literature review that pointed to ELL teacher preparation mainly focused on language and literacy development. Study participants (n=23) who covered a range from 1 to more than 20 years of teaching experience mostly displayed confident background knowledge regarding best practices for ELL instruction and assessment, in contrast to limited expertise in theory and practices that helped their students improve the social-emotional skills that impact academic performance and personal growth. Most of them, 61%, expressed the need of professional learning in emotion education in all phases of the study.

Current ELL standards and professional learning programs promote language instruction, socio-cultural awareness, and teacher collaboration (Casteel & Ballantyne, 2010; NBPTS, 2010; NEA, 2011; TESOL, 2019). Some teacher preparation programs target language and literacy development and academic achievement (Calderón, 2007,

2011; Echevarría et al., 2000; Walqui & van Lier, 2010). The English Learner Tool Kit (U.S. Department of Education, 2017a) emphasizes language development, academic English, and cultural diversity. Concerning teacher preparation on SEL, Schonert-Reichl et al. (2017) found (a) an average of 40 U.S. states include teacher certification in supporting student responsible decision-making, relationship skills, and self-management; 22 states require preparation in self-awareness, and 26 states in social awareness; (b) in preservice teacher preparation programs, 44 states also require social-awareness, three states ask for self-awareness, and one state looks for self-management; (c) there are social-emotional certification requirements in all 50 U.S. states and the district of Columbia, but only 10 states demand four of the five social-emotional competencies; (d) the lowest competencies addressed were self-awareness in nine states and self-management in two states; and (e) there was only one preservice teacher preparation course regarding ELs in California. The most comprehensive approach is presented by the pending Reaching English Learners Act – H.R. 1153, 116th Congress (Congress.Gov, 2019) which looks to provide grants for postsecondary education institutions that effectively instruct future ELL educators in helping ELs to attain high academic levels and English proficiency; identify and meet the needs of ELs with disabilities; recognize and address ELs’ social and emotional needs; and promote parent, family, and community engagement in EL services and programs.

ELL teachers should be part of continuous professional learning efforts that serve the needs of the changing generations. According to Microsoft’s (2018) Transforming Education guide,

Social and emotional skills revolve around the ability to communicate, collaborate and solve problems in a modern context. This makes technology a crucial part of authentic skills development. If students are to succeed both in the classroom today and in the workplace tomorrow, they will need strong social and emotional skills to navigate our emerging digital, virtual, augmented and mixed-reality worlds. (p. 226)

More than a thousand beginning and student teachers surveyed said they will change the profession by 2030 through increasing the use of technology in 60%, increasing SEL in 48%, and devoting more teaching time to global issues in 47% (The Economist Intelligence Unit, 2020). Only 38% of them felt prepared to teach diverse students, although 91% expected increase in classroom diversity; and just 38% thought their training prepared them to use digital technology. The teaching profession is projected to grow by 3-9% in the next decade, and

technology advances [will] allow teachers to spend less time on routine tasks and give them new ways to understand and interact with their students” where personalized learning will shift “to a student-centered model customized to individual needs with a greater emphasis on social-emotional skills. (Microsoft Education, 2018, p. 5)

Personalized education, demanded improvement of social interactions and problem-solving skills, increased use of technology, enlarged multicultural and multilingual diversity in the classrooms, and a needed discussion of global issues are a just few of the numerous challenges all educators must learn to navigate properly and smoothly. Professional learning opportunities should maintain up-to-date language

development theories and practices for ELL educators as well as provide social-emotional or emotional intelligence, personalized, and technology education for students, teachers, staff, administration, families, and communities. In an increasingly demanding society, “The growing role of education as the engine of economic change makes the work happening to transform our schools and classrooms fundamental to global progress” (Anthony Salcito, as cited in Microsoft, 2018, p. 3).

Research. I decided to address this educational DBR research as a PD/L design study, although the original name for this type of research is professional development design study (Cobb et al., 2015). I wanted to honor the research that anteceded it and to emphasize its evolution. The new definition of professional learning differs from professional development by empowering educators to take control of their own learning and develop skills that address student needs and high-level learning (Learning Forward, 2011). Professional development mostly referred to generic types of workshops where experts delivered information. Thus, this type of educational research should be upgraded to professional learning design study.

In terms of design and execution, this study contributed to the DBR field as a model of professional development design study that meets the expectations of a valid and consistent educational DBR study and reflects the five crosscutting features of design studies (Cobb et al., 2015): First, it provided a learning environment through the online professional learning module and developed a theory of learning for ELL educators that addressed ELs’ need to enhance their academic resilience and achievement. Second, the PD/L study was interventionist and innovative as it intended to improve learning, specifically of ELL educators under a new conceptual framework. In addition, the study

had a strong pragmatic orientation observed in the professional learning experience for ELL teachers and a theoretical orientation in the creation of the conceptual framework with the integration of evidence-based approaches and practices. Moreover, the study involved testing and revision and followed a continuous cycle of design of the learning module and adaptation of the conceptual framework that serves ELs and ELL teacher needs; enactment in a real, local context of an ELL team that provided background information about their instruction and program's needs and evaluated the PD/L module; analysis of gathered results during the iterations; and redesign of the module and conceptual framework at every step of the research process. Finally, the professional learning intervention model and its grounded conceptual framework will be available for ELL professionals who want to replicate or adjust it to their own contexts.

In other words, the PD/L design study proved to be interventionist, iterative, process oriented, utility oriented, and theory oriented (van den Akker et al., 2006); and its outcomes are detailed enough for modification and implementation and flexible enough for pragmatic application in real contexts without changing their theoretical essence. I also intended to overcome some limitations of professional development design studies (Cobb et al., 2015).

1. Although the study did not specifically address equity, it considered the needs of a particular group of vulnerable students and promoted teacher learning about learner identity and strengths awareness and better educational opportunities for them.
2. The conclusions of the study can be generalized in terms of protocols regarding how to conduct professional development design research that

produces pragmatic and theoretical outcomes and how the protocols can be replicated by similar groups or adapted to other kinds of groups of teachers and learners.

3. The study focused on specific ELL teacher needs and gave them the opportunity to contribute to their own learning by identifying their own practices and struggles and acting as expert evaluators of content, design, and effectiveness of the professional learning experience.

Implications for Educational Leaders

Educational leaders define the culture, vision, and trajectory of schools. Their role is complex for the high level of responsibility and commitment needed to serve all kinds of stakeholders, from students, instructional staff, and other school personnel to families and community. No initiative will ever work without the leadership's support. Leaders' understanding of the impact of education on emotional intelligence for everybody and its benefits in academic learning and achievement, work performance, mental and physical health, decision-making, and relationship building is definitive to approach the task in a comprehensive way. "Including staff in personalized learning experiences and identifying social-emotional skills they want teachers to model in their classrooms are two ways school leaders can set the stage" (Microsoft Education, 2018, p. 26).

During the assessment of this design study's professional learning intervention, all participants agreed on its potential effectiveness in ELL teachers and ELs' learning. To serve ELs, their teachers, and families, ELL educators require school or district leaders backing the implementation of professional learning initiatives or an EL learning program based on the findings of this study—the conceptual framework or the suggested

content for teacher professional learning respectively. Effective educational leaders target student growth while they promote teacher preparation. “If we want children to flourish, we have to begin taking care of our teachers” (Brackett, 2019, p. 191); and I would add, the rest of the adults at the schools, in the families, at work, and in the community. This study found that ELL participating teachers had limited knowledge about emotional intelligence theory and practices—including self-care strategies—and their relevance in teaching and student learning. By acknowledging every individual’s social-emotional needs and the positive impact of emotion education in every aspect of life and by encouraging learning opportunities as the ones shown in this study, educational leaders can support the development of all stakeholders’ personal and environmental protective factors and endorse the advancement of a more equitable society.

Unexpected Implications for All Stakeholders

While I was working on the conclusions of the study, the world was surprised by the COVID-19 pandemic and, after a few stressful months into it, the U.S. reengaged in the continued fight for social justice. The virus crisis rushed teachers, schools, educational leaders, and families to find strategies and resources for student remote learning in order to maintain the social distance necessary to avoid the spread of the infection. Teachers were forced to acquire new digital skills to keep assisting students with instruction, and parents had to work from home while helping their children with their online education.

It was a transformational moment when the value of schools and teachers was acknowledged; however, education systems encountered rising challenges with the identification of equity issues not only due to insufficiency in technology devices and

internet services for all students, but also in their basic needs. Offering food for disadvantaged students became another essential service provided by schools; but, above all, children's safety and emotional health turned into real concerns on many educators' minds. School personnel realized the unexpected transition from normalcy to seclusion at home could potentially increase violence, anxiety or depression, and consumption of alcohol or illegal substances among other unhealthy ways students may try to cope with the uncertainty of times. Schools created systems to keep open helplines for students and also for teachers who became more vulnerable to compassion fatigue.

In the midst of the pandemic, when everyone seemed to be navigating the new normal smoothly, another challenge emerged regarding social injustice. Increasing protests caused by racial inequality spurred the schools' conversation on race and other equity issues. Thus, the reflections on how to support students in the face of this continued national crisis, understand, discuss, and act consciously and adequately during uncertain times developed into a new priority. Though social justice has been a longstanding problem in our country, the current events brought it to the forefront again; and a renewed sense of urgency arose.

In the search for ways to lead the conversation, education on emotional intelligence and SEL approaches gained more contemporary relevance, not just for ELs but for all students (Brackett, 2019; CASEL, 2015; Yale University, 2020). Digging into the power of emotions leads individuals to explore identity, cultural assets, voice, agency, sense of belonging, values, and dreams. People learn to listen and own their story and experiences, find and comprehend patterns in attitudes and behavior, confront personal prejudice and bias, look for comprehensive ways to understand others' views and break

barriers, build listening and communication skills, make sound decisions, take care of mental and physical health, and chase their dreams and validate others—all in a nonjudgmental and constructive way. The Class of 2030 report (Microsoft Education, 2018) stated,

The young people who contributed to this landmark study were clear: they had high aspirations for their future learning in order to engage in impactful work; they valued creativity, problem solving, and the use of technology; and they wanted more time spent developing the social and emotional skills that will help them navigate a future which will be profoundly social. (p. 27)

Besides developing strong academic and technical abilities, making emotion education part of the curriculum creates spaces for safe, supportive, and engaging learning. It also deepens relationships and improves support for all stakeholders to connect, heal, and cultivate their own social and emotional competencies. In sum, embracing education for all in emotional intelligence development opens the door for a more equitable, fair, balanced, and humane society.

Recommendations

By reconceptualizing curricula in emotional intelligence as the study of emotions for ELs and ELL teachers, I have enriched an existing theoretical construct and delineated a framework that includes evidence-based practices to enhance academic resilience and language development. I also demonstrated professional learning improvement through a systematic DBR PD/L study that used conjecture mapping as its investigation technique. Incorporating one or both perspectives from the study, curriculum design and professional learning research, I propose four recommendations

for future investigation.

Serving Practicing ELL Educators Through the Designed Curriculum

This study focused on ELL professional learning curriculum design, based on a research-based theoretical framework and evidence-based practices, whose potential effectiveness was evaluated by ELL professionals with knowledge and experience of ELD practices. Since the designed curriculum has the flexibility to be adjusted to other language learning contexts digitally or in face-to-face sessions, the next step can be a 2-part investigation where experienced ELL teachers study the professional learning module and utilize self-care practices while implementing some of the suggested ELD and SEL activities with their students during a specific period of time in order to examine reflections and effects on the participants. This part was not done during my investigation due to the implementation with students and should include preparation time with a multidisciplinary team. In that sense, I recommend asking for support from the school psychologists or social workers, especially for the most sensitive topics that involve trauma or ACEs and expression of emotions from both students and teachers. This collaboration would help ELL teachers be more confident in interacting with their students, and this type of study would considerably enrich the current research.

Creating Additional Opportunities for ELL Practice and Integration

The development of specific modules or units of curricula for ELs and ELL teachers can be the subject for PD/L or classroom design studies. The replication of the research process used in this study could guide new investigation to generate more detailed programs for teacher professional learning or student instruction in any topic. For instance, future research could address SEL through science, technology,

engineering, and math or technical areas, because ELs may have particular issues with these subjects. There is a lack of research that concentrates on professional learning, due to most of it has focused on student learning. Therefore, there is a pool of opportunities in this area for school districts and educational researchers.

Studying Other Student and Adult Populations

Similarly, educational design studies concerned with emotional intelligence education for other stakeholders can use this study for guidance. Research on professional learning for teachers of different subject areas and student populations—such as elementary or middle grades students, students with disabilities, gifted children, SLIFE, ELs with disabilities, gifted ELs, and adult learners to name a few—could be beneficial and have the opportunity to rely, improve, or debate ideas, resources, and conclusions obtained in this study. It could also inform specific curricular design and instruction on the science of emotion for educators in content, technical and vocational, arts, and physical education areas. School leaders could use the study to promote learning opportunities on the power of emotions for clerical and support staff, families, and community. The extent and depth of research possibilities are unlimited.

Preparing New Teachers

Bearing upon teacher preparation, this design study focused on in-service ELL educators who had the knowledge and experience of working with ELs and knew the language development process. Neither practicing nor future ELL teachers' current professional learning offers a profound and holistic approach to emotion education. Curricula for future teachers and their students should support skill, attitude, and habit development in social, emotional, and academic areas “including stress management, the

ability to be calm and mindful in the face of stress, and how to be self-aware and able to problem solve, collaborate, and marshal resilience” (The Aspen Institute, 2019, p. 53).

Along these lines, numerous opportunities wait for professional learning studies in preparation of future or preservice teachers of ELs regarding emotion education and its impact on personal and academic achievement. Similar actions for preservice teachers of all student populations and subject areas are on great shortage and demand.

Conclusion

The Enhancing English Learners’ Academic Resilience—A Professional Development/Learning Design Study offers a conceptual framework and a detailed table of contents for professional learning of ELL teachers that supports ELs’ academic resilience and achievement. This research consisted of three phases. First was an extensive literature review that generated a conceptual framework where emotional intelligence development is at the center of a process that involves ELD supported by SEL, brain-based learning, trauma-informed approach, self-efficacy, and teacher self-care among other research and evidence-based practices as well as the digital collection of ELL educator perceptions about their ELs’ academic and social-emotional strengths and challenges. Second was the ELL teacher electronic evaluation of a professional learning digital module that explained the conceptual framework components embedded in ELL instruction and a focus group that revised the results of the collected data and commented on the proposed module. The third and last phase was the final analysis of participant responses and the refinement of the conceptual framework and its corresponding contents for ELL professional learning.

Amidst the urgency to provide language development for students, ELL

professionals usually and unintentionally may ignore ELs' social and emotional needs or address them superficially. For decades, schools avoided those personal topics in the classroom and let psychologists, social workers, and other professionals deal with them. Research magnifies the importance of the educators' pivotal role in student development of social and emotional skills as the path to personal and academic success. Since ELs are an especially vulnerable group of students with one of the lowest academic performance in U.S. schools and their ELL teachers are their first responders, this design study models essential curricula for both students and teachers.

All in all, advancing education and learning is a recurrent need that gets refreshed and readjusted during societal transitions. The world pandemic and the American-led fight for social justice have proven the urgency to cultivate everyone's—vulnerable populations like MLs/ELs, their families, and teachers—abilities to manage and regulate emotions and the areas they influence, in the search for equity for all. As always, education of the mind and the heart is the greatest equalizer.

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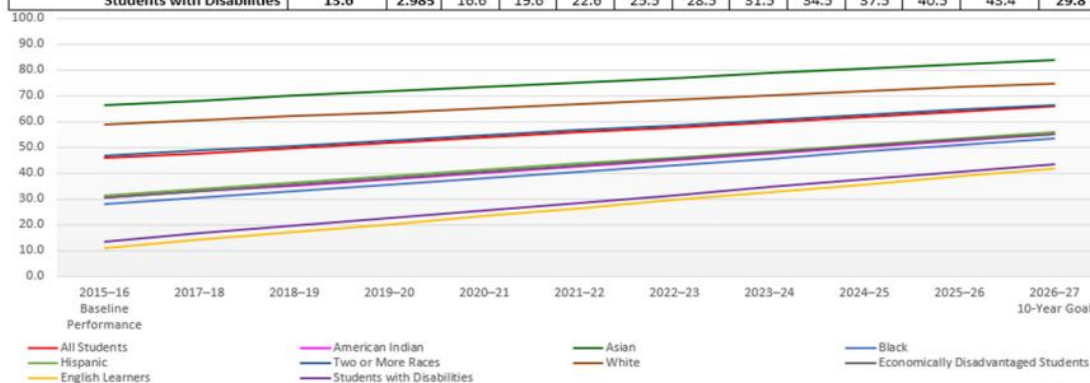
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Appendix A

NC State Plan for the ESSA – Historical Performance Tables

State Level Reading Grades 3-8	2015-16 Baseline Performance (Percent Proficient)	Percent Increase Per Year	2017-18 (Percent Prof)	2018-19 (Percent Prof)	2019-20 (Percent Prof)	2020-21 (Percent Prof)	2021-22 (Percent Prof)	2022-23 (Percent Prof)	2023-24 (Percent Prof)	2024-25 (Percent Prof)	2025-26 (Percent Prof)	2026-27 10-Year Goal (Percent Prof)	10-Year Percent Improvement
			Yearly Measures of Interim Progress										
All Students	45.8	2.003	47.8	49.8	51.8	53.8	55.8	57.8	59.8	61.8	63.8	65.8	20.0
Subgroups													
American Indian	30.4	2.473	32.9	35.3	37.8	40.3	42.8	45.2	47.7	50.2	52.7	55.1	24.7
Asian	66.4	1.760	68.2	69.9	71.7	73.4	75.2	77.0	78.7	80.5	82.2	84.0	17.6
Black	27.9	2.549	30.4	33.0	35.5	38.1	40.6	43.2	45.7	48.3	50.8	53.4	25.5
Hispanic	31.5	2.439	33.9	36.4	38.8	41.3	43.7	46.1	48.6	51.0	53.5	55.9	24.4
Two or More Races	46.7	1.976	48.7	50.7	52.6	54.6	56.6	58.6	60.5	62.5	64.5	66.5	19.8
White	58.8	1.606	60.4	62.0	63.6	65.2	66.8	68.4	70.0	71.6	73.3	74.9	16.1
Economically Disadvantaged Students	30.7	2.464	33.2	35.6	38.1	40.6	43.0	45.5	47.9	50.4	52.9	55.3	24.6
English Learners	11.1	3.062	14.2	17.2	20.3	23.3	26.4	29.5	32.5	35.6	38.7	41.7	30.6
Students with Disabilities	13.6	2.985	16.6	19.6	22.6	25.5	28.5	31.5	34.5	37.5	40.5	43.4	29.8

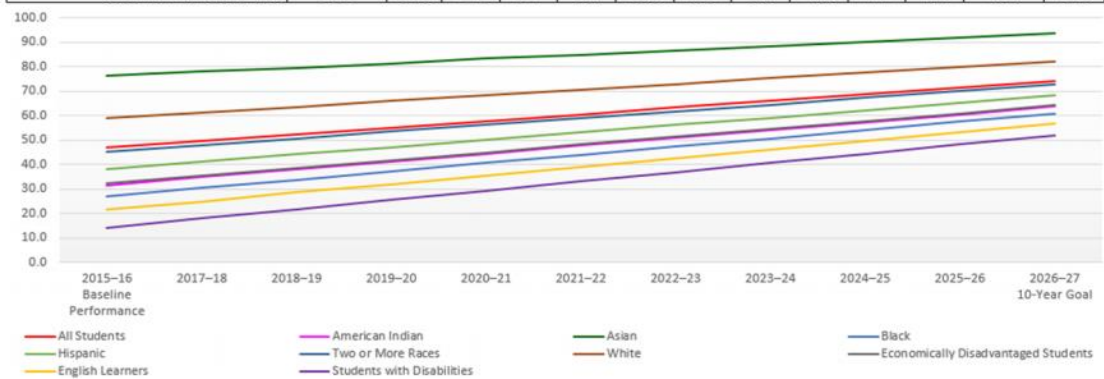


As of 7/21/2017

Appendix A

A. Academic Achievement

State Level Math Grades 3–8	2015–16 Baseline Performance (Percent Proficient)	Percent Increase Per Year	2017–18	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24	2024–25	2025–26	2026–27 10-Year Goal (Percent Prof)	10-Year Percent Improvement
			Yearly Measures of Interim Progress										
All Students	47.0	2.709	49.7	52.4	55.1	57.8	60.5	63.3	66.0	68.7	71.4	74.1	27.1
Subgroups													
American Indian	31.6	3.216	34.8	38.0	41.2	44.5	47.7	50.9	54.1	57.3	60.5	63.8	32.2
Asian	76.1	1.763	77.9	79.6	81.4	83.2	84.9	86.7	88.4	90.2	92.0	93.7	17.6
Black	27.1	3.363	30.5	33.8	37.2	40.6	43.9	47.3	50.6	54.0	57.4	60.7	33.6
Hispanic	38.1	3.004	41.1	44.1	47.1	50.1	53.1	56.1	59.1	62.1	65.1	68.1	30.0
Two or More Races	45.1	2.775	47.9	50.6	53.4	56.2	59.0	61.7	64.5	67.3	70.1	72.9	27.8
White	58.9	2.325	61.2	63.6	65.9	68.2	70.5	72.9	75.2	77.5	79.8	82.2	23.3
Economically Disadvantaged Students	32.1	3.200	35.3	38.5	41.7	44.9	48.1	51.3	54.5	57.7	60.9	64.1	32.0
English Learners	21.4	3.549	24.9	28.5	32.0	35.6	39.1	42.7	46.2	49.8	53.3	56.9	35.5
Students with Disabilities	14.1	3.788	17.9	21.7	25.5	29.3	33.0	36.8	40.6	44.4	48.2	52.0	37.9

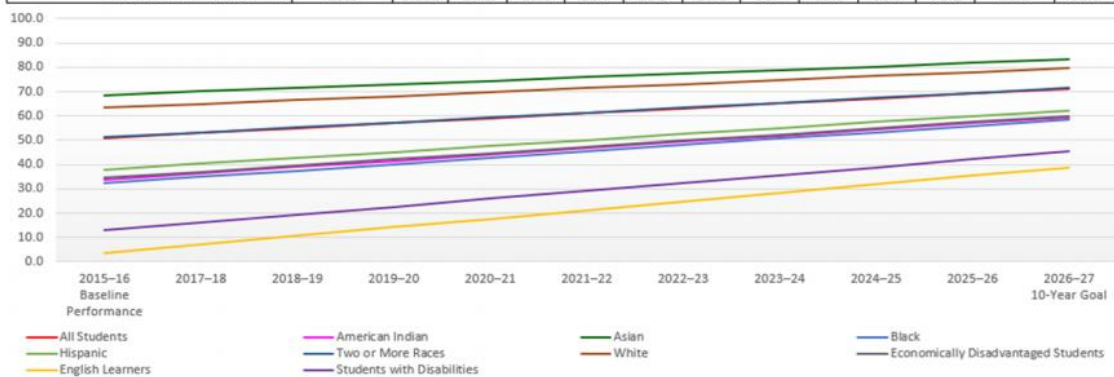


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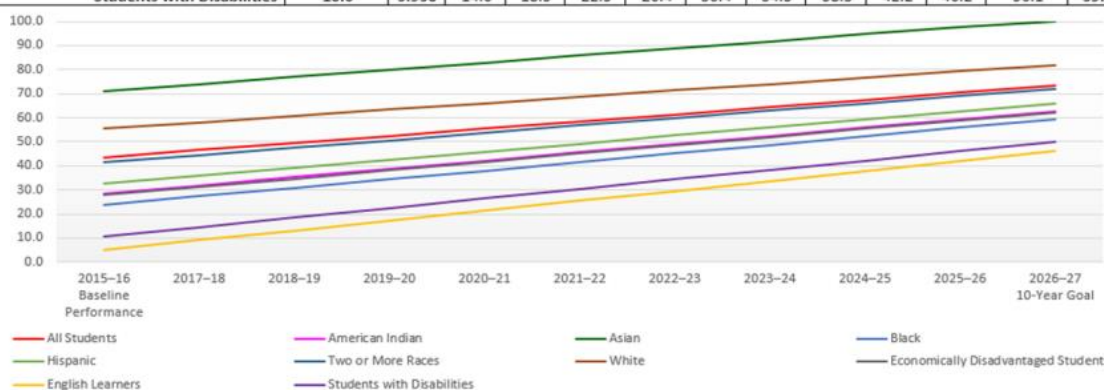
A. Academic Achievement

State Level Reading High School	2015–16 Baseline Performance (Percent Proficient)	Percent Increase Per Year	2017–18	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24	2024–25	2025–26	2026–27 10-Year Goal (Percent Prof)	10-Year Percent Improvement
			Yearly Measures of Interim Progress										
All Students	51.0	2.031	53.0	55.1	57.1	59.1	61.2	63.2	65.2	67.2	69.3	71.3	20.3
Subgroups													
American Indian	33.9	2.569	36.5	39.0	41.6	44.2	46.7	49.3	51.9	54.5	57.0	59.6	25.7
Asian	68.6	1.468	70.1	71.5	73.0	74.5	75.9	77.4	78.9	80.3	81.8	83.3	14.7
Black	32.3	2.620	34.9	37.5	40.2	42.8	45.4	48.0	50.6	53.3	55.9	58.5	26.2
Hispanic	37.9	2.442	40.3	42.8	45.2	47.7	50.1	52.6	55.0	57.4	59.9	62.3	24.4
Two or More Races	51.3	2.017	53.3	55.3	57.4	59.4	61.4	63.4	65.4	67.4	69.5	71.5	20.2
White	63.3	1.636	64.9	66.6	68.2	69.8	71.5	73.1	74.8	76.4	78.0	79.7	16.4
Economically Disadvantaged Students	34.5	2.550	37.1	39.6	42.2	44.7	47.3	49.8	52.4	54.9	57.5	60.0	25.5
English Learners	3.6	3.531	7.1	10.7	14.2	17.7	21.3	24.8	28.3	31.8	35.4	38.9	35.3
Students with Disabilities	13.0	3.232	16.2	19.5	22.7	25.9	29.2	32.4	35.6	38.9	42.1	45.3	32.3



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State Level Math High School	2015-16 Baseline Performance (Percent Proficient)	Percent Increase Per Year	2017-18 (Percent Prof)	2018-19 (Percent Prof)	2019-20 (Percent Prof)	2020-21 (Percent Prof)	2021-22 (Percent Prof)	2022-23 (Percent Prof)	2023-24 (Percent Prof)	2024-25 (Percent Prof)	2025-26 (Percent Prof)	2026-27 10-Year Goal (Percent Prof)	10-Year Percent Improvement
			Yearly Measures of Interim Progress										
All Students	43.5	2.981	46.5	49.5	52.4	55.4	58.4	61.4	64.4	67.3	70.3	73.3	29.8
Subgroups													
American Indian	28.4	3.433	31.8	35.3	38.7	42.1	45.6	49.0	52.4	55.9	59.3	62.7	34.3
Asian	71.0	2.970	74.0	76.9	79.9	82.9	85.9	88.8	91.8	94.8	97.7	100.0	29.0
Black	23.7	3.569	27.3	30.8	34.4	38.0	41.5	45.1	48.7	52.3	55.8	59.4	35.7
Hispanic	32.7	3.308	36.0	39.3	42.6	45.9	49.2	52.5	55.9	59.2	62.5	65.8	33.1
Two or More Races	41.5	3.052	44.6	47.6	50.7	53.7	56.8	59.8	62.9	65.9	69.0	72.0	30.5
White	55.5	2.645	58.1	60.8	63.4	66.1	68.7	71.4	74.0	76.7	79.3	82.0	26.5
Economically Disadvantaged Students	27.8	3.450	31.3	34.7	38.2	41.6	45.1	48.5	52.0	55.4	58.9	62.3	34.5
English Learners	4.9	4.116	9.0	13.1	17.2	21.4	25.5	29.6	33.7	37.8	41.9	46.1	41.2
Students with Disabilities	10.6	3.950	14.6	18.5	22.5	26.4	30.4	34.3	38.3	42.2	46.2	50.1	39.5

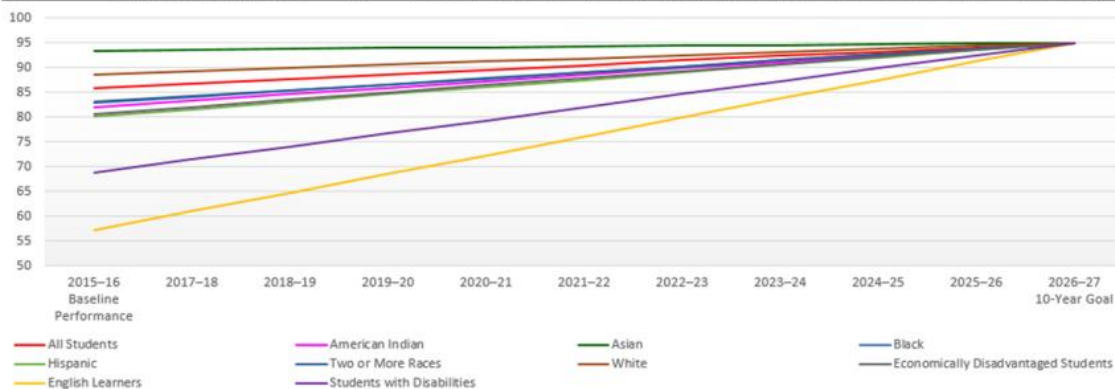


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Appendix A

B. Graduation Rates

Four-Year Cohort Graduation Rate	2015-16 Baseline Performance (Percent Graduate)	Percent Increase Per Year	2017-18 (Percent Grad)	2018-19 (Percent Grad)	2019-20 (Percent Grad)	2020-21 (Percent Grad)	2021-22 (Percent Grad)	2022-23 (Percent Grad)	2023-24 (Percent Grad)	2024-25 (Percent Grad)	2025-26 (Percent Grad)	2026-27 10-Year Goal (Percent Grad)	10-Year Percent Improvement
			Yearly Measures of Interim Progress										
All Students	85.9	0.910	86.8	87.7	88.6	89.5	90.4	91.4	92.3	93.2	94.1	95.0	9.1
Subgroups													
American Indian	82.0	1.300	83.3	84.6	85.9	87.2	88.5	89.8	91.1	92.4	93.7	95.0	13.0
Asian	93.4	0.160	93.6	93.7	93.9	94.0	94.2	94.4	94.5	94.7	94.8	95.0	1.6
Black	82.9	1.210	84.1	85.3	86.5	87.7	88.9	90.2	91.4	92.6	93.8	95.0	12.0
Hispanic	80.1	1.490	81.6	83.1	84.6	86.1	87.5	89.0	90.5	92.0	93.5	95.0	14.9
Two or More Races	83.0	1.200	84.2	85.4	86.6	87.8	89.0	90.2	91.4	92.6	93.8	95.0	12.0
White	88.6	0.640	89.2	89.9	90.5	91.2	91.8	92.4	93.1	93.7	94.4	95.0	6.4
Economically Disadvantaged Students	80.6	1.440	82.0	83.5	84.9	86.4	87.8	89.2	90.7	92.1	93.6	95.0	14.4
English Learners	57.2	3.780	61.0	64.8	68.5	72.3	76.1	79.9	83.7	87.4	91.2	95.0	37.8
Students with Disabilities	68.9	2.610	71.5	74.1	76.7	79.3	82.0	84.6	87.2	89.8	92.4	95.0	26.1



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Appendix B

WIDA Guiding Principles of Language Development

WIDA Guiding Principles of Language Development

These updated Guiding Principles of Language Development and Learning exemplify WIDA's overarching and ever-present Can Do Philosophy.

1. Multilingual learners' languages and cultures are valuable resources to be leveraged for schooling and classroom life; leveraging these assets and challenging biases help develop multilingual learners' independence and encourage their agency in learning (Little, Dam, & Legenhausen, 2017; Moll, Amanti, Neff, & González, 1992; Nieto & Bode, 2018; Perley, 2011).

Multilingual learners refers to all children and youth who are, or have been, consistently exposed to multiple languages. It includes students known as English language learners (ELLs) or dual language learners (DLLs); heritage language learners; and students who speak varieties of English or indigenous languages.
2. Multilingual learners' development of multiple languages enhances their knowledge and cultural bases, their intellectual capacities, and their flexibility in language use (Arellano, Liu, Stoker, & Slama, 2018; Escamilla, Hopewell, Butvilofsky, Sparrow, Soltero-González, Ruiz-Figueroa, & Escamilla, 2013; Genesee, n.d.; Potowski, 2007).
3. Multilingual learners' language development and learning occur over time through meaningful engagement in activities that are valued in their homes, schools and communities (Engeström, 2009; Larsen-Freeman, 2018; van Lier, 2008; Wen, 2008).
4. Multilingual learners' language, social-emotional, and cognitive development are inter-related processes that contribute to their success in school and beyond (Aldana & Mayer, 2014; Barac & Bialystok, 2012; Gándara, 2015; Sánchez-López & Young, 2018).
5. Multilingual learners use and develop language when opportunities for learning take into account their individual experiences, characteristics, abilities, and levels of language proficiency (Gibbons, 2002; Swain, Kinnear, & Steinman, 2015; TESOL International Association, 2018; Vygotsky, 1978).
6. Multilingual learners use and develop language through activities which intentionally integrate multiple modalities, including oral, written, visual, and kinesthetic modes of communication (Choi & Yi, 2015; Jewitt, 2008; van Lier, 2006; Zwiers & Crawford, 2011).



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WIDA Guiding Principles of Language Development

7. Multilingual learners use and develop language to interpret and access information, ideas, and concepts from a variety of sources, including real-life objects, models, representations, and multimodal texts (Ajayl, 2009; Cope & Kalantzis, 2009; Jewitt, 2009; Kervin & Derewianka, 2011).
8. Multilingual learners draw on their metacognitive, metalinguistic, and metacultural awareness to develop effectiveness in language use (Bialystok & Barac, 2012; Casey & Ridgeway-Gillis, 2011; Gottlieb & Castro, 2017; Jung, 2013).
9. Multilingual learners use their full linguistic repertoire, including translanguaging practices, to enrich their language development and learning (García, Johnson, & Seltzer, 2017; Hornberger & Link, 2012; Wei, 2018).
10. Multilingual learners use and develop language to interpret and present different perspectives, build awareness of relationships, and affirm their identities (Cummins, 2001; Esteban-Guitart & Moll, 2014; May, 2013, Nieto, 2010).

Complete bibliography available upon request



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Appendix C

Standards for Professional Learning

Standards summary

Standards for Professional Learning	Core elements of each standard
<p>LEARNING COMMUNITIES: Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.</p>	<ul style="list-style-type: none"> • Engage in continuous improvement. • Develop collective responsibility. • Create alignment and accountability.
<p>LEADERSHIP: Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.</p>	<ul style="list-style-type: none"> • Develop capacity for learning and leading. • Advocate for professional learning. • Create support systems and structures.
<p>RESOURCES: Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.</p>	<ul style="list-style-type: none"> • Prioritize human, fiscal, material, technology, and time resources. • Monitor resources. • Coordinate resources.
<p>DATA: Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.</p>	<ul style="list-style-type: none"> • Analyze student, educator, and system data. • Assess progress. • Evaluate professional learning.
<p>LEARNING DESIGNS: Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.</p>	<ul style="list-style-type: none"> • Apply learning theories, research, and models. • Select learning designs. • Promote active engagement.
<p>IMPLEMENTATION: Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long-term change.</p>	<ul style="list-style-type: none"> • Apply change research. • Sustain implementation. • Provide constructive feedback.
<p>OUTCOMES: Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards.</p>	<ul style="list-style-type: none"> • Meet performance standards. • Address learning outcomes. • Build coherence.

Appendix D

Electronic Invitation to Participate in the Research

Invitation to Participate in ELL Research Study

ML
Mon /22/20 8:15 AM

A: < @ >; A < @ >; B <B @ > +35 others

Dear Colleague,

I am an English Language Learning teacher and a doctoral candidate at Gardner-Webb University. I am conducting a research study to evaluate ELL teacher preparation and professional development on English Learners' Academic Resilience. The study has three phases where you can participate: An open-ended electronic questionnaire, a digital survey to evaluate an online professional development module, and a group discussion. I sincerely appreciate your participation in these activities.

The title of this study is: *Enhancing English Language Learners' Academic Resilience –A Professional Development Design Study*. Academic resilience is the individual's capacity to succeed in academic environments, in spite of the adversities. There is no doubt that life experiences have shaped resilience in our English Learners; however, data show that they are one of the student groups with the lowest academic performance and graduation rates. As the frontline professionals that serve these students, ELL teachers understand ELs' challenges at school. Your contribution to this research will help to strengthen ELL teacher preparation to support ELs' academic resilience in our district.

Participation in this research study is completely voluntary and participants may withdraw from the study at any time. If you have any questions or concerns, please contact me directly at < > or @ .edu.

To participate in the research:

1. Sign the electronic informed consent in this link: bit.ly/...
2. Then, respond to the anonymous, online questionnaire by clicking on: bit.ly/... It will take about 20 minutes.
3. Log into your ... account to join the Canvas course "Academic Resilience in English Learners." You can find the module at: <https://...com/courses/...>; You will **not** have to do the whole module, but to provide feedback on its design and potential effectiveness as a learning tool for ELL teachers. Simultaneously, you will evaluate the module anonymously through an electronic survey at bit.ly/.... This activity will take maximum 2 hours.
4. You are also invited to participate in a 30-minute group discussion to talk about the module in detail. To join the group, click on: bit.ly/...

Thank you in advance for your willingness to contribute to the education profession. Your participation has the potential to impact ELL teacher support in our district and across North Carolina.

Sincerely,
M L

Appendix E

Research Instrument 1: Open-Ended Questionnaire



Academic Resilience for English Learners - Questionnaire

Thanks for participating in the Academic Resilience for ELs study!

This initial questionnaire will take about 20 minutes. All information collected in this questionnaire will remain confidential and anonymous. There are no identifying markers to link your responses to your identity. Your answers will help improve professional development offered to English language learning educators.

* Required

How long have you been an English language learning (ELL) teacher? *

- 1 year
- 2 to 3 years
- 4 to 10 years
- 11 to 15 years
- 16 to 20 years
- More than 20 years

What grade level(s) do you currently teach? Check all that apply. *

- Kindergarten
- Elementary School: 1st - 2nd grade
- Elementary School: 3rd - 4th grade
- Elementary School: 5th grade
- Middle School (6th - 8th grade)
- High School (9th - 12th grade)

Indicate the type of English Learners (ELs) you have regularly in your classes.
Check all that apply. *

- Entering (Proficiency Level 1)
- Emerging/Developing (Proficiency Levels 2 & 3)
- Expanding/Bridging (Proficiency Levels 4 & 5)
- Dual Identified ELs (EC ELs)
- SLIFE (Students with Limited or Interrupted Formal Education)
- LTELs (Long-Term English Learners)

1. As an English Language Learning (ELL) professional, what type of teacher preparation have you received to work with your English Learners (ELs)? *

Your answer _____

2. What specific professional development or other type of support have you received to work with the group age of your students (elementary, middle, high)? *

Your answer _____

3. What specific challenges do your ELs have in terms of academics? *

Your answer _____

4. What strategies or research-based practices do you use to manage your students' academic challenges? *

Your answer _____

5. What specific academic strengths do your ELs have? *

Your answer _____

6. What strategies or research-based practices do you use to help them build on their academic strengths? *

Your answer

7. What specific challenges do your ELs have in terms of socio-emotional needs? *

Your answer

8. What strategies or research-based practices do you use to manage your students' socio-emotional challenges? *

Your answer

9. What specific socio-emotional strengths do your ELs have? *

Your answer

10. What strategies or research-based practices do you use to help them build on their socio-emotional strengths? *

Your answer

11. What additional support would you need to work more effectively with your ELs? *

Your answer

12. How do you take care of yourself after dealing with your ELs' struggles? *

Your answer

To Start Evaluating the PD Module

Make sure you open the module first by clicking on this link: bit.ly/AR4ELModule

You will evaluate each section of the module through the Survey. There are no identifying markers to link your responses to your identity.

To open the survey, click here: bit.ly/AR4ELSurvey

Throughout the exploration of the module, you will receive directions to evaluate it. The process takes less than 2 hours.

Thank You for Participation!!

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Appendix F

Research Instrument 2: Survey – Evaluation of PD/L Module

Academic Resilience for English Learners - Professional Development Module Survey

Thanks for participating in the Academic Resilience for ELs study!
All information collected in this survey will remain confidential and anonymous. There are no identifying markers to link your responses to your identity. Please, answer honestly so the Professional Development Module can be improved and better support other English language learning professionals.

* Required

Demographics

How long have you been an English language learning (ELL) teacher? *

- 1 year
- 2 to 3 years
- 4 to 10 years
- 11 to 15 years
- 16 to 20 years
- More than 20 years

What grade level(s) do you currently teach? Check all that apply. *

- Kindergarten
- Elementary School: 1st - 2nd grade
- Elementary School: 3rd - 4th grade
- Elementary School: 5th grade
- Middle School (6th - 8th grade)
- High School (9th - 12th grade)

Indicate the type of English Learners (ELs) you have regularly in your classes.
Check all that apply. *

- Entering (Proficiency Level 1)
- Emerging/Developing (Proficiency Levels 2 & 3)
- Expanding/Bridging (Proficiency Levels 4 & 5)
- Dual Identified ELs (EC ELs)
- SLIFE (Students with Limited or Interrupted Formal Education)
- LTELs (Long-Term English Learners)

Academic Resilience for English Learners Survey - Content

Please, indicate your opinion about each of the statements below. Your answers are confidential.

1. To what extent does Section 1-"Introduction" inform the need to have a framework to support English learners' academic resilience? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

What information would you add or remove? *

Your answer _____

2. How well does Section 2-"Identifying Needs and Challenges" describe English learners' needs? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

What information would you add or remove? *

Your answer _____

3. In Section 2-"Identifying Needs and Challenges," how well do the asset-approach and WIDA Can Do Philosophy provide adequate background information for teachers of ELs? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

What information would you add or remove? *

Your answer

4. In Section 3-"Acquiring Protective Factors," how well does the information about Self-Efficacy describe individuals' personal strengths? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

What information would you add or remove? *

Your answer

5. In Section 3-"Acquiring Protective Factors," to what extent do the theories about Social-Emotional Learning, Brain-Based Learning, and Trauma-Informed Approach explain individuals' external protective factors? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

What information would you add or remove? *

Your answer

6. In Section 4-"Protective Factors Working in Concert," to what extent do the activities, practices, and resources exemplify how to support the development of external protective factors in ELs? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

What information would you add or remove? *

Your answer _____

7. In Section 5-"Building Self-Efficacy," to what extent do the activities, practices, and resources exemplify how to support the development of personal protective factors in ELs? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

What information would you add or remove? *

Your answer _____

8. In Section 6-"Enduring Motivation," how well do the activities, practices, and resources exemplify how to encourage ELs to pursuit college/career goals and plan for their future? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

What information would you add or remove? *

Your answer _____

9. How well does Section 7-"Compassion Fatigue in ELL Teachers" help you as an educator to understand the topic, identify the symptoms, and look for healing/protective practices? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

What information would you add or remove? *

Your answer _____

10. How effective is Section 8-"Reflection" as a conclusion for the PD online module? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

What information would you add or remove? *

Your answer _____

Academic Resilience for English Learners Survey - Design

Please, indicate your opinion about each of the statements below. Your answers are confidential.

11. How well does the module vary the presentation of theories and resources and appeal to adult learners and multiple learning modalities? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

Justify your answer: *

Your answer _____

12. To what extent is the language used in the module user-friendly, engaging, clear, and considerate of cognitive load? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

Justify your answer: *

Your answer _____

13. How well do the materials in the module provide opportunities for classroom use or further study? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

Justify your answer: *

Your answer _____

14. How effectively are white space, graphic elements, and alignment used to organize the information in the module? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

Justify your answer: *

Your answer _____

15. To what extent are graphics related to the goals of the module, are of high quality, and enhance reader's interest or understanding ? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

Justify your answer: *

Your answer _____

16. How well do the links allow the reader to navigate the different areas of the module? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

Justify your answer: *

Your answer _____

17. To what extent are the layout and design visually striking and the module of high-quality? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

Justify your answer: *

Your answer _____

18. To what extent would the professional development module potentially support ELs' academic resilience? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

Justify your answer: *

Your answer _____

19. How effective would this professional development module be for other ELL teachers? *

1 2 3 4 5 6 7 8 9 10

Not at all A great deal

Justify your answer: *

Your answer _____

20. In general, what is your opinion about the Academic Resilience for ELs online professional development module? *

Your answer _____

Justify your answer: *

Your answer _____

Focus Group (Optional)

Thanks a lot for your responses! All information in the previous survey will remain confidential and anonymous.

Please consider participation in a single session focus group (20-30 minutes) to further discuss the professional development module. The link below will transfer independently from your survey to the focus group participation form. You can also copy the link and open the form in another tab or window. The focus group discussion will allow for more detailed improvement of the module and other professional development initiatives.

<http://bit.ly/AR4ELGroup>

Thank You for Your Participation!!

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Appendix G

Research Instrument 3: Semi-Structured Focus Group Interview

Focus Group Questions

Project Title: Enhancing ELs' Academic Resilience – A PD/L Design Study

Researcher: Mabel Eliana Lamprea

1. At the beginning of the study, you may have responded to a questionnaire that asked you about professional development opportunities for ELL teachers and the type of support you need to work more effectively with your ELs. Do you think the online professional development module, “Academic Resilience for ELs” responded to your needs and supported your instruction and practice with ELs? If yes, how did it do it? If not, why?
2. What elements of the online professional development module, “Academic Resilience for ELs” were strong and useful for you as ELL teachers? What parts of the module did you find the most interesting?
3. What elements of the module were weak and not very useful or interesting for you as ELL teachers? What needs to be improved or removed?
4. How do you think your new learning would help your ELs improve their academic resilience? What needs to be done to help you work more effectively with your ELs?
5. Let us look at the results of the survey per section of the online module. You will be asked for comments, suggestions, or clarification when needed.
(Use of Survey results here)
6. In what topics would you need further professional development or support?

Appendix H

Codebook for Questionnaire Analysis

Questionnaire Codebook

Themes & codes	Sub-codes	Definitions/Samples
1. Academic	1.1. Academic Language	The language needed for students to do the school work
	1.2. Gaps in Education	Disparity of students in performance or attendance
	1.3. Emotional Problems	Anxiety, depression, anger
	1.4. Literacy Skills	Reading and writing abilities
	1.5. Math Skills	Mathematical knowledge/ability
	1.6. Motivation	Willingness or desire to do something
	1.7. L1 Use	Use of first language learned at home
2. Social-Emotional	2.1. Emotions	Instinctive feeling
	2.2. Motivation	Willingness or desire to do something
	2.3. Relationships	Connections of people, concepts, or objects
	2.4. Trauma	A psychological or emotional response to a disturbing experience
3. Academic	3.1. ELL Ts' Lack of Time	"The lack of efficient use of teaching time to make the content accessible to all cases of ELs." -T3
	3.2. GenEd Teachers	Teachers of Math/Language Arts/Science/ Social Stud.
	3.3. Mixed-Ability Classes	Classes with students that have varying skill levels
	3.4. Testing	Evaluation or assessment
4. Social-Emotional	4.1. Academic Difficulties	"Struggles with reading and analyzing long passages... also ... with algebraic equations" -T1
	4.2. Family Issues	"Some have talked to me...about family issues and not having money for things." -T7
	4.3. Financial Issues	"Many Ss work long shifts at factories/plants at night"
	4.4. Relationships	"Struggles with establishing positive relationships"
	4.5. School Resources	"I organize meetings with our school social worker"
5. Academic	5.1. Bilingualism	"I show my students the power they have for being bilingual" -T5
	5.2. Self-Efficacy	an individual's belief in his or her ability to achieve tasks and goals successfully
	5.3. Meta-Cognition	Thinking about one's own thinking
6. Social-Emotional (CASEL, 2015)	6.1. Self-Awareness	"The ability to accurately <i>recognize</i> one's emotions and thoughts and their influence on behavior" (p. 5).
	6.2. Self-Management	"The ability to <i>regulate</i> one's emotions, thoughts, and behaviors effectively in different situations" (p. 5).
	6.3. Social Awareness	"The ability to <i>take the perspective of and empathize</i> with others from diverse backgrounds and cultures, to understand social and ethical norms for behavior, and to recognize family, school, and community resources and supports" (p. 5).
	6.4. Relationship Skills	"The ability to <i>establish and maintain healthy and rewarding relationships</i> with diverse individuals and groups" (p. 6).
	6.5. Responsible Decision-Making	"The ability to <i>make constructive and respectful choices</i> about personal behavior and social interactions based on consideration of ethical standards, safety concerns, social norms, the realistic evaluation of consequences of various actions, and the well-being of self and others" (p. 6).

