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SANTA BARBARA

How Elementary Pre-Service Teachers Acquire Pedagogical Language Knowledge for  
Supporting English Learners' Academic Language Development

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

by

Lois Harmon

Committee in charge:  
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Professor Diana Arya  
Professor Mary Brenner  
Doctor Jennifer Scalzo

June 2017

The dissertation of Lois Harmon is approved.

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Richard P. Duran, Ph.D., Committee Chair

December 2016

How Elementary Pre-Service Teachers Acquire Pedagogical Language Knowledge for  
Supporting English Learners' Academic Language Development

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by

Lois Harmon

## DEDICATION

“Grandchildren are the crown of grandparents...”(Proverbs 17:6).

This dissertation is lovingly dedicated to my deceased grandfathers-William Goode  
Harmon and Nathaniel Douglas Sr.

Both of these men encouraged, inspired, and motivated me throughout my educational journey. I appreciate my Grandpa Goode for being hard on me, and I will never forget the day he pulled aside and explained why he so hard on his oldest and favorite granddaughter. He passed on the day I took the GRE-February 24, 2012, but his legacy lives on through me. Although my Granddaddy Nathaniel was very ill, he made his way to the highest of seven hills to witness me graduate from Florida Agricultural and Mechanical University (FAMU). I will always remember the huge smile on his face during our fellowship immediately following commencement. My entire educational journey has been a testament to both of their amazing lives and legacies, which I will continue to celebrate and carry on throughout my career and life overall.

## ACKNOWLEDGEMENTS

I would like to acknowledge the many people who supported me through completing this dissertation and the milestones along the way.

I would first like to thank my parents and first teachers-William and Cynthia Harmon, my siblings-Christian, Nehemiah, and Sarah, my extended family, particularly, my cousins-Drs. Isaiah and Karen Harmon, my godparents, friends, and mentors. Thanks to my parents for the godly foundation and spiritual inheritance you provided and the unprecedented principles you established and exemplified for me. Thank you to my grandparents for rearing my parents and contributing to my upbringing , and thank you to my godparents for your continual sacrifices, support and encouragement. Thank you to cousins Isaiah and Karen for your continual support, prayers, and encouragement to persevere. Cousin Isaiah, you always emphasized the importance of knowing the 5Ws and H, which enacted my inquiry development, and you told me not to stop before attaining the Ph.D. Cousin Karen, you are my favorite teacher of all time, for you introduced me to the scientific method and pushed me to think critically. Both of you taught me firsthand what inquiry-based learning is and motivate me to make my good better, my better best, and my best excellent!

I would also like to acknowledge my phenomenal dissertation committee: Dr. Richard Duran, the exceptional dissertation chairperson I was honored to work with since my commencement at UCSB. Dr. Duran, you have been a wonderful mentor, even before becoming my official advisor. Thank you for supporting my ideas and valuing my scholarly perspective. Thank you as well to Drs. Jennifer Scalzo (content expert), Mary Brenner (methods expert), and Diana Arya (literacy expert), my extraordinary dissertation committee members. Your careful review and encouraging comments of the dissertation drafts allowed me to incorporate your suggestions with ease.

Other significant support and counsel were provided by Mrs. Sandra Henderson-Santa Fe College and Drs. Thyria Green Ansley, Mary Diallo, Mary Newell, Endya Stewart, and Genniver Bell-FAMU, Drs. Patricia Marin and John Yun-Michigan State University, and Pamela Jennings-UC Office of the President. Mrs. Henderson, you are the best counselor a girl could have, for you taught me the difference between

doing something and doing it well, and you helped me achieve balance. Dr. Ansley, you were a wonderful advisor during my time at FAMU and you continue to give me great advice. I will always cherish our conversations and time spent together. Thank you Dr. Diallo for helping me prepare to study abroad, the experience that sparked my interest in helping students disadvantaged by the language barrier. Thank you Drs. Newell, Stewart, and Bell for a phenomenal undergraduate teacher education experience at FAMU, which resulted in my being an exemplary professional, and for encouraging me to pursue a PhD, particularly at UCSB. Thank you as well to Drs. Marin (a relentless visionary), Yun (an unprecedented Principal Investigator), and Jennings (a game-changer) for your hard work and self-less dedication to the UCSB-FAMU Research Scholars program, and the unimaginable opportunities it has afforded me. May we all continue to lift as we climb!

I would like to give special thanks to Trinda Davis, Mark Grimes, and Alma Boutin-Martinez. Each of you contributed to my success in different ways, and I thank you for all the mentorship and guidance for helping me progress effectively and efficiently. Trinda, you welcomed me with open arms when I moved to Tallahassee, helped me move to Santa Barbara, and remain in my corner. Mark, you have been the best academic mentor, for you are extremely resourceful and always helpful! Alma, you have always looked out for me, and I love hanging out with your family which has become my extended family. Finally, I would like to thank the UCSB community, including the: UC Evaluation Center, Graduate Division, Graduate Student Association, InterVarsity Christian Fellowship, The Navigators, Chi Alpha Christian Fellowship, the Chicano Studies institute, and the Black Graduate Student Association. These organizations have interwoven throughout my graduate experience to form a home away from home for me. The campus ministries, in particular, gave me balance and community outside of academia, as well as opportunities to publicly share my faith across campus in various capacities.

Most of all, I would like to thank God as none of my success would be possible without Him. I've always had one overarching goal in life: to fulfill my God-given purpose, knowing that as I do this, I will be a blessing to others. The motto for my career is and always will be "*The needy shall not always be forgotten and the expectation of the*

*poor shall not perish forever* (Psalms 9:18). This is why my research, teaching, and service, highlight and uplift underrepresented and underserved populations, and I will always aspire to enhance the trajectories of individuals who are unseen, unheard, and unknown.



## VITA OF LOIS HARMON

December 2016

### EDUCATION

- PhD in Education**, Emphasis in Leadership and Organizations (ELO) 2017  
University of California, Santa Barbara (UCSB)  
Award: Four-year annual UC-HBCU Fellowship (2012-2016)
- M.A., Education**, Emphasis in ELO 2014  
UCSB
- B.S., Elementary Education** 2012  
Florida A&M University (FAMU), Tallahassee, Florida  
Awards: Dean's List, Summa Cum Laude (2010-2012)
- Florida Educator's Certificate covering Elementary Education (Grades K-6), English for Speakers of Other Languages (ESOL) Endorsement (K-6) and (K-12) Reading Endorsement.
  - Pre-service teaching experiences in Kindergarten through fifth grades in Florida, including third grade student teaching internship.
  - National Aeronautics and Space Administration (NASA) institute for minority elementary pre-service teachers training completion for inquiry-based mathematics and science instruction.
  - My student teaching experience culminated in Action Research presentations at FAMU's College of Education Research Colloquium and the Florida Association of Teacher Education (FATE) conference at the University of Florida.

### PROFESSIONAL DEVELOPMENT

- Pre-Service Teacher Institute (PSTI)** 2011  
NASA  
Titusville, FL  
This was a two-week training for minority K-12 instructors in teaching inquiry-based math and science.
- Dean's Symposium** 2010-2011  
Florida State University  
Tallahassee, FL This is an annual event that brings together educational researchers and scholars, state policy-makers, school administrators, teachers and teacher educators, agency officials, and Florida State faculty and students to discuss educational issues of critical importance in FL and the nation.

## **FFMT Conference**

2009-2010

This is a mandatory annual conference for FFMT Scholars which focuses on professional and career development for minority pre-service and in-service teachers in Florida.

## **PUBLICATIONS**

Arya, D., Harlow, D., Hansen, A, **Harmon, L.**, McBeath, J., & Pulgar, J. *Innovative Youth: An engineering and literacy integrated approach. Science Scope.*

Yun, J. T., Diguilio, L., & **Harmon, L.** (2014). *Get Focused Stay Focused (GFSF)*. Santa Barbara, CA: University of California. Educational Evaluation Center.

Yun, J. T., Grimes, M. S., Dang, M., Grimm, R., Wigginton, R., Espinosa, E., Diguilio, L., Hunt, E., Baldwin, E. E., & **Harmon, L.** (2014). *Online Instruction Pilot Project (OIPP) Evaluation Final Report*. Santa Barbara, CA: University of California. Educational Evaluation Center.

## **PRESENTATIONS**

**Harmon, L.** (2015). *How preservice teachers acquire the knowledge and skills necessary to provide comprehensive academic language instruction to English learners*. Paper presentation. The Biennial Conference of the University of West Indies Schools of Education. Cave Hill campus, Barbados. June 2015.

**Harmon, L.** (2013). *Effective literacy practices: Challenges and usage of the curriculum in The English language mainstream setting in providing literacy education for first grade Spanish-speaking English language learners*. Powerpoint presentation. University of California, Santa Barbara. Grad Slam 2013.

**Harmon, L.**, Alexander, D., Bailey, A.,(2013). *UC-HBCU initiative and UCSB-FAMU partnership. Logic model*. Powerpoint presentation at the National Association of Student Personnel Administrators (NASPA) 2013 Conference.

**Harmon, L.**, Alexander, D., Bailey, A., Bellamy, E. (2012). *UC-HBCU initiative and UCSB- FAMU partnership. Logic model*. Powerpoint presentation at the UCSB-FAMU Fellowship Reception. University of California, Santa Barbara.

**Harmon, L.** (2012). *Effective literacy practices: Challenges and usage of the curriculum in The English language mainstream setting in providing literacy education for first grade Spanish-speaking English language learners*. Poster presentation. UC Santa Barbara Research Symposium.

**Harmon, L.** (2012). *Effective literacy practices: Challenges and usage of the curriculum in The English language mainstream setting in providing literacy education for first grade Spanish-speaking English language learners.* PowerPoint presentation. At UC Santa Barbara.

**Harmon, L.** Muhammad, A. (2012). *Instructional Modes: Teacher-directed verses computer-assisted.* Action Research poster presented at the Florida A&M University Pre-Service Teacher Symposium. April 2012.

**Harmon, L.** (2012). *Instructional Modes: Teacher-directed verses computer-assisted Instruction.* Roundtable presentation at the Florida Association of Teacher Education (FATE) Conference. University of Florida, Gainesville, FL. April, 2012.

Young, V. **Harmon, L.** Mackery, R., Westbrook, C. (2011). *Tech Talk: The relationship between SES and parent – school internet communication.* Poster presentation at NC State University summer undergraduate research experience (SURE) Program.

## **RESEARCH EXPERIENCE**

**Graduate Student Researcher** August 2014-August 2015  
UCSB Education Department Santa Barbara, CA  
**UCSB-FAMU Research Scholars Program**

- Served as the primary liaison between UCSB and FAMU and the primary contact person for administrative aspects.
- Involvement ranged from recruiting students to scheduling events and networking opportunities as well as serving as a cultural guide and academic mentor to interns for research development

**Graduate Student Researcher** July 2013-October 2014  
University of California Evaluation Center, UCSB Santa Barbara, CA  
Designed logic models and surveys, performed qualitative data analysis, assisted with interview data collection, and worked on the following evaluation projects:

- **University of California Online Education Pilot Program:** Performed mixed-method analyses, and contributed to writing the report.
- **Get Focused...Stay Focused! (Santa Barbara City College):** Disseminated grade-specific pre- and post-surveys online to four high schools to collect data surrounding students' post-secondary aspirations. Preliminary data analysis and findings were presented to attendees of the 2014 *Get Focused...Stay Focused!* Conference.

- **2014 UC Team Science Retreat:** Helped develop a logic model, evaluation strategy and data collection instruments for the UC Team Science Retreat at UCSB in July 2014.

**UCSB-FAMU Research Scholars Program** June-August 2012  
 University of California, Institute for Training in Educational Evaluation Santa Barbara, CA  
 Designed an individual research project and collaborated with colleagues to create a logic model to explain the UC-HBCU Initiative and partnership between UCSB and FAMU.

**Summer Undergraduate Research Experience (SURE)** 2011  
 North Carolina State University  
 Raleigh, NC  
 Collaborated with colleagues to learn about and present on a project underway by a faculty mentor. This was a longitudinal study of the relationship between tenth graders' socioeconomic status and parent-school communication.

**TEACHING EXPERIENCE**

**Teaching Associate** October 2015-March 2017  
 UCSB Education Department and Summer Sessions Santa Barbara, CA

**ED 173: Introduction to Leadership Development**

Teach theoretical constructs and practical applications of leadership and organizational behavior, assist students in developing individual and corporate approaches to effective leadership while assessing their leadership skills, and help students understand leadership in a global context

**INT 95: The Modern Research University**

Mentored and connected freshmen with campus resources, faculty, staff, and community members affiliated with UCSB to get a head start on their academic careers; Led three discussion sections weekly among approximately 45 freshmen over the span of six weeks, and taught students about undergraduate research opportunities

**ED 123: Culture, Education, and Development**

Performed administrative tasks, lead a weekly discussion section, and graded assignments

**ED 124: Sociocultural Theories of Teaching and Learning**

Taught, graded, held office hours, and placed 30-70 undergraduate students (most of whom were education minors) per course at different sites to work with youth; Led weekly discussion sections, performed administrative tasks, handled technological aspects of the course, and facilitated communication between site directors and students.

**M.Ed Facilitator**

UCSB Education Department

January 2013-June 2016

Santa Barbara, CA

Facilitate small groups of teacher candidates that focus on professional development for candidates as they write their theses; Read candidates' writing, facilitate feedback among M.Ed. students, and monitor student progress; Direct the final peer review process and edit student work for publication

**K-12 EXPERIENCE****Pre-Service Teacher**

2008-2012

Rotated between eight different schools: observing, assisting and teaching students between voluntary pre-Kindergarten (VPK) and fourth grade.

**McEnroe Reading & Language Arts Clinic**

2015-2016

UCSB

Santa Barbara, CA

Support the literacy goals of students in K-6 grades, including grade-level reading fluency and comprehension, in-depth discussions of challenging academic texts, and communicating complex ideas in various forms, including writing.

**Third Grade Student-Teaching Internship,**

2012

Oak Ridge Elementary School

Tallahassee, FL

**Taught Kindergarten**

2011

FAMU Developmental Research School

Tallahassee, FL

**Taught Third grade**

2011

Pineview Elementary School

Tallahassee, FL

**Taught Kindergarten and Third grade**

2011

Sabal Palm School

Tallahassee, FL

**Taught Pre-Kindergarten**

2010

Gilchrist Elementary

Tallahassee, FL

**Taught Second grade**

2010

Bond Elementary

Tallahassee, FL

**Taught Third grade**

2010

Lake Forest Elementary

Gainesville, FL

**Taught second through fourth grades**

2009

Lawton Chiles

Gainesville, FL

Worked with mainstream students, English Learners, struggling readers and special education students of varying exceptionalities, and performed informal reading inventories

**Taught Kindergarten**

2008

Kimball Wiles Elementary

Gainesville, FL

## **ADVOCACY & LEADERSHIP**

### **Constructions of Class and Poverty and Human Rights, Panel Chair**

4th Biennial Conference of the International Association of Inter-American Studies  
(UCSB) Conference Theme: Human Rights in the Americas  
Santa Barbara, CA October 6, 2016

**Graduate Student Representative for UC Santa Barbara** 2013-Present

**University of California Student Association** 2013-2015

UC Students of Color Conference, Merced, Los Angeles 2013-2014

UC Student Lobby Conference, Sacramento 2014-2015  
Lobbied legislators to pass laws in favor of students in California  
Issues: The 2014-2015 UC budgets, sexual assault

UC Student Congress Conference, Oakland, CA August 2014  
Assisted with creating the Graduates for Recruitment, Accountability, and  
Diversity in Educations (GRADE) campaign

**United States Student Association** 2013-2014

US National Student Legislative Conference August 2014

National Student Congress Conference August 2014  
Assisted undergraduates in working on the following issues affecting students  
UC-wide: Sexual violence on campus, admission and recruitment of students  
from underrepresented backgrounds, and accessible and affordable tuition for  
these students.

**Graduate Student Association Representative for Education** 2013-Present  
UCSB Santa Barbara, CA

**Vice President of Communications** September 2014-June 2015  
UCSB Graduate Student Association of Education Santa Barbara, CA

**Graduate Student Apartments Resident Assistant** June 2014– September 2015  
UCSB Residential and Community Living Santa Barbara, CA

**UCSB Graduate Apartments Representative** November 2013-March 2015  
Chancellor’s Smoke-Free and Tobacco-Free Steering Committee Santa Barbara, CA  
Collaborated with administrators and students across UCSB to create and promote a  
smoke-free campus and local environment, including graduate apartments

## OUTREACH

**Black Resource Committee** June 2015-Present  
UCSB Santa Barbara, CA

This committee creates and implements solutions for the African American population at UCSB.

- Central areas of focus include: enrollment, retention/ social climate, and graduation and beyond. Serving on a subcommittee that focuses on recruitment and retention of African American students.
- Working on increasing and sustaining student-initiated outreach programs at UCSB.

**OneBody Santa Barbara** January 2016-Present  
Collaborate with ministries across UCSB's campus to plan and facilitate monthly prayer and praise gatherings on campus and other faith-based events.

**The Takeover** January 2016-Present  
This is a faith-based event that creates a safe space for fellowship among students, faculty, staff, and community members.

- Visionary of The TakeOver and core team member of its planning committee.

**Bible Study Leader** June 2014-January 2015  
UCSB Graduate Apartments Santa Barbara, CA

**Graduate student orientation panelist** October 2014  
UCSB Santa Barbara, CA

**IMPACT, founder and leader** September 2011-May 2012  
FAMU Residence Hall Tallahassee, FL  
Influencing and Motivating People According to Christ's Teachings (IMPACT) was a weekly Bible Study.

## AWARDS

### University of California, Santa Barbara

Chicano Studies Institute Fellowship 2012-Present

Graduate Student Association Travel Grant July 2016

Academic Senate Travel Grant July 2016

UC-HBCU Fellowship September 2012-June 2016

Department of Education Travel Grant 2015

Graduate Student Association Travel Grant ( June 2015

Graduate Student Showcase First annual Grad Slam, First Preliminary Round, third place winner	2013
Florida Fund for Minority Teachers (FFMT) scholarship	2010- 2012
Minority Teacher Education Scholarship (\$900)	2009

## **INTERNATIONAL EXPERIENCE**

**Tambor Y Danza: An AfroCuban Drum + Dance Immersion** 2016  
Havana, Matanzas, and Santiago, Cuba  
Became immersed in the Afro-Cuban culture which ranged from participating in drum and dance courses, excursions, and attending local performances.

**Menendez Pelayo International University** 2011  
Seville, Spain  
Studied Spanish, culture, and business

**Fundacion Gota De Leche** 2011  
Seville, Spain  
Worked in the foundation's store and the proceeds went toward providing clothes and school supplies to underprivileged children.

## **AFFILIATIONS**

**Chicano Studies Institute** 2014-Present  
UCSB

**Chi Alpha (XA) Christian Fellowship, President** 2014-Present  
UCSB

**IntverVarsity Christian Fellowship** 2012-2014  
UCSB

**American Educational Research Association (AERA)** 2012-2013

**Navigators Christian Fellowship** 2012-2013  
UCSB

**FFMT, FAMU Chapter** 2010-2012

**Sold Out Servant Leader** 2010-2011  
FAMU Wesley Foundation  
Tallahassee, FL

**Phi Delta Kappa International, FAMU Chapter** 2010-2011





## ABSTRACT

### How Elementary Pre-Service Teachers Acquire Pedagogical Language Knowledge for Supporting English Learners' Academic Language Development

by

Lois Harmon

Increasingly large populations of English Learners (ELs) attend public schools within the US and teachers are held accountable for the academic performance of these students. Unfortunately, multiple studies have concluded that teachers graduating from teacher education programs are not equipped with the competencies to clearly identify the linguistic needs of ELs nor do they have the techniques needed to help these students learn English and content concurrently. Much of this lack of preparation is due to teacher education programs not making language pedagogy for supporting ELs a priority for their mainstream teachers.

My dissertation uses a phenomenological qualitative research approach to examine how a group of elementary mainstream pre-service teachers (PTs) acquire the knowledge and skills necessary to provide comprehensive academic language instruction for ELs, and how they plan, implement, and reflect upon their lessons. Data (observations, field notes, assignments, assessment portfolios, and interviews) were analyzed to explain how PTs learned about and applied language pedagogy to support ELs' academic language development. Results indicate that the major learning opportunities afforded to PTs were: learning about academic language, observing classroom instruction, creating and teaching lessons emphasizing academic language support, and conducting case studies based on shadowing ELs.

Many of the lesson strategies that PTs used to support ELs' academic language acquisition and comprehension were: gestures, graphic organizers, group work, questioning, drawing pictures, and using tangible objects, to visualize concepts. Of equal

importance, something evident across all PT reflections is that students, especially ELs and others who struggled with academic language, would benefit from continued exposure and practice. In addition, vocabulary support, and explicit instruction with manipulatives and teacher-led small group practice were common next steps identified by PTs to support ELs' academic language development. On the basis of these findings, I discuss implications for theory and practice. Overall, I argue that in order to support ELs' literacy development, PTs must learn about academic language-its use and demands. Then, they can identify ELs' academic language challenges and implement appropriate strategies to explicitly teach ELs how to meet academic language demands. From reflecting upon their instructional practices with these students, PTs also learn how to identify next steps for improving instruction. All of these forms of knowledge and application combine to form what is known as pedagogical language knowledge, or what PTs need to know about language in order to support ELs' linguistically.

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## CHAPTER I

### INTRODUCTION

Given that 4.4 million English Learners (ELs) attend US public schools with approximately 40% of them in California combined with projections indicating that these students will comprise more than 33% of the nationwide population by 2036, it is highly probable that all teachers will be required to teach these students at some point (Ballantyne, Sanderman, & Levy, 2008; Thomas & Collier, 2002 as cited in He, Prater, & Steed, 2011). Unfortunately, 70% of existing in-service teachers with ELs have not received training specifically geared toward teaching these students (Menken & Holmes, 2000 as cited in Evans, Arnot-Hopffer, & Jurich, 2005). However, Toscano and Vacca-Rizopoulos (2014) suggest that training educators in every school to better serve language minority students must be a top priority for every teacher. I suggest the same (training in knowledge, skills, dispositions, and professional development) must be a cardinal requisite for every pre-service teacher (PT) as well.

What is needed to prepare teachers to effectively teach English Learners has been a considerable concern for some time now (Cadiero-Kaplan, 2008; Cartiera, 2006; Chamot, 2005; Coady, Villegas & Lucas, 2002; He, Prater, & Steed, 2011; Hutchinson, 2013; Roy-Campbell, 2013; Vogt, 2009; Webster & Valeo, 2011). This has been an issue of both professional development for in-service teachers and teacher preparation for pre-service teachers. Within the teacher education research community, great demands for better teacher education have persisted (Ball, 2002; He, 2013; Faltis & Valdes, 2016; Villegas, 2007). What comes to mind currently is *Preparing Teachers for Teaching in and Advocating for Linguistically Diverse Classrooms: A Vade Mecum for Teacher*

*Educators*, that is, looking at issues of preparing PTs to teach ELs, the linguistic and cultural backgrounds of teacher educators, and how PTs develop linguistic, cultural, and learning scripts, which result from their personal and professional experiences (Faltis & Valdes, 2016). But more neglected lines of inquiry center around how teacher educators perceive language and language acquisition, the preferable approaches for preparing teachers to teach ELs, and the language knowledge base for PTs that informs effective pedagogy for ELs. However, the focus here is on our collective understanding of the language and literacy demands presented by the Common Core and how this shapes teacher education, which prepares PTs to meet it once they enter the classroom.

With the implementation of the Common Core State Standards underway comes the added burden on teacher educators to prepare pre-service teachers for an educational reform that heavily depends on language and literacy throughout the curriculum (Bunch, 2013; Moschkovich, 2013; Quinn, Lee, & Valdés, 2013). Given that the CCSS is in full implementation without any research on PTs learning about this initiative, it is important to look at how teacher education programs are preparing pre-service teachers to meet the demands of the CCSS in their instruction for ELs. I am interested in how PTs are being prepared in both the university and field settings, particularly at the consistencies and discrepancies between their learning in both settings.

### **Statement of the Research Problem**

***ELs tend to have poor literacy outcomes and lower academic achievement than their non-EL peers (August & Hakuta, 1997).***

Increasingly large populations of English Learners (ELs) attend public schools within the United States and teachers are held accountable for the academic performance

of these linguistic-minority students. English Learners are individuals who meet one of the following criteria: a person born outside of the United States whose native language is not English, an individual who comes from an environment in which English is not dominant, or a person who is an American Indian or Alaskan native from environments in which languages other than English affect his or her English-proficiency (Au, 1998). With an approximate enrollment of 10 million English learners in U.S. schools and the projection that this quantity will increase to 1 in 4 students by 2020 along with the estimation that they will comprise more than one quarter of the total enrollment by 2025, the EL population is the fastest-growing segment of the K–12 market (ELL Enrollment & Market Size, 2011; NCELA, 2007 as cited in Roy-Campbell, 2013). Unfortunately, ELs tend to have poor literacy outcomes and lower academic achievement than their non-EL peers (August & Hakuta, 1997; Hammer, Miccio, & Wagstaff, 2003).

**Research on the interrelationship between English Learners' academic achievement and pre-service teacher (PT) preparation has not been adequately investigated.**

Another misfortune is that research on the interrelationship between English Learners' academic achievement and pre-service teacher (PT) preparation has not been adequately investigated. However, we must rethink pre-service teacher preparation in order to meet the linguistic and academic demands of ELs, as educating this population of students is a systemic issue (Coady, Harper, & Long, 2011; Vogt, 2009). Moreover, the literature shows the pertinence of teachers understanding the linguistic needs of English Learners in order to teach these students effectively (Cartiera, 2006; Cadiero-Kaplan & Rodriguez, 2008; Hutchinson, 2013; Toscano & Vacca- Rizopoulos, 2014). Unfortunately, 70% of existing in-service teachers with ELs have not received training



specifically geared toward teaching these students (Menken, 2000 as cited in Evans, Arnot-Hopffer, & Jurich, 2005). This is not surprising given that teacher training often wanes in comparison to classroom experiences (Ballantyne, Sanderman, & Levy, 2008). However, Toscano and Vacca-Rizopoulos (2014) suggest that training educators in every school to better serve language minority students must be a top priority for every teacher. I suggest the same (training in knowledge, skills, dispositions, and professional development) must be a cardinal requisite for every pre-service teacher (PT) as well.

**Teachers graduating from teacher education programs are not equipped with the competencies to clearly identify the linguistic needs of English Learners nor do they have the techniques needed to help these students learn English and content concurrently.**

Teacher education, as defined by Faltis and Valdes (2016), is a “set of social phenomena deliberately intended to prepare new teachers through established curricula--coursework and apprenticeship in practice – with the knowledge, skills, and inclinations for entering the profession of teaching with a repertoire of practices appropriate for addressing the learning needs of all students.” (p.1). Unfortunately, multiple studies have concluded that teachers graduating from teacher education programs are not equipped with the competencies to clearly identify the linguistic needs of English Learners nor do they have the techniques needed to help these students learn English and content concurrently (Buck, Mast, Ehlers, & Franklin, 2005; Evans, Arnot-Hopffer, & Jurich, 2005; Waxman & Téllez, 2002 as cited in Webster & Valeo, 2011). Toscano and Vacca-Rizopoulos (2014) inform that “many teacher education programs only teach teachers about these students, not how to teach these students (p.11)”. Although teachers learn

about ELs in their programs, many of them are unaware of what constitutes effective instruction for these students (Cartiera, 2006). Much of this lack of preparation is due to teacher education programs not making this a priority for their mainstream teachers as it has been primarily reserved for bilingual and English as a second language (ESL) teachers (Cartiera, 2006). This is unfortunate as a brief review of the literature shows “a strong relationship exists between teacher knowledge and skills acquired in teacher education programs and subsequent impact on teaching performance and student achievement” (Darling-Hammond, 2000 as cited in Cartiera, 2006 p.27).

### **Statement of Purpose**

While enrolled in a teacher education program at a university in the western United States, pre-service teachers (PTs) engage in coursework and fieldwork concurrently. INT 23 is the English language development and specially designed academic instruction in English (SDAIE) methodology course offered to pre-service teachers to prepare them to help English Learners develop academic language in order to engage with content and perform on par with their native English-speaking peers. The ELD component is taught in the fall and the SDAIE section is taught in the winter. This course is designed to provide elementary, multiple subject and special education pre-service teachers with the knowledge and skills necessary to provide comprehensive instruction for English Learners. Specific focus is given to the application of pedagogical theories, principles, and practices for English language development and specially designed academic instruction in English. For the ELD section, pre-service teachers utilize information about students’ assessed levels of English proficiency to construct,

implement, and reflect upon ELD lessons that facilitate the development of listening, speaking, reading and writing (Scalzo, 2013).

As part of the course requirements, pre-service teachers spend time in classrooms over a 10-week period. The amount of days each week that PTs are present for ELD instruction at their school sites varies according to placement. While in the field, all pre-service teachers observe, plan, and teach lessons focused on language development. A primary requirement for this course is for pre-service teachers to develop and teach lessons that ensure the development of English language and literacy, as well as promote student access and achievement in relation to state standards. The overall goal of this course is for pre-service teachers to develop the knowledge and skills to make informed decisions about how to teach their students who are English Learners. This includes knowledge of: (a) second language acquisition theories; (b) English language proficiency levels and the assessments through which these levels are determined, and (c) the ELD standards.

For the ELD course in the fall, two different groups (Section A and Section B) of pre-service teachers meet biweekly for a total of five class sessions over a span of 10 weeks. A major course requirement for ELD is a categorical program monitoring (CPM) presentation in which pre-service teachers are grouped according to their school placements to describe how ELD is structured and implemented in their schools. For the CPM assignment, each pre-service teacher writes a reflection of his or her observations and each group informs the class about its school's overall demographics and the specific EL demographics and services within the school. In addition to observing and reflecting upon ELD instruction, each pre-service teacher also creates an ELD lesson. While not

mandatory, teaching their lessons in the field is highly suggested to the pre-service teachers.

The purpose of this study is to gain insight on how pre-service teachers acquire the knowledge and skills necessary to provide comprehensive academic language instruction for English learners, and how they plan, implement, and reflect upon their lessons. For this study, I explore how pre-service teachers learn about language pedagogy and how they apply information from their ELD /SDAIE course while teaching English Learners. For this study, I am primarily interested in how pre-service teachers learn how to support English Learners' academic language development as they engage in their coursework and teach English Learners, and the challenges that these PTs face while teaching ELs. I am also interested in PT reflections regarding their work with English Learners to inform theory and practice for teacher education to support teachers of English Learners.

### **Research Questions**

Using the previous information as a guiding context, this study examines and explores: a) how pre-service teachers made sense of what they learned from coursework and observed at their school sites; and b) how they helped students, especially English Learners, develop academic language. This includes looking at both the pre-service teachers' capacities (knowledge, skills, and dispositions) and constraints for working with ELs. Last, but not least, this study also explores how the pre-service teachers reflected upon their learning and instructional experiences in both the university and field settings. This study addresses the following questions:

1. What were the opportunities afforded to pre-service teachers during their ELD/SDAIE training, and how were they taken up?
  - A. As it relates to working with English Learners, how did the pre-service teachers make sense of what they learned while taking INT 23?
2. How did pre-service teachers support English Learners' academic language development as evident in their course assignments?
  - B. How did PTs apply what they learned during INT 23 to their instructional practices for ELs?
3. What can we learn from preservice teachers' reflections of their instructional practices for working with English Learners in light of California's ELD standards?
  - A. How did PTs discuss ELs and their academic language development?
  - B. What supports did pre-service teachers incorporate into their instruction or identify as measures that could have improved their instruction?

### **Overview of Methodology**

This study involved qualitative procedures informed by a phenomenological design to investigate the learning opportunities afforded to a group of elementary pre-service teachers enrolled in a course offered by a traditional teacher education program at a large public university in the western United States. Phenomenology alludes to an individual's conception of the significance of an event or situation. A phenomenological design allows the researcher to explore pre-service teachers' conceptions of their critical learning moments (Leedy & Ormrod, 2016). While the findings of this study may be constrained to pre-service teachers enrolled in a single course and placed at certain schools for field work, findings may also be informative to other pre-service teachers,

teacher educators, or teacher education and professional development programs for teachers.

The primary sources of data were observations of INT 23 and PTs' course assignments, and the data were collected in two phases. In phase 1 of the study, I observed and took field notes on INT 23 FW for two quarters, or a total of 20 weeks. During this phase, I also collected and analyzed course assignments submitted by pre-service teachers. A second data source was document review, employed in order to learn more about how the teacher education program aligns with California's standards for preparing PTs to teach ELs effectively through the INT 23 FW course.

After the course ended, in Phase 2 of the study, I interviewed 12 elementary mainstream pre-service teachers enrolled in INT 23. The interviews were semi-structured (Merriam, 2009) and focused on the following three areas: learning opportunities afforded to PTs by INT 23, how PTs supported English Learners' academic language development, and instructional practices that PTs highlighted as supports for working with ELs (see Appendix A).

### **Rationale and Significance**

In order to effectively address problems with pedagogical practices for both pre-service teachers and English Learners in the future to prevent current problems from being perpetuated, we must turn to empirical research on teacher education and give voice to pre-service teachers. This investigation provides insight into how teacher preparation for working with English Learners impacts academic language instruction, specifically how the PTs' supported English Learners' academic language development and use, and how they conceptualized the challenges of supporting English Learners'

academic language development. Given that historically there has been a dearth of mainstream teacher training for English Learners coupled with the fact that a study that examines the views and experiences of pre-service teachers in relation to their training in academic language instruction has not been done before, this study provides unique insight.

**Role of the researcher.** This project employs a qualitative study from a phenomenological approach with the researcher as an instrument (Creswell, 2012). a) I collected some preliminary data through observations and field notes in a natural setting- the university-while observing the ELD/SDAIE class; (b) I reviewed field notes, ELD observations and lesson plans, and inspected these data for possible patterns; (c) I continued recording field notes in the natural setting and collected SDAIE lesson plans, edTPA portfolios, and EL case studies, followed by conducting interviews that might substantiate, clarify, or contradict those patterns; and (d) I conducted a more thorough, detailed analysis of the data and repeated step b and most of step c minus returning to the natural environment as the course had terminated before the interviews were conducted.

### **Definitions of key terminology**

1. Academic language- formal disciplinary communication used by teachers, students, and academic texts to discuss abstract ideas and engage in academic tasks (i.e. the language used for academic purposes)
2. INT 23 -the English language development and specially designed academic instruction in English (SDAIE) methodology course offered to pre-service teachers to prepare them to help English Learners develop academic language in

- order to engage with content and perform on par with their native English-speaking peers
3. English language development (ELD) instruction-the pedagogy of academic language to help students develop skills in listening, speaking, reading, and writing in English
  4. English Learners- individuals who meet one of the following criteria: a person born outside of the United States whose native language is not English, an individual who comes from an environment in which English is not dominant, or a person who is an American Indian or Alaskan native from environments in which languages other than English affect his or her English-proficiency.
  5. Pedagogical language knowledge-the knowledge of language linked to disciplinary teaching and learning and situated in specific contexts in which teaching and learning occur
  6. Pre-service teachers-student teachers or teacher candidates enrolled in a teacher education program to undergo training to become in-service teachers
  7. Second language acquisition (SLA)-the process of acquiring an additional language
  8. Specifically designed academic instruction in English (SDAIE)--a method of teaching academic language and content simultaneously to students in English

### **Organization of the dissertation**

This study seeks to describe the opportunities afforded to pre-service teachers and how the PTs undertook said opportunities to provide comprehensive academic language instruction for English Learners. Chapter II reviews select literature within the field



related to theoretical frameworks guiding the Common Core, ELD standards, and teacher preparation for academic language development. Chapter III outlines the methods used to answer the research questions posed in Chapter I. Chapter IV describes the findings of the study, and Chapter V provides a discussion of the results. Finally, Chapter VI provides the conclusion and further implications of the study.

## CHAPTER II

### THEORETICAL FRAMEWORK

The research questions that guide this study are informed by the principles of second language acquisition and literacy requirements embedded in California's English Language Development Standards corresponding to the Common Core State Standards (CCSS), which will be further discussed in this chapter. Both the ELD standards and CCSS include explicit and salient academic language and literacy expectations that pre-service teachers and students must adhere to for attaining academic achievement. This chapter describes the Common Core and ELD standards for informing academic language and literacy development. I begin by explaining my theoretical approach to this study, followed by describing the CCSS and ELD standards. I then discuss the Common Core perspective of second language acquisition, which informs the demands and expectations accompanying this initiative. Throughout this chapter, I emphasize theories of second language acquisition underlying the Common Core to make apparent the teaching and learning expectations for successful language and literacy development.

The theoretical framework guiding this research draws on scholarship that conceptualizes the language and literacy demands that accompany the Common Core State Standards (CCSS), for they have implications that inform the competencies that pre-service teachers need to teach English Learners. This study employs the theoretical underpinnings of the Common Core as the theoretical frameworks to help better understand the language and literacy demands placed on elementary teachers and English Learners. Of significant importance, this theoretical approach guides the

exploration of how elementary pre-service teachers are trained to support ELs' academic language development.

**The CCSS.** Developed by the National Governors Association Center for Best Practices (NGA) in conjunction with the Council of Chief State School Officers (CCSSO), the Common Core is the existing reform effort that defines what students should know and be able to do to be college and career-ready (Gamson, Lu, & Eckert, 2013; Marsh & Wohlsetter, 2013 ). The initiative stemmed from concerns that the No Child Left Behind (NCLB) Act of 2001(which permitted states to set their own measurement standards to determine the academic progress for their students) promoted poor standards for academic achievement (Baker, 2014). The Common Core entails a broad scope and sequence of higher-order competencies that students must acquire to master content (Baker, 2014). Not only does the CCSS place demands on students' knowledge and abilities, it also encompasses implications for second language acquisition and places steep demands on teachers (Hakuta & Santos, 2012). Though widely accepted across the country by most states and the District of Columbia, the debate over whether or not the Common Core is developmentally appropriate, particularly for the primary grades and English Learners, remains constant (Bauerlein, 2014).

The Common Core State Standards expand upon existing state standards and provide clear and consistent learning goals to prepare students for college and the workforce. These standards are designed to provide consistency of learning across states that have adopted them, but they are not a curriculum (CDE, 2015; Isken, Honig, & Jago, 2014; Marsh & Wohlsetter, 2013). They include rigorous research and evidence-based

expectations for students at each grade level that are designed to help them apply critical thinking skills to succeed in the global economy (Marsh & Wohlsetter, 2013). For grades K-8, the standards are divided into specific grade level standards in English language arts and literacy and mathematics, and for grades 9-12, the standards are grouped into grade bands of 9-10 grade standards and 11-12 grade standards (CCSSI, 2015b).

Drawing upon the best available evidence from policy learning in the United States and other top-performing countries, the CCSS focus on core concepts and procedures starting in the early grades, but do not define instructional procedures or curricular materials to best support students, especially those who are English Learners (CCSSI, 2015b). However, states and local education agencies are responsible for creating supplemental resources and services that align with the Common Core to help their students master the standards (CCSSI, 2015b). While neither the CCSS nor state standards comprehensively entail students' learning needs, knowledge, or abilities, the CCSS provide consistent and understandable directives leading to attainment of the learning goals to prepare students for college and career readiness (CCSSI, 2015b).

The Common Core State Standards for English language arts (ELA) and literacy establish guidelines for academic language use and literacy skills for students to effectively communicate in all domains (listening, speaking, reading, and writing) and understand concepts in all content areas (history, social studies, science, and technical subjects) (CCSSI, 2015a). The Common Core also incorporates College and Career Readiness anchor standards which define the broad interdisciplinary literacy expectations needed to succeed in college and the workforce. The anchor standards support the ELA/literacy standards by articulating core knowledge and skills, while grade-specific

standards provide additional clarity of expectations. Beginning in grade 6, content area teachers use these standards to help students master content in their respective disciplines (CCSSI, 2015a). It is important to note that the grade 6–12 literacy anchor standards are supplements to, not substitutes for, the content standards. Overall, the ELA/literacy standards articulate what it means to be literate as well as encourage the development and use of critical-thinking skills to help students effectively interact with and comprehend complex texts. These skills include reasoning and finding evidence to support claims (CCSSI, 2015a).

States that adopted the Common Core consent that this initiative will account for 85% of their standards in each subject area, and they can add up to 15% of their own standards to the adopted CCSS (Kendall et al., 2012). The identification, implementation, and assessment (if assessment will exist) of the additional state standards are currently being determined. As mentioned earlier, the CCSS expand upon existing state standards to promote the skills that students need to be college and career ready. While the CCSS envision what it means to be literate in the global economic society of the 21<sup>st</sup> century, they do not define implementation as the Common Core only serves as a roadmap to attain learning goals (CCSSI, 2015b). The implementation of the existing state standards and the new CCSS is left to the states and districts as they are responsible for most of the instructional decisions. Of the 46 states that have adopted the Common Core, California is one of 11 states that added state-specific content in at least one subject area, with ELA being one of them. It is important to note that this content is included to explain or supplement, not add to, the CCSS (Kendall, et al., 2012). As it pertains to the CCSS

ELA format in California, the state has included the CCSS verbatim, while adding words and phrases that clarify the standards beneath the CCSS (Kendall et al., 2012).

**ELD standards.** As mandated by Title III under the Elementary and Secondary Education Act, amended by the No Child Left Behind Act of 2001, all states adopted or developed English language development (ELD) standards to align language demands with the content standards (Pompa & Hakuta, 2012; Reauthorization E.S.E.A: Diverse Learners, A Blueprint for Reform, 2010 as cited in Faltis & Valdes, 2016). To comply with Title III and address the critical links between the CCSS and the ELD standards, the Council of Chief State School Officers (CCSSO) and the English language development/proficiency (ELD/P) committee created a two-dimensional framework that conceptualizes the demands placed on ELs as these students engage in disciplinary practices while acquiring academic language development (CCSSO, 2012). The ELD standards framework focus on two dimensions of language knowledge: (a) metalinguistic awareness—students’ language awareness and metacognition at each level—and (b) accuracy of production—ELs’ accuracy of linguistic production as they develop language proficiency. Within the framework, standards are structured to initially emphasize discourse as a social process by focusing on communication and comprehension in social settings, followed by pragmatics. The framework for ELD standards integrated with CCSS for ELA/Literacy outlines expectations in the key areas of theoretical foundations, progression of language development, links to the standards, and classroom language use that students should correspond to”(CCSSO, 2012). This framework served as a model for states developing their ELD standards.

Prior to the Common Core, California adopted its English language development (ELD) standards in 1999 to serve a dual purpose: (a) to mainstream all ELs and (b) to provide a bridge to the English Language Arts content standards while supporting teachers in helping ELs reach language and academic proficiencies (Bailey & Huang, 2011). These standards were used primarily for helping students acquire the vocabulary and grammatical skills that were emphasized in the ELA standards. Since the Common Core shifts instruction from the traditional emphasis on language structure to language use for communication and learning in content areas, stakeholders realized that ELs require additional support to acquire English proficiency and content skills simultaneously. The California State Legislature enacted AB 124 in 2011 mandating revision and updating of the 1999 ELD Standards so that they took into consideration the new ELA Standards. Subsequently, using the Framework for ELD standards integrated with CCSS for ELA/Literacy (developed by the CCSSO) as a guide, the CDE in collaboration with WestEd, a research organization, created ELD standards to correspond to, not align with, Common Core English language arts standards, and they are to be compatible with ELD/P assessments for reporting annual measurable achievement objectives (AMAOs) for English language proficiency (Faltis & Valdes, 2016). The California ELD standards are designed to be fewer, clearer, and higher (as they correspond to CCSS, requiring ELs to attain English proficiency and academic content simultaneously) than the former ELD standards (Torlakson, 2012a).

In August 2012, the State Superintendent of Public Instruction (SSPI) submitted the first draft of the current ELD standards which was approved by the state board of education (SBE) three months later. Approved in November 2012, the current ELD

standards were established by two central principles: transparency to and from the educational practitioner arena, and empirical research. The first principle consisted of input and feedback from diverse stakeholders such as educators, content specialists and a panel of experts, and the second principle included sound theory based on empirical research and review of that research (Torlakson, 2012b). Not only did the SSPI submit the first draft of the ELD standards that were approved, it also invited publishers of language arts and math instructional materials to submit supplemental instructional materials that link current curricula to the Common Core. These materials were published to serve as an implementation guide for Kindergarten through eighth grade teachers to align their instructional practices with the CCSS (CDE, 2013).

**Organization of the ELD standards.** Across all grade levels, the ELD standards are sectioned into two groups: (1) goal, critical principles, and overview (see Figure 1) and (2) elaboration on critical principles for developing language and cognition in academic contexts (see Figure 2). The first section introduces the standards with: a goal statement for ELs, critical principles for academic language and cognitive development, and an “at-a-glance” overview of Parts I–III of the ELD Standards in alignment with corresponding grade level CCSS for ELA (Torlakson, 2012a, p.14-15). The second section elaborates on the critical principles in three parts: Part I-*Interacting in Meaningful Ways* (see Figure 2), Part II-*Learning About How English Works* (see Figure 3), and Part III-*Using Foundational Literacy Skills* (see Figure 4). The goal for each standard is self-explanatory as it is the purpose of the standard. The critical principles further define the goal and entail the knowledge and experiences that students acquire as a result of achieving the goal. These principles also introduce readers to parts I-III of each goal



(Torlakson, 2012a). Parts I and II of the CA ELD Standards are outlined by headings and letters which cluster standards together. In Part I: Interacting in Meaningful Ways, the headings identify *communicative modes*: Collaborative, Interpretive, and Productive (See Figure 2). In Part II: Learning About How English Works, the headings identify key language processes: Structuring Cohesive Texts, Expanding and Enriching Ideas, and Connecting and Condensing Ideas (see Figure 3). Below each heading is a set of ELD content strands, represented by numbers. Both Parts I and II are structured for instructors to focus on them individually and in conjunction with each other, and Part III is self-explanatory.

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English Language Development Standards for Grade 3**

**Section 1: Goal, Critical Principles, and Overview**

**Goal:** English learners read, analyze, interpret, and create a variety of literary and informational text types. They develop an understanding of how language is a complex, dynamic, and social resource for making meaning, as well as how content is organized in different text types and across disciplines using text structure, language features, and vocabulary depending on purpose and audience. They are aware that different languages and variations of English exist, and they recognize their home languages and cultures as resources to value in their own right and also to draw upon in order to build proficiency in English. English learners contribute actively to class and group discussions, asking questions, responding appropriately, and providing useful feedback. They demonstrate knowledge of content through oral presentations, writing, collaborative conversations, and multimedia. They develop proficiency in shifting language use based on task, purpose, audience, and text type.

**Critical Principles for Developing Language and Cognition in Academic Contexts:** While advancing along the continuum of English language development levels, English learners at all levels engage in intellectually challenging literacy, disciplinary, and disciplinary literacy tasks. They use language in meaningful and relevant ways appropriate to grade level content area, topic, purpose, audience, and text type in English language arts, mathematics, science, social studies, and the arts. Specifically, they use language to gain and exchange information and ideas in three communicative modes (collaborative, interpretive, and productive), and they apply knowledge of language to academic tasks via three cross-mode language processes (structuring cohesive texts, expanding and enriching ideas, and connecting and condensing ideas) using various linguistic resources.

**Part I: Interacting in Meaningful Ways**

	Corresponding Common Core State Standards for English Language Arts*
<b>A. Collaborative</b> <ol style="list-style-type: none"> <li>1. Exchanging information and ideas with others through oral collaborative discussions on a range of social and academic topics</li> <li>2. Interacting with others in written English in various communicative forms (print, communicative technology, and multimedia)</li> <li>3. Offering and supporting opinions and negotiating with others in communicative exchanges</li> <li>4. Adapting language choices to various contexts (based on task, purpose, audience, and text type)</li> </ol>	<ul style="list-style-type: none"> <li>• SL.3.1.6; L.3.1.3,6</li> <li>• W.3.6; L.3.1.3,6</li> <li>• SL.3.1.6; L.3.1.3,6</li> <li>• W.3.4-5; SL.3.1.6; L.3.1.3,6</li> </ul>
<b>B. Interpretive</b> <ol style="list-style-type: none"> <li>5. Listening actively to spoken English in a range of social and academic contexts</li> <li>6. Reading closely literary and informational texts and viewing multimedia to determine how meaning is conveyed explicitly and implicitly through language</li> <li>7. Evaluating how well writers and speakers use language to support ideas and opinions with details or reasons depending on modality, text type, purpose, audience, topic, and content area</li> <li>8. Analyzing how writers and speakers use vocabulary and other language resources for specific purposes (to explain, persuade, entertain, etc.) depending on modality, text type, purpose, audience, topic, and content area</li> </ol>	<ul style="list-style-type: none"> <li>• SL.3.1-3; L.3.3</li> <li>• RL.3.1-7-9-10; RI.3.1-7-9-10; SL.3.2-3; L.3.3,4,6</li> <li>• RL.3.3-4-6; RI.3.2,6,8; SL.3.3; L.3.3-6</li> <li>• RL.3.4-5; RI.3.4-5; SL.3.3; L.3.3-6</li> </ul>
<b>C. Productive</b> <ol style="list-style-type: none"> <li>9. Expressing information and ideas in formal oral presentations on academic topics</li> <li>10. Writing literary and informational texts to present, describe, and explain ideas and information, using appropriate technology</li> <li>11. Supporting own opinions and evaluating others' opinions in speaking and writing</li> <li>12. Selecting and applying varied and precise vocabulary and language structures to effectively convey ideas</li> </ol>	<ul style="list-style-type: none"> <li>• SL.3.4-6; L.3.1,3,6</li> <li>• W.3.1-8,10; L.3.1-3,6</li> <li>• W.3.1,4,10; SL.3.4,6; L.3.1-3,6</li> <li>• W.3.4-5; SL.3.4,6; L.3.1,3,5-6</li> </ul>

**Figure 1.** English Language Development Standards for Third Grade. Section I. Goals, Critical Principles, and Overview (CDE, 2012, <http://www.cde.ca.gov/sp/el/er/documents/sbeeldstdg3c.pdf> )

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Section 2: Elaboration on Critical Principles for Developing Language & Cognition in Academic Contexts				
Texts and Discourse in Context	English Language Development Level Continuum			
Part 1, strands 1–4 Corresponding Common Core State Standards for English Language Arts:	Emerging	Expanding	Bridging	
<p>1. SL.3.1.6; L.3.1.3,3.6</p> <p>2. W.3.6; L.3.1.3,3.6</p> <p>3. SL.3.1.6; L.3.1.3,3.6</p> <p>4. W.3.4-5; SL.3.1.6; L.3.1.3,3.6</p> <p><b>Purposes for using language include:</b> Describing, entertaining, informing, interpreting, analyzing, recounting, explaining, persuading, negotiating, justifying, evaluating, etc.</p> <p><b>Text types include:</b> Informational text types include: description (e.g., science log entry); procedure (e.g., how to solve a mathematics problem); recount (e.g., autobiography, science experiment results); information report (e.g., science or history report); explanation (e.g., how or why something happened); exposition (e.g., opinion); response (e.g., literary analysis); etc.</p> <p><b>Literary text types include:</b> stories (e.g., fantasy, legends, fables); drama (e.g., readers' theater); poetry; retelling a story; etc.</p> <p><b>Audiences include:</b> Peers (one-to-one) Small group (one-to-group) Whole group (one-to-many)</p>	<b>A. Collaborative</b>	<p><b>1. Exchanging information and ideas</b> Contribute to conversations and express ideas by asking and answering yes/no and wh- questions and responding using short phrases.</p> <p><b>2. Interacting via written English</b> Collaborate with peers on joint writing projects of short informational and literary texts, using technology where appropriate for publishing, graphics, etc.</p> <p><b>3. Offering opinions</b> Offer opinions and negotiate with others in conversations using basic learned phrases (e.g., <i>I think...</i>), as well as open responses in order to gain and/or hold the floor.</p>	<p><b>1. Exchanging information and ideas</b> Contribute to class, group, and partner discussions, including sustained dialogue, by following turn-taking rules, asking relevant questions, affirming others, and adding relevant information.</p> <p><b>2. Interacting via written English</b> Collaborate with peers on joint writing projects of longer informational and literary texts, using technology where appropriate for publishing, graphics, etc.</p> <p><b>3. Offering opinions</b> Offer opinions and negotiate with others in conversations using an expanded set of learned phrases (e.g., <i>I agree with X, and...</i>), as well as open responses in order to gain and/or hold the floor, provide counter-arguments, etc.</p>	<p><b>1. Exchanging information and ideas</b> Contribute to class, group, and partner discussions, including sustained dialogue, by following turn-taking rules, asking relevant questions, affirming others, adding relevant information, building on responses, and providing useful feedback.</p> <p><b>2. Interacting via written English</b> Collaborate with peers on joint writing projects of a variety of longer informational and literary texts, using technology where appropriate for publishing, graphics, etc.</p> <p><b>3. Offering opinions</b> Offer opinions and negotiate with others in conversations using a variety of learned phrases (e.g., <i>That's a good idea, but X</i>), as well as open responses in order to gain and/or hold the floor, provide counter-arguments, elaborate on an idea, etc.</p>
	<p><b>4. Adapting language choices</b> Recognize that language choices (e.g., vocabulary) vary according to social setting (e.g., playground versus classroom) with substantial support from peers or adults.</p>	<p><b>4. Adapting language choices</b> Adjust language choices (e.g., vocabulary, use of dialogue, etc.) according to purpose (e.g., persuading, entertaining), social setting, and audience (e.g., peers versus adults) with moderate support from peers or adults.</p>	<p><b>4. Adapting language choices</b> Adjust language choices according to purpose (e.g., persuading, entertaining), task, and audience (e.g., peer-to-peer versus peer-to-teacher) with light support from peers or adults.</p>	

**Figure 2.** California English Language Development Standards for Third Grade. Section 2, Part 1: Interacting in Meaningful Ways Overview (CDE, 2012, <http://www.cde.ca.gov/sp/el/er/documents/sbeeldstdg3c.pdf> )

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Part II: Learning About How English Works	Corresponding Common Core State Standards for English Language Arts*
A. Structuring Cohesive Texts	
1. Understanding text structure	•RL.3.5; RI.3.5; W.3.1-5; SL.3.4
2. Understanding cohesion	•RL.3.5; RI.3.5; W.3.1-4; SL.3.4; L.3.1,3
B. Expanding and Enriching Ideas	
3. Using verbs and verb phrases	•W.3.5; SL.3.6; L.3.1,3,6
4. Using nouns and noun phrases	•W.3.5; SL.3.6; L.3.1,3,6
5. Modifying to add details	•W.3.5; SL.3.4,6; L.3.1,3,6
C. Connecting and Condensing Ideas	
6. Connecting ideas	•W.3.1-3,5; SL.3.4,6; L.3.1,3,6
7. Condensing ideas	•W.3.1-3,5; SL.3.4,6; L.3.1,3,6
Part III: Using Foundational Literacy Skills	•RF.K-3.1-4 (as appropriate)
* The California English Language Development Standards correspond to California's Common Core Standards for English Language Arts (ELA). English learners should have full access to and opportunities to learn ELA, mathematics, science, history/social studies, and other content at the same time they are progressing toward full proficiency in English.	

Note: Examples provided in specific standards *are offered only as illustrative possibilities* and should not be misinterpreted as the only objectives of instruction or as the only types of language English learners might or should be able to understand or produce.

**Figure 3.** California English Language Development Standards for Third Grade. Part 2: Learning About How English Works Overview (CDE, 2012, <http://www.cde.ca.gov/sp/el/er/documents/sbeeldstdg3c.pdf> )

California Department of Education  
English Language Development Standards for Grade 3

<b>Section 2: Elaboration on Critical Principles for Developing Language &amp; Cognition in Academic Contexts</b> <b>Part III: Using Foundational Literacy Skills</b>	
<p><b>Foundational Literacy Skills:</b></p> <p><b>Literacy in an Alphabetic Writing System</b></p> <ul style="list-style-type: none"> <li>• Print concepts</li> <li>• Phonological awareness</li> <li>• Phonics &amp; word recognition</li> <li>• Fluency</li> </ul>	<p>See Appendix A for information on teaching reading foundational skills to English learners of various profiles based on age, native language, native language writing system, schooling experience, and literacy experience and proficiency. Some considerations are:</p> <ul style="list-style-type: none"> <li>• Native language and literacy (e.g., phoneme awareness or print concept skills in native language) should be assessed for potential transference to English language and literacy.</li> <li>• Similarities between native language and English should be highlighted (e.g., phonemes or letters that are the same in both languages).</li> <li>• Differences between native language and English should be highlighted (e.g., some phonemes in English may not exist in the student's native language; native language syntax may be different from English syntax).</li> </ul>

**Figure 4.** California English Language Development Standards for Third Grade. Section 2, Part 3:Using Foundational Literacy Skills Overview (CDE, 2012, <http://www.cde.ca.gov/sp/el/er/documents/sbeeldstdg3c.pdf> )

**Proficiency.** Within the ELD standards, proficiency is divided into three levels: emerging, expanding, and bridging, and descriptions are detailed into three support levels (substantial, moderate, and light) (see Figures 2, 5, and 6). The Proficiency Level Descriptors (PLDs) summarize the ELD stages that ELs are expected to progress through as they attain increasing proficiency in English (Torlakson, 2012a). Not only do they assist teachers in identifying ELs' knowledge and skills as they perform ELD instruction, they also guide them in performing differentiated instruction in the content areas (Linguanti, 2013). The substantial support level is more closely linked to the emerging stage, while the moderate support level is linked to the expanding stage, and the light or occasional level of support is linked to the bridging stage. Bridging is the highest performance level, for ELs who reach it demonstrate proficiency on (standardized) assessments aligned with the CCSS and these students are expected to be able to engage in intellectually challenging activities that are integral to content learning (Linguanti, 2013).

Proficiency Level Descriptors for California English Language Development Standards

Student Capacities	English Language Development: Proficiency Level Continuum			
	←-----Emerging-----→	→-----→	-----Expanding-----→	→-----→
<p><b>Native Language</b></p> <p>English learners come to school possessing a wide range of competencies in their native language appropriate to their age. They may have varying levels of literacy in their native language depending on their prior experiences in the home, community, and school. As learners of English as a new language, they gain metacognitive awareness of what language is and how it is used and apply this awareness in their language learning strategies, including drawing upon knowledge of their native language.</p>	<p><b>Overall Proficiency</b></p> <p>English learners <i>enter</i> the Emerging level having limited receptive and productive English skills.</p> <p>As they <i>progress through</i> the Emerging level, they start to respond to more varied communication tasks using learned words and phrases with increasing ease.</p>	<p><b>Overall Proficiency</b></p> <p>At <i>exit</i> from the Emerging level, students have basic English communication skills in social and academic contexts.</p>	<p><b>Overall Proficiency</b></p> <p>As English learners <i>progress through</i> the Expanding level, they move from being able to rehash learned phrases and sentences in English to meet their immediate communication and learning needs towards being able to increasingly engage in using the English language in more complex, cognitively demanding situations.</p>	<p><b>Overall Proficiency</b></p> <p>At <i>exit</i> from the Expanding level, students can use English to learn and communicate about a range of topics and academic content areas.</p>
<p><b>High Level Thinking with Linguistic Support</b></p> <p>English learners possess cognitive abilities appropriate to their age and experience. In order to communicate about their thinking as they learn English, they may need <i>varying linguistic support depending on the linguistic and cognitive demand of the task.</i></p>	<p><b>General Extent of Support: Substantial</b></p> <p>Students at the <i>early stages</i> of the Emerging level can engage in complex, cognitively demanding social and academic activities requiring language when provided substantial linguistic support; as they develop more familiarity and ease with understanding and using English, support may be moderate or light for familiar tasks or topics.</p>		<p><b>General Extent of Support: Moderate</b></p> <p>Students at the <i>early stages</i> of the Expanding level can engage in complex, cognitively demanding social and academic activities requiring language when provided moderate linguistic support; as they develop increasing ease with understanding and using English in a variety of contexts, support may be light for familiar tasks or topics.</p>	

Figure 5. California English Language Development Standards Proficiency Level Descriptors (Torlakson, 2012a, <http://www.cde.ca.gov/sp/el/er/documents/sbeoverviewpld.pdf> )

Proficiency Level Descriptors for California English Language Development Standards

Knowledge of Language	English Language Development: Proficiency Level Continuum →-----Bridging-----→	
	At the <i>early stages</i> of the Bridging level, students are able to:	At exit from the Bridging level, students are able to:
<b>Metalinguistic Awareness</b>	<p>Apply to their learning of English a sophisticated awareness about:</p> <ul style="list-style-type: none"> <li>• differences and similarities between their native language and English to learning English;</li> <li>• ways in which language may be different based on task, purpose, and audience;</li> </ul> <p>and how to:</p> <ul style="list-style-type: none"> <li>• intentionally and purposefully use a range of precise and varied grade-level general academic and domain-specific vocabulary in English related to new topics;</li> <li>• extend grade-level academic discourse in a variety of ways in a range of conversations and written texts of varying lengths and complexities;</li> <li>• recognize language differences, engage in self-monitoring, and adjust oral and written language in a range of contexts;</li> </ul>	<p>Apply to their learning of English a sophisticated awareness about:</p> <ul style="list-style-type: none"> <li>• differences and similarities between their native language and English to learning English;</li> <li>• ways in which language may be different based on task, purpose, and audience;</li> </ul> <p>and how to:</p> <ul style="list-style-type: none"> <li>• intentionally and purposefully use a range of precise and varied grade-level general academic and domain-specific vocabulary in English related to new topics across the disciplines;</li> <li>• extend grade-level academic discourse in a variety of ways in a range of conversations and written texts of varying lengths and complexities across the disciplines;</li> <li>• recognize language differences, engage in self-monitoring, and adjust oral and written language in a range of contexts across the disciplines;</li> </ul>
<b>Accuracy of Production</b>	<ul style="list-style-type: none"> <li>• be comprehensible when using a variety of grade-level expanded discourse or texts; and</li> <li>• may exhibit some errors in pronunciation, grammar, and writing conventions that usually do not impede meaning.</li> </ul>	<ul style="list-style-type: none"> <li>• be comprehensible when using a variety of grade-level expanded discourse or texts on a variety of topics; and</li> <li>• may exhibit some minor errors in pronunciation, grammar, and writing conventions that do not impede meaning.</li> </ul>

**Figure 6.** California English language Development Standards Proficiency Level Descriptors (Torlakson, 2012a, <http://www.cde.ca.gov/sp/el/er/documents/sbeoverviewpld.pdf> )



The PLD student capacities determine the amount of linguistic support students need based on the cognitive and linguistic demands of the tasks that they engage in (Linguanti, 2013). These capacities extend from the native language competencies that students have when they enter school to lifelong language learning that involves all language users (Torlakson, 2012a). Within each domain, the standards are structured by: the student capacities, the three proficiency levels which include the overall proficiency during entry, progress through, and exit from each domain; and the modes of communication within each domain: collaborative, interpretive, and productive. Each domain also includes communicative modes which involve the complexity of the context: “collaborative (engagement in dialogue with others); interpretive (comprehension and analysis of written and spoken texts); and productive (creation of oral presentations and written texts)” (Torlakson, 2012a, p.7). Although the PLDs provide summaries of the ELs’ expected progression throughout the stages, one must keep in mind that second language acquisition is not a linear process. Therefore, specific skills outlined by each proficiency description may vary according to the student or the task, or both.

The current ELD standards were established to clarify the knowledge and skills that are needed to achieve fluency in academic English and are being implemented to help students master the CCSS and ELA-aligned standards. Unlike the former ELD standards, the central focus of the current standards is not solely on the knowledge and function of language; they encompass a broader range of skills including disciplinary knowledge with a heavy emphasis on the use of academic language and higher level texts. The content of these standards focuses on higher order cognitive and linguistics

skills such as explanation, argumentation, and other forms of tasks that they engage in. One of the critical features of this paradigm shift is that the current ELD standards also suggest that all students should be able to access and understand complex texts across disciplines without rich scaffolding (CDE, 2013). With the implementation of the current ELD standards, all language modalities are integrated along with language awareness and academic English acquisition as instruction builds into and from literacy in the content areas (Walqui, 2012).

All of the aforementioned skills are imperative because the ELA standards emphasize the development of communicative academic skills as well as explicit language knowledge (Van Lier & Walqui, 2012). The ELA standards include: the language requirements of all subjects, the skill-specific requirements, and the requirements for explicit knowledge about language in the ELA standards. The latter requirements are divided into: conventions, pragmatics, and vocabulary acquisition and use, and they primarily focus on language functionality, particularly students' internalization and application of complex vocabulary and syntax. Although all of the specific language requirements are not outlined in detail here, it is imperative to know the components included within the standards.

**Second Language Acquisition.** Language acquisition and socialization have been traditionally considered as two distinct bailiwicks (as language acquisition theories of the past have focused on the acquisition of language and socialization through language as separate processes) independent of each other (Ochs & Schieffelin, 2001). It would be remiss to discuss language acquisition without mentioning the traditional contending theories of Skinner (nature and nurture) and Chomsky (nativist). Skinner

(1957) supposed that children learn language based on behaviorist principles, arguing that they bring insufficient knowledge and abilities to the language acquisition task and rely upon adults to reinforce their desired behaviors until they become fluent (as cited in Ochs & Schieffelin, 2001). On the other hand, Chomsky (1959) contended that children have an inherent ability or language acquisition device imprinted in their brains to learn any language, and he argued that adult reinforcement was insufficient in the language acquisition process (as cited in Ochs & Schieffelin, 2001; Faltis and Valdes, 2016). Unlike Skinner and Chomsky, linguistic anthropologists Ochs and Schieffelin (2001) argue that “the process of acquiring language and the process of acquiring sociocultural knowledge are intimately tied” (p.503).

According to Ochs (1988), socialization is the process by which people become members of a community and participate in its culture, and both socialization and enculturation are intertwined with language acquisition as language is the medium by which children are introduced and socialized within a community. In *Language Acquisition and Socialization: Three Developmental Stories and Their Implications*, Ochs and Schieffelin (2001) consider the role of language in social and cultural interactions as they argue that “language is constructed in socially appropriate and culturally meaningful ways” (p.501). Likewise, Borrero and Yeh (2010) affirm that language acquisition is linked to ecology as children learn and use language in their environments by adapting to the norms or environmental structures in place. Fortunately, language acquisition theories have evolved over the years to view language learning as a complex, social and cultural process.

The framework for the new CA ELD standards integrated with the CCSS for ELA/literacy defines language acquisition as a nonlinear sociolinguistic process, and the core content of the framework details learning as action in which students must develop and utilize linguistic and social tools to make meaning of language. Like the framework for the new ELD standards, the theoretical frameworks guiding this study emanate from scholarship that views language as a social and cultural tool and language acquisition as a process in which students bring linguistic and cultural assets to the classroom while learning new ones as they become proficient in English and academic language (Cole, 1996 as cited in Martin-Beltran, 2014). Since ELs are acquiring English and academic language concurrently, it is highly imperative that teachers provide comprehensible input for these students (Krashen, 1985; Krashen and Terrell, 1983 as cited in Roy-Campbell, 2013). The input hypothesis asserts that individuals acquire language only by receiving comprehensible input which is anything that clarifies information. If the input or instruction is comprehensible, students can understand the language, even if it contains vocabulary or syntax that they are unfamiliar with. For example, teachers must often use strategies to elucidate information to help students understand idioms and other colloquial expressions that are often unfamiliar to them. Examples of strategies that help students understand language that they may be unfamiliar with include sentence frames, visuals (pictures, graphic organizers, and word walls), and gestures or dramatic play among other activities. All of these exercises are considered comprehensible input.

In 1977, Dulay and Burt postulated the Affective Filter Hypothesis and its role in language acquisition. This hypothesis asserts that when students are anxious, unmotivated, or uncomfortable in any way, they are likely to be disinterested. Krashen

(1981) defines the affective filter as the students' level of comfort with the language being acquired, which is likely to predict students' interest and responsiveness in activities (as cited in Roy-Campbell, 2013). The theorist further explains that the affective filter is the student's emotional capacity that can allow or inhibit each individual to intake comprehensible input easily (Krashen, 1982 as cited in Hui Ni, 2012). Research indicates that low anxiety, motivation, and self-confidence are integral to students' success in language acquisition. If students are anxious or indifferent, they are less likely to be susceptible to instruction, no matter how comprehensible it is. To help ELs maintain low affective filters, teachers must create positive learning environments that encourage these students to participate in class activities. Teachers can address ELs' affective filters in multiple ways, including using an appropriate voice tone, displaying students' work, and giving descriptive praise.

While comprehensible input and the affective filter are important aspects to consider as they pertain to second language acquisition, they are not sufficient without two-way interactions that enable learners to fully develop the language being acquired. According to the interaction theory, two-way interactions occur when speakers are engaged interdependently and as communicative equivalents, as there is a need to obtain and convey new information by all engaged parties (Long, 1996). Teachers can promote two-way interactions through activities such as productive partners, scavenger hunts in which students find someone who: has the same birthday month, same number of zippers, or same colors, et cetera, or any type of group work.

Teaching English Learners requires a deeper understanding of students' cultural and linguistic backgrounds, as well as how students acquire language (He, Prater, &

Steed, 2011 as cited in Roy-Campbell, 2013). While language is the fundamental tool in learning and socialization as well as the means by which individuals make meaning, the context in which it develops is equally important (Duranti & Goodwin, 1992; Ochs & Schieffelin, 1984; Rogoff, 2003 as cited in Jiminez-Silva & Olsen, 2012). Thus, effective instruction in language development takes into consideration comprehensible input, the affective filter, and two-way interaction to foster ELs' language development and overall learning. Instruction that takes all of these into consideration may be in the form of class brainstorming, making tasks doable, and giving students multiple opportunities to speak, all of which increase motivation and participation.

Multiple pendulum shifts in second language acquisition have occurred in the past, but the current SLA perspective is that of social orientation. From this perspective, language use is not only the goal, but also the process by which to achieve language development to meet content standards (Alcon, 2004 as cited in Saunders, Goldenberg, & Marcelletti, 2013; Hakuta, Santos, & Fang, 2013). Therefore, ELs are not simply language learners, but also language users (Faltis & Valdes, 2016; Ochs & Schieffelin, 2001). To expand this perspective, education researchers have coined the phrase, "language as action" (Van Lier & Walqui, 2012). Advocates of this phrase view language as more than speech; they see it as an enterprise embedded in and driven by sociocultural factors. In other words, language is a system within a system-it has its own rules and functions, but it also adapts according to the norms of the context in which it is used. In their paper, "Language and the Common Core Standards", Leo van Lier and Aida Walqui (2012) discuss "language as way of making sense of the world and our place in it, and as

a range of ways of doing things (p.5).” From the language-based perspective, learning involves the integration and interdependence of language, cognition, and action.

## CHAPTER III

### REVIEW OF LITERATURE

#### **Academic language**

A common theme among the CCSS, the framework integrating the CCSS and ELA, and the current ELD standards is that the Common Core accompanies language and content demands signaling challenges for ELs and teachers. Naturally, children acquire implicit and explicit language knowledge, and by the time they arrive in school, they can demonstrate informal language proficiency. Most, if not all, of the English Learners that enter school have conversational English or basic interpersonal communication skills (BICS)--language skills needed to interact socially with other people. English Learners use BICS in social settings such as the on playground, in the lunch room, and on the school bus (Haynes, 2007; Cummins, 2011). One of the main challenges that these students face within the classroom is the development of cognitive academic language proficiency (CALP). Unlike BICS, CALP refers to formal academic learning, and entails academic language that seems foreign to most language minority students.

Chamot and O'Malley (1994) define *academic language* as “the language that is used by teachers and students for the purposes of imparting new information, describing abstract ideas, and developing students’ conceptual understanding” (Chamot & O'Malley, 1994, p.40 as cited in Saunders et al., 2013). It is different in structure and vocabulary from the language of social interactions, for it is the type of communication that individuals use while engaging in academic tasks such as reading a book or engaging in a class discussion (Filmore & Filmore, 2012; Kuehn, 2003). CALP is cognitively-demanding and requires the use of all four communication modes to learn



content as new language and content are presented to the students concurrently (Cummins, 1991). Of importance, academic language is often termed academic English--the “precise use of vocabulary”, grammatical accuracy, and knowledge of word functionality, or language students use at school to communicate with their teachers and peers to acquire and use knowledge (Scott, Jamieson-Noel, & Asselin, 2003 as cited in DiCerbo et al., p. 462; Bailey & Heritage, 2008; Chamot & O’Malley, 1994; Schleppegrell, 2004 as cited in DiCerbo et al., 2014)---or academic vocabulary---the particular and usual terminology or word knowledge, grammatical structures, and discourse genres that students must be able to comprehend, engage with, and manipulate as valued by the academic environment in order to access and display their understanding of content to attain success (Scarcella, 2003 as cited in Bowers, Fitts, Quirk, & Jung, 2010; Brozo & Simpson, 2007 as cited in Flynt & Brozo, 2008).

The notion of academic language developed out of research in the 1970s and 1980s that focused attention on the challenges of the language children engage with at school and how the language expectations at school differ from the language of the home and community for many children. Cummins’s (1980, 1981) found that assessments of ELs’ oral language proficiency did not adequately explain the challenges many students experienced while performing academic tasks, and he contended that the linguistic demands of these tasks contributed to ELs’ academic challenges. He then further explained the differences between formal and informal language (DiCerbo et al, 2014; Schleppegrell, 2012). Critics of Cummins’ early work suggested that he provided a dichotomous perspective of language acquisition and use (Scarcella, 2003 as cited in

DiCerbo et al, 2014), and interpreted his distinctions in characteristics between informal (BICS) and formal language (CALP) as deficits inherent in ELs (MacSwan & Rolstad, 2003 as cited in DiCerbo et al., 2014), although Cummins (1981, 1984, 2000) emphasized the concurrent acquisition and development of both social and cognitive aspects in students with the distinction being in the cognitive load and support of language use (DiCerbo et al., 2014).

Heath's (1983) ethnographic research on the similarities between language use in children's home and school communities illustrated how children are socialized in contrasting ways in their use of language because of distinctions in the ways language is valued among diverse contexts (as cited in DiCerbo et al., 2014; Schleppegrell, 2012) . Heath (1983) further explained how language positioned students more or less favorably for literacy learning in school. Researchers during this time shed light on the notion of academic English as an added register in children's linguistic development (as cited in Schleppegrell, 2012; DiCerbo et al., 2014). Meanwhile, functional linguists were creating frameworks to conceptualize language in its social context in peculiar and complex ways (Schleppegrell, 2012). Systemic functional linguistics, which is discussed later in this account, is an example of such framework.

In articulating the academic English demands of content area classrooms, Bailey and colleagues (Bailey, Butler, Borrego, LaFramenta, & Ong, 2002; Bailey, Butler, & Sato, 2007; Bailey, Butler, Stevens, & Lord, 2007; Bailey, Huang, Shin, Farnsworth, & Butler, 2006; Butler, Bailey, Stevens, Huang, & Lord, 2004) distinguish academic English from informal English on three key levels: “the lexical or academic vocabulary level, the grammatical or syntactic level, and the discourse or organizational level”

(Bailey, 2007, p. 3 as cited in DiCerbo et al., 2014). Bailey and Heritage (2008) expand the conceptualization of school language use by dividing academic English into School Navigational Language (SNL)- the language students use to communicate at school in a general sense--and Curriculum Content Language (CCL)--the language of pedagogy (as cited in DiCerbo et al., 2014). The researchers distinguish between SNL and CCL based on the following characterizations: their purposes, their degree of formality, their contextual acquisition and uses, the predominant modalities they use, and instructional expectations for language abilities across the three varieties (as cited in DiCerbo et al., 2014). Expanding upon Bailey and Heritage's (2008) description of SNL, Scarcella (2008) postulates the notions of Foundational Knowledge of English (FNE) and Essential Academic Language (EAL). She posits that these three types of English knowledge are essential to learning CCL, and suggests that ELs need FNE, should know SNL, and would benefit from already controlling EAL.

All encompassing, the definition and conceptualization of academic language variegates in sophistication and complexity as researchers vary in their theoretical and disciplinary orientations and approaches to inquiry surrounding the operationalization of academic language in educational research (DiCerbo et al., 2014). This complexity of determining what academic language means for teaching and learning becomes more nuanced and difficult as the CCSS brings more attention to it as they accompany heightened expectations for attaining it without distinguishing between the characteristics of this concept. Ultimately, language, the "hidden curriculum" of schooling, becomes more abstract and nuanced as content becomes more sophisticated (Bailey, Burkett, &

Freeman, 2010; Snow & Uccelli, 2009; Solomon & Rhodes, 1995 as cited in DiCerbo et al., 2014; DiCerbo, et al, 2014, p. 446). August and Hakuta (1997) suggest that

Developing an inclusive theory of how a second language is acquired therefore necessitates moving beyond the description of plausible acquisition mechanisms for specific domains to an explanation of how those mechanisms work together to produce the integrated knowledge of a language that enables its use for communication. (p. 35 as cited in Galquera, 2011)

The ultimate challenge that both teachers and researchers alike face as we seek to determine what academic language is and how to attain it is that the distinguishing components of this element remain unclear (DiCerbo et al., 2014).

As mentioned earlier, the current ELD standards require students to become language users. The standards significantly intertwine the development of academic language and content knowledge, and they require students to interact with each other to gain proficiency in both areas to achieve academic success. These standards do not allow language to be taught as an isolated subject, but instead require that students develop language proficiency in the context of learning content knowledge while engaging in meaningful interactions (Linguanti, 2013). To develop academic language growth, ELs must engage in meaningful content-rich activities that encourage, interest, and require them to interact with each other and learn by doing (Hakuta & Santos, 2012).

### **Conceptualizing the Demands and Opportunities for ELs**

Language is a common theme interwoven throughout the Common Core as it permeates all of the standards in multiple ways (Van Lier & Walqui, 2012). While the Common Core puts steep demands on all students, it presents even greater challenges to

English Learners (who are expected to become proficient in English while learning content). The following are key shifts between existing state standards and the Common Core standards: 1) frequent engagement with complex texts and academic language; 2) reading, writing, and speaking grounded in evidence from (literary and informational) texts; and 3) building knowledge through content-rich nonfiction (Hakuta & Santos, 2012; Hakuta, Santos, & Fang, 2013; CCSSI, 2015c). The first shift transitions the focus of literacy development from simply reading and writing to engaging with complex texts that progress in difficulty. According to the CCSS, text complexity refers to “the inherent difficulty of reading and comprehending to a text combined with the consideration of reader and task variables” (NGA/CCSSO, 2010, p.43 as cited in Gamson, et al., 2013). This emphasizes the sophisticated use and comprehension of academic vocabulary as students interact with the class and texts. Overall, the first shift stresses students’ vocabulary development and expansion across all domains and content areas (CCSSI, 2015c). The second shift transitions the focus from students’ using their schemata to using evidence from texts to answer questions and support claims. This shift emphasizes inferential and critical, rather than literal, comprehension across a range of informational and literary texts. As required by existing standards, students will still engage in narrative writing, but the CCSS also requires them to engage in informational writing and persuasive writing that is argumentative based on facts rather opinions and personal experiences (CCSSI, 2015c). Overall, this shift demands that students acquire a variety of skills to engage in disciplinary specific writing (Deeb-Westervelt, 2014). Last, but not least, the third shift emphasizes the importance of students fully understanding how society operates, and they learn this by engaging with content-rich informational texts

such as newspapers, magazines, biographies, and et cetera. For grades K-5, this requires an even greater balance between literary and informational reading, unlike in grades 6-12 for which standards place a heavier emphasis on literary nonfiction (CCSSI, 2015c; NYAPE, 2014).

Common themes implied by the key shifts caused by the Common Core are the language demands of multiple activities. Bailey and Huang (2012) notice that the individual CCSS include both implicit and explicit language abilities as well as ambiguous prerequisite skills (as cited in Wolf, Wang, & Blood, 2014). For instance, I will use the following CCSS ELA knowledge of language standard (CCSS.ELA-Literacy.L.3.3) as an example: *Use knowledge of language and its conventions when writing, speaking, reading, or listening* (see Appendix D Table 1). This standard includes two strands-1) *CCSS.ELA-Literacy.L.3.3.a /Choose words and phrases for effect* and 2) *CCSS.ELA-Literacy.L.3.3.b/Recognize and observe differences between the conventions of spoken and written standard English (CCSSib)*. Three explicit language skills and tasks are identified in this standard-choose, recognize, and observe. When unpacking this standard, one can see that it includes prerequisite skills such as knowing what an effect is and knowing how to recognize and observe various effects. Also, the second strand for the standard is very ambiguous as it does not spell out nor give an example of how to recognize types of effects whether spoken or written. It also implies that students are proficient enough to understand conventions of academic language to identify types of effects in two different domains, which heightens the initial challenges for English Learners. Although the Common Core language acquisition and literacy perspective requires shifting from the traditional theory of language as form and function, this

initiative commands that students learn language more effectively by understanding the rules that govern standard English (Bunch, Kibler, & Pimentel, 2012). The previous standard is just one example of ambiguous prerequisites, and implicit and explicit skills included within the CCSS.

Not only does the CCSS require students to have foundational skills as shown in the previous standard, they also require students to possess higher level skills to meet performance expectations, and the proportion of higher-level skills outweighs that of the foundational skills in the CCSS (Wolf et al., 2014). All of the key shifts brought by the CCSS demonstrate this as students are being required to engage in challenging tasks that steadily increase in rigor (Bunch et al., 2012). It is important to reiterate that half of the complex texts that students have to read are informational, which are not only challenging, but are often uninteresting (Bunch et al., 2012). Filmore and Filmore (2012) pinpoint two main problems involving English Learners' literacy learning. The first challenge is that the language in complex texts is quite different from the basic English that they speak as texts include syntax and semantics that students, ELs and native speakers alike, may be unfamiliar with. This challenge increases beginning in the fourth grade as students must read to learn. Prior to the fourth grade, students read texts that include pictures which help them understand the text, but as they progress to fourth grade and beyond, they can no longer rely on pictures as they must use context clues and other vocabulary and language resources as pedagogical tools to understand content (Filmore & Filmore, 2012).

While Filmore and Filmore (2012) recognize the academic language and content challenges presented to ELs by engaging in complex texts, they also assert that “one of

the biggest roadblocks to learning is that these students lack opportunities to work with complex texts. They contend that since “the only way to acquire the language of literacy is through literacy”, the simple texts offered to ELs fail to teach them conventions of language and academic discourse because they do not offer the richness and depth that the complex texts do (p. 65). Bunch et al. (2012) support this notion, claiming that language and literacy development occur as students engage in challenging, meaning-making tasks such as reading complex texts and engaging in academic discourse. From both perspectives, simple texts should not be given to ELs to shield them from failure because grammatical and communication errors are essential to the learning process and are the reasons that pedagogical supports are provided (Hakuta & Santos, 2012). Also, Pompa and Hakuta (2012) point out that many of the language errors made by ELs are common among all students as they engage in texts that are rich in content and depth. While it is obvious that engaging in complex texts accompanies many language and literacy challenges, Gamson, et al. (2012) assert that text complexity is not the main issue and that “overemphasis on it distracts us from educational problems that are arguably much more pressing” (p. 389). I agree with this statement suggesting that more focus should be centered on improving instruction to help students develop a wide range of skills to meet the learning goals set by the Common Core as this initiative not only requires shifts in language acquisition, but also in pedagogy (Hakuta & Santos, 2012; Wolf et al., 2014).

One of the primal caveats of the Common Core is its requirement that literacy be taught in all subject areas, making literacy instruction a collaborative effort; no longer is it the job reserved for language teachers and specialists, for all teachers are expected to



teach students (including ELs) the literacies of their disciplines (CCSSI, 2015d; Linquanti & Hakuta, 2012). In order to provide effective literacy instruction, teachers must understand the language and literacy standards and the demands that they place on students, especially English Learners. In *Teacher Development to Support English Language Learners in the Context of Common Core State Standards*, Santos, Darling-Hammond, and Cheuk (2012) contend that teachers need multiple curricula and pedagogical resources to integrate students' developmental needs with academic demands. In addition to possessing the resources, teachers need to know how to optimize the following language assets: progressions, demands, scaffolds, and supports. The language progressions refer to how students acquire both conversational and academic English proficiency, and language demands refer to the language requirements embedded in the tasks of given standards, while language supports and scaffolds refer to accommodations and modifications that teachers and schools can implement to secure students' access to the content with the intention to help them understand and master it. The language progressions reflect ELs' proficiencies outlined in the ELD standards, and gives teachers an idea of where students are situated along the continuum, which would hopefully help them better prepare students to perform well on standardized assessments (Santos et al., 2012). With the CCSS demands being deeper and greater than those of previous standards, knowledge of the aforementioned language assets will equip teachers with essential toolkits to teach English Learners effectively.

For elementary teachers particularly, teaching language arts must exceed literate practices solely focusing on foundational skills to incorporate a wide range of robust social and cultural processes (Moje & Luke, 2009; Scribner & Cole, 1981; Vygotsky,

1978 as cited in Hull & Moje, 2012). According to Hull and Moje (2012), students need to engage in a broad range of authentic tasks requiring them to use funds of knowledge that are needed outside of the classroom. However, one of the primary challenges involving classroom practices is for ELs to fully engage in content-rich, meaning-making activities that require higher-order language discourse (Hakuta & Santos, 2012; Wolf et al., 2012). In order for ELs to fully participate in classroom activities, they must understand the foundational skills that are implied in the CCSS (Wolf et al., 2014). For language learning to occur more effectively, Filmore and Filmore (2012) maintain that ELs must frequently interact with native speakers and content-rich texts which reinforce each other. The overall theme for literacy instruction is that it must incorporate opportunities for engagement with challenging texts and meaningful interactions that help students develop skills needed beyond accomplishing tasks to meet standards.

While the Common Core promotes a challenging and relevant education designed to prepare all students for post-secondary success, it does not guarantee that students, especially ELs, will understand and apply the language and content skills that are expected to be taught. The interesting factor relevant to this initiative is its emphasis on the interdependence of the two most critical challenges for all students, especially ELs: academic language and content knowledge acquisition. Language is the means by which to obtain comprehension and skills. While it is challenging to acquire language proficiency and academic skills in one's first language, these tasks become even more rigorous when involving a developing language (Van Lier & Walqui, 2012). The drastic reality regarding the implementation of the Common Core is that if ELs cannot acquire

academic language proficiency, they will not understand content nor succeed academically, hence the need for English language development instruction.

### **ELD Instruction**

By law, daily implementation of differentiated ELD instruction appropriate to the English proficiency levels of English Learners must occur until these students are reclassified as fluent English proficient (CDE, 2006). Examples of English language development (ELD) programs include sheltered instruction, content English as a second language (ESL), Specially Designed Academic Instruction in English (SDAIE) (Sobul, 1995), and the Sheltered Instruction Observation Protocol (SIOP) (Echevarria, Short & Vogt, 2004; Echevarria, Vogt, & Short, 2004; Short & Echevarria, 1999;), each of which is based on particularly varying curricular and pedagogical orientations and conceptualizations of second language acquisition (Galguera, 2011). While the law requires daily ELD instruction, it does not require a specific amount of time for ELD or a specific type of it as both vary according to the discretion of each district or school. ELD is its own subject, meaning that during this time, teachers are not required to teach content, as this instruction aims to help students develop CALP to access the core curriculum. However, some schools do provide content-based ELD in which content is the medium through which English language skills are taught. The curriculum for this type of ELD is not usually grade-level equivalent, although standards-based. content-based ELD lessons primarily frontload content to ensure that English Learners have vocabulary and language structures necessary for optimal access to the content being taught (Scalzo, 2013). It is important to note that although the Common Core-aligned ELD standards expect that ELs learn academic proficiency and content concurrently,

schools are still transitioning to this model for ELD instruction. So, some schools may focus solely on developing academic language separate from content, while others may merge both during ELD instruction.

**Oral language.** ELD instruction predominantly focuses on the use of oral language and vocabulary which are two of the fundamental skills essential to reading development in addition to phonemic awareness, phonics, fluency, and comprehension (August & Shanahan, 2006 as cited in NRC, 2010). While this is true, it is important to be cognizant of ELs' lack of oral academic language development due to their spending "less than two percent of their school day in oral language development" (Soto-Hinman, 2011, p.21), most of which includes exercising trivial skills, requiring one-word responses and answering literal comprehension questions, rather than acquisition and utilization of higher order skills as emphasized by the Common Core. Not only does this delay ELs' proficiency in academic English, it also hinders their access to content (Soto-Hinman, 2011). Although the research base for ELD instruction is relatively small, it does show the importance of incorporating the foundational oral language and literacy skills in the content areas as emphasized by the ELD standards (Nordmeyer, 2008). With their study on Kindergarten ELs, Saunders, Foorman, and Carlson (2006) found that devoting additional instructional time to oral communication produced improved listening and speaking skills without jeopardizing students' overall literacy outcomes (as cited in Saunders et al., 2013). Perhaps this may be true for students in the upper grades as well. While this is a positive result of yielding more instructional time to speaking and listening, teachers must keep in mind that students must also read and write in order to become proficient in academic language.

Historically, instruction in the four literacy domains has been implemented severally, with ELD primarily centered on speaking and listening. However, the instructional focus on each domain independently of each other has proven to be detrimental to ELs' academic language and literacy development (Soto-Hinman, 2011). With listening and reading as inputs and speaking and writing as outputs, in order to be effective, ELD instruction must be well-organized to incorporate all of these domains in sync with each other, for proficiency depends upon the mutual development of the domains (Soto-Hinman, 2011). To increase the chances of students' academic success, ELD instruction must require students' use of all language modalities as they engage in intellectually-challenging activities infused with content learning (Linquanti, 2013).

Not only should ELD instruction require students, particularly ELs, to engage in meaningful tasks while using their language domains in tandem, this instruction must also emphasize students' engagement in communication and collaboration to increase their academic language development and comprehension. Calderón, Hertz-Lazarowitz, and Slavin (1998) evaluated the effects of a cooperative learning program in El Paso, Texas, called the Bilingual Cooperative Integrated Reading and Composition, or BCIRC, among 222 English proficient second and third grade English Learners. The researchers studied the effects of the BCIRC on the Spanish and English reading, writing, and language achievement of the ELs in Spanish bilingual programs during their transition from Spanish to English instruction. Compared with a control group of similar English learners, those in the BCIRC had significantly higher scores on both English and Spanish reading measures due to their receiving daily opportunities to use language to make meaning and create solutions along with teachers applying firm principles of cooperative

learning to increase student engagement. Also, BCIRC third graders were able to exit bilingual education at a significantly higher rate than comparison students. Like the previous study, a second El Paso study by Calderón and others (2005) evaluated a similar bilingual program among third graders that emphasized cooperative learning and systematic phonics, which found that students in the cooperative learning classes scored higher than comparison students on English as well as Spanish reading measures. Both studies show that it is beneficial to implement cooperative learning methods, specifically to help ELs develop English proficiency and reading comprehension. It is important to note that BCIRC is especially advantageous for lower-performing students (Calderón, Hertz-Lazarowitz, & Slavin, 1998; Stevens & Slavin, 1995 as cited in Calderon et al., 2011). It is also important to note that the second study highlights the importance of teaching foundational language skills in conjunction with collaborative learning, both of which are beneficial to ELs' academic language development.

**Explicit Vocabulary instruction.** A critical determinant of English Learners' and all students' academic language development is their academic vocabularies (DiCerbo et al., 2014; Flynt & Brozo, 2008; Snow, Lawrence, & White, 2010; Soto-Hinman, 2011). Calderon, Slavin, and Sanchez (2011) affirm that a key indicator of the quality of literacy instruction is the emphasis on vocabulary, which is the foundation for students' phonological awareness and comprehension (Beck, Perfetti, & McKeown, 1982; Carlo, August, & Snow, 2005 as cited in Calderon et al., 2011). However, Townsend, Filippini, Collins, and Biancarosa (2012) deem teaching "vocabulary in general" inadequate for understanding students' academic language development needs (as cited in Schleppegrell, 2012). Recent research on academic vocabulary instruction stresses the significance of

teaching both conventional and disciplinary-specific vocabulary, including the varied definitions of terms across disciplines, and explicit teaching of word origin, structure, and form (DiCerbo et al., 2014; Flynt & Brozo, 2008). For ELs, vocabulary development should be both the immediate and distal learning objectives, and they should engage in explicit vocabulary instruction in all content areas throughout the lessons (Calderón et al., 2005). According to Graves (2006), it is more gainful for teachers to engage students in robust and eclectic language experiences, teach words (including origin and morphology) and concepts explicitly, and facilitate vocabulary consciousness to ensure comprehension of as many words as possible during the school day (as cited in Calderón et al., 2011). The National Reading Council (2010) informs that “building vocabulary depth (the degree of knowledge of a word) and breadth (the number of words) is more challenging for ELs than native English speakers” (NRC, 2010, p. 91). In a quasi-experimental study of Word Generation, a whole-school academic vocabulary improvement intervention, middle school (grades 6–8) language minority students in treatment schools showed greater gains than English-only students (Snow, Lawrence, & White, 2010 as cited in DiCerbo et al., 2014). For six months, students in the intervention group were taught five target words and then engaged in successive tasks that incorporated utilization of the words across disciplines. Comparison of student scores on a pre- and post-multiple-choice vocabulary test unveiled that students in the intervention group learned significantly more words than students in the control group, but the effect sizes were greater for language minority students than for English-only students. In addition, performance on the vocabulary assessments predicted performance on the state assessment in language arts (DiCerbo et al., 2014). This shows that in addition to

introducing students to new terminology, engaging them in meaningful tasks involving it increases their vocabularies.

Not only is it important to teach academic terminology and implement activities that embed it, it is also imperative to explicitly stress principles essential to vocabulary acquisition as well as ensure quality ELD instruction that ensures ELs' academic vocabulary development. In a study of 23 ethnically diverse self-contained classrooms of fifth, sixth, and seventh graders in Canadian public schools in which conventions of quality academic vocabulary instruction were emphasized, Scott, Jamieson-Noel, and Asselin (2003) realized, after conducting observations for three days on (a) the time spent on vocabulary instruction; (b) the format of instruction, including individual work, small group work, or whole class instruction; and (c) instructional methods, that even in vocabulary-rich classrooms, teachers did substantial mentioning and designating and meager explicit teaching (Scott et al., 2003 as cited in DiCerbo et al., 2014). The researchers found that less than 10% of the time was focused on vocabulary development, and in the content areas less than 2 % of instructional time was spent developing vocabulary knowledge (as cited in Flynt & Brozo, 2008). Consequently, the measure and form of vocabulary instruction occurring in classrooms is insufficient for ELs or other language minority students. Therefore, Scott and colleagues suggest that more focus be placed on both curriculum and professional development that illustrates explicit vocabulary instruction (as cited in DiCerbo et al., 2014). Of equal importance, Schleppegrell (2012) marks the necessity of supporting students in meaningful learning experiences that enable them to increase their vocabulary across all content areas.



Not only are explicitly teaching academic terminology and vocabulary acquisition principles and incorporating meaningful activities that require use of the target words essential to ELs' academic language development, these skills are also crucial for their reading comprehension. Walsh (2003) found that no Basal programs emphasized the principles essential to vocabulary development and comprehension (as cited in Flynt & Brozo, 2008). This is highly unfortunate as Basal programs are one of the most frequently used elementary reading curriculums nationwide. In addition to findings from the previous study, Dunn, Bonner, and Huske (2007) reported that after receiving explicit vocabulary instruction, students scored at the 50th percentile, with score increases by as much as 30% in reading comprehension. Linking both of the previous studies, Flynt and Brozo (2008) recommend that teachers consider their instructional methods and pay close attention to their use of structured techniques to extending word knowledge for students. Furthermore, the majority of studies included in the NRP report (NICHD, 2000) revealed that direct pedagogical approaches enhanced both vocabulary and comprehension (Kamil, 2004 as cited in Flynt & Brozo, 2008). Also, the RAND Reading Study Group (2002) reaffirmed the critical relationship between vocabulary knowledge and reading comprehension (as cited in Flynt & Brozo, 2008). Both reports reiterate the importance of vocabulary development as both the immediate and distal learning objective of language instruction.

**Instructional practices.** Drawing on findings from the RAND Reading Study Group Report (2002), Flynt and Brozo (2008) provided the following recommendations for what teachers should do to foster students' academic language development: be highly selective about which words to teach (Blachowicz & Fisher, 2000); provide

multiple encounters with targeted words (Pearson, Herbert, & Kamil, 2007); provide students direct instruction on how to infer word meanings (Graves, 2000; Nation, 2001; Scott et al., 2003); promote in-depth word knowledge (Beck, McKeown, & Kucan, 2002; Marzano, 2005); and provide students with opportunities to extend their word knowledge (Beck et al., 2002; Carlo et al., 2004; Marzano, 2004; Nagy, 1997).

**Teacher challenges.** In addition to the previous instructional practices, to effectively perform ELD instruction, teachers must perform differentiated instruction—a constant challenge for all teachers. Differentiated instruction requires understanding and monitoring students’ use of academic language to meet the demands of the tasks that they engage in (Lee, Quinn, and Valdes, 2013). With the focus of ELD instruction centered on the interrelatedness of language use and the knowledge about language, teachers may find it challenging to balance their teaching between communication and comprehension, not to mention the added challenge of finding a balance between the language modalities that students use while participating in ELD. Of equal importance, teachers must realize that proficiency in vernacular English without fluency in academic language use impedes academic achievement. This presents dominant challenges for them, which include helping students identify features of academic English and develop fluency in academic discourse to perform academic tasks successfully (Fillmore & Snow, 2000 as cited in Galguera, 2011). Numerous teachers, especially those who are not bilingual, find explicitly teaching language to be challenging as linguistic features and demands which may seem clear to them may not be clear for their English Learners. So, this produces an even greater challenge regarding learning what and how to teach specifically for

language instruction, which becomes further complex as teachers expand language instruction to content as academic language demands vary among content areas. This leads to the differentiation between “genre (focused on the social purposes of the activity) and register (focused on the lexical and grammatical choices children make in doing those activities)” (Schleppegrell, 2012, p.414), which are important to mention as “the registers of schooling have historical and social origins in ways of using language associated with social class positioning in our culture” (Schleppegrell, 2012, p. 411).

While discussing the registers and genres of schooling in-depth is beyond the scope of this account, I will highlight a couple of studies that show how academic registers begin to develop in children as they participate in non-academic tasks, both of which indicate the need to identify and value the linguistic resources from which additional linguistic resources can be developed. In their report on a study of home language comprehension and production of 58 three-year-old Dutch preschool children, Scheele et al. (2012) pointed to the genre-specific nature of the development of academic language. They found home experiences in personal narrative, impersonal narrative, and instruction genres were key indicators to the children’s emergent skill in developing academic language features (as cited in Schleppegrell, 2012). Moreover, in another study accentuating the role of task and genre in studying academic language use, Crosson et al. (2012) found a relationship between engagement in higher-order writing tasks and academic language use for bilingual fourth and fifth grade students writing in Spanish (as cited in Schleppegrell, 2012). Combining the finding from both studies, Schleppegrell (2012) stressed the value that exploring the roles of genre and task brings to academic language development research and our understanding of how to support ELs’ learning.

Also, both studies reiterate the importance of engaging students' in meaningful activities, and the former study has implications for implementing instruction that draws on students' cultural funds of knowledge to increase their academic language development. Much of students' learning occurs outside of school, but teachers often find it challenging to connect their instructional practices to how students learn in environments external to school (Bransford et al., 2005). To maximize students' learning opportunities, teachers must be able to assess students' knowledge and beliefs, evaluate how they learn in each domain, and create contexts that foster their academic success (Au, 1980; Mehan, Villanueva, Hubbard, & Lintz, 1996; Tharp, 1982 as cited in Banks et al., 2005).

In addition to the aforementioned challenges, Gandara, Maxwell-Jolly, and Driscoll (2005) outlined other difficulties mentioned by more than two dozen teachers of ELs in California: Difficulty communicating with students and their families; insufficient time to teach English and content; missed class time for students, ELs being pulled out for language support; widely varying levels of proficiency and preparation of ELs in one class; lack of essential instructional resources; and lack of teacher preparation (as cited in Lucas & Grinberg, 2008, p. 608). At present, the research on academic language development and instruction offers a complicated outlook on what can be accomplished through teacher behavior as there is not yet a definitive finding of what the most effective academic language instruction is or even whether academic language can be effectively taught. Gee (2005) contends that meaning in language is cinched to context and contact, which cannot always be replicated in schools (as cited in DiCerbo et al., 2014). Nevertheless, once teachers understand the academic demands placed on ELs, they will be able to integrate them with their developmental needs. No matter the instructional

decisions of teachers or contexts, ELD instruction aims to expand students' use of higher-level academic discourse as it includes supplements for the concepts incorporated within the state language arts content standards (CDE, 2006). However, a well-balanced curriculum that focuses on language form and functionality has yet to be implemented, but ELD instruction is designed to be an action-based way of teaching and learning that combines both aspects smoothly.

### **Teacher preparation for academic language development**

In a recent review of research on teaching academic English to English Learners, DiCerbo et al. (2014) posited the need for expanding all teachers' knowledge of language and language development as the enhancement of the language and literacy skills of ELs depends heavily on this (Adger, Snow, & Christian, 2002 as cited in DiCerbo et al., 2014; Bunch, 2013). The researchers maintained that conversations on preparing and training teachers about academic language instruction for ELs comprise targeting the understandings and abilities that teachers need to help students grasp, discern, and yield the language of the academic content. Bailey et al. (2010) argue the need for teachers to engage in "thinking and acting linguistically" (p. 608 as cited in DiCerbo et al., 2014). Wong, Fillmore, and Snow (2000) describe this thinking as teachers' acquisition and use of the linguistic features and discourse structures of their content areas as they relate to the academic language functions expected of students. Acting linguistically denotes teachers as analysts and instructors of discourse structures and rhetorical tools that are embedded in texts from their content areas (Wong, Fillmore & Snow, 2000 as cited in DiCerbo et al., 2014).

**Coursework.** Preparing and training teachers to think and act linguistically requires reexamining the content of the coursework and experiences that both preservice and in-service teachers engage in (DiCerbo et al., 2014). Wong, Fillmore, and Snow (2000) campaign for the “systematic and intensive preparation” of teachers in educational linguistics (p. 4 cited in DiCerbo et al., 2014). Making the case that few US schools require students to study a foreign language, which may contribute to teachers’ inability to assist ELs in doing so, Wong, Fillmore, and Snow (2005) advocate for PTs to take linguistic courses to expose them to the structure and function of language in order to develop knowledge and skills appropriate to helping ELs develop the language-related skills needed to be successful in school (as cited in Lucas & Grinberg, 2008). They suggest that all teachers should understand the operation of language modalities across disciplinary contexts and develop the linguistic knowledge and ability to assist students in developing fluency in each modality within the academic discipline(s) they teach. While novice teachers have countless school-related experiences in their native language to inform their language instruction practices, most have limited or no experiences as foreign language learners (Lortie, 1975 as cited in Galguera, 2011). Perhaps all pre-service teachers could learn about language use across all modalities in a language other than their primary language from taking foreign or second language courses as “foreign language courses emphasize culture as a cardinal aspect, and second language courses aim to help teachers acquire functional proficiency in a language different from one’s native language(s) (Fishman, 2001, p. 186 as cited in Galguera, 2011).”

**Shadowing ELs.** Loughran (1997) shed light on the dearth of a collaborative discernment of pedagogy for preservice teacher preparation among teacher educators

(Galguera, 2011). One of the many challenges of teacher educators for language development is helping PTs focus on the meaning of language versus its form and general features which is what people naturally do. They are also challenged to raise PT awareness of the relationship between their knowledge, actions, and academic language use (Galguera, 2011). Soto-Hinman (2011) suggests training teachers in EL shadowing to systemically create awareness around the importance of academic oral language development. While shadowing ELs, “teachers monitor the academic language and listening opportunities of ELs at five-minute intervals over a two-hour period of time”, allowing them to identify patterns surrounding who speaks the most in classrooms, and recognize the absence of opportunities for academic oral language use in the classroom (p.21).

Soto-Hinman (2011) recommends shadowing ELs as a method to be utilized for both teacher education programs and other professional development agencies for teachers as it helps them understand the importance of academic oral language development and how to incorporate it into their lesson planning and implementation. These activities give pre-service teachers insight into the academic experiences of ELs. Such shadowing activities have been implemented in districts, county offices of education, and colleges across California including the Los Angeles Unified School District (LAUSD), Santa Barbara, and San Luis Obispo County Offices of Education, and Claremont Graduate University, among many other teacher education and professional development agencies (Soto-Hinman, 2011). While shadowing ELs is a widespread enterprise, one must be aware that it is pre-mature for teachers to engage in this activity before studying both the features of academic oral language and the divergent forms of

listening that they will monitor. The time spent on learning how to shadow ELs varies across pre-service and in-service education agencies as some courses implement this activity mid-way through the course, while education agencies may spend a full day covering the academic oral language features for listening and speaking, followed by a day of shadowing ELs.

At the teacher education level, after formally shadowing ELs, PTs must engage in professional development centered on how to create more academic oral language development. In addition, teacher educators must demonstrate effective academic oral language interaction and model how to infuse such activities in pre-service teachers' lesson planning. Soto-Hinman (2011) asserts that Think-Pair-Share is the most fundamentally effective strategy for this type of professional development across all levels. With this strategy, teachers think of an event pertaining to the subject at hand, pair with a partner to discuss it, and share their feedback with each other and the whole group. There are multiple ways to implement this technique, and it varies accordingly.

As a result of shadowing ELs, teachers become more conscious to include opportunities for academic oral language use into their lessons. For example, an LAUSD teacher stated, "The person talking most is the person who is learning most. . . . And I'm doing most of the talking in my class!" (Soto-Hinman, 2011, p.22). This strategy enables teachers to reflect on their instructional practices and their impact on student academic oral language development. The previous example shows how the teacher speaking the most in the classroom may have impeded students' academic oral language development by them speaking less. Not only is it important for teachers to be mindful of who speaks the most in the classroom, it is also important that they examine the types of questions to



ensure that they elicit academic dialogue that extends beyond one-word answers. Once teachers identify patterns and reflect upon them, they become more aware of their instructional practices and include open-ended questions and diverse conversational opportunities in their instructional design. Soto-Hinman (2011) suggests that teachers provide reciprocal teaching opportunities to help students increase their academic oral language proficiency. Based on the assumption that one learns more by teaching, reciprocal teaching is a student-centered technique used to allow students to teach each other about what they learned. This technique also increases the following skills of students as they take on said roles: summarizing, questioning, predicting, and connecting. With reciprocal teaching, Soto-Hinman (2011) recommends that students rotate between roles for each task, and notes that “ELs may need more time, practice, and scaffolding with a new skill, and must be explicitly trained in how to have such academic conversations” (p.23). While shadowing ELs is a professional activity that promotes teachers’ critical awareness of students’ academic oral language development, both think-pair-share and reciprocal teaching can be used for professional development and in the classroom to facilitate students’ academic oral language development.

**Working with linguistically diverse students.** In a study to examine what can be learned regarding teacher candidates’ preparation for working with linguistically diverse students, Bunch et al. (2009) documented how eight elementary teacher candidates from teacher preparation programs throughout California discussed issues related to language and learning for ELs in their extensive written materials about their teaching and their students’ learning submitted as part of their PACT Teaching Events. The PACT is a high-stakes preservice teacher performance assessment designed to

evaluate teacher candidates to determine whether or not they meet certain guidelines related to teaching and learning. However, this study extended beyond the score candidates received on the PACT rubrics in order to closely examine how candidates articulated their understandings of the relevant issues. The researchers were primarily interested in utilizing the PACT as a tool to support and evaluate teacher candidates' preparation for working with linguistically diverse students in a way "that integrates a focus on issues related to linguistically non-dominant students, rather than having teachers consider these issues as separate, "add-on" concerns that may become marginalized" (p.106).

By examining written materials submitted with the PACT, Bunch et al. (2009) found key supports that the candidates either incorporated into their teaching event or identified in their reflections as measures that could have improved their instruction. Researchers then highlighted how the candidates articulated the challenges inherent in mathematics teaching and learning for ELs and other language minority students. Findings from this study show that all of the candidates expressed the significance of using multiple representations to make language and mathematical concepts comprehensible. This enabled the candidates to illustrate and explain both math problems and concepts lucidly. In addition to utilizing multiple representations, the candidates promoted and facilitated students' use of mathematical vocabulary and discourse by focusing on the meanings and uses of technical terms. This proved to extend both the students' English and academic English as students used all four language modalities to discuss and apply math concepts. While promoting and facilitating students' use of academic vocabulary and discourse proved beneficial for the students, the candidates

had mixed feelings about the demands of these processes. A few of the candidates did not find these to be too demanding as they perceived math as a subject heavily dominated by numbers, while other candidates found these to be extremely demanding as language played a huge role in concepts and content presented to students. Perhaps the demands associated with promoting and facilitating the use of academic vocabulary varied according to academic expectations and tasks.

**Key strategies.** Other strategies that were proven to be key supports by the candidates included: using a variety of participation structures (whole group, small group, and partnering), supporting use of students' native languages, and connecting to students' schemata and community knowledge. It is important to note that some of the candidates utilized strategies that viewed students' native languages as resources rather than barriers to their learning and language development. These candidates promoted use of their students' native languages to access math content and enhance their language development. On the other hand, other candidates relied heavily on native language use without providing support. These candidates often used translation materials or depended on bilingual personnel and found this to be ineffective. This shows that while students' native language should be promoted to learn English and content, appropriate resources should also be implemented to facilitate students' use of their native languages for learning in English.

**PT challenges.** As it pertains to the challenges of teaching and learning mathematics in linguistically diverse classrooms, teacher candidates varied in how they viewed: a) the nature of language in learning math and learning math in English, b) the language and learning demands, and c) how they attempted to support ELs' learning. Most of the

challenges were attributed to students' dispositions, family support, and instructional contexts. Two of the candidates regarded ELs' challenges of learning as inherent. They perceived that students' challenges were due to intrinsic characteristics or behaviors such as laziness or distraction, which contributed to learning errors or incomplete assignments. In addition, several candidates deemed that ELs' math challenges were due to lack of parental or familial support as some of the students lacked academic resources at home to reinforce what they learned in the classroom, and often had parents who were uninvolved in their academics. As it pertained to instructional contexts, some of the candidates expressed that ELs' challenges lay not in their inherent limitations, behaviors, or familial backgrounds, but in their instructional contexts. For instance, one candidate expressed that her classroom management was problematic as she did not pause to observe whether or not students paid attention to her modeling, while another candidate explained that her lessons incorporated multiple activities that often interfered with students' learning opportunities. She mentioned that students often worked on some activities and ran out of time to engage in more challenging activities, which prevented them from developing higher-level academic skills. From this study, Bunch et al. (2009) display how the PACT can be used to gain insight on teacher reflection as well as demonstrate multiple instructional challenges that occur in the classroom pertaining to academic language, classroom management, and beyond.

**Professional learning tasks.** DiCerbo et al. (2014) call for the need for teachers to possess linguistic knowledge necessary to appropriately select instructional tools and materials within their teaching domains that support students' development of increasingly sophisticated language abilities and to plan instructional activities that

provide opportunities for students to use language in increasingly meaningful ways. To prepare teachers to do this, Wong, Fillmore and Snow (2000) assert that educational linguistics courses be mandated in teacher education programs (as cited in DiCerbo et al., 2014). Moreover, Ball and Cohen (1999) suggest the use of professional learning tasks as vital requirements in preservice and in-service programs. A professional learning task (PLT) is a sequence of exercises in which the curricula are established in the activities, inquiries, and problems of practice, and facilitates “the development of a disposition of inquiry” (p.27 as cited Galguera, 2011). Furthermore, in a study of the approach to inquiry, Merino (2007) found that teacher research projects can influence their perceptions of their preparedness to teach academic language.

After several years of teaching English language development methods courses for multiple and single subject preservice teachers, Galguera (2011) performed a self-study to assess the following assumption:

By providing preservice teachers with opportunities to examine specific functions of language in academic contexts and experience ways in which language is used to represent knowledge in classrooms as well as the power and status differences encoded in language, they begin to construct deep understandings of language as pedagogical content knowledge (Shulman, 1987) (p.90)

While pedagogical content knowledge and all that the above assumption entails is important, I use Galguera’s study to focus more on the professional learning tasks that pre-service teachers engaged in, and the insights that they provide as a result of their experiences, which contributes to the discussion of teacher education pedagogy for academic language development. Before further discussing the study conducted by

Galguera, it is necessary to explain what a gestalt is. Korthagen and Kessels (1999) use the term *gestalt* to refer to the numerous subliminal antecedents of teacher actions that denote most teaching situations, and campaign for a “realistic approach” to teacher education that requires PTs to analyze their gestalts, schemas, and theories (in that order) to establish coherence across all three levels of teacher knowledge and behavior (p. 10 as cited Galguera, 2011). Tigcheelar and Korthagen (2004) noticed a difference between novice and experienced teachers in the degree to which they recognized and considered their gestalts. After many similar situations requiring immediate reaction, the researchers noticed experienced teachers’ ability to analyze their behaviors. They implemented three approaches to help preservice teachers connect theory and practice: (a) exposing gestalts, (b) dealing with recent experiences and gestalts, and (c) creating new experiences (as cited in Galguera, 2011). These approaches embrace four principles of realistic teacher education distinguished from more traditional theory-to-practice approaches: (1) focusing on pre-service teachers’ personal experiences and actions, (2) the promotion of reflecting on these experiences and actions, (3) collaboration between PTs, and (4) using PTs’ existing gestalts as the basis for their professional development (Tigcheelar & Korthagen, 2004, p. 677 as cited in Galguera, 2011).

With the aim to unearth preservice teachers’ gestalts toward teaching for language development, Galguera (2011) engaged PTs in a PLT to create new gestalts and, through examination, reflection, and discussion, develop new experiences which would become the basis for pedagogical language knowledge. For this study, pre-service teachers wrote reflections in a structured format to summarize activities that they engaged in, and included insights and concerns from a student’s and a teacher’s perspective. By

using participant structures, Galguera (2011) aimed to understand the awareness of pre-service teachers' emerging knowledge about teaching academic language development in order to improve their effectiveness in learning to teach. "Participant structures are explicit planned interactions that scaffold students' comprehension and production primarily of oral language in accordance to academic discourse norms" (Galguera, 2011, p. 93).

For her PLT, Galguera (2011) focused on two participant structures: an Extended Anticipation Guide (EAG), which included a reading passage in Spanish, and an Oral Language Development Jigsaw (OLDJ) which was in English only. The following were learning objectives for EAGs: (1) developing metacognitive awareness for reading comprehension, (2) utilizing strategies for reading with a purpose, (3) note-taking skills, and (4) quoting pertinent passages. The overall aim for implementing this participant structure was to depict the power of developing schemata and metacognition as language development scaffolds (Walqui, 2006 as cited in Galguera, 2011). The EAG also exhibits an instructional approach for utilizing language to describe complexity, engage in critical thinking, and provide evidence, which are also skills that are emphasized by the Common Core standards (Zwiers, 2008 as cited in Galguera, 2011). Aiming to develop awareness for reading in a second language and foster empathy toward language learners, the EAG also incorporates both figurative and explicit expressions for diverse audiences in addition to the other academic language demands previously mentioned (Zwiers, 2008 as cited in Galguera, 2011).

Similarly, the OLDJ also promotes academic language development at the discourse level. Despite their limited proficiency in Spanish, most of the pre-service

teachers expressed feeling both challenged and surprised by their own language production. When asked what stood out the most to them pertaining to teaching for language development, most of the PTs mentioned pre-reading activities and teaching reading as aspects of language development along with “scaffolding”, “context”, and “background knowledge” as relevant components of academic language development. Both the EAG and OLDJ helped surface PTs’ gestalts and experiences as well as create new experiences regarding academic language use, but the OLDJ promoted empathy for English Learners as it required preservice teachers to read a newspaper in Spanish. However, the EAG was more effective in revealing old gestalts and creating new ones. Overall, Galguera’s study exemplifies the use of professional learning tasks for teacher education to discover pre-service teachers’ awareness of academic language development, and it contributes to the literature on teacher preparation for academic language development.

**Dispositions.** During the standards-based movement of the 1990s, pre-service teacher dispositions became a major aspect of the teacher education discourse (Freeman, 2003 as cited in Villegas, 2007). Dispositions are the habits of people to behave in certain ways under specific circumstances, based on their convictions--attitudes and beliefs (Villegas, 2007). PT convictions are imperative elements of their immediate and distal professional development (Nespor, 1987; Pajares, 1992 as cited in He & Levin, 2008). A conglomerate of their convictions is what Cornett (1990) refers to as personal practical theories, which inform teachers, relying upon their past experiences derived from non-instructional tasks that emerge as a consequence of creating and teaching lessons. In other words, these are systemic personal theories that teachers possess and use to make



instructional decisions based on their past instructional experiences. If teacher educators and cooperating teachers are aware of PTs' personal practical theories, they can better facilitate their professional development and teaching to promote equitable instruction (as cited in He & Levin. 2008).

Lucas and Grinberg (2008) identify the following convictions associated with teaching ELs: “affirming views of linguistic diversity and bilingualism, awareness of the sociopolitical dimension of language use and language education, and inclination to collaborate with colleagues who are language specialists” (p.612). The first conviction views ELs' linguistic diversity as resources, and their English proficiencies as abilities rather than deficiencies (Gonzalez & Darling-Hammond, 1997; Lucas, Henze, & Donato, 1990; Maxwell-Jolly & Gandara, 2002 as cited in Lucas & Grinberg, 2008). Empirical research suggests that there is a relationship between teachers' convictions about their language abilities and learning and teachers' expectations for students (Byrnes, Kiger, & Manning, 1996; Byrnes, Kiger, and Manniing, 1997; Platt & Troudi, 1997; Walker, Shafer, & Iiams, 2004; Youngs & Youngs, 2001 as cited in Lucas & Grinberg, 2008). An example of this is Pygmalion in the classroom as shown in a study by Rosenthal and Jacobson (1968) in which teachers were told that students were gifted (even when this was false), and held higher expectations for them than other students, which resulted in the former group of students performing higher than the latter group (as cited in Ball, 2002). PTs must be careful not to fall prey to believing the myths and stereotypes of ELs, but instead” learn how to learn from these students and members of their communities” (Banks et al., 2005, p.247).

The second conviction pertains to teachers being socio-culturally conscious, realizing that language is not politically neutral, but is instead tied to a sociopolitical context and plays out in power relations. Teachers who are socio-culturally conscious respect all learners and their experiences, are confident in students' learning capacities, and are willing to evaluate and alter their practices as well as find new solutions to help all students learn (Delpit, 1995; Ladson-Billings, 1994; 1995; Villegas, 1991; Villegas & Lucas, 2002 as cited in Banks et al., 2005). These teachers are also self-aware of how their culture shapes their perceptions, which impact their instructional practices (Banks et al., 2005). It is equally important for teachers of ELs to develop a sociolinguistic consciousness to understand ELs as speakers of non-dominant languages and recognize that these students face challenges that extend beyond developing English proficiency and attaining high academic achievement in the classroom (Olsen, 1997 as cited in Lucas & Grinberg, 2008). These teachers realize that ELs' ways of thinking are not equally valued by the dominant society and curriculum, and these teachers critically reflect on their practices to become self-aware of whether or not they are reinforcing hegemony and maintaining the status quo that keeps ELs at a disadvantage (Lucas & Grinberg, 2008).

Faltis and Valdes (2016) suggest that self-reflection and critical awareness of language and language diversity can be developed through activities that require pre-service teachers to examine their convictions and feelings toward language, language variation, and educational experiences with linguistically diverse children. These activities can then be expanded to include reflection and awareness concerning student language uses, particularly among students who use nonstandard language. Perhaps this would help PTs understand that judgments of ELs' language use are social, not linguistic,

as the value of language use is intimately tied to the context in which it occurs (Valdes et al., 2005). PTs who are socio-culturally conscious place more value on the language users than language use; contrary to society, which has socialized us to adopt attitudes, sometimes unconsciously, through dominant social norms (Wolfram, Adger, & Christian, 1999 as cited in Valdes et al., 2005). Bartolome (2000, 2002) suggests ideological clarity is a prerequisite for teachers to develop sociocultural and sociolinguistic consciousness (as cited in Lucas & Grinberg, 2008). Finally, the third conviction is self-explanatory as it stresses the importance of teachers consulting colleagues who are more expert in language use and language learning to inform their practices for ELs.

In “Dispositions in Teacher Education”, Villegas (2007) emphasizes the need for teacher education programs to examine PTs’ dispositions related to social justice as teaching inspired by social justice principles aims to teach all students equitably. In like manner, noticing that much of the literature focusing on the knowledge, skills, and dispositions that teachers should have often overlooks the capacities needed to work with diverse students, Grant and Agosto (2008) point to the need for more research that considers the relationship between teacher capacity--“the core knowledge, skills, and dispositions that teachers should possess to teach in today’s classrooms”--and social justice (Howard & Aleman, 2008, p. 158). Contributing to teacher capacity is the role that teachers play and their perceptions of themselves and their role in the classroom, for all of these aspects interact with each other (Grant & Agosto, 2008). Bransford et al. (2005) explain that all teachers have underlying theories of learning which must be made explicit so that they can be evaluated to improve practice. All too often pre-service teachers generally fail to challenge their beliefs throughout their training, only to have to contend

with them when they become in-service teachers (Rathis, 2001; Zeichner & Tabachnick, 1981; as cited in Villegas, 2007). It is the job of teacher educators to provide and facilitate opportunities for PTs' to demonstrate their dispositions, especially as they pertain to their expectations for disadvantaged students. This leads to a bigger issue: PTs bring varied experiences into their teacher education programs, and teacher educators often rely on their colleagues in other departments to teach the PTs what they need to know (Lortie, 1975; McDiarmid & Clevenger-Bright, 2008). Nonetheless, PT dispositions are often contingent upon their abilities and shown through their patterns of action (Villegas, 2007). These dispositions can be assessed as teacher educators and cooperating teachers observe the expectations that PTs set for their students, how they treat students and their skills for teaching students equitably.

In a mixed method study to discover which types of knowledge and experiences secondary pre-service teachers need to provide culturally-responsive math teaching, Aguirre, Zavant, and Katanyoutanant (2012) found firm pre-service teacher receptivity for supporting academic language development for English Learners and incorporating cultural funds of knowledge into mathematics lessons, and mixed receptivity for incorporating social justice into mathematics lessons. Of importance, analysis of teacher resistance revealed challenges with pedagogy rather than ideology. The primary implication of this analysis is that teacher education must include "intellectual tools" to support and expand upon pre-service teachers' development of pedagogical content knowledge in substantive and dynamic ways (Grossman et al., 2005 as cited in Aguirre et al., 2012). This study also implies that by observing the points of PT receptivity and resistance, and being willing to critically reflect, teacher educators can better inform

PTs in their respective teacher education programs, and use these points as directives for their course designs. While this study looked at how secondary pre-service teachers developed pedagogical content knowledge (PCK) through a culturally responsive mathematics teaching approach, its implications are applicable to teacher preparation of all grades and content areas, particularly for elementary PTs and their teacher educators as academic language at the elementary levels is foundational to all other academic development. This study also shows that although PTs may not find it challenging to accept the principles of how students develop academic language, they do struggle with how to apply these principles; thus, a divide between theory and practice, which I discuss later in this account.

### **Pedagogical language knowledge**

The literature shows the pertinence of teachers understanding the linguistic needs of English Learners in order to teach these students effectively (Cadiero-Kaplan & Rodriguez, 2008; Cartiera, 2006; Hutchinson, 2013; Toscano & Vacca- Rizopoulos, 2014). Given that language is central to understanding, teaching, and achieving the Common Core standards, all teachers need to know about language, and teacher education programs must foster opportunities for PTs to develop this knowledge.

Grossman et al. (2005) refer to this as pedagogical content knowledge, or:

... the pedagogical understandings of the subject matter ... which include, among other things, the ability to anticipate and respond to typical student patterns of understanding and misunderstanding within a content area, and the ability to create multiple examples and representations of challenging topics that make the content accessible to a wide range of

learners (p. 201 as cited in Aguirre et al., 2012).

In “Pedagogy Language Knowledge: Preparing Mainstream Teachers for English Learners in the New Standards Era”, George Bunch (2013) provides insights into how teachers can respond to the challenge of implementing language pedagogy to ELs effectively. Bunch recommends that teachers view and treat language as action to support ELs in meeting the lofty goals of the CCSS. He argues that teachers need pedagogical language knowledge different from the pedagogical content knowledge about language needed by both ESL teachers and the pedagogical content knowledge mainstream teachers need in the core subject areas. Bunch (2013) defines this pedagogical language knowledge as the “knowledge of language directly related to disciplinary teaching and learning and situated in the particular (and multiple) contexts in which teaching and learning take place” (Bunch, p. 307).

Villegas (2007) suggests that building teachers’ linguistic expertise requires competencies for creating classrooms that build upon students’ cultural strengths while engaging them in meaningful tasks. These competencies include knowledge of: second language acquisition principles, the difference between informal language and academic language, the time it takes for ELs to become proficient in English, and how anxiety can cause students to shy away from participation (Lucas & Villegas, 2011 as cited in Bunch, 2013; DeCapua & Marshall, 2011). However, it is imperative that teachers recognize aspects of daily talk before they study linguistics (Valdes et al., 2005). Valdes et al. (2005) argue that in order to support the academic language development of ELs, teachers must understand how language functions in their own personal lives and in the lives of students who are perceived as not having language challenges. Attending to their

personal linguistic registers or ways of using language across contexts will help them hone in on how ELs' language adapts across contexts. As teachers attend to language functionality, they will understand that as ELs' develop two or more languages concurrently, the languages will not develop parallel to each other, but will be specialized as they use each language for specific contexts, for "we use language in different ways to do different things" (Schleppegrell, 2012, p.411). According to Faltis and Valdes (2016), the literature is limited for teacher preparation for what K-12 teachers should know about language and disciplinary language for English learners as the primary foci of this field is on academic content, classroom management, differentiated instruction, and cultural diversity. While each of these topics is important and relevant to ELs in some way, language and the role that it plays in students' academic development are often overlooked.

**Linguistic approaches.** The literature on teacher education approaches for teaching students from linguistically diverse backgrounds is also limited, with most studies on initiatives that have been implemented, being descriptive and few of these being empirical measuring implementation effectiveness (Lucas & Grinberg, 2008). Moreover, in response to the pedagogical language knowledge needed for teachers to meet the CCSS language and literacy demands, attention has been given to the systemic functional linguistics (SFL) theory (Halliday, 1993 as cited in Bunch, 2013). Unlike traditional language acquisition approaches, SFL combines linguistic features embedded in texts and tasks with the social contexts of learning environments, focusing on language selections that impact and are impacted by varying purposes (Bunch, 2013). This theory is being emphasized in response to concerns that traditional approaches (such as

sheltered instruction and comprehensive input) fail to focus explicitly on linguistic features of academic language (Aguirre-Munoz et al., 2008 as cited in Bunch, 2013). Brisk and Zisselsberger (2011) argue that making linguistic forms explicit increases ELs' access to information (as cited in Bunch, 2013). However, the two primary demands to enforce SFL is the knowledge of teacher education programs to teach PTs about it, and the time for teachers to implement it (Bunch, 2013).

As part of a federally-funded partnership between the teacher education program at the University of Massachusetts Amherst and Massachusetts urban school districts aimed to prepare mainstream teachers to support EL academic language development, the Master's degree and ESL certificate for both in-service and pre-service teachers require candidates to participate in a project that combines aspects of SFL and multi-literacies (Cope & Kalantzis, 1993) as they become apprenticed into analyzing linguistic registers of their students' literacy practices and implement responsive pedagogical instruction (Gebhard & Willett, 2008). This project was guided by four principles: (1) language is a dynamic system of linguistic choices; (2) academic language and informal language differ in significant ways; (3) teaching academic language extends beyond teaching vocabulary; and (4) the purpose of academic language is not to replace home and peer ways of language use (Gebhart & Willett, 2008 as cited in Bunch, 2013). At the heart of this project was an integrated focus on "the linguistic features of disciplinary texts and the role of language in interests, commitments, and power dynamics inherent in texts inside and outside the classroom" (Bunch, 2013, p.314). For this project, teachers' coursework centers on local issues facing targeted audiences of students. The teachers create curriculum based on a model that requires them to select a task that integrates



interests of students, themselves, and their schools' curricula goals, and state standards. They then select a specific genre aligned with students' reading and writing purposes, and explicitly analyze linguistic features of disciplinary texts (Gebhard & Willett, 2008 as cited in Bunch, 2013). As a result of participating in the project, a majority of the teachers developed a deeper understanding of content specific language practices used to create content knowledge. However, numerous teachers opposed implementing this approach, but admitted that engaging in a multi-faceted approach to professional development that included instruction integrating standards, SFL approaches, and multicultural literacy has potential for productivity (Gebhard & Willett, 2008 as cited in Bunch, 2013). Overall, research on professional development that focuses on functional linguistics has been perceived to be useful as analysis of EL writing has indicated that limited attention given to grammar is inadequate to address the types of errors that occur in EL student writing. This suggests that teachers need an in-depth knowledge of academic language features within their disciplines to address EL writing challenges (Schleppegrell, 2004 as cited in DiCerbo et al., 2014).

**Sociocultural approaches.** Other approaches to developing pedagogical content or language knowledge have focused less on linguistic features and more on language for participation (Ball, 2002; Bunch, 2013). These approaches treat language as a resource and begin identifying social structures and demands on language users based on the contexts that they are in rather than starting with the linguistic features of texts (Bunch, 2013). From this view, meaning-making emerges from the daily tasks that individuals engage in, rather than the grammar of language, and ELs' language development results from their social interactions within and beyond the classroom (Hawkins, 2004; Johnson,

2009 as cited in Bunch, 2013). Of importance, Cazden (1986) outlined approaches to discourse analysis prevalent in the 1970s and 1980s which examined classroom participation and structures, features of teacher talk, cultural and peer diversity, and classroom discourse and student learning (as cited in Ball, 2002).

**QTEL.** Walqui (2011), through WestEd's Quality Teaching for English Learners (QTEL) combines both linguistic and social learning aspects to engage teachers and teacher educators in professional learning tasks to develop pedagogical language knowledge (WestEd, 2005-2015a; Bunch, 2013). QTEL is a professional development initiative that provides educators with the tools they need to help all students achieve the overall goal of the CCSS: college and career readiness. This approach includes "high challenge and high support for teachers and students to promote literacy achievement" (WestEd, 2005-2015a). This approach features: high expectations, rigor, quality interactions, and a focus on language and quality curricula (WestEd, 2005-2015a; WestEd, 2005-2015b).

Based on sociolinguistic principles that explain how teachers learn and promote students' language use for specific purposes based on contexts, learning that results from QTEL is recognized when measured quantitatively and qualitatively, and evolves with time (as cited in Bunch, 2013). In two randomized studies of QTEL implementation, no improvement of school-based standardized tests occurred, but both studies were unable to isolate effects of QTEL, rendering them unclear (Bos et al., 2012; Rockman et al., n.d. as cited in Bunch, 2013). In another study measuring classroom quality to specifically address QTEL-aligned practices, a statistically-significant impact of student-to-student interaction resulted for QTEL compared to the control (Bos et al., 2012 as cited in Bunch,

2013). So, QTEL does have some effect, but this is a fairly recent initiative that is being implemented. Therefore, long-term results of this effort remain to be seen, but it is an innovative approach to teacher education that addresses EL education as well as promotes research engagement for pre-services teachers, who are predominantly practitioners.

### **Professional development**

While providing professional development to educators to meet the language needs of English Learners to achieve the CCSS, Kenji Hakuta and Jeff Zwiers (2014) discovered three “under-realized principles”: 1) language development must progress with each lesson; 2) all teachers are language teachers (Schleppegrell, 2012); and 3) professional development for academic language development is complex and must be addressed strategically (Amos, 2014a). For the first principle, the researchers addressed the need to shift from the traditional way of teaching academic language in which teachers pre-teach vocabulary and provide sentences. Academic language instruction should require students to engage in authentic tasks using the new vocabulary, making the language meaningful while promoting class interaction. This shift helps students build upon the vocabulary and meet the standards which include progressive learning goals as students develop academically (Amos, 2014a, CCSSI, 2015c). This under-realized principle also points to the importance of oral language development. Researchers emphasize that teachers can no longer afford to ignore students’ listening and speaking skills as the standards for these domains are more demanding than ever before. The second under-realized principle highlights the need for teachers to use multiple types of techniques to help students develop academic language across content and grade levels. These include: using complex texts to expand vocabulary; clarifying complex

terminology, modeling, guiding, and authentic independent and collaborative tasks. Last, but not least, the third under-realized principle centers on teachers' need to solidify understanding of how challenging content is embedded in texts across subject areas. Understanding the intricacies that are constructed within texts across content involves collaborative inquiry among teachers to unfold the overlaps (Amos, 2014a). All of these under-realized principles align with the key literacy shifts accompanying the Common Core State Standards, emphasizing the needed pedagogical shifts from traditional practices to diverse effective strategies.

**Effective strategies.** Teachers working with English Learners found professional development most favorable when it integrated opportunities for hands-on practice with teaching strategies readily applicable in their classrooms, in-class examples with their own or a colleague's students, and personalized mentoring (Marsh and Calderón, 1989 as cited in Calderón et al., 2011). Moreover, Lara-Alecio and colleagues (2009) found that ongoing biweekly professional development improved Kindergarten teachers' work with English Learners (as cited in Calderon et al., 2011). The teachers became more effective after receiving training in eight specific strategies: enhanced instruction via planning, student engagement, vocabulary building and fluency, oral language development, literacy development, reading comprehension, parental support and involvement, and reflective practice through portfolio development. Furthermore, Tong and colleagues (2008) credited the acceleration of English learners' oral language development to well-planned professional development (as cited in Calderon et al., 2011).

In a study conducted to determine strategies upper elementary mainstream teachers were learning through professional development and which strategies they found to be effective in working with their English Learners, Bowers et al. (2010) found that direct and structured focus on the development of academic English, notably advanced oral-language development is effective for student success. The primary purposes of this study were to determine which strategies teachers felt improved student proficiency and why, and to investigate the relationships between teacher professional development focused on improving students' academic-language skills and their reported implementation of research-based instructional strategies. During their professional development, the teachers were exposed to several strategies that fell under one of the four categories: building background knowledge, comprehensible input, explicit teaching, and opportunities to practice.

While the teachers learned about several strategies during their professional development activities, the researchers were particularly interested in teachers' efficacy in implementing the strategies. The researchers found that teachers determined that specifically designed academic instruction in English (SDAIE) (Los Angeles Unified School District, 1993) and A Focused Approach (Dutro & Moran, 2003) were effective instructional strategies for developing literacy with English Learners. However, it was challenging to identify specific strategies that were effective as these approaches incorporate a wide range of techniques for teachers to integrate into their instruction. In addition, 88% of the third and fourth grade teachers reported that strategies associated with building background knowledge were effective in helping students access grade level content, while 63% of the teachers attributed the credit to explicit teaching.

To explore the frequency of strategy use during a typical week, Bowers et al. (2010) asked respondents to rate strategy use on a 4-point scale, with 1 being never and 4 being more than five times a week. The following strategies were used more than five times per week by more than 50% of the participants: providing wait time (87.9%), modifying speech (63.6%), providing students with opportunities to orally elaborate concepts (61.7%), using a variety of grouping strategies (57.9%) integrating more than one language skill (57%), linking past learning with new content (53.8%), and activating prior knowledge before content area instruction (52.8%). The least frequently used strategy, which fell into the Comprehensible Input category, was using the students' native language to clarify concepts, with only 11.2% of teachers using the strategy more than five times per week and over 50% never using native languages to clarify content.

Moreover, graphic organizers were found to be highly useful for instruction as 28% of teachers deemed graphic organizers as an effective instructional strategy, and 50% reported that they used them more than five times per week and 85% used them more than three times per week. While this study has multiple implications for strategies effective for helping ELs learn, it is important to highlight the significance of using students' native language as a resource to enhance their literacy development (Bowers et al., 2010). Research illuminates the vital benefit of incorporating ELs' native language(s) during instruction. ELs who have strong literacy skills in their native languages are able to transfer their skills, but must be explicitly taught how to (NRC, 2010). Although English is the target language, it is cardinal that teachers respect all native languages represented in the classroom, for this demonstrates respect for all students' home cultures as well. "Just as language and identity are interwoven, so are culture and identity"

(Calderón et al., 2011, p.111), Strategies that incorporate ELs' native languages and cultures lower their affective filters by allowing them to not only communicate in their native languages; it also increases the chances that they will develop comprehension smoothly and become more eager to use new academic English terminology to engage in tasks meaningfully (Calderón et al., 2011),

As it pertains to the limitations of this study, the researchers noted that classroom observations would have provided a closer lens into the frequency and types of instructional strategies reported. They also mention that increasing the scale rating from four to six would have provided more variation in frequencies, which would have given a more accurate idea of the most frequently used strategies of those reported. Overall, this study shows that the types of strategies that teachers implement are heavily influenced by their professional development. While this provides insight into how often teachers use certain strategies, more research is needed to determine which strategies are beneficial for developing analytical skills and other higher level literacy skills needed to achieve Common Core standards. This shows the need for longitudinal classroom research to explore and contribute to the research base to determine whether or not the most frequently used strategies in this study contribute to higher-level literacy skill development (Schleppegrell et al., 2004 as cited in Bowers et al., 2010). Seeing that academic language development is essential to attain the goals set by the Common Core, this creates both a considerable opportunity and an urgent challenge to enhance teacher education for all students, especially English Learners. Considering ELs' challenges and the (lack of) resources that they enter school with, how are pre-service teachers being

prepared to support these students as they develop academic English proficiency and knowledge of language use?

### **Theory and practice**

Integrating theory and practice is a consistent challenge for teacher education as a dichotomy exists between learning theory in the university and gaining practice in the field (Le Cornu & Ewing, 2008 as cited in Anderson & Freebody, 2012). Anderson and Freebody (2012) suggest that “the theory-practice dichotomy is made and therefore can be unmade if there is the institutional will to do so” (p. 360). The issue of linking theory with practice points to how teachers learn and develop, and thus leads to how teacher education programs enact instructional practices to prepare teachers to teach (ELs) effectively.

All too often conceptions of how teachers learn are under investigated, but are indeed something that should be highly attended to. Upon exploring theory and research relevant to teachers’ professional adaptation, Hammerness et al. (2005) discovered three issues in learning to teach: (1) the problem of the apprenticeship of observation (Lortie, 1975); (2) the problem of enactment (Kennedy, 1999); and (3) the problem of complexity. The first issue is that learning to teach requires teachers to perceive from a different perspective than they did when they were students. This deals with what Lortie (1975) calls the “apprenticeship of observation”, or learning from being a student in a traditional classroom for more than a decade. Being students from primary grades to post-secondary schooling may cause pre-service teachers to misconceive teaching as an easy task and profession, especially since they are already familiar with many of the concepts that are taught in their programs (Lortie, 1975 as cited in Hammerness et al.,



2005). While PTs' familiarity with concepts can be good as instruction builds upon their schemata, it could also be problematic if they incorporate new ideas into their existing schema without challenging their thoughts or perceptions as they are being taught (Kennedy, 1999 as cited in Hammerness et al., 2005).

**Linguistic and cultural dissonance.** Shaped by their own experiences, PTs bring very different perceptions to teaching, not realizing that ELs learn differently than they do, which results in dissonance between them and these students (Darling-Hammond, 2011; DeCapua & Marshall, 2011). Due to linguistic and cultural dissonance, which exists frequently, English Learners find it challenging to understand teachers' linguistic reasoning (Ball & Tyson, 2011). DeCapua and Marshall (2011) provide an example of teaching ELs about power in math. They illustrate how a teacher explains the general meaning of power before connecting this concept to math. The illustration shows that teachers cannot assume that English Learners automatically know what terms mean for academic language use. Actually, ELs should already be familiar with the language and content if the task is the focus, and after they become familiar with the task, teachers can add new language and information to the task. Of importance, most students with limited formal education (SLIFE), a subpopulation of ELs, come from cultures that are collectivistic, unlike American culture which promotes individualism. They learn best when information is explicit, centered around collaboration, and immediately relevant to them, rather than abstract and serving a long-term purpose such as knowledge for a future test (DeCapua & Marshall, 2011). The key to working with these (and all) students is to build upon how they learn. Although information about ELs' linguistic and cultural

aspects might be included in coursework, PTs are not fully challenged with understanding these realities until faced with them in the classroom.

Secondly, teachers must apply what they learn almost immediately if given the chance, and thirdly, “they need to develop metacognitive habits of mind that can guide decisions and reflection on practice in support of continual improvement” (Hammerness, et al., 2005, p. 359). The second issue pertains to transferring inert knowledge to knowledge in action which presents a steep challenge for pre-service teachers as applying information is not as easy as understanding it. Inert knowledge is that which is understood, but not applied. PTs are often challenged to demonstrate their understanding by applying it in the classroom rather than regurgitating it on a test, much different from what they have been trained to do before entering their programs. For example, PTs may acquire knowledge for effective teaching, but find it difficult to apply it to their instructional decisions. A major challenge contributing to PTs’ inert knowledge is their acquisition of information such as strategies in the university facility apart from simultaneous pedagogical application of it which occurs in their field placements.

An example of the third problem, or complexity of learning to teach could be demonstrated by PTs’ challenge to build upon ELs’ learning by gaining insight into these students’ cultural funds of knowledge, or “the routine practices in which students engage with their families and peers, and in institutional settings outside of school, along with the belief systems inherent in such practices” (Lee, 2007, p.34; Villegas, 2007). Lee (2007) explains that teachers must be in tune to daily connections between ELs’ informal knowledge and academic knowledge that occur in the learning environment --often through misconceptions, and what they demonstrate about students’ (mis)understanding

of content. This helps teachers assess students' strengths and challenges, re-direct students, and improve pedagogy (Villegas, 2007). To do this effectively, teachers must understand ELs' cultural funds of knowledge. Lee (2007) suggests that what is needed is a model (drawing from theories of cognition, motivation, development, sociolinguistics, and disciplinary learning) that explains ways of understanding cultural displays related to discipline-specific learning. Such a model would illustrate the role of perceptions in influencing actions and provide opportunities for both students and teachers to negotiate community-based and school-based norms.

To teach PTs how to build upon ELs' funds of knowledge, teacher educators can use the mutually adaptive learning program (MALP)---an instructional framework that combines practice and research to inform teachers of what is most effective for these students (DeCapua & Marshall, 2010; Marshall 1994; Marshall, DeCapua, & Antolini, 2010 as cited in DeCapua & Marshall, 2011). Learning about ELs' cultural funds of knowledge is equally as important for PTs as learning about content and language (Lee, 2007). PTs who are unaware of linguistic and cultural dissonances that play out through education do not understand challenges facing English Learners nor how to combat them. However, by learning about and integrating ELs' cultural funds of knowledge with content knowledge and applying it to teaching, PTs develop equity pedagogy to help students overcome systemic differences (Darling-Hammond, 2011).

Research shows that learning experiences that reinforce knowledge in action, which require comprehension, differ from those that reinforce rote memorization, which does not require comprehension (Good & Brophy, 1995; Resnick, 1987 as cited in Hammerness, et al., 2005). Perhaps this is obvious being that PTs' acquisition of

knowledge and the application of it occur in different settings. While they may regurgitate information to their instructors and peers, knowledge in action occurs when they apply the information they learn to their instructional practices. When this happens, teachers begin to realize what they comprehend and what they find challenging.

McDonald (1992) refers to this as real teaching, which occurs in triangulation between the teacher, the students, and the content, all of which constantly shift (as cited in Hammerness, et al., 2005). This leads to the third issue, which is arguably the most complex as it requires not only understanding and applying content knowledge, but also understanding the individual and diverse needs of students while engaging in critical reflection to make informed decisions and improve personal learning simultaneously. From the three issues identified by Hammerness et al. (2005) one can see that teacher education is very complex and that bridging theory and practice requires considering how teachers learn and the issues that this process entails.

### **The empirical research base on language and literacy teacher preparation**

The literature only provides a fragmented picture of what teacher preparation for academic language and literacy instruction looks like as existing research on the characteristics of teacher preparation for improving student outcomes is limited. After summarizing literature on empirical research regarding content area preparation for teachers since the 1990s, Floden and Meniketti (2005) conclude that the empirical base is strikingly lean, with the majority of it addressing teacher preparation for secondary mathematics teachers. Grossman, Schoenfeld, and Lee (2005) call attention to the complexities of identifying what elementary teachers need to know, and they claim that the need for elementary PTs' training in both general subjects and specific disciplines is

equivalent to that of secondary PTs in their disciplines (as cited in NRC, 2010). As it pertains to identifying the preparation that pre-service teachers need for language and literacy instruction, it is helpful to look at research on reading teacher preparation as some of the same issues exist for this discipline, especially since language and literacy teachers are often reading teachers and vice versa.

The National Reading Council (2010) identified a range of both empirical and non-empirical research that highlights the preparation that reading teachers need, and the bulk of the literature points to two topics: the process of learning how to read, and techniques for teaching the fundamental principles of fluency and identifying obstacles that can impede students' reading development. While it is accepted that research-based preparation in the fundamental reading skills and instructional practices essential to reading development are likely to increase teachers' effectiveness and students' success, there is no scientific evidence of causation between such preparation and teacher effectiveness, nor is there plausible evidence of how the preparation should be implemented (NRC, 2010). From reviewing approximately 100,000 studies published between 1966 and the late 1990s, the National Reading Panel (2000) found a firm empirically based consensus on the knowledge and skills that students should have to be successful readers and the types of instruction that fosters their reading success. Although not as empirically supported as the former findings, the panel found a growing accord pertaining to the knowledge that reading teachers should have, and it found little empirical evidence of the preparation that they need to teach reading successfully (IRA, 2007; Snow, Burns & Griffin, 1998 as cited in NRC, 2010).

One source of evidence that demonstrates what reading teachers are expected to know is the state standardized teaching test developed by the Educational Testing Service (ETS). While there is limited data available pertaining to state requirements such as coursework and features of teacher preparation programs, studies conducted by the ETS show that not all states require test items that assess teachers' knowledge of phonemic awareness, phonics, or vocabulary, and only three states (including California) require a separate exam for elementary teacher certification (Stotsky, 2006 as cited in NRC, 2010). From collecting survey data of New York City pre-service teachers focused on the types of learning opportunities they received in their teacher preparation programs, Stotsky (2006) found that the programs highly emphasized the importance of learning about children's literature and the characteristics of beginning readers, learning how to engage students in reading, and learning how to activate students' schema (as cited in NRC, 2010). Though there is considerable discussion on the data demonstrating the types of learning opportunities candidates receive in their programs, the research base is insufficient for drawing conclusions regarding how much teacher preparation for reading and other areas of literacy education is based on empirical evidence (NRC, 2010). While there is substantial scientific evidence concerning the knowledge and skills of effective reading teachers, more erudition for English Learners is necessary (NRC, 2010).

After reviewing literature on literacy development across multiple research areas, the National Literacy Panel for Language Minority Children and Youth determined the knowledge it perceives as important for teachers who will work with English Learners:

- Competence at explicit instruction in vocabulary,

- Content instruction that focuses on learning from text, comprehending and producing academic language, genre differentiation, and academic writing;
- Understanding of home-school differences in interaction patterns or styles and individual differences among the wide range of English Learners; and
- Understanding the ways language and reading interact, the skills that transfer into English and how to facilitate that transfer; and understanding of the context in which second-language users develop as readers.

(August & Shanahan, 2006 as cited in NRC, 2010, p.90).

Similarly, after summarizing the research available, Lucas and Grinberg (2008) identified types of knowledge needed by teachers of ELs:

- The language backgrounds, experiences, and proficiencies of their students;
- Second language development;
- The connection between language, culture, and identity;
- Language forms, mechanics, and uses; and
- The differences between conversational and academic language

(Lucas & Grinberg, 2008, p.614)

In addition, two of the teacher education standards adopted by the teachers of English as a second language (TESOL) and the National Council for Accreditation of Teacher Education (NCATE) are:

- *Language* teachers must understand language as a system, knowing components of language such as phonology, syntax, semantics, pragmatics, and writing conventions. They should also understand first and second language acquisition.

- *Professionalism* teachers must know the research and history in the field of ELD.

In addition, they must act as advocates for their students and field, working in cooperation with colleagues when appropriate.

(TESOL, 2003 as cited in Téllez & Waxman, 2006, p. 8).

Last, but not least, teachers also need “knowledge of language and language development (expert knowledge of the target language as well as processes by which students learn their native and new languages, and reflective practice)” (NBTS ELD standards for exemplary practicing teachers, NA as cited in Téllez & Waxman, 2006, p.26). While competencies for teachers of English Learners have been identified across diverse educational agencies, more research is needed, for “issues about the nature of knowledge are extremely important and far from obvious” (Bransford et al., 2005, p.42).

**Effects of teacher preparation.** Darling-Hammond and colleagues (2005) report a fundamental relationship between “teacher effectiveness and the quantity of training teachers have received in subject matter and content-specific teaching methods” (p.395 as cited in NRC, 2010). One approach for enhancing teacher education that has been proposed is training for teacher educators that integrates coaching from language experts, which would result in the integration of language education into the coursework for pre-service teachers distributed throughout the matriculation of teacher education curricula from undergraduate to graduate and professional school and beyond (Baca & Escamilla, 2002 as cited in DiCerbo et al., 2014). Tellez and Waxman (2004) argue that although initial efforts to prepare teachers regarding academic language are convincing, this training is insufficient. Though reviews of previous research deem preparation in content knowledge, field experience, and the quality of teacher candidates likely to result



in desirable outcomes, the empirical base does not evince sound connections between teacher content knowledge and student learning, field experiences and teacher effectiveness (NRC, 2010). Despite coursework and field experiences in ELD instruction specifically, research has shown that numerous teachers have not been well-prepared to implement effective language instruction for ELs and other language minority students (Alexander, Heaveside, & Farris; Lewis et al., 1999 as cited in Téllez & Waxman, 2006).

Reviewing the literature on the content preparation of teachers, Wilson and colleagues (2001) found that elementary teachers often lacked mathematical understanding, and that characteristics of coursework effectiveness could not be empirically identified, proving that taking courses or majoring in specific subjects is not likely to improve outcomes of quality, partially due to inadequate correlation between pedagogical content knowledge and in the quantity of courses taken in that specific content area (NRC, 2010). Likewise, Wilson and colleagues (2001) concluded that although it is clear that education in pedagogy (foundations and methods courses and theories) is important, it is unclear which aspects on teacher preparation in this domain are effective (NRC, 2010). Of the empirical studies that have reported the effects of coursework on teacher preparation, very few account for the characteristics that pre-service teachers bring into their programs or control for selection bias among the sample of teachers under study (NRC, 2010). This increases the complexity of the types and degrees of pedagogical and content knowledge that they need as they all enter with varying experiences and skills. In addition, researchers have also found it challenging to determine causal links between teacher preparation and student outcomes after pre-service teachers exit their programs, not to mention that graduates may be more effective

in some settings than others (NRC, 2010). An important consideration for research is how to ensure that pre-service teachers are being well-prepared to implement English and academic language instruction for all students, especially English Learners and other language minority students.

Documenting best practices is essential for PTs of diverse learners. Howard and Aleman (2008) suggest that teacher researchers develop a “culture of evidence”, documenting the contexts and events of critical learning moments to highlight the effects on teacher education programs on PT quality and student learning (p.167). Bransford et al. (2005) mentioned that efforts have been made in which teacher educators require candidates to show evidence of student learning as a result of their instructional practices. To do this, teacher educators create tasks that require candidates to show proof of their practices and evaluation of students’ performance as a direct result of them. Bransford et al. (2005) also explain that reflection is a vital part of teacher education that contributes to pre-service teachers’ metacognition. For instance, at San Jose State University, PTs engage in an assignment that requires them to recount an effective learning experience (internal or external to school) and a less effective learning experience, and analyze these events to pinpoint what contributed to their learning and what interfered with it. Examining the aspects of their learning experiences causes PTs to be more cognizant of how they learn and how they are learning in their programs. Both Stanford and Vanderbilt Universities offer courses in which pre-service teachers write reflections after completing difficult tasks or working on certain assignments. Their reflections inform teacher educators of what and how they learn as well as what they want to learn more about (Bransford et al., 2005). Also, Gage (1978) recommends the “protocols approach”

which entails watching videos that show instances occurring in realistic settings, of particular types of teacher behavior. After viewing the videos, pre-service teachers should be able to analyze events and teacher behaviors in real classrooms appropriately (p. 1140). At the heart of the protocols approach is the concern about teachers knowing “how”, not “what” (p.1140). So, this approach focuses more on teachers’ procedural, rather than content, knowledge. Further collection of evidence and examination of events are useful for PTs, (novice and experienced) teachers, and teacher educators, and could create a model for both teacher education and professional development programs to demonstrate the capacities needed to work with diverse students (Howard & Aleman, 2008).

### **Preparing teachers for diverse populations**

The current focus for teacher education is on preparing teachers for diversity in the 21st century, particularly addressing equity for students of diverse backgrounds (Ball, 2002; Ball & Tyson, 2011; Duncan-Andrade, 2011; Faltis & Valdes, 2016). Au (1998) defines this group as “students in the United States who are usually from low-income families, of African American, Asian American, Latino/a, or Native American ancestry, and speakers of a home language other than standard American English” (p.298). To date, research on teacher education for teaching linguistically diverse students lags. Linguistically diverse students range from those who are limited English proficient to those who are multi-competent bilingual learners. One key area that permeates and links all aspects of teacher education for these students is the knowledge base that pre-service teachers need to prepare them to meet the CCSS to be college and career ready. This knowledge base ranges from general pedagogical principles applicable to language and

language diversity to special skills needed for English Learners and academic disciplines as research is constantly showing a difference between pedagogy language knowledge and pedagogy content knowledge (Bunch, 2013; Faltis & Valdes, 2016; Mishra & Koehler, 2006).

The interconnectedness of variables affecting learning for pre-service teachers depend on their understandings of the nature and variation of linguistic diversity among English Learners and the new challenges of implementing the CCSS. Research in the past has focused on language development such as second language pedagogy and language use rather than the overall sociocultural features of discourse and interactions for teaching and learning (Cazden, 1986; Luke, 1995 as cited in Ball, 2002). However, “future teachers need and deserve up-to-date pedagogical knowledge that more deeply covers how language works differently when used in one-to-many presentations as opposed to one-on-one interactions and how written language more resembles oral presentational language” (Faltis & Vales, p.63). Research on the role of language, discourse, and text has become an educational focal issue as it is a critical area for improvement to inform pedagogical resources and approaches for teaching students from diverse backgrounds. For pre-service teachers to develop a better understanding of the nature of communication, Faltis and Valdes (2016) challenge teacher educators to “shift the emphasis to helping teachers understand the major role language plays in instruction and learning in all academic disciplines” (p.64).

Faltis and Valdes (2016) suggest that pedagogical language knowledge requires much self-reflection and critical awareness of how language and language diversity permeate all aspects of teaching and learning. However, the research is mixed on how

much critical awareness is needed and what this looks like for pre-service teachers with little experience in diverse languages, particularly as it pertains to what these PTs can acquire, and whether or not this results in teaching quality. Faltis and Valdes (2015) further suggest the need for teacher educators to increase advocacy for and knowledge of linguistically diverse learners, as well as include more focused instructional practices aimed at teaching English Learners in all methods courses, foundational courses, and fieldwork experiences. Precious little is known about teacher education to teach English Learners because research on this aspect of diversity in teacher education is highly limited (Hammerness, et al., 2005; Hollins & Guzmán, 2005 as cited in Faltis & Valdes, 2016).

As it pertains to literacy teacher preparation, the demand for empirical research for this strand is clamant. Large-scale multi-site research is limited, and so is research on linking pre-service teachers' practice to their students' achievement, especially the students that they teach when they become in-service teachers. This type of research requires multiple resources such as funding, tracking cohorts, and examining their training requirements and field experiences among other aspects of their programs in addition to investigating the organizational structures of their newfound placements (Burkhardt & Shoenfield, 2003; Cochran-Smith, 2004 as cited in Young & Draper, 2006).

From their review of the literature on professional development, Knight and Wiseman (2006) found a lean amount of studies that addressed the effectiveness of professional development programs for teachers of ELs (as cited in DiCerbo et al., 2014). Experts conclude that academic language is the most challenging language register to

develop for all students (DiCerpo, 2014; Schleppegrell, 2012). Across all disciplines, it is expected that teachers explicitly teach lexical, syntactic, and semantic features specific to their domains to address the challenges of academic language acquisition comprehensively. This is essential for fostering cohesion and coherence in communication across varying academic contexts. The literature also underscores the importance of instruction that promotes students' use of academic language for sophisticated purposes such as reciprocal teaching or presenting, and it highlights the need for students to develop metalinguistic awareness of academic language characteristics. Also, professional development that explores learning about academic language that is content and grade-level specific is viewed as more applicable than professional development on academic language alone (Ballantyne et al., 2008 as cited in DiCerbo et al., 2014).

From the literature, it appears that consistent professional development for teachers focused on academic language is capable of both confronting and altering teacher beliefs and practices regarding language (DiCerbo, 2014). Providing the best opportunities for engaging students in academic language requires refined conceptualization of instructional approaches for both language and content combined with a steady balance between teacher and student talk, and instruction that incorporates modeling, scaffolding, discussing and questioning that elicits elaborate responses. Galguera (2011) advocates for a shift in the conceptualization of instruction for teachers and teacher educators away from "English learners" toward "language use for academic purposes" as an orientation to examine teacher education (p.85).

Viewing the term “English Learners” as “(a) both too broad and not inclusive enough, (b) likely to elicit views of students as deficient, (c) not conducive to “one-size-fits-all” approaches (Reyes, 1992), and (d) lacking a widely-accepted theory or model to explain the relationship between teaching and learning”, Galguera (2011) proposes a conceptual framework that assumes a link between teachers’ experiential pedagogy and critical language awareness toward a functional view of academic language (p.86). At the heart of the framework proposed by Galguera is pedagogical content knowledge--the interconnection between content and pedagogy. Galguera (2011) suggests expanding this concept to not only prepare teachers to teach English Learners, but to also focus on helping them develop pedagogical language knowledge, or “pedagogical content knowledge for language development” (Shulman, 1987 as cited in Galguera, 2011, p. 90).

Moving forward, Dicerbo et al. (2014) uphold three major priorities for research surrounding academic language development and instruction: 1) research should hone in on recognizing the specific academic language challenges for English Learners across contexts and purposes, for the literature on academic language development and instruction for these students and other linguistically diverse students has hardly begun; 2) varying instructional approaches for academic language must be analyzed for their effects on ELs’ academic performance; and 3) the researchers call for more concrete evaluation of professional development programs designed to develop teacher knowledge and skills for academic language development and instruction. Although research on professional development for academic language is in the minority in comparison to the other aspects of teacher professional development or academic language in general, the

literature reviewed supports that high-quality preparation and training can provide meaningful learning opportunities for teachers on academic language within disciplines. As the research base for professional development for teachers acquiring academic language knowledge for their teaching domains expands, I am hopeful that the literature will provide abundant information on the nature of academic language as it is being operationalized within professional development programs so improvements in practice and policy can be implemented.



## CHAPTER IV

### METHODOLOGY

***Introduction:*** This study utilized qualitative methods, informed by a phenomenological design, to explore the learning opportunities afforded to a group of elementary pre-service teachers enrolled in a course offered by a traditional teacher education program at a large public university in the western United States. This study is analyzed according to the research questions guiding it, and the analysis of the third research question is organized according to the principles of the ELD standards to describe how the PTs supported English Learners' academic language development.

***Rationale for research approach:*** This project employs a qualitative study from a phenomenological approach with the researcher as an instrument (Creswell, 2012). Qualitative research originates from cultural anthropology and American sociology and has been adopted by educational researchers in recent past (Borg & Gall, 1989; Kirk & Miller, 1986 as cited in Creswell, 2009). This form of inquiry aims to understand a unique social circumstance, event, role, group, or interaction (Locke, Spirduso, & Silverman, 1987 as cited in Creswell, 2009). With qualitative research, the researcher uses diverse sources of evidence to create a substantial and substantive depiction of complex, multifaceted phenomena (Leedy & Ormrod, 2016). Qualitative methods focus on phenomena that occur in natural environments and they involve capturing and investigating the complexity of those phenomena and attempt to depict their varied formations (Leedy & Ormrod, 2016). Qualitative methodology often involves an iterative process in which the researcher oscillates between data collection and data analysis in what is often referred to as the constant comparative method (Leedy & Ormrod, 2016).

This method was utilized in this study in the following ways: (a) I collected some preliminary data through observations and field notes in a natural setting--the university---while observing the ELD/SDAIE class; (b) I reviewed field notes and ELD observations and lesson plans and inspected these data for possible patterns; (c) I continued recording field notes in the natural setting and collected SDAIE lesson plans, edTPA portfolios, and EL case studies, followed by conducting interviews that might substantiate, clarify, or contradict those patterns; and (d) I conducted a more thorough, detailed analysis of the data and repeated step b and most of step c minus returning to the natural environment as the course terminated before the interviews were conducted.

**Phenomenological study.** In its broadest sense, the term phenomenology refers to an individual's conception of the significance of a situation, as opposed to the situation as it exists external to the individual. A phenomenological study attempts to understand individuals' conceptions of particular circumstances (Leedy & Ormrod, 2016).

Phenomenological researchers heavily depend on interviews with a small, carefully selected sample of participants. A typical size is from five to twenty five individuals, all of whom have had direct experience with the phenomena being studied (Leedy & Ormrod, 2005). Qualitative or purposeful sampling aims to select information-rich cases (e.g. individuals, groups, sites, or documents) that will grant in-depth understanding (McMillan, 2015). With purposeful sampling, the primary requirement for utilizing a sufficient amount of cases is the information provided. Since the sampling intends to provide in-depth information, sampling is considered exhaustive when forthcoming information from additional cases does not alter the results (McMillan, 2015).

**Researcher Bias.** I am a former elementary pre-service teacher and I also work seasonally with the teacher education program to facilitate pre-service teachers' theses development. All of the pre-service teachers who I worked with for theses development were also enrolled in INT 23 and participated in interviews for this study. I also observed the ELD section of INT 23 for a previous mixed methods study to complete my thesis for my Master's degree. In addition, I have conducted multiple presentations focused on English Learners' second language acquisition and pre-service teachers' learning how to provide comprehensive English language development instruction for these students. The phenomenological research tradition requires one to refrain from imposing any perspectives other than those of the participants (Wertz, 2005 as cited in McMillan, 2016). So, I have taken careful consideration to include direct quotes and thick descriptions as provided by the participants, both of which are explained in further detail in the data analysis section of this report.

**Participants.** This research study focuses on elementary pre-service teachers enrolled in the English language development/ specifically designed academic instruction in English course. The ELD/SDAIE course is a requirement for the multiple subjects teaching (MST) credential, which provides Kindergarten through sixth (K-6) grade certification. The ELD section is usually offered beginning in the third month (September) of 13-month teacher education program, while the SDAIE section begins in the seventh month (January) of the program. The site of the degree program is a public research university that is part of a larger university system; the campus is located in a mid-size metropolitan area and encompasses a suburban school district. The area of the institution is also a popular tourist and resort destination.

Forty seven (N=47) pre-service teachers attended the INT 23 class: five males and 42 females, 23% of whom were Caucasian female special education (ESC) candidates. Of the males, three were Hispanic/Latino/a, with Spanish as their native language, and 2 were Caucasian. Other demographics of the class include: 47% White, Non-Hispanic, 16% Hispanic/Latino/a, .07% Asian American,.05% American Indian or Pacific Islander, and 30% multiracial. While all of these candidates participated in the course of focus, I only collected coursework from MST candidates (see Appendix J). I collected the following data: 28 ELD Observations, 28 ELD lesson plans, 30 SDAIE lesson plans, 15 edTPA portfolios, and 19 EL case studies, and I collected information from 12 interviewees. I also collected case studies from PTs who volunteered to participate in interviews and/or submit edTPA portfolios. Three of the EL case studies that I analyzed were from candidates who initially volunteered to be interviewed, but were unable to follow through. For more detailed information regarding the data sets for this study, see Appendices J-M.

*Interviewees.* For this study, 12 pre-service teachers were interviewed. Interviewees were self-selected as their participation was dependent upon their being mainstream MST candidates who volunteered to be interviewed. Thirty eight percent of the PTs spoke Spanish fluently and 33% of them were former ELs, 62% were native English speakers, and one was a native Korean speaker. Of the 12 interviewees, nine participated in interviews in person or via telephone and four completed questionnaires and submitted them via email.

**Research context:** This research occurs at the interface of two institutions-a teacher education program and local elementary schools-that are responding to policy changes.

**The Teacher Education Program/INT 23 course.** Currently addressed in the teacher education program are varying proficiency levels, educational levels, and cultural backgrounds of English Learners. To align with national and state standards for preparing pre-service teachers to teach English Learners, the teacher education program (TEP) has certain standards. The *INT 23: ELD/SDAIE Methods and Procedures* course, of which (the researcher sat in on and collected data for six months) aligns with *Standard 12: Preparation to Teach English Learners*. Within INT 23, candidates were given opportunities to acquire knowledge of linguistic development, first and second language acquisition, positive and negative language transfer, and how home literacy connects to second language development. In this course, credential candidates engaged in structured activities whereby they explored theoretical principles of second language acquisition. For the ELD/SDAIE course, pre-service teachers were graded based on the following: attendance and participation, the categorical program monitoring, or CPM presentation, and ELD observation, the ELD lesson and reflection, the EL case study, and the SDAIE lesson plan and analysis. I collected and examined the following assignments that were required of the ELD/SDAIE course: the ELD observation, the ELD lesson, the SDAIE lesson, the edTPA portfolio, and the EL case study.

- **ELD Observation.** For the CPM assignment, candidates investigated the demographics of their schools with regard to English learners, the English language proficiency levels of students, and the various ELD programs (e.g., push-in, pull out, in class small group ELD instruction, whole group “leveled” programs by EL proficiency levels, and newcomer programs) offered at their schools. After observing at least one ELD lesson to see what and how locally

adopted materials were implemented, candidates described instructional curricula and resources used for ELD instruction to their INT 23 class. As part of this assignment, PTs observed ELD instruction in the fall during the PTs' initial placements to determine which of the program models were being employed at their sites (e.g., Content-Based ELD, push-in or pull-out ELD, Transitional Bilingual, Newcomer, etc.). PTs who were placed in classes that did not implement ELD instruction observed it in another class at their school if it was offered. They shared this information with the class to inform their colleagues of what local districts and schools implemented.

- **ELD and SDAIE Lesson Plans.** PTs designed and taught an ELD lesson in the fall and a SDAIE lesson in the winter, driven by the newly adopted ELD standards. Many of them did not teach their ELD lessons, but most taught their SDAIE lessons and they collected and analyzed student work samples. As part of the TEP lesson design frame, PTs incorporated instructional modifications (e.g SDAIE strategies, scaffolding of language demands such as sentence frames and vocabulary, attention to academic language functions and forms, opportunities for students to develop fluency with the language and concept) for English Learners to understand content concepts and further develop English proficiency. During the fall, students created general lesson plans for ELD lessons, but during the winter, PTs learned more about academic language support for ELs. For the SDAIE lesson, PTs had to include language objectives, functions, and forms in addition to instructional modifications to support students. They were also encouraged to teach their SDAIE lessons.

- **edTPA** is a teacher performance assessment used to determine candidates' ability to plan, implement, and evaluate effective assessment for the students to monitor their progress and inform subsequent instructional decisions. PTs designed a series of three math lessons to assess both productive (speaking/writing) and receptive (listening/reading) skills to monitor student learning. The edTPA includes multiple components, but I specifically examined the planning, instruction, and assessment commentaries to see how PTs supported ELs' academic language development. These commentaries included analyses of teaching events and work samples of the whole class and focus students (including English Learners). The analyses focused on patterns of student errors, skills, and understandings in relation to standards/objectives. For this assignment, PTs identified specific patterns for individuals or subgroups (e.g., English Learners) in addition to the whole class. From these analyses, they determined next steps for students who demonstrated that they have met the learning objectives and for students who demonstrated that they have not. The next steps focus on improving student performance through targeted support to individuals and groups to address specific identified needs. Throughout the Teaching Events, PTs consider academic language and literacy issues in addition to content in their design and analysis of assessments. For the edTPA overall, PTs designed, taught and reflected upon mathematics lessons that appropriately embedded English literacy and language development (listening, speaking, vocabulary development, reading and/or writing).

- **EL Case Study.** The last major course assignment as part of the SDAIE section in the winter was the EL case study. For this assignment, PTs shadowed an EL across various subjects for two weeks and examined student work and/or video of student interactions from their field placements. PTs were given access to ELs' cumulative files and they aimed to learn how to diagnose these students' difficulties accessing literacy in terms of cognitive, pedagogical (e.g., cultural and institutional access), and individual factors (e.g., skills), primary language proficiency, and prior schooling. With this assignment, PTs provided detailed information on their focused students, and they gave recommendations for helping these ELs improve their academic language development.

### **Data collection and methods**

*Research sample and data sources:* With the advice and assistance of a colleague associated with the teacher education program, a purposeful sampling strategy was used to identify most of the instruments for this study, specifically course assignments that were selected (Spradley, 1979). The data sources for this study include: 1) observations and field notes by the researcher, 2) ELD observations by the pre-service teachers, 3) ELD and SDAIE lessons, 4) edTPA commentaries, 5) EL case studies, and 6) interviews, all of which are primary sources of evidence. Observations and field notes by the researcher were conducted during the ELD/SDAIE course sessions, while the ELD observations (by the pre-service teachers) and ELD and SDAIE lesson plans and edTPA commentaries were submitted online. Additionally, eight interviews were conducted in-person and four interviews were submitted to me via email (N=12 interviews total). Most of these particular entities selected for analysis comprise the purposive sampling for this



study because they yield the most information about the topic under investigation. However, the edTPA commentaries and interviews comprise a self-selected sample. Though all elementary pre-service teachers were requested to volunteer their edTPA commentaries and participate in interviews, I collected edTPA commentaries from those who gave consent for them and I interviewed those who were willing to participate in the interviews, whether oral or written. While all of these units of study were intentionally identified and used to provide the needed information, most cases were selected prior to data collection, whereas others were determined as data were being collected. For example, ELD observations, ELD lesson plans and SDAIE lesson plans were collected from all of the elementary pre-service teachers enrolled in INT 23. However, edTPA portfolios were only collected from candidates who gave consent, and interviews were conducted with elementary candidates who were available and willing to participate in them. To triangulate the data between edTPA portfolios and interviews, EL case studies were collected from candidates whose consent was received and/or those who participated in interviews to provide in-depth understanding. I also analyzed case studies for three candidates who initially provided consent forms for interviews, but did not follow through with them. These case studies were the exceptions because I coded and analyzed EL case studies from all candidates who provided consent forms for access to their edTPA portfolios or access to interview them. Although three candidates did not follow through with participating in interviews, it was too complicated to extract the data that was already input.

To be clear, 47 candidates were enrolled in INT 23, but only 33 of them were mainstream elementary pre-service teachers. I collected ELD and SDAIE lesson plans

from all of the elementary mainstream PTs who submitted them, and I collected case studies from 19 of them. Of the 19 EL case studies, five were from candidates who were interviewed and 14 were from candidates who submitted edTPA portfolios. So, five of the candidates who were interviewed did not submit edTPA portfolios (see AppendixK).

- **Observations and field notes.** By observing naturally occurring behavior over the course of two quarters, I was able to obtain a rich, deep understanding of the phenomenon being studied, particularly the types of learning opportunities afforded to pre-service teachers pertaining to academic language support for English Learners. The observations and field notes demonstrate the content of the ELD and SDAIE coursework as well as capture the dialogue between PTs and the instructor of the course. Both observations and field notes help answer the first research question: “What were the opportunities afforded to pre-service teachers during their ELD/SDAIE training, and how were they taken up?” In particular, the field notes highlight strategies that pre-service teachers learned about and how they learned about the CCSS and ELD standards, and their academic language demands on English Learners.
- **The ELD observations.** The ELD observations conducted by pre-service teachers as part of their CPM assignments are used to help answer the first research question: What opportunities are afforded pre-service teachers during their ELD/SDAIE training, and how are they taken up?. With this assignment, PTs took active roles in their daily, naturally occurring lives to inquire about and report on the structure and implementation of ELD instruction in their classrooms or elsewhere at their school sites. With this data source, PTs were participant

observers as they were genuine participants in the activity being studied. For this assignment, PTs recorded brief notes of their observations and collaborated with their classmates to present detailed information and their interpretation of ELD instruction at their schools.

- **Lesson Plans and commentaries** are documents written in first person by pre-service teachers who have had direct experience with the phenomenon being studied. While undergoing their ELD training, pre-service teachers created and taught lessons that included ELD standards and scaffolds for English Learners. Prior to conducting interviews, I reviewed lesson plans to enhance the context of the interview protocol to cover specific information relevant to the PTs' instructional practices. The lesson plans were used to answer the second research question: "How did pre-service teachers support English Learners' academic language development as evident in their course assignments?", specifically how they supported ELs' concurrent development of English language proficiency and disciplinary language.
- **edTPA commentaries.** Documents are frequently used to verify or supplement data obtained from observations or interviews (McMillan, 2015). To meet a requirement for edTPA-their assessment portfolio-the pre-service teachers wrote commentaries to reflect on their instructional practices. The commentaries were used to answer the third research question: "What can we learn from preservice teachers' reflections of their instructional practices for working with English Learners in light of California's ELD standards? The commentaries elicit how the pre-service teachers: a) perceived the role that (academic) language plays in

- literacy and learning in the content areas ; b) discussed English Learners and their academic language development; and c) how they discussed the supports they either incorporated into their lesson(s) or identified in their reflections as measures that could have improved their instruction. Since the most universal way of gaining insight is through personal narratives of experiences (Rodgers & Scott, 2008), the commentaries that pre-service teachers provided give insight into their capacities and constraints for supporting English Learners' academic language development and use as well as contribute to a "culture of evidence" (Howard & Aleman, p.167). Within their commentaries, PTs documented best practices essential for the academic language development of diverse learners, and they documented the contexts and events of critical learning moments for them and their students. I read commentaries to retrieve data to coincide with the interview data to increase the validation of the findings as well as shed light on issues relevant to language teaching and learning for ELs that PTs pinpointed.
- **Semi-structured interview.** After the ELD/SDAIE course terminated, a semi-structured interview was conducted to explore the learning and instructional experiences of the elementary pre-service teachers as they conceptualized academic language demands and applied information from their coursework to their classroom instruction. With this interview, I honed in on the role of participants as ELD pre-service teachers to gain insight into how they and their cooperating teachers supported English Learners' academic language development as well as the PTs' teaching and learning experiences pertaining to ELD instruction. This interview also discussed the SDAIE lessons and edTPA

series planned and taught by the pre-service teachers, focusing on aspects from planning to reflection in order to discover how pre-service teachers supported ELs' academic language development and use, and whether or not they applied information (i.e. principles and/or strategies) from their training to their practice. The protocol also included questions about the EL case study. The full interview protocol is included in Appendix A. Data from this interview helped answer the second and third research questions (2) How did pre-service teachers support English Learners' academic language development as evident in their course assignments?; and (3) What can we learn from preservice teachers' reflections of their instructional practices for working with English Learners in light of California's ELD standards?), specifically as they pertain to how the PTs integrated scaffolds to support ELs' academic language development, and how they reflected upon their instructional practices for ELs.

***Data analysis methods:*** With course assignments and interviews being the key units of analyses, the overarching data analysis method for this project was assignment analysis. After analyzing each activity, I merged findings according to themes that emerged. Moreover, pre-service teachers' coursework assignments that did not involve teaching were analyzed more generally according to upper and lower grades, while assignments that involved teaching were analyzed according to specific aspects and activities involved. In addition, findings that correspond to the third research question were analyzed according to the three critical principles of the ELD standards: 1) Interacting in Meaningful Ways; 2) Learning About How English Works; and 3) Using Foundational Literacy Skills. As mentioned earlier, this study involved the constant

comparative method---an iterative process in which I fluctuated among data collection, analysis, and interpretation, which are three independent, yet interconnected steps (Leedy & Omrod, 2016). Also, I downloaded all of the course assignments that were submitted online through the university portal and I converted assignments in formats other than Word into Word documents, which made it easier to code in a database. edTPA portfolios were retrieved through specific links online and were also downloaded. The ELD and SDAIE lesson plans were primarily uploaded in other formats and needed to be converted to Word. Assignments were saved in electronic formats--USB thumb drive and an online site (box.com)-and organized into five different folders: 1) ELD observations; 2) ELD lessons 3) SDAIE lessons; 4) edTPA portfolios; and 5) EL case studies. It is important to reiterate that coursework was only collected from mainstream MST candidates, and like the interview selection, edTPA commentaries were collected from mainstream MST candidates who consented. All assignments uploaded for each individual were saved to appropriate folders, and the edTPA portfolios folder included 16 folders---one for each portfolio obtained.

After downloading and skimming different types of assignments that were submitted, I identified preliminary codes that were likely to be helpful in coding the data. The following were preliminary codes for ELD observations and lesson plans: English Learners, language, grade, objective, topic, activity/task, form, function, strategy/support, assessment, and evaluation. Additional codes (PT perspective---teacher challenge, student challenge, receptive skills, productive skills, etc.) were added to the initial coding scheme as more data were collected and examined. All codes were inspired by previous research, research questions, and most of all, the text within the data. All of the

assignments were manually coded in the comments section in the Word document of each assignment examined. Then, these codes were listed and reviewed to construct a final list of codes and sub codes, which were defined as concretely and specifically as possible before the data were coded online in Dedoose---a mixed methods software program. After all of the data were coded, I identified noteworthy patterns and relationships among the codes by making comparisons and drawing contrasts (i.e. I was alert for outliers, exceptions, and contradictions) within the data set. Additionally, I interpreted data in light of the research problems and the second and third research questions. In addition, I attended to the triangulation within the data (discussed further in the analysis).

After the initial round of manual coding on Dedoose, I used Creswell's Data Analysis Spiral to analyze the data (Creswell, 2013 as cited in Leedy & Omrod, 2016). As mentioned previously, data were organized into file folders on a thumb drive and uploaded on Dedoose. I scrutinized the entire data set several times to get a sense of what it contained in its entirety. In the process, I kept a methods journal of data memos to document every step along the way from collecting data to coding and analyzing it, which included possible themes emerging from the categories. After identifying themes and subthemes, I classified the data accordingly followed by integrating and summarizing the data for readership, which explains what was experienced and how. Overall, I took a phenomenological approach on a discourse level when coding transcripts by identifying and building upon patterns that emerged until a sense of exhaustion of the number of patterns that I identified in the discourse was reached. Sampling is considered exhaustive when forthcoming information from additional cases does not alter the results.

Additionally, I applied an overlay of coding with concepts used within the teacher education program. So, I used a hybrid approach between codes from the research questions and assignments and concepts used within the teacher education course to develop the coding scheme for this study.

***Issues of trustworthiness:*** Determining the veracity of the report, discussing the generalizability of it, and advancing the probability of replicating a study have been acknowledged as scientific evidence scholarship. In qualitative research, a consensus has been established on addressing validity and reliability (Creswell, 1994), aspects of which certain precautions were taken to enhance findings for this report. Validity involves data quality pertaining to the results (Creswell & Clark, 2007). In qualitative research, validity centers on determining the accuracy, trustworthiness and credibility on the account of the researcher and participants involved (Lincoln & Guba, 1985 as cited in Creswell & Clark, 2007). For this study, I employed the following validity strategies as suggested by Creswell (2009):

- Procedures were documented (Creswell, 2009). As mentioned earlier, data memos were kept to detail all of the steps outlined within the data collection and analysis processes.
- Prolonged time was spent in the field, particularly at the university. This allowed me to develop an in-depth understanding of the phenomenon under study and explain the context. According to Creswell (2009), "The more experience that a researcher has with participants in their actual setting, the more accurate or valid will be the findings p.192)." Spending prolonged time at the university with pre-



service teachers helped me establish rapport with the participants, which contributed to the comfort of participants to be transparent during the interviews.

- Researcher bias is included to inform readers of my background brought to this study.

Other careful considerations were employed to ensure that the results accurately portray the views and meanings of participants. I intentionally used quotes from participants throughout the study so as to not take away nor add to what they said in order to prevent misinterpreting their statements. I also gave adequate attention to how the context within which the data were gathered influenced the results. This study offers thick descriptions of the course context and assignments to explain the factors that contribute to their findings (e.g. class dialogue, handouts, assignments, and et cetera). In addition, this study displays context sensitivity in the attention given to contextual factors and in providing copious details or thick descriptions. For instance, it is evident that pre-service teachers were placed at different schools in which the structure and implementation of (ELD) instruction varied accordingly. Highlighting the nuances in context and individual characteristics allowed an interpretive phenomenological analysis in which individuals' encounters in various circumstances were examined to understand how context affects meaning (McMillan, 2015). To move beyond the surface and delve deeper into the complexity of perspectives, I triangulated multiple sources of data and searched for exceptions and contradictions both within the sample selected and the data collected (Creswell, 1994). Additionally, I sought feedback from both participants and professional colleagues about findings and interpretations. All of these steps were taken

in attempt to establish balance, fairness, and completeness in data analysis and interpretation.

While qualitative validity serves the purpose of checking for accuracy of findings by incorporating definitive procedures, qualitative reliability involves consistency across the research process (Gibbs, 2007 as cited in Creswell, 2009). Gibbs (2007) suggests a couple of reliability procedures:

- Transcripts were checked for mistakes such as typos or missed information during transcription. I also followed up with interviewees (i.e. member checks) to clarify misinformation. For the interview transcripts that were emailed, the interview protocols were explained verbally via phone and outlined via email to the interviewees.
- Codes were checked for consistency of definitions through constant comparing of data across documents, including memos and transcripts (as cited within Creswell, 2009).

According to Creswell and Clark (2007), reliability plays a minor role in qualitative research and primarily refers to agreement among researchers on data coding. Since there is only one researcher for this project, the main consideration needed for coding reliability was consistency of coding across documents, which was incorporated through constant comparing of codes and definitions across documents. However, it is important to indicate the importance of generalization as it pertains to this research project. Since qualitative research does not aim to generalize findings to individuals, sites, or places outside those under study, generalization is highly limited in this type of inquiry; however, the value of this approach is inherent in the unique delineation and themes

constructed in context of a specific site. Therefore, “particularity rather than rather than generalizability is the hallmark of qualitative research” (Greene & Caracelli, 1997 as cited Creswell, 2009, p.193). Limited generalizability may be prevalent regarding the categories or themes emerged from the data analysis or for the data collection strategies used by the researcher. However, limitations in replicating the study may exist even if all procedures are used because each case is unique and therefore cannot be replicated (Creswell, 1995). Although results from this study are not generalizable, the thick descriptions and attention to details allow for transferability (Patton et al., 2014).

***Limitations and delimitations:*** Most of the limitations and delimitations exist because of the many nuances involved, specifically data collected from numerous pre-service teachers across several schools and their switching grades throughout the academic year. This interferes with the depth that I was able to obtain regarding the phenomenon being studied. For instance, PTs did not teach the same grade year-round; so they were not able to account for the activities/topics covered when they were not there. While it is beneficial to learn about their trajectories between each grade level that they taught, a limited depth was achieved. While all data selected included all of the major course assignments, only subsets of the data were examined based on the self-selected sample. Also, the self-selected sample of interviewees was disproportionate based on gender as most of the participants were females. Additionally, samples were only selected from one course in one teacher education program. So, while findings may be useful to inform and build upon, they cannot be generalized for all pre-service teachers and teacher education programs. Overall, specific variables such as the university, the INT 23 course and coursework, specific participants and their school sites, and the phenomenological

research design contribute to the delimitation of this study. Since this study confines itself to observing one class and interviewing certain pre-service teachers from a traditional public teacher education program in which PTs were placed at various school sites, a limitation for this study is the purposive sampling procedure, which decreases the generalizability of findings. So, this study will not be generalizable to all areas of teacher education and findings could also be subject to other interpretations based on readership.

Another major limitation of this study includes email interviews. While e-mail interviewing was convenient for participants who were traveling, I had to wait months before interviewees completed the interviews. One interviewee said that she completed the interview and emailed me it to me, but I never received it. Since she was unable to retrieve it, I could not collect interview data from her. Another limitation regarding email interviews is the risk of participants forgetting important details of critical incidents imperative to the interview due to the lapse in time between their experiences and interview participation. Another limitation of email interviewees is that participants have time to carefully respond to information, which may cause them to think more carefully about how to articulate responses versus stating their immediate thoughts to answer questions during in-person interviews. Also, the interviewees may have answered questions in a different order than they were asked which may have skewed the data.

Fortunately, I was able to explain the interview questionnaire and supplemental materials to participants over the phone prior to their answering the questions, but, unfortunately, I was unable to ask follow-up questions that I probably would have asked if I interviewed participants in person. Also, the types of responses varied across questions and interviewees. Some questions were answered thoroughly, while others

were answered with bullet points or a list of answers without rich data. However, one good aspect of email interviewing is that this method permitted me to prolong the interview to gather desirable information when necessary (Kivits, 2005 as cited in Opdenakker, 2006 ). Another limitation of email interviewing is the lack of social cues involved. For instance, I was unable to fully grasp how interviewees felt about certain issues because I did not hear their voices (e.g. intonation/inflection) or observe their body language (rolling eyes, laughing, etc.) while they answered questions. Last, but not least, I appreciate that I did not have to transcribe emailed interviews, but I also realize that my transcriptions would have appeared differently than their written responses, which more than likely would have affected my coding of the interview data. Overall, time delay between receiving and answering questions, the flexibility of how to articulate answers and answer questions in a different order, and the style of written responses from interviewees are all limitations of email interviewing.

**Summary:** The phenomenological qualitative research approach was used in this study to explore the opportunities afforded to a group of elementary pre-service teachers enrolled in a course in a traditional public teacher education program. First employed were a collection of observations and field notes conducted by the researcher followed by the collection of assignments and assessment portfolios submitted by participants. Additionally, interviews were conducted to develop a robust data set to be researched appropriately. The methodologies and procedures within this study were used to understand how a group of elementary pre-service teachers learned about and supported English Learners' academic language development. The analyses based on the methods described help explain what the pre-service teachers' learning opportunities were, how

they supported ELs' academic language development, and what they learned from reflecting upon their instructional practices for working with ELs.

## CHAPTER V

### FINDINGS

**Introduction.** This chapter includes findings which are separated according to research questions. To answer the first research question: “What were the opportunities afforded to pre-service teachers during their ELD/SDAIE training, and how were they taken up? “, it is best to look at the topics and activities that were implemented in INT 23 relevant to this study. Findings to answer this question are included in the ELD section and delineated into lower and upper grades based on ELD observations and ELD lesson plans. For the second research question: “How did pre-service teachers support English Learners’ academic language development as evident in their course assignments?”, it is best to discuss the SDAIE lessons designed by PTs to support students’ academic language development. Findings from these lessons are delineated into specific aspects of the lesson plans across grade levels. Last, but not least, for the third research question: “What can we learn from preservice teachers’ reflections of their instructional practices for working with English Learners in light of California’s ELD standards?”, vignettes from PTs’ edTPA and EL case study accounts are given and analyzed according how the PTs discussed English Learners and strategies for supporting these students’ academic language development as well as next steps or measures for improving instruction.

**RQ1: What were the opportunities afforded to pre-service teachers during their ELD/SDAIE training, and how were they taken up?**

**INT 23: ELD section.**

Topics of interest regarding this research that were covered during the fall in INT 23 were: ELD standards, strategies for teaching ELD, using academic language functions

and forms, and ELD Strategies and vocabulary development. The major assignments due during this quarter were the ELD observation, site collaborative Categorical Program Monitoring (CPM), and ELD lesson plan.

To inform PTs about the ELD standards, the instructor explained each standard component (Interacting In Meaningful Ways, How English Works, Foundational Literacy Skills, and EL Proficiency Levels), the initial three of which will be used to guide the analyses for the third research question's findings. The instructor strongly emphasized the purpose of language use and text types to inform PTs of the importance of identifying the purpose, text type(s), and audience for developing their lesson plans. To apply information that they learned about the ELD standards, the PTs found a grade level standard for the grades that they taught and created a grade appropriate activity that addressed each component of the ELD standard. During the late fall, the class discussed language functions, forms, supports, and objectives. To learn about these, the class watched a video of a first grade ELD lesson. The main highpoint that PTs took from the video is that forms enable students to perform language functions. Based on a powerpoint presentation given by the instructor, the following were general premises of academic language (with embedded references) outlined in this course:

- Academic language must be intentionally and purposefully taught to K-12 students.
- Merely being exposed to, or even engaged in, an activity in English is not sufficient to ensure academic success or English language development.
- Therefore, teacher candidates must reflect on how language is used for a range of purposes in their lessons.



In this course, candidates learned the following about academic language:

- Academic language development is making the language explicit to bolster students' autonomy over language and enhance their language manipulation according to the purpose (function) and audience for the message.
- Academic language involves vocabulary and linguistic structures (forms) for comprehending and formulating descriptions, interpretations and reasoning.
- Providing meaningful opportunities for students to develop fluency in academic language permits access to the school discourse and pillars academic achievement.

(Dutro and Moran, 2003).

Table 2. Academic Language Aspects

Purposes	<b>Functions</b>	Interpret, predict, explain, justify
Word Choice	<b>Forms</b>	Vocabulary + sentence frames
Communicative competence	<b>Fluency</b>	Opportunities to practice throughout the lesson and assessments

Academic language also includes specific vocabulary and linguistic structures for making an argument, generating hypotheses, and etcetera. Sentence frames, which include connecting words (e.g. because, whereas, therefore), are examples of linguistic features. Additionally, fluency is the facility with which a speaker, reader and writer uses language. It is developed through focused and intentional interactions with a range of uses of language (both oral and written), and many opportunities to practice language forms in different contexts (Dutro and Moran, 2003).

After learning about academic language, candidates engaged in application and practice by identifying academic language functions and forms in their lessons. When planning their ELD lessons, candidates were encouraged to focus on one or two purposes for instruction. The class also engaged in an ELD lesson analysis using their lesson design frame (see Appendix E). In addition to learning about academic language functions and forms, the candidates learned about different vocabulary development strategies as the instructor defined them and provided examples. They were also given time to work on their ELD lesson plans given the new information they learned.

In late September, the course instructor checked in with the class regarding their ELD observations. As a class, the instructor and PTs realized that all schools implement ELD instruction differently. One school only enforced academic language, meaning that at this school, all students were perceived as language learners and instead of ELD being implemented as a separate subject, academic language was embedded in instructional practices throughout the day. PTs placed at this site were confused since there was no particular time set aside for language instruction, and the embedded academic language looked different across grades. For example, one PT mentioned that the second grade students at this school may eventually receive ELD instruction, but the upper grades had ELD embedded in their writing prompts. So, PTs at this school were confused about the structure and type of ELD instruction implemented at this school as it was challenging to identify in their classes. A month later, one PT at this site still had not seen ELD. Fortunately, two PTs at two different sites had seen ELD at their placements, one of which identified the structured English immersion model, formally known as sheltered instruction.

**ELD Observations** were collected from 28 pre-service teachers to capture their perspectives of ELD instruction they observed. Prior to conducting interviews, I read ELD observations that were submitted by all of the elementary PTs. Here, I identified themes regarding ELD instruction to look further into,

**Lower grades.** From looking at the ELD observations, I found that the primary forms of language that were covered in the lower grades were parts of speech, the primary functions were identifying, comparing, and contrasting, the primary strategy utilized was sentence frames, and the primary language skills that ELD instruction focused on were spelling and academic vocabulary. Most of the classes in the lower grades focused on identifying verbs and comparing and contrasting objects such as shapes. When observing a lesson on verbs, one PT asserted, “[while] students have acquired knowledge of knowing what an action is, we as the educators need to provide academic language to it”. With this activity, the students learned synonyms for verbs to increase their academic vocabulary. For example, if the boy was throwing a ball, students were asked to come up with other verbs that mean throw (e.g. tossed). Moreover, sentence frames were used to help students strengthen their communication skills and express ideas, and conversations were used to guide language use. One PT observed content ELD instruction in which science was incorporated into ELD for the entire 2nd grade. In this specific lesson, the class discussed the way seeds travel. Students learned the following academic vocabulary: dispersing, scattering, travelling, floating, seed pods, and stickers. The students also learned a sentence frame and practiced using it in pairs.

**Upper grades.** From looking at the ELD observations, I found that ELD instruction in the upper grades expanded upon language forms and functions to

incorporate more complex activities and skills than the lower grades. Similarly to ELD instruction in the lower grades, the primary forms of language that were covered were parts of speech and vocabulary, but unlike ELD instruction in the lower grades, this type of ELD instruction expanded upon language forms and functions to emphasize focus on details by providing description, and the primary skill of focus was writing. As it pertained to parts of speech, students in the upper grades not only identified these concepts; they used them while writing paragraphs. These students also revised their writing multiple times. Like students in the lower grades, students in the upper grades focused on academic vocabulary specific for context. For instance, one class learned vocabulary to describe the chaparral biome, and students learned how to find important details in an informational text. These students also practiced reading fluency and intonation, and the primary function they focused on was describing. (This was over the course of five sessions.) In one sixth grade class, ELD instruction focused on weekly vocabulary words (one from the ELD workbook and another science-based term) and grammar. In another upper grade class, students were divided into small groups to complete a jigsaw organizational grid based on the lesson concepts. These are examples of ELD instruction in the upper grades expanding upon language forms and functions to incorporate more complex activities than those observed in the lower grades.

The structure of ELD instruction was also a theme highlighted from the ELD observations, specifically the time and model for ELD instruction that was used. Most observations of ELD classes showed that ELD instruction was structured to allow students the most talking time possible. On average, systematic ELD instruction occurred for 30 minutes per day, four days per week, with the exception of a couple of school sites

that implemented content-based ELD instruction. PTs noticed students constantly talking and practicing what they learned. Many of the PTs affirmed that students benefitted a lot from this structure because they were given the opportunity to talk about what they learned, something critical for language development. While most, if not all, PTs mentioned the benefit of using this time for students to engage in conversations, one PT noticed that “students finished the 30 minute lesson after drawing and writing, but did not get a chance to share their clues with each other”, which led me to inquire about how PTs felt about the amount of time allotted to ELD instruction (which was discussed during the interview).

Two school sites implemented different models of ELD instruction. One of these schools did not separate ELD instruction into a time block, but instead required it to be embedded in all instruction throughout the day. The other school, as noted by a fourth grade PT at its site, did not have an official ELD program or class. In the other grade levels, there were curriculum specialists who conducted small groups and occasionally pulled out EL students. However, the fourth grade specialist left before the beginning of the school year and was not replaced. So, the 4th grade ELD instruction at this site was done in class. The PT mentioned that ELD instruction occurred in small groups, or by the PT or classroom teacher.

As it pertained to grouping, most students were grouped according to linguistic ability (based on assessment results) across schools. One school grouped ELs according to linguistic ability for ELD instruction and English Only (EO) students for academic language instruction. According to the fourth grade PT mentioned above,

One of the struggles we have doing it this way is our academic rotations. We have the EL students from the two other fourth grades coming in to our room, and we don't have as much background knowledge about them, so it becomes difficult to assess how much help they need, and the best way to provide that help. The quote above led me to further probe into grouping of students, particularly ELs for ELD instruction and the challenges of teaching ELD to ELs from other classes (See Appendix A, Questions 3-3). Overall, ELD instruction ranged from 20-45 minutes three to five days per week and it occurred systematically, infused with content or throughout the day across all subjects.

**ELD lesson plans.** While all of the PTs created ELD lesson plans, only a few taught them due to constraints beyond their control. For example, some PTs were placed in classes that did not implement ELD instruction, and some PTs were not given opportunities to teach ELD. So, I looked at ELD lesson plans to investigate the types of activities and learning objectives that PTs focused on in the lower grades and upper grades. To get an idea of the emphasis placed on language by pre-service teachers, these lessons were analyzed based on the following codes: learning objective, language form, language function, and strategy (See Appendix E).

**Lower grades.** The primary language forms incorporated into the ELD lesson plans for the lower grades were parts of speech, vocabulary, and sequence. The parts of speech primarily consisted of verbs, specifically recalling and acting them out, and the use of prepositions to describe the location of objects in relation to other objects in space. The lesson plans also incorporated opportunities for students to provide their own definitions of preposition while being given the correct definition or wording if

necessary. The main types of vocabulary incorporated into the ELD lesson plans for lower grades were prepositions, opposites (e.g. hot/cold, happy/sad), and the five Ws and H (e.g. who, what,..how). Sequence was also a language form incorporated into lesson plans for students to discuss characters, the sequence of events, and the ending of a story. Moreover, the main functions that were planned for the lower grades were: asking, answering, discussing, explaining comparing, and contrasting. For many of the lesson plans, students were taught how to ask questions and listen in order to practice conversation skills. One PT who had six EL students noted the benefit of practicing how to ask questions before being told to ask questions about a text for these students. This PT planned to give sentence frames to guide their asking. Opportunities to discuss, compare, and contrast characters based on characteristics were incorporated into lessons in addition to the opportunities for students to discuss their likes and dislikes.

The primary strategies planned for lower grades as shown in the ELD lesson plans were: modeling, pair/share, read aloud, and repetition. Repetition was planned for students with language difficulties so they could hear the same words over and over again. Another strategy incorporated with these students in mind was using pictures with words to put the words into context. Most of the assessments planned for students in the lower grades were incorporated throughout the lessons as PTs planned to ask students to identify the verb in their sentence and provide reasoning for this identification. PTs also planned to walk around and listen to students sharing to see if they could verbally express what they learned. Other planned assessments included identifying and underlining sight words in decodable books in order to demonstrate their ability to read common high-frequency words by sight.

**Upper grades.** The primary language forms incorporated into the ELD lesson plans for the upper grades were parts of speech and inferences. The parts of speech mainly consisted of prepositions, specifically knowing when to use prepositions and how they fit into prepositional phrases. Making inferences is a topic and language function that appeared in many of the ELD lesson plans for the upper grades. Within one lesson plan, a PT planned to read a story aloud and stop frequently for the class to discuss parts of the story and make inferences. The PT also planned to incorporate pair/share by allowing students to discuss with their elbow partners what kind of inference they could make after giving them a small prompt. They would then be asked to share with the whole group while using a sentence frame. The PT planned to work on an inference chart on the doc camera as the lesson progressed, particularly to help EL students practice making their own inferences by lightly guiding them with questions. After the read aloud, the PT planned to ask students to state in their own words what an inference is. Their responses would help guide the subsequent lesson, specifically what needs more clarification. Within ELD lesson plans that focused on inferences, PTs indicated the importance of providing ELs with visuals of the components of making an inference in addition to introducing the language used when making an inference (sentence frames). Many of the PTs wanted students to understand what inferences are and how to make them because making inferences that are supported by details from the text is a very important language function and skill that students in the upper grades are required to learn and engage in.

**Functions.** Identifying was the primary language discourse function incorporated into the ELD lesson plans for both lower and upper grades. One example of



a lesson plan with the use of this language function is one in which a PT created a “Scoot” activity which required students to identify the helping verbs within a sentence in order to demonstrate their ability to use verb tense to convey various times, sequences, states, and conditions. For the upper grades, one lesson plan included an activity that required students to identify the topic, thesis statement, main points, and supports and use this information to write an outline after they read a text. In addition to identifying, ELD lesson plans for the upper grades also required students to describe, explain, analyze and predict in order to infer. One can see that while “identifying” was the primary language function incorporated into ELD lesson plans for both lower and upper grades, lesson plans for the upper grades expanded upon this function for students to include others which required them to use critical thinking skills to infer and write based on textual information. While most of the ELD lesson plans were created for language arts, a few of them were created for math, particularly in the lower grades. Most of these lessons were developed to teach students in the lower grades how to show various representations of numbers, such as dots or tally marks as well as how to record and organize their data.

**Strategies.** Strategies incorporated into ELD lesson plans for both lower and upper grades included: pre-teaching vocabulary, think-pair-share, reviewing the previous day’s lesson, and relating learning to the everyday world. While all of these strategies are self-explanatory, it is important to point out is the use of the think-pair-share strategy was often planned for both grade types similarly throughout ELD lesson plans. The plans stated that students will first think-pair-share with their elbow partner before participating in a whole class discussion in hopes of increasing prior knowledge and class participation. While it was more often apparent in the lower grades, lesson plans for the

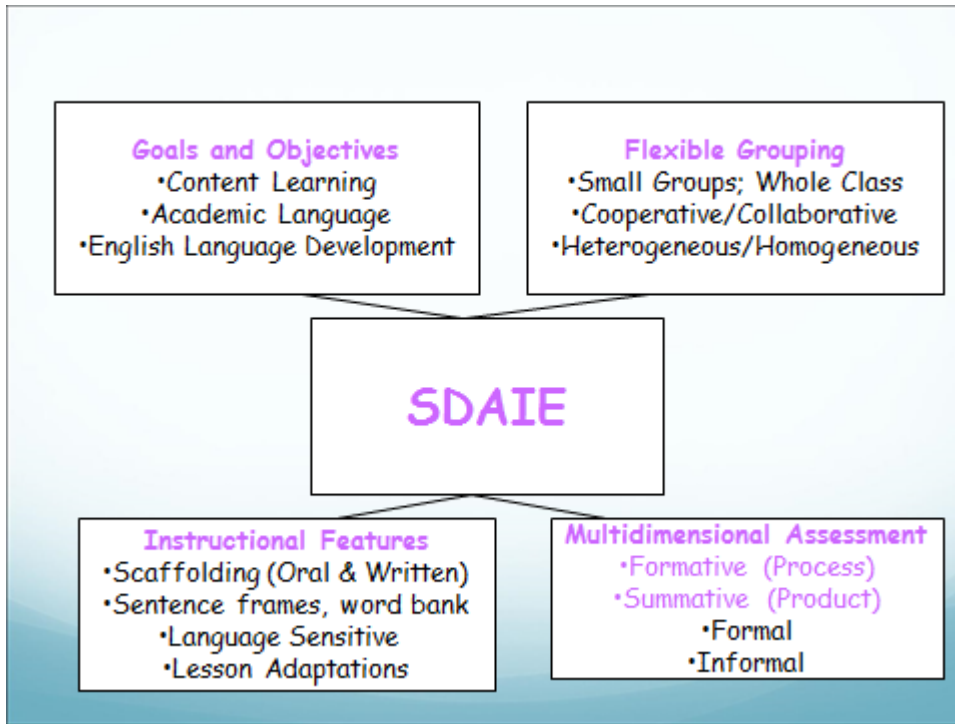
upper grades also mentioned that PTs would remind students to use the sentence frames to structure their answers when sharing. Moreover, strategies that were different for each grade type included color coding, repetition, and choral recitation for the lower grades, and the use of graphic organizers for the upper grades. One ELD lesson plan for a lower grade included color coding and repetition to reinforce the structure of cause and effect sentences and the use of “so” and “because”. While students shared with their partners, the PT planned to assess their abilities to correctly compose cause and effect sentences using “so” and “because”.

Additionally, ELD lesson plans for the lower grades often included having students chorally recite information for PTs to support them through repetition. For the upper grades, ELD lesson plans often included graphic organizers to ease students into the writing process. In one lesson plan, students would be given a graphic organizer and a brief review of expository writing to create an outline and write a paragraph with an introduction and conclusion. For another lesson, students would be given a specific community and the accompanying reading sections to complete a graphic organizer with facts to do a quick write in order to demonstrate their ability to describe the process in which early societies developed. One can see that while pre-service teachers in both lower and upper grades included many similar strategies for their ELD lesson plans, lesson plans created by the PTs in lower grades included more review and oral language strategies such as choral recitation for repetition, while lesson strategies planned by PTs in the upper grades were used for students to engage in writing.

**INT 23: SDAIE section.**

Topics of interest regarding this research that were covered during the winter in INT 23 were: Principles of SDAIE, commonalities and distinctions of ELD/SDAIE, content and language objectives, academic language and assessment for edTPA, and analysis of English learner student work.

In January, the PTs remained at their assigned school sites, but switched grades from lower (K-2) to upper (3-6) or upper to lower. During the winter quarter, PTs learned that specifically designed academic instruction in English (SDAIE), formerly referred to as sheltered instruction, uses scaffolds to focus on important features of fluent English. While ELD focuses on language, SDAIE focuses on content with the primary objective of concept development. With SDAIE, teachers provide students with comprehensible input to enhance their cognitive academic language proficiency (CALP) to access the grade appropriate core curriculum. To effectively implement SDAIE, teachers must understand language acquisition and design lessons that consider the special linguistic and cultural backgrounds of their students (Dutro and Moran, 2003 as cited in Scalzo, 2016b). One question that arose during class, was “How is this done for ELs below grade level?”, To answer this, the instructor explained the four main goals of SDAIE: 1) learn content, 2) learn English, 3) practice higher level thinking skills; and 4) advance literacy skills, in accord with the graphic below (Dutro and Moran, 2003 as cited in Scalzo, 2016b). To further explain how to scaffold lessons for ELs below grade level, the instructor explained how to modify lessons for SDAIE (see Appendix F).



**Figure 7.** SDAIE: Specially Designed Academic Instruction in English (Scalzo, 2016b)

After learning about the principles and features of SDAIE, the class used a Venn diagram to contrast ELD lessons to SDAIE lessons based on information in the “Modifying Lessons for SDAIE” form. By contrasting this form to the “ELD Lesson Analysis using Lesson Design Frame” Form (see Appendices E-F), candidates distinguished between ELD and SDAIE features. While it is clear that many of the SDAIE features were not required for the ELD lessons, it is important to note that for both lesson plans, PTs identified academic language functions and forms, but the SDAIE lessons included many more features, including assessment of prior knowledge, use of text, “real world” application, and et cetera. For their ELD lesson plans, PTs wrote statements regarding the purpose of each lesson component, but for the SDAIE lesson plans, they had to demonstrate evidence of each lesson component while providing modifications for them.

Moreover, the class watched a video of a Kindergarten number sense lesson (<https://www.teachingchannel.org/videos/visualizing-number-combinations>) and analyzed the lesson based on the SDAIE modifications form.

After the video analysis, the instructor explained language demands and the purpose of language objectives to the class. Language demands are linguistic task requirements, which can be high or low. Examples of high linguistic demands are providing information based on text or constructing an argument, and examples of low language demands include drawing pictures to explain thinking or role playing. It is more challenging to grasp details from a text or argue than it is to draw a picture or role play a character for any student, especially an EL. So, determining whether a language demand is high or low depends on how challenging the task is linguistically. For high linguistic demands, teachers must consider how to scaffold and contextualize for the students who need it, and if linguistic demands are low, they must consider how to embed opportunities for students to use language in the lesson. When linguistic demands are uncovered in the academic standards and content objectives, teachers can effectively scaffold lessons for students to enhance their productive (speaking and writing) and receptive skills (listening and reading). Therefore, it is important to have both language objectives and content objectives.

SDAIE lessons include language objectives and content objectives, which can be the same (e.g. students will identify when to use ‘a’ versus ‘an’), but, are often different. An example of a content objective is “Given an explicit model of possible strategies of counting, the students will determine how many fingers there are in the class in order to demonstrate counting on or adding by tens and place value understanding.” The language

objective that coincides with this is “Given modeling and sentence frames, the learners will describe their counting strategies to their classmates in order to demonstrate effective interaction and communication of ideas”. A language objective includes what is desired for students to think, know, understand or be able to do. It must address how students will demonstrate this by describing observable actions that can be assessed. To create language objectives for their SDAIE lesson plans, candidates were given the following sentence frame: “Given (supports), the learners will (function) in order to (connection to learning objectives and content standards).” While the desired outcomes are the same for both the content and language objectives, the linguistic tasks required of the students to achieve the objective(s) in addition to the language support is explicit in the language objective. To reinforce what language demands are, the instructor provided multiple examples for the candidates.

The class learned how to conduct a SDAIE lesson according to content (content objectives) targeting ELD standards (language objectives). While the content objectives are given in the content standards, the language objectives are made apparent through scaffolds, particularly forms (e.g. sentence frames, organizers, and word walls) through which comprehensible input (multiple opportunities to practice) is provided. The class also discussed aspects of the SDAIE Grid (See Appendix F). In early February, the instructor informed the class of the following scaffolding principles: a) tap into prior knowledge, b) pay attention to cognitive load, c) promote peer collaboration; and d) cultivate metacognition and awareness, or thinking about thinking (Dutro and Moran, 2003 as cited in Scalzo, 2016b).

**Academic language for edTPA.** In mid-February, the class further discussed academic language to prepare for edTPA. For this course, academic language is defined as oral and written language used for academic purposes and the means through which students develop and express understanding of disciplines. Academic language includes a defined system of functions with explicit expectations; precisely-defined vocabulary to express abstract concepts and complex ideas; and syntax for coherence among ideas (Dutro and Moran, 2003 as cited in Scalzo, 2016). The class looked at the edTPA Handbook ([https://gauchospace.ucsb.edu/courses/pluginfile.php/639246/mod\\_resource/content/1/EMHandbook.pdf](https://gauchospace.ucsb.edu/courses/pluginfile.php/639246/mod_resource/content/1/EMHandbook.pdf)) and discussed academic language functions in context of the edTPA. Shortly thereafter, the instructor passed out the formal lesson plan template and told the pre-service teachers to design a lesson with functions and demands according to a specific prompt. They were encouraged, but not required, to use academic language functions suggested in the edTPA handbook.

The class also discussed developing rubrics for lesson planning, specifically academic language (vocabulary use, sentence structures, and functions) and evaluative criteria. The evaluative criteria included how the students demonstrate their degree of understanding the learning objective, and are labeled: emerging, bridging, or expanding according to the ELD standards. The instructor also distributed the following handout: “Rubric 4: Identifying and Supporting Language Demands”, and reviewed levels three and four to distinguish between the two, particularly the differences between general and targeted language supports (see Appendix G). Word walls and sentence frames are examples of general language supports, while targeted language support includes

strategies that specifically support English Learners based on their language proficiencies. The PTs then looked at “Rubric 14: Analyzing Students’ Language Use and Mathematics Learning” to prepare their edTPA assessment around academic language functions (See Appendix H). They were also given a resource-“The Nature of Mathematics Language, taken from Teaching Mathematics to English Language Learners”---to reference while considering how to create and evaluate edTPA assessments for academic language use (Kersaint, Thompson, and Petkova, 2013)

**EL case study.** Between late February and early March, the PTs divided into small groups to discuss observations and work samples of the ELs they shadowed. Then, they created tables to chart their data to include in their case studies. The PTs also analyzed student work (see Appendix I).

**Summary:** While undertaking INT 23, pre-service teachers learned about ELD standards, strategies for teaching ELD, using academic language functions and forms, and vocabulary development. To apply information that they learned about ELD standards, the PTs found a grade level standard for the grades that they taught and created a grade appropriate activity that addressed each component of the ELD standard. To learn about language functions, forms, supports, and objectives, the class watched a video of a first grade ELD lesson, and discussed the language aspects addressed in the lesson. After learning about academic language, candidates engaged in application and practice by identifying academic language functions and forms in their own lessons. In addition to learning about academic language, the candidates analyzed ELD lessons and learned about different vocabulary development strategies.



Other topics covered in INT 23 were: Principles of SDAIE, commonalities and distinctions of ELD/SDAIE, content and language objectives, academic language and assessment for edTPA, and analysis of English Learner student work. During the course, PTs distinguished between ELD and SDAIE features, learned how to modify lessons for SDAIE, and demonstrated evidence of SDAIE features in their SDAIE lessons. PTs also learned about scaffolding principles including tapping into prior knowledge and promoting peer collaboration. They further discussed academic language to prepare for edTPA and designed SDAIE lessons according to a specific prompt. In addition, PTs learned how to develop rubrics for lesson planning and evaluative criteria. The major learning opportunities afforded to pre-service teachers during INT 23 were: observing ELD instruction, creating ELD and SDAIE lessons, and learning about academic language to prepare for edTPA.

A particular learning experience for the pre-service teachers was observing ELD instruction and reporting on it. Designing ELD lesson plans was another learning experience afforded to pre-service teachers. While all of the PTs created ELD lessons, only a few taught them. An interesting finding from this study is that for their ELD lesson plans, PTs incorporated language aspects they noticed were taught during their observations of ELD instruction. For example, with regard to the ELD observations, the primary language forms covered in the lower grades were parts of speech, and a primary function was identify. For the ELD lesson plans, the primary language forms incorporated for the lower and upper grades were parts of speech, and the primary language function was identifying. Overall, particular learning experiences that were afforded to pre-service teachers while undertaking the course of focus included:

switching grades from lower (K-2) to upper (3-6) or upper to lower, distinguishing between ELD and SDAIE features, creating and analyzing lessons based on the SDAIE modifications form, and discussing academic language and developing rubrics to prepare for edTPA---an assessment portfolio of a series of their mathematics lessons.

**RQ2: How did pre-service teachers support English Learners' academic language development as evident in their course assignments?**

**SDAIE lessons**

To answer the second research question, this section analyzes how pre-service teachers addressed ELs' needs and supported their learning as evident in aspects of their SDAIE lessons. Since most of the candidates created SDAIE lessons for their edTPA portfolios, most of the SDAIE lessons focused on mathematics.

**Objectives**

Most of the content objectives for the lower grades focused on addition and transferring skills of addition and subtraction across math activities, and most of the language objectives focused on comparing and counting numbers and decoding. One SDAIE lesson required students to determine how many fingers there were in the class in order to demonstrate counting on or adding by tens. For a Kindergarten SDAIE lesson, students were given a piece of paper with their names and different sentence frames, and they were expected to identify the number of letters in their names and compare the length of their names with their peers' names. Another Kindergarten SDAIE lesson required students to compare two stacks of objects using "less than", "greater than" and "equal to". All of these lessons involved counting and the last two required students to

compare in order to make a determination, a skill that is most often taught in the lower grades, especially for Kindergarten math.

As it pertains to transferring math skills, a content objective for a first grade SDAIE lesson was for students to translate the skills they developed for adding and subtracting within ten, to adding and subtracting within 20. For another first grade math lesson, the content objective was for students to switch the addends of a problem and know that the total is still the same (commutative property). Another content objective for many of the SDAIE lessons for the lower grades was for students to add two expressions on either side of the equal sign and determine if the equation was true or false. Other SDAIE math lessons for lower grades required students to describe counting strategies to their classmates in order to demonstrate effective interaction and communication of ideas. Math SDAIE lesson examples show that addition, subtraction, and counting were highly emphasized by pre-service teachers in the lower grades, and they demonstrated the importance of vocabulary development for concepts such as greater than, less than, equal to, true, and false in order for students to understand content.

Moreover, decoding was a highly emphasized skill in SDAIE language arts lessons for the lower grades. For a Kindergarten SDAIE lesson in language arts focused on the short i vowel sound, students were expected to pronounce cvc words with i in the medial position (e.g. pig, sit, hit, etc.). For another SDAIE lesson, students were given the sentence frame “I have \_\_\_\_\_. Who has?” along with matching pictures of the cvc words containing the short i in the medial position, and they had to identify and decode eight cvc words with the short i sound. Both of these examples show that decoding and

identifying were common language objectives for taught during language arts by PTs in the lower grades.

SDAIE lessons for the upper grades included content objectives focused on math conventions and content vocabulary, and the language objectives focused on identifying and analyzing important information. For instance, for a lesson on developing the concepts and conventions for using the coordinate grid, fifth grade students took notes and explained their thinking to the class. These students were given a notes sheet to complete which was also an easy reference to the content vocabulary. It included visuals, definitions, and examples as context for important concepts. So, while the content objective was for students to grasp conventions of a coordinate grid, the language objective was for them to recognize grid concepts. For another SDAIE lesson, a fifth grade class isolated the most important information about specific events and articulated the information to their peers. For this lesson, the PT provided sentence frames to help students express events in terms of cause and effect.

Moreover, for a fourth grade geometry lesson, students identified and compared and contrasted lines, points, line segments, rays and angles. For this lesson, the PT provided sentence frames and a vocabulary word wall to help students compare and contrast features of geometric figures. Another common language objective for SDAIE lessons was for students to explain their strategies for solving problems, and to help students do this, PTs implemented sentence frames and structured questions. Of importance, students were also required to justify their thinking and identify features. Note-taking was a commonplace skill for the upper grades for many of the SDAIE lessons. All of these are examples of SDAIE lesson language objectives for upper

grades that focused on students' abilities to recognize, analyze, and justify important information, whether concepts for a coordinate grid, important events or geometric figures.

### **Strategies**

Modeling, manipulatives, gestures, and sentence frames were common strategies implemented throughout SDAIE lessons for lower grades. One PT used modeling that matched oral directions to demonstrate expectations for students. This PT also used math manipulatives and gestures as language supports for students to interact with the ideas. For instance, students used cubes to represent greater than and less than, and they used one arm above the other to show an equal sign. According to the PT,

We bring our arms wide and up and use a big voice when we say "greater than".

We bring our arms in and use a smaller voice when we say "less than".

Along with modeling, the PT provided an opportunity for students to practice speaking and gesturing.

For another SDAIE lesson, students listened to two subtraction word problems and followed along as the PT used manipulatives to demonstrate the visual component of the problems. Then, students were given their own foam tens frame to follow along as the PT provided another word problem. Meanwhile, the PT observed students as they used the manipulatives to demonstrate the word problems to see if they used the manipulatives in correspondence to the specific subtraction problem. As the lesson progressed, students became the subjects of the word problems and were called upon to act them out. For this lesson, the PT stated,

Modeling allows the opportunity for ELs to access the concept in another way other than just orally/listening. They are able to see what is going on, as well as take part in one of the examples. Given sentence frames the learners will create their own subtraction stories.

One can see that for this SDAIE lesson, students used manipulatives to demonstrate their understanding\, and they also participated in role play.

Like the previous lesson, another SDAIE lesson included opportunities for students to become subjects, but this one also included pre-teaching vocabulary. For this lesson, the PT taught new vocabulary (e.g. long(er) and short(er)) by using different objects, and the PT used a slinky to show different lengths. See the following excerpt from the lesson plan:

Stretch a slinky as much as I can to make it long. Say, “long,” and ask students to repeat after me. Shorten a slinky while saying, “short!” Students repeat after me.

Provide sentence frames: \_\_\_\_\_ is longer/shorter than \_\_\_\_\_.

Choose two students (one girl and one boy) in order to compare their hair lengths.

Ask them to come to the front and stand side-by-side (makes it easier for students to visualize who has longer/shorter hair). Say, “Student A (girl)’s hair is LONG.

Student B (boy)’s hair is SHORT.” Check students’ understanding of vocabulary by asking, “Whose hair is long? Whose hair is short?” Then, use the sentence

frame to say a complete sentence: Student A’s hair is longer than Student B’s hair/ Student B’s hair is shorter than Student A’s hair.

With this SDAIE lesson, the PT used a tangible object, sentence frames, and students as subjects to help students visualize and articulate concepts to make comparisons.

Sentence frames were incorporated in all of the SDAIE lessons for the lower grades. These structures were provided for students to articulate their thoughts in complete sentences. For one SDAIE lesson, students were given sentence frames to compare the amount of objects in different groups. In another SDAIE lesson, sentence frames were written on sentence strips that stuck to the white board. To familiarize students with the sentence frames, the PT and students took turns reading the frame: The \_\_\_ is longer than the \_\_\_\_. As this lesson progressed, students were also provided with graphic organizers (venn diagrams) to compare and contrast. Then, they taped their strips on the side of the diagram where they deemed fit. Finally, students discussed their decisions with partners before being asked to share with the class. This lesson is one example of many SDAIE lessons that included sentence frames, graphic organizers, and pair share to help students justify and articulate their decisions. Similarly to the previous SDAIE lesson, another SDAIE lesson required comparing, but focused on measurement attributes of items. This lesson included a review chart and content language for the class to compare findings on comparison grids. To express which item was the longest, the class used the following sentence frame: “The \_\_\_ is the longest”, which was initially modeled by the PT before students used it independently. This SDAIE lesson is an example of how the PT supported students’ language use through modeling and a sentence frame. Both examples show that making comparisons was widely emphasized by PTs in the lower grades for math, and they show that sentence frames and comparison grids were useful for helping students in the lower grades make comparisons.

Other strategies for lower grade SDAIE lessons included teacher-led small group instruction, discussion, and review. While checking for understanding during a SDAIE

lesson, if a PT noticed students struggling with problem solving, (s)he worked with them in a small group as the rest of the class continued working independently. For another SDAIE lesson, this class engaged in a lot of discussion, a strategy aimed to involve everyone. The PT for this lesson also included a sentence frame and had the class work on writing together to articulate ideas as a group. According to the PT,

It is important for the ELLs because it allows them to all work together, talk and interact in the group together and allows them to have a frame to help them speak and organize their thoughts appropriately.

For another SDAIE lesson, one class read a story multiple times. For the first reading, the PT read the book aloud. For the second reading, the PT asked questions when (s)he noticed a student or students visibly confused. For the third and final reading, the PT asked students to highlight or comment on anything they wanted to while (s)he read. While reading the story multiple times was the primary strategy for this lesson, the PT also incorporated sub strategies such as pausing, questioning, and allowing students to highlight things that stood out to them in order to aid students' comprehension.

While all of the SDAIE lessons for lower grades included strategies such as modeling, manipulatives, and sentence frames, many of the lessons incorporated gestures, graphic organizers, and students as subjects of lessons to help students acquire and use the language to engage in content. Although not heavily expounded upon, other strategies that were used for helping diverse learners in a few of the lessons included pair sharing and drawing pictures. One PT mentioned, "Pair share gives students a chance to talk things over with someone before sharing or moving on". Another PT who incorporated pair/share stated, "I want to give students the chance to help a friend to



build community and show that not only a teacher can be of help.” This shows that pair/share was used to help students build community and use their peers as resources. Moreover, another PT incorporated drawing pictures to help students make connections to concepts, and this PT used gestures such as facial expressions while also modeling. One can see that multiple strategies were used for SDAIE lesson plans across the lower grades to support students’ academic language development.

Findings indicate that group work, drawing, and questioning were highly incorporated in SDAIE lessons to provide language support for students in the upper grades. For one SDAIE lesson in which table talk was incorporated throughout, a PT wrote,

I do this to give the students a chance to talk about the concept. For my students that need extra support in language, it allows them to both practice in a low stress environment as well as hear their peers use the language.

According to this PT, “It is important for ELLs to speak so that they practice using the content vocabulary. This lesson occurred during a math rotation in which only one EL was present. (S)he further expressed,

I think the strategies of working with smaller groups and discussing whole group provide different settings for all students to get involved in the conversation...Perhaps ELs better obtain information when it is explained by their peers, instead of just me as the teacher.

This PT often wrote problems on the board for students to practice with their table groups. (S)he explained,

This provides another chance for ELs who might not be as comfortable talking in a whole group to talk and listen to peers in a smaller group setting. They can also practice and talk through the steps of solving this kind of problem:  $3\frac{3}{5} + 5\frac{1}{5}$ . Here, the PT implemented table talk as a form of pair-share for students to brainstorm ideas together, and it helps the English Learner hear and speak academic language in a structure more intimate than the whole group. This strategy also encourages students, especially ELs, to use their peers as resources.

In another SDAIE lesson that incorporated table talk, the PT also provided a page for notes, a word wall, and a sentence frame wall, all of which students used to support their thinking. During this lesson, the PT sat with each group for a few minutes at a time to facilitate the development of strategies as well as meaningful communication about those strategies. So, for this lesson, the PT not only permitted group work, but (s)he also provided students with several communicative resources.

Drawing was widely used for upper grade SDAIE lessons to help students connect with content. For example, one PT modeled an activity in writing and drawing, and students drew a picture to represent the specific numbers for this activity. For another SDAIE lesson, a PT stated, "Some ELLs might not have the verbal skills necessary to explain their thinking so drawing a picture will allow them to communicate that with me in a different method." In order to engage students, one PT used intonations to tell the story and pictures to help students visualize it. (S)he also told the story slowly when students struggled with comprehension. All of these are examples of drawing being incorporated by PTs to help students in the upper grades comprehend and communicate information.

Like drawing, questioning was also used throughout SDAIE lessons for upper grades. For one lesson, students were given sentence frames and structured questions to explain their problem-solving strategies. For another SDAIE lesson, the PT wrote, “I am looking to see if students are making the connection. If not, I will ask probing questions in order to have them think about other possibilities.” For another SDAIE lesson that involved storytelling, a PT stated, “Students will be able to comprehend the story by answering questions.” Additionally, another PT explained, “Answering questions and receiving immediate feedback allows all students, especially ELLs, to have a clear understanding of the objective.” All of these are examples of questioning used by PTs to help students in the upper grades explain and understand content. Although not widely, gestures were also incorporated by PTs as comprehensible input to help students in the upper grades understand vocabulary.

**Functions.** Since most of the SDAIE lesson plans that PTs created for INT 23 were included in their edTPA portfolios, this is a good place to discuss language functions across SDAIE/edTPA lessons. For edTPA portfolios, the primary functions identified by pre-service teachers for the lower grades were: explain, compare, contrast, and describe, while the primary functions identified for the upper grades were: explain, justify, describe, and classify.

Explaining was the language function essential for students to develop conceptual understanding and procedural fluency across all grade levels. According to one Kindergarten pre-service teacher, “understanding how to express number relationships involved in early addition and subtraction will help them communicate their problem solving.” The PT further wrote, “At this grade level, my students have a

hard time communicating their ideas, and the language forms should foster their acquisition of these concepts.” The forms that this PT implemented for his students were sentence frames and phrases to guide their explanations. For his edTPA series, students were required to explain how they knew the total number of passengers on a double-decker bus. “Students could explain that the two different decks of a bus contribute to the total amount of passengers”, wrote the PT.

Kindergarten students also needed to “explain math problems/scenarios in the context from which they were learning the addition and subtraction concepts.” For example, students explained their mathematical reasoning about the number of passengers on the top deck of a double-decker bus and the number of passengers on the bottom deck, and how this made the total number of passengers on the bus. It is important to note that in order to explain the math problems to determine the total number of passengers on the double-decker bus, Kindergarten students needed to understand key vocabulary and a key mathematical operation-addition. The key vocabulary in the learning task were “passengers” and the location of the passengers, whether on the top or bottom deck. Students also needed to understand the symbol of addition, the + (plus) sign, in the learning task to understand the equation sentence frame that the PT wrote on the board:  $\_\_\_ + \_\_\_ = \_\_\_$ . During this lesson series, students also had to explain how they knew the number of the passengers on one bus matched the other, which demonstrated their ability to reason mathematically and explain their problem-solving strategies.

For first graders, a large part of the edTPA lesson series focused on explaining which methods were used to solve word problems, through both oral and written

responses. This, according to a first grade PT, was “beneficial for all students, especially those who needed assistance determining when to add or subtract.” Another first grade PT wrote,

In regards to the language function and learning task of explaining how word problems were solved, the students need to have a deep understanding of addition and subtraction. This includes being able to understand what addition and subtraction are as well as what their symbols mean and look like when writing a number sentence. The students will also need to understand the vocabulary terms that lead them to either add or subtract.”

Regarding the upper grades, the language function explain was essential for students to develop conceptual understanding, procedural fluency, mathematical reasoning and problem solving skills.

One third grade class learned about area throughout the lesson series and had an assessment which asked students to explain what area is by completing the sentence frame: “Area is \_\_\_\_\_.” One can see that the discourse associated with this language task was written and the syntax of the sentence was provided by a sentence frame for students to fill in the blank with their definitions. Moreover, in a fifth grade class, students were asked to solve for the product using one of the strategies discussed as a whole group. Then, they had to explain why the strategy worked to their partners. This activity was designed to help students develop strategies for multiplying whole numbers by a fraction through discussion and problem solving. Each partner explained his or her thinking to the other partner by saying “I chose the \_\_\_\_\_ strategy because \_\_\_\_\_.” For the third lesson, students worked on a fraction word problem in groups of three to four

students before presenting to the rest of the class which strategy they chose for each set of numbers and why they chose that particular strategy. For this activity, students were expected to explain why one strategy was more efficient than another one given each set of numbers. This lesson series is an example of how students were required to not only reason mathematically to explain, but also justify their reasoning, specifically, the strategy they chose. This is an example of students engaging in multiple higher order skills (collaborating, problem solving, explaining, justifying, and presenting) simultaneously. It is also clear that there was a strong emphasis in this learning segment on sense-making and conceptual understanding as students problem solved, shared strategies, and justified their thinking.

In another fifth grade class, students were asked to “describe” or “justify” their strategies by answering questions such as “why did you switch the problem from a division to a multiplication problem.” According to the PT of this class, “vocabulary is the area students struggled with most.” One can see that even if students understand why they chose a particular strategy, it was challenging for them to describe or justify their answer without the appropriate math vocabulary. The language function “describe” was also essential for students in the lower grades to develop conceptual understanding, procedural fluency, mathematical reasoning, and problem-solving skills. According to one first grade PT, “they need to be able to describe the number of tens and ones they have as well as how the number of tens and ones relates to the digits in a number to build their conceptual understanding. Then, they can build on that conceptual understanding to develop procedural fluency, mathematical reasoning, and problem solving skills. Therefore, students need to be able to “describe” to develop them all.” Both of these

examples show that pre-service teachers have to ensure that students have key vocabulary in their repertoires and understand the definitions of terms in order to develop a foundation of conceptual understanding to build upon.

Another language function essential for students to develop is classifying. According to a sixth grade PT, “this language function is essential to students’ conceptual understanding because the concepts themselves are classifying lines, angles, and eventually shapes into different categories.” Classifying is important for procedural fluency as students learn how to look at lines, angles, or shapes, determine their key attributes, and categorize them. For this series, students were given opportunities to practice the skill of classifying based on attributes across multiple contexts. One example of a task that highlights this skill is from the third lesson.

As a whole group, students look at page 184 of their Student Books, which has examples and non-examples of shapes that are symmetrical. Below that there is a box with many shapes in it and students work with partners to circle the shapes that have at least one line of symmetry, and then draw that line of symmetry. Students then draw their own examples of shapes with at least one line of symmetry, and examples of shapes that do not, or are asymmetrical. Students then write their own definition of “line of symmetry”.

During this lesson, students practiced looking at different shapes and classifying them as symmetrical or asymmetrical, a skill that would be used to later help them classify polygons based on their attributes.

The central focus and purpose of the previous lesson series was (1) to teach students how to identify and explain the classification of different lines and angles, and

(2) to identify and explain the meaning of line of symmetry, which they will use later to explain the classification of different polygons. So, in order to explain the classification of polygons in following lessons, students had to explore attributes of polygons and the meaning of parallel, perpendicular, and intersecting lines. This involved creating a working definition of parallel and perpendicular lines, while also measuring acute and obtuse angles and adding angles together in addition to defining “line of symmetry” and identifying lines of symmetry in different polygons. It is evident that this edTPA lesson series involved comparing and contrasting---language functions essential for students to learn the content and develop mathematical reasoning. These skills were often implicit and explicit across all grade levels for the edTPA series.

**Summary:** How did pre-service teachers support English Learners’ academic language development as evident in their course assignments? While reviewing the SDAIE and edTPA lessons that were submitted, I noticed that all of the pre-service teachers included language objectives, sentence frames and key vocabulary for academic language considerations. For the lower grades, primary SDAIE lesson strategies included: modeling, manipulatives, gestures, and sentence frames. All of the Kindergarten PTs emphasized modeling throughout their lessons by acting out the problems and allowing students to do so in small group settings, while first grade PTs modeled appropriate oral speaking. One second grade PT used modeling and verbal repetition to support beginning learners.

First grade PTs incorporated hands-on activities such as folding paper squares into halves and fourths and using geoblocks as the focus was more on learning fractions and geometry. Rubber bands, index cards, construction paper, class charts (labeled: Bundles,



Singles, Total, or Tens, Ones, Total ), number cards unifix cubes, and colored tiles were also used by first grade pre-service teachers to support students' mathematics learning. It is important to underscore that of the PTs who taught in the lower grades and submitted SDAIE and edTPA lesson plans, only those who taught Kindergarten included visual strategies. The following were visual strategies used by Kindergarten PTs: videos, "Who Has, I Have" cards-picture cards for matching vocabulary with images. Both Kindergarten and first grade PTs allowed students to use ipads for certain activities, while first grade PTs displayed sentence frames on whiteboards. For her edTPA series, one first grade PT displayed content on her whiteboard, TV, and document camera, and she allowed her students to use ipads. With sentence frames, students were able to articulate their thoughts in complete sentences.

Kindergarten and first grade teachers incorporated more hands-on activities than second grade PTs. Kindergarten PTs incorporated hands-on use of manipulatives such as unifix cubes, pipe cleaners, assorted colored beads, pattern blocks, and foam tens frames for various lessons, most of which centered on counting, sorting, and patterns. Two Kindergarten PTs collaborated to create their edTPA series on measurement, and for their lessons, they used pan balance scales, building blocks, and items to weigh (e.g. one pound of potatoes), produce bags, and measurement journals. Using a tangible object helped students visualize and articulate concepts to make comparisons. Many of the lessons also incorporated gestures, graphic organizers, and students as subjects of lessons to help students acquire and use the language to engage in content. It was also common for PTs to use students as subjects while pre-teaching vocabulary. One second grade PT pre-taught domain specific words and phrases through examples while using

gestures to help students understand key words and phrases. Other strategies used across SDAIE lessons for diverse learners in the lower grades included teacher-led small group instruction, discussions, review, pair sharing, and drawing pictures.

All of the upper grade pre-service teachers planned their SDAIE and edTPA lessons with language objectives, key vocabulary and sentence frames as academic language considerations. However, third grade PTs utilized venn diagrams more than the other upper grade PTs. For the upper grades, SDAIE lessons included content objectives focused on math conventions and content vocabulary, and the language objectives focused on identifying and analyzing important information. Findings indicate that group work, questioning, and drawing were incorporated into SDAIE lessons to provide language support for students. It is important to reiterate that drawing was an essential support that teachers permitted students to use to communicate in order to supplement for the lack of academic language to express their ideas and answers. This strategy was widely used across the upper grades. Gestures were also incorporated as comprehensible input to help students understand vocabulary and connect with content.

In their SDAIE and edTPA lessons, all of the upper grade pre-service teachers included visuals for academic language support. For her initial edTPA lesson, one third grade PT allowed students to create posters to reference throughout the series. Students were also given vocabulary cards with definitions and picture examples to reference. They also referenced posters on the classroom wall of the two main academic terms--- attributes and quadrilaterals---throughout the unit in addition to viewing new vocabulary terms displayed on the board as the series progressed. For her edTPA series on geometry, a fourth grade PT used white boards, a document camera, number grid, and poster boards

as visuals for her class to reference. For their SDAIE and edTPA lessons, fifth grade PTs used the following visuals to support academic language: Whiteboards, maps, venn diagram posters and handouts, slideshows, iPads, TVs, writing templates, strategy posters, number cards, dice, videos, and drawing paper. All of the upper grade teachers incorporated various manipulatives for their lessons including: grid paper, math journals, tiles, construction paper of various sizes, rulers, and number lines. Moreover, two fifth grade PTs created an edTPA series in which they gave each student a sheet of drawing paper with an investigation question on it. Students used the paper to develop strategies to answer the investigation, and they received a sheet of poster paper to draw out their strategy to answer the question.

Overall, all of the pre-service teachers supported students' academic language development by emphasizing language objectives, sentence frames and key vocabulary in their SDAIE and edTPA lessons. PTs in the lower grades also included modeling, manipulatives, and gestures to support academic language development. While Kindergarten PTs emphasized modeling and visual strategies throughout their lessons the most, first grade PTs incorporated more hands-on activities to support students' mathematics learning. However, both Kindergarten and first grade PTs allowed students to use iPads for certain activities. Of importance, Kindergarten and first grade pre-service teachers incorporated more hands-on activities than second grade PTs. In addition, many of the PTs in the lower grades incorporated gestures, graphic organizers, and students as subjects of lessons to help students acquire and use academic language to engage with content. Other strategies used across SDAIE lessons for diverse learners in

the lower grades included teacher-led small group instruction, discussions, review, pair sharing, and drawing pictures.

As it pertains to how teachers supported the academic language development of students in the upper grades, third grade PTs utilized venn diagrams the most. PTs in the upper grades used group work, questioning, and drawing as the primary strategies in their SDAIE lessons to provide language support for students. In their SDAIE and edTPA lessons, all of the upper grade pre-service teachers included visuals for academic language support. It is important to highlight that third grade pre-service teachers highly emphasized prior knowledge, modeling, and group work into their lessons, and fifth grade PTs emphasized work space for students in their lessons. For instance, one third grade PT always made sure that students used material newly learned and this teacher model everything for students throughout each lesson. One can see the multiple ways that pre-service teachers supported students' academic language development in their SDAIE and edTPA lessons.

### **RQ3: What can we learn from preservice teachers' reflections of their instructional practices for working with English Learners in light of California's ELD standards?**

**Introduction:** This section discusses instructional practices for supporting English Learners' academic language development reported by preservice teachers across grade levels. This section also includes measures that PTs mention could have been used to improve instruction for ELs. Findings from edTPA portfolios, EL case studies, and interviews were merged to provide insight into how PTs described instructional practices and provide recommendations for helping ELs improve their

academic language development as a result of teaching these students math and shadowing them across learning contexts in their second classroom placements. For edTPA, all of the pre-service teachers created and taught a series of three math lessons for their second classroom placements. For the EL case study, each PT shadowed an EL across different subjects for at least two weeks.

### **Interacting in Meaningful Ways**

Here, I highlight findings from pre-service teachers' reflections pertinent to emphasizing the importance of promoting meaningful interactions to support English Learners' academic language development.

Using hands-on experiences focused on meaning of vocabulary, language, and content in addition to keeping students active were keys to supporting students' academic language development during instruction. These activities were especially useful for engaging students in the lower grades. Referring to Kindergarten students, one PT explained, "ELD is new for the students, so they have a slightly higher interest in it than in the upper grades." This PT found that in the upper grades, "students didn't enjoy ELD very much, especially if they were in the beginning stages of learning English." She also found that "active games and making everything hands on or visual and relate-able to the students were keys."

While teaching weight relativity, two Kindergarten pre-service teachers gave their classes opportunities to weigh two different things and predict whether or not the weight on the scale would increase or decrease. One of the PTs explained how this hands-on activity was used to clear student's misconceptions of weight comparisons. For instance, students put a big bouncy ball on one side of a scale and a smaller rock on the other side.

It was not until then that students realized that bigger objects are not always heavier. This was also a great way to emphasize verbal academic language use "I believe this one will be heavier", not "I think this one's bigger". This lesson gave students a visual representation of the difference between bigger and heavier. However, one measure that one of the PTs realized could have improved this lesson is giving students sufficient instructions. While the class had different weight gain stations, the teachers "didn't go through it enough with them and it was "kind of a disaster". Reflecting upon this lesson, the PT realized the importance of explaining one step at a time while giving directions to Kindergarten students.

One pre-service teacher who taught third and first grade (in that order) reported that hands-on activities helped solidify concepts for her students. For her first grade ELD class, she stated, "When we did more of the hands-on things, it stuck with them a lot more. We did a lesson on the senses, and for taste, they tasted different snacks and they described tastes-salty, sweet, spicy, etc.). She also explained, "Having the real experience combined with talking about the language really stuck with them, and they really had a blast and were involved." To teach students how to compare and contrast, one PT who taught fourth grade and Kindergarten (in that order) integrated hands-on reading and writing activities. The fourth grade class read and wrote about "James and the Giant Peach", while the Kindergarten class analyzed three different Gingerbread stories. After the Kindergarteners read the stories, the class created a big poster that included story components. Each row of the poster was for a different story and the columns were: characters, setting, repeated phrases, and the outcome. The PT explained,

First, we read a story and noted the components (e.g. the plot) to help us compare the ending. They all got different versions of the Gingerbread to show which character they had: Gingerbread boy, cowboy, and a girl. It had lined paper on the back for them to express why they chose that character. I chose this character because...

The activities for both of the classes involved “a lot of verbal work, partner and whole group sharing” as students shared their character comparisons and contrasts in small groups or pairs before sharing with the class.

While hands-on activities may be used to solidify content for students to comprehend, teachers must be mindful of the rigor involved in such tasks. Referring to a lesson in which students had to build a pyramid, one sixth grade pre-service teacher stated,

Early on, I thought the lesson objectives and demands were too hard for them. You build a pyramid with this many tooth pics and marshmallows and we'll see who builds the tallest structure. Not only that, part of the objective was to identify how many geometric shapes were in yours. We should've primed them with geometric shapes day one.

Here, the PT mentioned priming students with geometric figures as a measure that could have been used prior to the class building pyramids. This example highlights the need for teachers to be mindful of the pre-requisite skills that students need to acquire before engaging in hands-on activities, and it speaks to being mindful of the rigor that accompany tasks.

In contrast to the previous example, one first grade pre-service teacher incorporated a hands-on activity to help students count and group items by ten. To count beads, students were given the opportunity to choose one of two methods: 1) count the beads and separate them into groups of ten. Then, write the number on a notecard; or 2) thread the beads on the pipe cleaners ten by ten. Then, count the groups of 10 and left over ones to find the total number of beads they have. Students who chose the first option used the total number to make groups of tens, with singles left over. Then, they threaded 10 beads per pipe cleaner and repeated until all their beads were done. Regardless of the method, students concluded: “There are a total of \_\_\_ beads.” According to the PT, “Manipulatives and hand on experience makes this concept less abstract, especially for visual and kinesthetic learners.” These examples of students choosing their math methods demonstrate PTs facilitating students’ ownership of their learning through personal decision-making in addition to their using manipulatives for sense-making.

Contrasting activities of her second grade class to her sixth grade class, one PT mentioned that in second grade, students often engaged in choral responses and tossing a bean bag to each other to answer, whereas in sixth grade, students often engaged in group work. Referring to her sixth graders, she explained, “There'd be like two or three kids in a group and they'd have a little task like looking at a picture and writing down an observation and share it.” This example shows that PTs implemented hands-on activities that were grade appropriate for students (e.g, choral responding and bean bag tossing verses observation writing).



One PT who taught third and first grade implemented group explorations involving sentence frames and guiding questions. She gave oral guiding questions or a written question and sentence frames for students to answer. Although this activity was successful for third grade, the PT mentioned that pair/share would have been more helpful if she was there in the beginning to teach them what to do and to give more structure. Since first grade was the PT's second placement and she was not with the class during the beginning of the school year when they initially used the pair/share strategy, she never modified the format for this structure. She lamented,

I wish I would've done it anyway although I was there later in the year. I think they're capable of doing it, but it's the way it was structured. They usually gave one word responses, like "the answer is three" because that's how they were used to doing it.

It is evident that teaching students how to have a conversation instead of "just saying talk to your partner" is a measure that this PT should have taken before implementing the pair/share strategy for her first grade students.

While contrasting math activities across first and third grades, the PT from the previous example mentioned math was challenging for students in both grades, but first grade students had "a lot of time to work with the concepts and there were a lot of hands-on activities that were incorporated into the curriculum that fell out of the 3rd grade curriculum. The first grade class constantly rotated working with games and manipulatives and "revisiting old things that helped them develop those skills". This example shows that first grade students engaged in hands-on activities that were, unfortunately, not included for third grade students. Moreover, one fourth grade PT

mentioned that hands-on activities are helpful for meaning vocabulary. The PT admitted, “I learned a lot from one student. At the beginning of an activity, he didn't understand what (s)symmetrical was, and I didn't give him the answer.” The class was given paper with a shape to fold in half, and at the end of the activity, students had to write what they thought the concept meant. By engaging in the hands-on activity, the student wrote the correct definition of the concept. With this lesson, the PT and student realized that a hands-on activity can help students personally arrive at answers without teacher assistance.

While learning about fractions, a fifth grade class engaged in a lesson that included a trail that was 30km, a picnic table at every one-sixth of the trail, and a picnic table at every one-fourth of the trail. The students had to identify the correct picnic table based on certain fraction measurements. The PT stated, “It was fun, but it was challenging because their measurements had to be perfect, and I think it was a lot for them.” Here, one can see that hands-on activities are fun and can be implemented for learning challenging concepts. Overall, hands-on activities can be used across grade levels and subjects to promote engagement and learning fun for students.

**Application.** edTPA findings show that students in both lower and upper grades were typically very enthusiastic about learning mathematics because they saw “the ways in which they can use it in everyday life, and also enjoyed how hands-on it can be”. It was very typical for math lessons across grade levels to involve the use of manipulatives, games, and activities, all of which students used to learn many different strategies to approach solving math problems. According to one first grade PT,

Having the knowledge of several different strategies allows for them to have more confidence in themselves in learning mathematics, especially as they begin to see how one strategy can be used in solving several different types of problems, such as using blocks for counting, adding, subtracting, measuring, and solving word problems.

These students saw “the ways in which math is sensible and useful in their everyday lives.” For example, “since we recently spent a few days learning time, students are constantly looking at the clock and telling each other what time it is and what we are transitioning to next”, the PT further stated.

One Kindergarten PT wrote, “My students often saw math as worthwhile when counting the number of students in attendance each day.” Students found it valuable to count the number of students and understood that it helped the cafeteria staff know how many lunches to provide for their class. The PT informed, “There are times that I present the problem that the cafeteria staff doesn’t know how many kids need lunch in our class. I then say that it is our job to find out how many kids we have in total.” Furthermore, knowing that most of the students came from families that did not have vehicles and, therefore, rode the local bus for transportation, the PT designed a lesson involving passengers entering and exiting a double-decker bus, which was “a great entry point to adding and subtracting numbers.” The PT explained, “In terms of their cultural and language backgrounds, students are from Spanish speaking families which have equivalent words and concepts of adding and subtracting.” With this lesson, the PT built upon ELs’ cultural and linguistic strengths to connect passengers entering and exiting the bus with addition and subtraction. Although, this section is not intended to focus on pre-

service teachers' dispositions toward students, it is important to acknowledge that the PT did not look at these students from a deficit perspective as a result of their lack of personal transportation. Instead, he highlighted their access to public transportation and created a lesson that related to their personal experiences to help them understand and perform mathematical operations.

In the upper grades, students constructed their own understanding based off of personal experiences, which according to a fifth grade PT, "is more effective than when they are told or given information." Having her students create their own understandings of how rectangular areas and values are related through place value, this PT allowed her students to work in small groups with numerous opportunities for peer communication and explanation of ideas; giving them opportunities "to act as academic examples to their peers"--- something mutually beneficial for all of the students. Another fifth grade PT said, "My cooperating teacher and I make an effort to relate all math concepts to realia. This way, students see a direct connection between math and real world situations." This PT was placed at a school that highly encouraged connecting math with other content areas. The PT mentioned, "This also helps students realize that math applies to a variety of situations and is not just a subject taught in school."

Findings from EL case studies showed that activities such as games and art-related projects in addition to individual attention were helpful for English Learners who struggled with reading. A major form of academic language that English Learners in the lower grades struggled with was sight words. ELs were often unable to recognize words previously read and repeated (e.g. and, the, did), even when appearing on the same page. One EL struggled with the letter "g" (didn't recognize it or know its sound). One PT who

shadowed an EL who struggled with sight words incorporated games and activities that involve a lot of sight word practice. Knowing that the EL needed as much intervention and one-on-one attention as possible, the PT spent a lot of time working with him on learning his sight words and letters during workshop rotations. So, instead of him going to the “read to self” and “read to a buddy” rotations (where he did not read), he worked individually with the PT.

Reading was also a challenge for ELs in the upper grades. One example of this is Lissett, a fifth grade student who did not speak much English, but she was beginning to understand conversational English very well, and her understanding of academic English was also improving. Lissett’s performance in science varied depending on the activity. If the lesson included reading from the textbook, she did not pay attention, but she was engaged and invested when asked to create a project. She enjoyed art-related activities and was one of the top students in art class. Lissett’s PT noted that Lissett often drew and painted in her spare time. Perhaps integrating art-related activities with reading in addition to individual support may also be helpful for other ELs who struggle with reading.

Findings from the EL case study showed that creating a low-stakes environment, encouraging meaningful interactions among students, and checking in with students were strategies proven to be effective for helping ELs engage in academic language use. One PT had the honor of teaching Bob, a focus student, and five other beginning English Learners during targeted ELD instruction daily. Bob initially had a personal tablet brought from home that had a translation application from Mandarin to English. He was supposed to use this device to read books, but the PT seldom observed him using this

tool as a translating apparatus as intended. Consequently, the cooperating teacher asked Bob's parents not to allow him to bring the tablet to school. As a result, the PT observed remarkable breakthroughs in Bob's language abilities. The PT noticed that by using strategies in which students interacted with the content in meaningful and unique ways, Bob was likely to be more engaged and understand the content at a higher degree. Additionally, Bob seemed to interact well with his elbow partner during conversations. During ELD instruction, the PT created many AB conversations on the language form or function the unit covered in order to facilitate peer interaction and content acquisition. During lessons, the PT created simple sentence frames for students to complete using their knowledge. The PT modeled how to do this once or twice before having student volunteers participate in the activity at the front of the class. During lessons that involved AB conversations, Bob raised his hand quickly to provide a response, or he jumped up from his seat to volunteer.

Creating a low stakes environment is one way that helps ELs participate. With regards to scaffolding, one PT viewed incorporating more time for partner sharing combined with structured academic language as helpful. This PT chose these two strategies because his/her focus student was successful with both. Consistently working with other students to go over answers before participating proved to be an effective strategy for increasing ELs' participation. One PT deemed that providing, reviewing, and practicing sentence frames helped his/her EL focus student feel comfortable participating. According to this PT, repetition of academic language and provision of multiple examples from the teacher and classmates are also helpful. An example of this is the

PT's reviewing of cause and effect with students and provision of several examples while allowing the students to pair share and share aloud with the class.

Furthermore, one PT was interested in how a Kindergarten EL used certain language and was able to keep up, as well as understand how to engage ELs. This PT was also interested in what materials ELs might need that others might not need. Giving the EL focus student five minutes of the PT's time throughout the day and checking in with her really helped the student. The PT noticed her improvement with sight words, but expressed that (s)he did not know if the student would have progressed without his/her checking in on a weekly basis,.

**Grouping.** While whole group instruction was the most widely used structure across all lessons and grade levels, partnering and small groups were often found equally effective for helping English Learners comprehend content. Pair/share was often used during whole group instruction. When this format was implemented, PTs asked a question to the class, but instead of calling on students to answer, teachers instructed them to turn to a partner and share their answer. Referring to a Kindergarten EL that he shadowed, a PT mentioned that "she works well with partners as she works with new content". A PT who taught first and fourth grades found pair share to be incredibly helpful for learning academic language. She explained:

Students were able to lower their affective filters through the opportunity to speak to their peers first. This lessened some pressure. Students were also given time to process the question that was asked. I noticed that ELL students benefitted from time to think and pair share as compared to times where this was not given.

This PT noticed that during whole group instruction, “native speakers mostly dominated conversations.” So, she used partner share and fair sticks (with students’ names to call on) in order to hear more voices. From the PT’s perspective, “this allowed other students to speak and have time to flush out their ideas”. Perhaps partnering to share ideas helped students use academic language. In like manner, a PT who taught first and third grade expressed,

I’m not an EL, but I still try to articulate the answer in my head before saying it aloud. So, I could see how sharing with one person before the group would make one more willing to share aloud. I think small group is also more helpful because you can assess where they’re at more and provide more support, even if they’re not grouped linguistically. You can give ELs more specific support within their small groups, which is easier to do than in a whole group.

Realizing that she, although not an EL, liked processing information before sharing, the PT allowed students to initially share with partners, believing this would result in their being more willing to share with the group. Here, the PT reiterated use of partnering to lower the affective filter by allowing ELs to share ideas with a partner before sharing with the class. This PT also mentioned a contrast between small group and whole group.

While teaching fourth grade, a PT noticed that students were more comfortable in small groups. This PT felt that there were not enough opportunities or enough of a push for students to practice academic language. “I think it was heavily emphasized in math, but not as much in other subject areas.” However, with small group instruction, students were able to practice using academic language with their peers. A balance of whole group instruction and small group worked best for her students. She added, “Giving students



sentence frames to practice with their peers and facilitating discussions between them allowed students to practice the habit of academic conversation.” According to another PT, small groups can be more beneficial than whole class instruction because the students are able to “hear more people use more language”. It can also help to have students explain concepts to each other. She further declared,

Pair/share can be more effective in practicing certain language skills because there is more opportunity to share (in fact both partners would have to share so there is no opportunity to not speak up like there could be in a small group) and having just one other person could lower the affective filter for a student nervous to use the language skill. This of course also depends on the relationships between the students.

This PT found providing language support to her class beneficial for everyone and, although not stated in the above quote, she preferred mixed language leveled groupings to help ELs during small group instruction. This PT’s perspective reiterates the benefits of using small groups to support students’ academic language development and concept comprehension.

**Participation.** Findings from the EL case study showed that English Learners’ participation varied according to the linguistic demands accompanied by subject areas. Findings also showed that working in small groups and pairs was helpful for ELs gaining increased confidence to participate. While shadowing an EL, one PT noticed that English Learners’ language use varies according to setting. The PT wrote,

I don’t know if it was their knowledge of the content area or what it was, but the student would be more confident in certain settings versus others and be more

willing to speak out and things like that. They were very quiet during science and history, but more willing to participate during math which was leveled math. Perhaps the student in the above example was more likely to participate in math because students were grouped for this subject based on academic ability, which may have made him or her more confident and comfortable than (s)he would have been if (s)he was grouped with students of higher academic abilities for this subject. In like manner, another PT wrote,

A pattern that I noticed in terms of Adrian's participation in class is that he is extremely willing to speak up and ask questions during math and language arts. However, he is not the same during homeroom science or social studies. While this English Learner was more willing to participate during language arts, this was not true for all English Learners. For example, referring to one focus student, a PT acknowledged, "She doesn't share as much in language arts, but in math, she will raise her hand to be a volunteer." While students in the previous examples were less likely to participate during science, Axel was able to engage in science because there was no writing involved. His PT noted that science included all hands-on activities. For example, in one activity, "they were measuring how many table spoons of salt could be added to a small jar of water before it became saturated and could hold no more salt". Axel's PT noted that he was a very active participant in his group and was able to complete the required task.

English Learners' participation may not have been solely based on the subject, but the language demands as well. For instance, when referring to Gavin---an EL who was shadowed, his PT mentioned that he is a quiet student who perhaps lacks the confidence

to participate in class when the language demands are high. However, he performs better when there are scaffolds in place to support language learners. Moreover, the PT of Daisy---another EL who was shadowed-wrote,

She participates much more when the language demands are reduced, like in ELD, but when the language demands increase, like during math and discussions of stories, she participates much less. Daisy seems to be very receptive to language, as she understands most directions, though modeling does increase her understanding.... I've also noticed that she is more likely to follow directions and finish her work when I model an activity in addition to giving verbal directions.

Daisy's PT also wrote,

I think that if there are some language demands with participation, especially if it comes to reading, she is less likely to participate. I have noticed that after pair sharing, she is more comfortable with raising her hand to participate, and I think that really helps her go over an answer and hear another student's answer.

Here, Daisy's PT allowed students to work with small groups and partners while also incorporating sentence frames for them to practice language before sharing their ideas with the class. These are examples of implementing scaffolds to help ELs feel more comfortable with participating. Within the EL case study, Daisy's PT continued to reiterate how successful she was during small group situations and how she was much more likely to participate if given time to think and share with a partner first. The PT also mentioned that Daisy is more successful with using language when she practices it chorally with a small group and then with a partner before using it independently.

Both Gavin's and Daisy's participation show the importance of incorporating support to reduce language demands for content. The example of Gavin shows that incorporating scaffolds for ELs impacts their confidence and the example of Daisy shows the importance of teacher modeling in addition to providing explicit directions for tasks. Other supports for language learners includes allowing them to work with partners and in small groups to gain practice with language which will, in turn, increase their confidence and participation. For example, the PT of Elsie---an EL who was shadowed---noticed that with partner work, she was more willing to participate and she was "able to engage in the activity she felt distant from during the whole group discussion". Elsie's PT further wrote,

"I noticed that she doesn't raise her hand to participate as much as the other students across all subject areas. She will pair share, say things with the rest of the class, read along with the rest of the class, and do all the hand motions that we've learned for our songs or letter sounds. I think that she doesn't raise her hand to participate unless she is sure of her answer or has encouragement from someone else to share. She has asked to share her journal writing and projects that she has worked on, and I think she's proud of her work so she feels comfortable sharing. During language arts, she does blending with the class, but doesn't raise her hand to read the words we've written or the sentence. She is more averse to participating in the language arts when it comes to raising her hand to be called on or read. I have noticed that she participates more with math than language arts, but even then, she doesn't participate much when it's just her and the attention is all on her."

Here, Elsie's PT's observations show that she was more comfortable and willing to participate when working with a partner than alone during whole group. This example shows that it is less pressure for ELs to participate during whole class if the activity incorporates choral response or corporate read aloud, but more pressure exists when students have to respond or read aloud individually. When referring to Daisy mentioned earlier, her PT further noted,

She also produces more language in small group settings where there is a smaller audience and less pressure. I have noticed that in large groups when I give students time to share with a partner she usually does so and she is more likely to share with the class. The biggest success I have seen with Daisy is during ELD when we practice using sentence frames as a class and in pairs before students say them on their own to the class.

Observations of Daisy show that she was under less pressure when participating in small groups or with partners, and having sentence frames to practice with pairs or the class was helpful for practicing the language. All of these examples show that ELs' participation in subject areas depends more on the language demands of tasks than the subjects themselves, and these examples also show that including strategies such as modeling, sentence frames, and work with partners or in small group settings allow ELs to work under less pressure and contributes to their class participation.

Observations from a particular EL case study show that ELs also participate nonverbally. Let's take a look at a transcript from this case study:

Does not call out answers when the teacher asks questions  
He shares with his partner what he thinks using his hands

Puts thumb to chest to agree with what was shared

He is asked to share with partner his idea, and he tries with hand gestures but is not able to explain his thinking, however he had the right answer. Students are asked to talk to partner about a problem posted on the board, he listens to what his partner shares but he does not share his own. Everyone else would be copying down what the teacher would write and when the teacher would ask the students to share thinking with their peers, he would just sit there and listen to others share. Observations of this student show that although he did not verbally contribute in class, he did participate in nonverbal ways, particularly through gestures. These observations have implications for checking in with students to ensure that they have the language to participate, especially when working with partners.

### **Learning about How English Works**

To understand how pre-service teachers perceived the role that language plays, it is important to understand how they discussed English Learners, and the roles of ELs' native language, language in general, as well as academic language.

**English Learners.** Most of the English Learners across all of the classes were from Spanish-speaking homes, with a few coming from other language backgrounds, Mandarin, Ukrainian, Korean, and Tagalog being some of them. The ELs in both lower and upper grades ranged across all linguistic proficiencies, which affected teaching. One fourth grade PT who had three English Learners, two of whom spoke English at home, but had low language proficiencies, wrote, "All of this affects my teaching because I must plan to challenge the students who are ready for more, and support the students who need extra help." In a class with 18 English Learners, a fifth grade PT wrote,

Most of my students are proficient in conversational English; at times, they require language supports for academic English. There is one student, Lisset who emigrated from Mexico one year ago; she is beginning to understand conversational English but requires extensive support for academic English. These examples show that differentiated instruction is essential for teaching English Learners as they range across proficiency levels. The examples also show that academic language support is necessary for ELs who are conversationally fluent, and even more extensive academic language support is necessary for beginning ELs.

One PT mentioned, “I noticed that ELs would stick with others who were also ELs on some occasions and others would spend their time with native English speakers.” One PT who was placed in fifth grade and Kindergarten noticed that “ELs tend to be a lot more quiet---very keep to themselves at times, and give up easily sometimes when they're doing tasks.” She also indicated that these students “know who's going to get the answer right..... So, they come up with a number of tricks to ensure that they get their stuff right too. This PT noticed that in both fifth grade and Kindergarten, ELs were very conscious of who among their classmates were apt to answer questions correctly, and they also wanted to articulate the correct answers. Another PT expressed,

I think what's most important is making sure they feel comfortable and not judged. Creating a community where it's okay for them to not say things correctly. Letting them know that they have to take risks and mess up sometimes, and that's completely fine. Telling other members of the class not to judge others. This shows the importance of creating a positive classroom environment to promote and maintain a healthy climate in which English Learners do not mind taking risks to share

their answers, no matter how conscious they are of who among their peers are prone to know the content. Moreover, another PT who taught fifth grade (in a fifth-sixth combination class) and Kindergarten realized that most ELs were reclassified by fifth and sixth grades at her school. Therefore, according to this PT, “they did not need as much specific instruction or support.” However, these students “were expected to advocate for themselves more and communicate when they needed help.” Since students in the upper grades were not provided with as much explicit language support as those in Kindergarten, they had to self-advocate by informing the teacher of the resources or support that they needed linguistically.

**Classification.** Findings from the EL case study showed a wide range of learning needs and abilities among English Learners within the same classes. In one fifth grade placement, a PT admitted that (s)he was amazed at the range of learning needs in the class from beginning English Learners to above grade level students and many students at and below grade level with different subject areas.. For the English Learner case study, one PT chose to focus on a student from China who had no English proficiency or schooling prior to attending school in the US. Fortunately, three other students whose first language is Mandarin were also in this class. So, these students could interact with each other inside and outside of the class. It was also helpful that the mother of one of these students was an English teacher in China. Therefore, her English skills were more advanced, which enabled her to help translate for the focus student in order for him to access content. Moreover, another focus student was a first generation Spanish-speaking EL who scored in the intermediate range for listening and speaking on the CELDT and



Adept---summative assessments that determine ELD placements. The student was six years old and in Kindergarten, but had not yet started reading.

Another PT mentioned that (s)he was confused about the ELD placement of her focus student, Cayless, who was placed in the lowest leveled language group. Caylee is a Korean EL who scored early advanced in reading and advanced in the other three language domains according to her English language assessment. Also, Caylee's test results from another assessment (COGAT) placed her in the GATE program for next year. (She had the highest COGAT scores out of the entire class.) Her PT wanted to observe how she was able to succeed as an EL. The PT was particularly curious about her habits, resources, and linguistic abilities. From the PT's perspective, it seemed that even though Caylee was an EL, she could benefit more in the other language groups. The PT wondered, "Is it just because she is an EL that she is in this group? Her assessment results would seem to place her in a higher level language group". Furthermore, another PT also wondered about the classification of an EL (s)he shadowed. The PT was curious of how long the student would be classified as an English Learner. When looking at his work, according to the PT,

The amount he participates, and the confidence he has when speaking with peers and adults, I do not see how the types of accommodations he receives differ from those that English only students need as well. I am also wondering what other criteria qualifies students as ELLs other than answering a questionnaire which states more than English is spoken at home.

One can see that students' linguistic abilities ranged throughout the class, and some of the PTs were confused about the classifications of English Learners as their ELD placements were often seemed to be misaligned with their assessment scores.

**Native language.** Findings show that most of the English Learners across all of the grade levels were native Spanish speakers, and language transfer was easier for ELs whose native language is similar to English. One fifth grade pre-service teacher asserted that in order for English Learners' primary language to have an effect on how they are learning the target language, they need to "have a good knowledge of their primary language." For instance, ELs need to be cognizant of cognates between their native language and English in order to understand and use English. This PT stated,

The majority of ELs I worked with speaks Spanish and is able to have some conversation in Spanish, but it's not advanced and they don't have any academic language. So, they can't translate over to English.

This example shows that English Learners should possess a strong knowledge base of their native language in order to make connections between that and the target language.

When speaking of ELs' ability to transfer knowledge and skills between their native language and English, one PT who taught Kindergarten and fourth grade wrote,

Definitely for students whose language goes the same way---is written in the same direction and has the same type of letters, it seemed a lot easier....If the languages are similar, it's easier to make the transfer.

According to a PT who taught Kindergarten, fifth and sixth grades, "It is also helpful when you have most English learners who speak the same language so you can tap into that knowledge if possible." Another pre-service teacher wrote, "If they're all Spanish-

speakers, then it's easier to take that into account. The cognates would help them.” This PT mentioned that other factors impacted ELs’ linguistic transfer as well. While most of the ELs she taught in both placements spoke Spanish as a native language, one of the students in her fourth grade class spoke Tagalog. The PT mentioned that transferring differed according to the varied levels of proficiency within the native languages.

Another PT informed, “If you have someone else who is not a Spanish-speaker, then it gets trickier. Since I'm bilingual, accommodating for Spanish-speakers is not hard, but not all of them are Spanish-speakers”. This leads to pre-service teachers’ resources for instructing English Learners linguistically.

Referring to her Kindergarten Spanish-speaking English Learners, one pre-service teacher mentioned that they were pretty good at English and excited when she spoke Spanish. “There's a lot of stuff that you can explain to them that they might not know in English in Spanish. It would just clear the way for them a little bit more.” In her fourth grade class, one PT claimed, “we tried to throw in Spanish.” Her class read *Esperanza Rising* (which includes Spanish phrases), and students who were native Spanish speakers answered in Spanish. The CT of this class did not speak Spanish, but could understand a little of it. She would ask, “What does that mean or how do you pronounce that?” to help teach them English while valuing their native language. To help certain students, The PT said words in Spanish if students did not understand it in English, “and I think that there's no harm in that”, she stated. While the PT was bilingual in English and in Spanish and her CT was not, both teachers valued ELs’ native language and used it to help students learn English. The PT also mentioned that while working on their morning spelling packets, two boys who were Spanish speakers and sometimes challenged by the

words or definitions helped each other in Spanish. This shows that ELs who spoke the same native language were a resource that teachers maximized to help them support ELs' linguistically:

Moreover, another PT noticed that the school district that she taught in “had a lot of resources for ELs, especially those whose first language is Spanish.” Plus, “there are linguistic similarities between English and Spanish, much less so between English and Chinese”, she stated. As a result, she recalled commenting to her friends that it was “harder to know what to do to help students whose first language was not English or Spanish”.

**Language.** According to one pre-service teacher, “Kindergarten students are learning and developing their language skills.” One first grade pre-service teacher stated that since ELs often “say whatever they're thinking, they would hear a word that sounded similar to another word that they knew and they would go down another path of the word that they knew.” This example could refer to students hearing false cognates or other words that could potentially mislead them. Contrasting transfer abilities of her ELs whose native language was Spanish to those whose native language was Chinese, she stated, “The Spanish students were more articulate because the students from China were more at the receptive stage of speaking.” Therefore, the PT did not know if Spanish-speaking ELs' ability to make those connections was due to the similarities between Spanish and English, or students' ability to articulate the language due to their conversational fluency in English. This points to the issue of ELs' varying linguistic proficiencies across domains. It is important to note that research shows that ELs often understand more than

they can articulate. So, processing the target language takes time before students are able to produce knowledge using it.

In fifth grade, “a lot more discussion like less focus on saying things the right way and more focus on understanding content” occurred, according to one PT. She expressed, “I feel like a lot of language gets lost in fifth grade, but at the same time, during language arts, there would be more writing essays and things like that.” Moreover, during a lesson on making inferences, one fourth grade class paused frequently while reading to discuss parts of the story and what inferences could be made. Within the whole group, students were often prompted and given various opportunities to discuss (using sentence frames) with their elbow partners what kind of inference they could make. With the whole group, the teacher completed an inference chart on the doc camera as the story progressed. According to the PT, this activity (in addition to guiding questions) was helpful for EL students’ practice with making their own inferences. Of importance, a fifth grade PT mentioned that more time coupled with “more varied or engaging activities could have been allotted because the kids get bored of just sitting and talking”. In like manner, another fifth grade PT expressed, “I think it's worth it to make the lessons as engaging as possible, especially for ELD. Having them do a lot of talking. There was a lesson that I taught about time. I turned the class into a clock and they rotated around the clock instead of just sitting and talking.”

At the end of a lesson that involved pair sharing and sentence frames for students to discuss their favorite colors, one first grade class sang a song with simple sentences and hand motions that paired with the words. It “was especially beneficial for EL students to pair words with actions”, said the PT. Perhaps all of the measures to

incorporate more types of hands-on activities are mentioned by PTs in the upper grades because the lower grades already do a good job of incorporating these activities.

Unfortunately, hands-on activities are reduced or nonexistent in the upper grades as the focus shifts more to sitting quietly to read, write, or briefly discuss content. Nonetheless, all of these examples have implications for the creativity, need, and purpose of hands-on activities for comprehension and engagement.

**Academic Language.** “Academic language itself is extremely different across grade levels”, stated a pre-service teacher who taught Kindergarten, fifth, and sixth grade students. However, realizing that many of the ELs she taught in her fifth-sixth combo class were reclassified, this PT also stated, “I did not see much challenge with students understanding academic language in my older class. When comparing her upper and lower grade classes, she mentioned that in Kindergarten, “most of the new language might sound basic but it is the language they need for that academic language”. For instance, students learned –er which is commonly used on the playground (“I am taller than you”, tall vs big vs long, etc). Similarly, another PT stated,

What I feel that really helped, especially in Kindergarten, is language for them seemed to be all academic language. So, I really felt that implementing forms and functions for them in lessons throughout the day was very helpful, and I really feel that the students benefited from that.

This PT taught at a school where ELD was implemented throughout the day and believed that this model of instruction “worked very well for this grade level”.

According to a PT who taught second and fifth grades, science and language arts are extremely dense subjects that even the English-only students in her class struggled with. She said,

I try to break it down as much as I can when we're reading the text and discussing the topics at hand, but even I get confused at times. I can only imagine how an EL who struggles to read most of the academic language in these textbooks might feel.

This example shows that reading and discussing texts involved higher-order skills that challenge everyone in the class, including native English-speaking students and teachers.

“Students, especially ELL students, need more exposure to academic language in order to promote development”, stated a PT who taught first and fourth grades. She asserted that this requires the teacher to emphasize academic language as often as she can. She said “My supervisor suggested reviewing terms each day and allowing students to see those terms in a variety of ways.” This PT explained that students “learned terms during hands-on activities, through visuals such as powerpoints and through reading”. To help students understand academic language, the PT who taught Kindergarten and sixth grade and ELD throughout the day always introduced vocabulary to students through modeling, and students listened to how he used the academic language and they learned how to answer questions using academic language. For her Kindergarten, fifth and sixth grade students, a PT used similar supports and strategies (visuals, pair/share, etc.) across grades. She mentioned that the manipulatives helped the students “(some of them just because they like having something to touch and move) visualize abstract concepts of greater/less”.

“There can be positive transfer between a student’s home language and academic English”, stated the PT who taught Kindergarten, fifth and sixth grades. This PT asserted that students should be encouraged to find similarities and share their home language with the class. For instance, Spanish has many cognates that can be used to help students build English vocabulary and “feel like their home language is respected and valued”. Another Kindergarten PT noticed that ELs in this grade have conversational language. So,

They read the books and grab things here and there, and it transfers over to their academic writing and they write how they talk. That's kind of hard because you don't want them to write that way.

A PT who taught second and fifth grades expressed,

I feel like sometimes the students don’t have the academic language in their primary language. So, it's like they have to learn the word and concept in English, but it's like what does the definition mean?

The majority of ELs this PT worked with spoke Spanish, but not advanced academic language, which made it difficult for them to translate academic language between Spanish and English.

Moreover, a PT who taught first and fourth grades stated that “Most students had developed much more academic language by 4th grade. This may be largely due to exposure”, she reasoned. However, she did notice a significant number of students in both grade levels who struggled with academic language. She affirmed that they needed to hear the words repeatedly within context. She said, “I could tell a difference in student understanding when I repeated the academic language. It felt like I was a broken record,



but it made a difference in their understanding in the end.” While contrasting the learning expectations of her fifth grade class to those of her second grade class, one PT mentioned that higher expectations existed in fifth grade because these students “know how to do school”. While in second grade, students need repeated exposure, this “kind of weans out” in fifth grade as students are expected to be able to understand things after few exposure. The PT informed that there was more emphasis on language in second grade, and more emphasis on content in fifth grade. For instance, the second grade class had multiple linguistic resources for students: a sight wall, class library, and read-aloud activities. Referring to the fifth grade students, the PT admitted,

I don't know if we were serving them as well in academic language because there's so much more that they have to learn. So, it's kind of like if you didn't get it in the lower grades, you're kind of really far off.

The emphasis on language in the lower grades versus emphasis on content in the upper grades was a common contrast highlighted among pre-service teachers across placements. Perhaps this is attributed to the learning to read (in the lower grades) versus reading to learn (in the upper grades) dynamic.

Academic language use was an aspect of focus for some of the EL case studies. According to his PT, Jeremy---an EL focus student who enjoyed talking throughout class---appeared to feel much more comfortable with social conversations, but lacked confidence during academic presentations or explaining his reasoning, or a definition of a word. When these things came up, Jeremy “tried to pretend as if he doesn't know or he messed up”. While teaching a math unit on teen numbers, one PT made it a point to explicitly teach academic language. The key with Julian---an EL focus student-, and all

other Kindergartners, according to this PT, was frequent use and multiple examples of how and when to use it with the help of sentence frames. The PT consistently offered sentence frames for students to participate in a type of choral call and response in which the teacher used the sentence frame and the students echoed it. For homework, Julian only answered one side of a worksheet that had expressions such as  $1.25 \times 19$ . The other side had word problems which he left blank. Julian struggled with the language and therefore was not able to read the word problems. However, his blank word problems did not mean he did not know how to do the work as his ability to do the multiplication problems shows that he understood the concept. For the same assignment, the teacher asked students to share their thinking with their peers and the PT noticed him staring at his partner, not knowing what to say. One can see that academic language use was a challenge, even when the concept was understood, and that academic language use should be explicitly taught. One can also see that when ELs are asked to speak with their partners, the teacher should monitor them to make sure they speak and understand how to use the academic language in order to fully participate in the dialogue.

### **Using Foundational Literacy Skills**

Of the foundational reading skills (phonemic awareness, phonics, fluency, meaning vocabulary, and comprehension) discussing vocabulary and comprehension was most commonplace among pre-service teachers across all grade levels. So, these two skills are analyzed and discussed below. Of the foundational mathematics skills (number sense and operations, algebra, geometry and spatial sense, measurement, and data analysis and probability) this section will highlight measurement (weight comparisons), algebra (addition), number sense and operations (place value), and geometry (unit labels

and line comparisons) as these are the primary skills that pre-service teachers pinpointed while discussing ELs' strengths and challenges during edTPA.

**Vocabulary.** Academic vocabulary and aspects of grammar were the primary academic language challenges among English Learners that pre-service teachers highlighted. Referring to ELs whose native language was Spanish, one pre-service teacher who taught second and fifth grades stated, "A lot of their grammatical mistakes came from the structure of Spanish". Although this PT could not recall specific examples, she mentioned that these students often structured sentences in ways that made sense in Spanish, but not in English. For instance, adding or omitting an s, or their pronunciation transferred from Spanish. The PT also mentioned that students often explained that ELs' incorrect use of words "flowed in Spanish, but not in English". Moreover, a pre-service teacher who taught Kindergarten and fourth grade mentioned that although most of her ELs spoke Spanish as a native language, one of her Kindergarten ELs was of Asian descent. He was a very high achieving student who often made "little grammatical mistakes" that were common for Kindergarteners. For instance, to speak in past tense, the student might say "He hurted me." The PT noticed "in his pronunciation that he would drop some letters". Sentence structure and pronunciation errors were common mistakes among ELs as they learned English, especially academic English.

Academic vocabulary was a challenge for English Learners. "Sometimes the challenge is that there would be one essential word the student needed to know to do that activity and the student didn't know what it was", stated a pre-service teacher who taught Kindergarten and fourth grade. For example, one of her students often got stuck doing activities due to the vocabulary involved. This example shows that although a

student is capable of performing tasks, embarking upon unfamiliar vocabulary often hindered his progress. It is also important to note that vocabulary used often could still be unfamiliar to ELs. While contrasting the expectations for her second and fifth grade classes, one PT explained that in second grade, the cooperating teacher had to walk students through an activity because they were just beginning to learn the compare and contrast functions. So, the teacher had to specifically state that "compare is when you're finding the similarities between two things and contrast is finding the difference between two things", whereas in fifth grade, the CT "could say, "Who remembers what compare and contrast mean?" and you can have a quick little discussion about them and jump into applying that to the content." This example shows that learning the skills was emphasized in the lower grade, while applying the skills was emphasized in the upper grade.

The PT from the previous example further admitted that when realizing that her fourth grade students did not know what compare and contrast meant, she had to "go back and explain both terms". While implementing a lesson in which the class had to compare and contrast two characters of a story, the PT admitted,

I was going straight into the activity and then I realized they didn't really know what I was talking about. So, I was expecting them to do this function. I had this expectation that by 4th grade, they knew. So, I had to back track and better explain what I meant by comparing and contrasting.

She further declared,

I think we do a disservice to students when we say compare and we mean both--- what's the same and what's different. When I'm saying compare---the same and contrast---different. So, it's really confusing.

It is important to note that compare and contrast had to be explicitly taught to fourth grade students. The PT also brought up a good point that both “compare and contrast” are often used together and interchangeably, which can be confusing to students, especially ELs, when they have to apply them. So, perhaps teachers should say compare, “then” contrast (not “and”). Even more challenging than comparing and contrasting is using “figurative language---personification, metaphor and simile” according to this PT. One can see that common academic language functions and figurative language use present academic vocabulary challenges for students, especially ELs.

Consistent use of vocabulary across contexts is essential for helping students access and understand academic vocabulary across subjects. “My supervisor suggested reviewing terms each day and allowing students to see those terms in a variety of ways”, stated one PT who taught first and fourth grades. This PT explained that students learned important terms through hands-on activities, visuals, and reading. Moreover, to make content more accessible to Axel- a fifth grade English Learner that she shadowed, one fifth grade PT expressed,

There should be some alignment between what he does in the pullout classrooms and what he is learning in his homeroom classroom. Since I have been working with him mainly in Math, I have noticed that he lacks a lot of the Math vocabulary that he needs to understand.

Axel would benefit from some pre-teaching of terms or basic concepts before he is expected to follow along with the whole group instruction.” According to a pre-service teacher who taught Kindergarten and fifth grade, “Working with the words more in different ways” is essential to students’ academic vocabulary development. “You can’t just say “Here’s a new word.” Let them know that they are going to see it everywhere. The words are going to help them grow”, she stated.

Similarly, another PT who taught Kindergarten, fifth and sixth grades suggested “consistent use of academic vocabulary across contexts and in different situations.” This PT shadowed a Kindergarten EL and when asked for recommended practices for this student, she suggested “helping him use the vocabulary in his own speech and providing many definitions and synonyms for the vocabulary used.” She also recommended the use of sentence frames to help him use the vocabulary in addition to scaffolding his grammar usage, and she stated that “Visuals are very helpful, even if all you can do is make an arm movement or model an action while you are speaking.” These examples show that PTs using vocabulary across contexts in addition to assisting with sentence structure, grammar usage and gestures were helpful for supporting students’ academic vocabulary development.

In like manner of using academic vocabulary across contexts, familiarizing students with the new vocabulary is the main theme that emerges from pre-service teachers’ responses. “Pre-teaching vocabulary will give students the confidence to participate as well as the ability to access the academic information they are learning”, said one pre-service teacher who taught Kindergarten and third grade.

Frontloading vocabulary was a strategy often used to help students understand lesson concepts across grade levels. One pre-service teacher who taught Kindergarten, fifth, and sixth grade students always planned for visuals, multiple ways of explaining things, and frontloading vocabulary for every lesson. According to the PT, this routine was not difficult because it was a part of her “regular lesson planning process and is important for all students”. If the PT noticed students “having a hard time with a certain concept”, she altered scaffolding. A pre-service teacher who taught second and fifth grades usually attempted to frontload the “necessary “vocabulary for different lessons for both placements. Another pre-service teacher who taught fifth grade and shadowed a fifth grade EL included pre-teaching vocabulary (along with simplifying or translating written directions, giving verbal instructions, translating key words, and using visuals) for her focus student. However, when she pre-taught vocabulary to her focus student, “it seemed to be overwhelming”. Therefore, she explained to the student that the words would be used in an upcoming lesson. These examples show that PTs had different experiences pre-teaching vocabulary. While one PT used this strategy all of the time and did not find it challenging, another PT used it as needed, and yet another found it to be overwhelming for one of her ELs. These examples show that while pre-teaching vocabulary is often used to help students understand content, it can also be overwhelming for some students, especially ELs.

One pre-service teacher who taught sixth grade and Kindergarten recommended repetition and scaffolding as best practices for a Kindergarten EL that he shadowed. According to the PT, these strategies involve “consistent practice with academic language and new vocabulary words”. One pre-service teacher informed,

Something that I want to make sure that I pay attention to do is right at the beginning of introducing the lesson, checking to see if they understand what I'm talking about, making them familiar with the vocabulary because unless they're given the opportunity to tell you or even if they are given it, they won't say anything. They're just going to go along with it.

One can see that checking for understanding at the beginning of a lesson is a way to familiarize students with academic vocabulary. “Making sure they understand the vocabulary rather than regurgitating the definition is important to success overall”, said one PT who taught third and first grades. Here, the PT is referring to the importance of making sure all students comprehend academic vocabulary across all subjects. In order for students to process mathematical information, they need to “first understand the specialized words that are unique to mathematics (e.g. improper fraction, whole number, mixed number...)”, according to a PT who taught fifth grade. While teaching math, this PT addressed the vocabulary and had students repeat after her. She also mentioned that her EL students would have benefitted from having a review of the vocabulary and concepts before starting the lessons. She asserted, “This would have ensured that language would not be getting in the way of their comprehension and they could have been more engaged in the discussion.” This shows that although the PT addressed the vocabulary for students to recognize and pronounce, ELs would have benefitted more if the mathematical concepts were described and understood prior to lessons.

Visuals such as posters and word walls are also useful for students' academic vocabulary development. “Having the vocabulary written out as well as more visuals would support all of my students, especially my EL students”, affirmed one fifth grade



pre-service teacher. As a measure to improve discussion for one of her lessons, this PT mentioned that she would have created a poster with the vocabulary and sentence frames that students needed to use. Although this PT “mentioned the sentence frame and probed students to use it”, she admitted that all of her students, especially her EL students, “would have benefitted from having the visual”. While viewing a video of her class during math, the PT noticed that most of the students demonstrated an understanding of the vocabulary such as “improper fraction, whole number, unit fraction, mixed number...” but she should have had the terms written on a poster for those students who needed to see them.

Moreover, another fifth grade PT made a personal note to chart out the weekly vocabulary words for an EL that he shadowed to further develop the student’s academic language. Furthermore, having word walls was also a reference that PTs used or identified as a measure that they should have used to familiarize students with academic vocabulary. To introduce her class to a new math unit on statistics, one PT who taught first and sixth grades created a word wall rich with unfamiliar math terms, and she used body movements and visuals to reinforce the meaning for each of the new words. This PT believed this was a good scaffold for Chris---an EL she shadowed---since he referred to the body movements as she asked him to explain an answer such as mean as the fair share. This PT was happy to see her student using a scaffold she provided to make sense of the term and concept. In contrast, a PT who taught fifth grade admitted that it would have been helpful to have created a word wall with new vocabulary for students to use as a reference. One can see that posters, word walls, and gestures are resources that pre-service teachers mentioned can be used to familiarize students with academic vocabulary.

When comparing and contrasting instruction between the lower and upper grades, one pre-service teacher who taught Kindergarten and third grade stated,

In the younger grades, the main focus was on vocabulary, whereas the upper grades were more focused on parts of speech and sentence structure with very little emphasis on vocabulary (unfortunately). Most of the strategies were the same in all grades I worked in.

While shadowing an EL, one PT who taught second and sixth grades realized that her focus student “lacked in vocabulary and understanding sentence structure and grammar”, although he was very fluent in reading. Both of these examples bring attention to academic vocabulary and discourse, both of which were interconnected across all grade levels.

Findings from EL case studies show that English Learners often struggled with blending, vocabulary and writing. One PT noticed that an EL struggled with simple, single syllable words. The PT urged her to focus on one letter at a time and sound by sound. However, when blending, she did not blend all sounds together. So, the PT said the word to her and they practiced saying it a few times. On the other hand, Alejandro---an EL shadowed by another PT---struggled with vocabulary, so the PT used synonyms and kid-friendly definitions whenever possible. For example, the PT worked with Alejandro on a worksheet about the *th* sound. He had to read words and write them under the correct pictures. Some of the pictures did not match any words. He successfully read the word, but the PT realized that Alejandro had no idea what a moth was, which limited his ability to match it to the picture. As the PT stated, “It might appear that he couldn’t read the word when in reality the vocabulary was the problem.” When the PT said

“that’s similar to a butterfly”, he was able to label the correct picture. It is clear that English Learners may be able to decode words, but blending and vocabulary still present challenges, especially if the concept is unfamiliar.

Moreover, in a Kindergarten journal during a language arts rotation, an English Learner wrote: “Mi Famle tk me t the pok.” (My family takes me to the park). The student was able to write a complete sentence with a subject and verb. He identified beginning and ending sounds in words and used a capital and a period, but he also put one capital letter in the middle of his sentence. Perhaps he may have perceived “family” as a proper noun. This writing sample demonstrates the student’s understanding of how a sentence is constructed, but it shows that medial sounds are missing. The mistakes in this sample were similar for both ELs and non-ELs in Kindergarten, and it implies that Kindergartners should be taught more about letters and sounds (e.g. the sounds made by “e”, “y”, “o”, and “oo”).

**Student Strengths.** Findings from edTPA revealed strengths among students in lower grades in comparing weights, counting, identifying place value, and using correct operations for problem solving, while strengths among students in upper grades were understanding how to solve problems using targeted language demands.

In a Kindergarten class composed primarily of English Learners, students scored proficient or higher in weight vocabulary and relativity of weight comparisons. For the same lesson in another Kindergarten class, students were able to use sentence frames (with their PT’s guidance) to compare and contrast to accurately identify which object would be heavier and which would be lighter. When asked to show a thumbs up or down in scenarios in which a heavier item was placed on one side, students demonstrated

ability to contrast the weight of two objects. Although using informal language with their bodies, it is clear that these students understood the concept and the role that the balance scale played in weighing objects. edTPA commentaries showed that the procedural fluency when using the balance scale was successfully met by all students and they were all able to identify which side of the scale would move up or down depending on the two objects placed on each. One can see that students were able to articulate their thoughts and provide sound mathematical reasoning based on their observations when asked to make comparisons.

Other strengths reported by PTs from edTPA results among students in the lower grades indicate that majority of the students could count by ones and tens to 100, and these students demonstrated a wide range of prior understanding of place value. It was common for first grade students to correctly identify the number of tens and ones as well as master basic addition and subtraction. First grade students also demonstrated ability to use the correct operations to solve word problems, skills heavily reinforced in the upper grades.

Prior to teaching the learning segment, one fifth grade PT administered a pre-assessment in order to identify students' schemata, strengths, and stretches, and found that one of the whole class strengths was dividing whole numbers. After analyzing all assessments and working individually with all students in the learning segment, this PT realized that her students demonstrated "having a solid foundation for solving whole numbers by unit fractions using models". Another fifth grade PT found that students were successful in "explaining their thinking using the targeted language demands";

particularly their ability “to use the selected language function of identifying and justifying a strategy to multiply a whole number by a fraction”.

**Comprehension challenges.** Results from edTPA showed that while the majority of students in the lower grades could count to 100, there were students who struggled to count beyond 39. As it pertained to place value, some students could not correctly identify the number of tens and ones that composed various numbers, and among those who could, some could not explain how or why. When they tried to explain how or why, their “explanations did not show that they understood that the tens place represents physical groups of tens and the ones place represents single objects not grouped into tens.” One whole class analysis for a first grade class showed that many students were still struggling with understanding the definition of “a ten.” The PT believed that “part of the problem was that students were expected to jump from using manipulatives for three days to using no manipulatives, which can be a difficult jump.” Thus, it is important to practice with manipulatives and then support students to do the same tasks without the manipulatives. This PT implemented an activity with manipulates and repetition of place value skills, which was “important for both English Learners and students who are below grade level in math because they typically need extra exposure to concepts to develop a deep understanding”. The PT stated,

H. Douglas Brown argues that meaningful learning can occur “by making abstract learning more concrete.” Using manipulatives here makes place value more concrete, which is very important. It is also essential that we make the connections between the concrete and the abstract explicit for students.

One third grade pre-service teacher noticed that her class struggled most with using the appropriate units to label answers. “Only 5 students out of the class labeled their answers with square units or square centimeters.” Here, it is unclear whether students struggled with labeling units due to not understanding which units or overlooking the importance of indicating the units. However, it is important to note that it was a challenge for most of a third grade class.

A fourth grade PT mentioned that “common mathematical misunderstandings start with the difference between parallel and perpendicular lines. Students tend to understand that they are independent of each other, but when they are compared, students tend to get confused.” The PT thinks that “part of this confusion comes from the unfamiliar words that are used to describe these lines.” This example implies that when seeing parallel and perpendicular lines, students recognize that they are different, but they do not understand the differences in characteristics of these lines when they hear them described. This example has implications for explicitly teaching context-specific vocabulary and discourse, especially for geometry, to help students distinguish between figures.

One fifth grade PT noticed that her students often did not explain the strategies they chose for solving math problems nor elaborate on why were useful. Another fifth grade PT mentioned that her students “showed a bit more deficiency in writing their own story problem using a whole number and a fraction and/or solving a given story problem dealing with fractions.” These examples show that math is often integrated with writing in the upper grades, especially for fifth grade students. The examples also show that explaining math strategies and creating word problems are skills that should be explicitly

taught for these students. Overall, edTPA results showed that students in the upper grades need more explicit instruction in understanding and using units, vocabulary, and discourse for mathematics.

### ***Strategies for supporting comprehension***

**Multiple strategies.** To support ELs' comprehension, pre-service teachers across all grade levels implemented as many strategies as possible for each lesson. According to a pre-service teacher who taught third and first grades, knowing "which strategies support which students" accompanies "getting to know students". The PT suggested, "try multiple strategies to figure out which works best". When asked which strategies proved to be key instructional supports for each grade level taught, one PT mentioned that key instructional supports for Kindergarten were: visuals, manipulatives, movements, repetition, rhymes or examples, while key instructional supports for fifth and sixth grades included pair/share, visuals, guided notes, and repetition. While both PTs mentioned multiple strategies as key supports for helping students comprehend content, visuals and repetition were common best practices for teaching upper and lower grades.

While shadowing Axel, a fifth grade EL, one PT suggested "providing as many visuals as possible" as a helpful strategy for enhancing this student's comprehension. She explained, "I was able to see how much easier it was for him to write a poem about a bird when he had the picture of the bird in front of him." This is an example of using pictures to help students connect with texts and learning activities. Here, Axel seeing a picture of the bird helped him write about this animal. The PT further mentioned that "explaining concepts to him is a lot easier when we have manipulatives available such as Geoboards to represent the multiplication of fractions". This example shows the

importance of using manipulatives as visual representations and hands-on activities to represent math concepts, making content less abstract for students, especially ELs.

On the board, Axel's PT often used magnet representations of fractions in the forms of squares and circles for students to use as reference points. Although students "were aware that they were there and had worked with them before", the PT admitted that she "should have made it more explicit that they could use those to represent their thinking". She expressed, "I could have also used the models as I explained to offer students with a visual of the fractions we were working with." The PT felt that the visual would have been helpful for ELs and other students who struggled with "visualizing what fractions are in relation to a whole number". Moreover, a PT who taught Kindergarten, fifth and sixth grades informed that "manipulatives were helpful for engagement and language practice". One can see the importance of not only PTs having visuals such as manipulatives available as references, but also constantly using them and reminding students to as well to help make the connections between the objects and concepts. This often involves repetition and scaffolding.

Of the multiple strategies implemented in upper and lower grades, repetition and scaffolding were found to be key instructional supports across grade levels. "Repetition is key", stated a PT who taught Kindergarten and third grade. In like manner, a PT who taught Kindergarten, fifth, and sixth grades attributed her classes' success with using the correct math vocabulary to repetition. She affirmed, "We practiced the words all together a lot and used a lot of repetition; by the end most students were using the words consistently". Moreover, scaffolding was of equal or greater importance to using repetition, for repetition was often a sub strategy of scaffolding. One of the most effective



scaffolding strategies implemented for ELs was simplifying instructions. For a fifth grade EL that she shadowed, one PT simplified the written instructions for a math activity to help the student understand the task with as few words as possible. When discussing how she accommodated ELs for assessments, one PT who taught second and fifth grades expressed, “I think the one way that I remember accommodating for assessments was make myself available to read directions aloud if necessary more so for 5th grade. There was more complex written language for 5th grade.” This PT made herself available to read assessment directions for both placements, but found that fifth grade students took more advantage of this resource due to the more complex language involved in the tasks.

Furthermore, one pre-service teacher who taught Kindergarten and fourth grade implemented multiple strategies to scaffold her language arts lessons. Her fourth grade class compared and contrasted two main characters in a story. This involved much scaffolding as students analyzed characters before writing a paragraph. The class also did a venn diagram in a small group---five to seven students in a leveled group. Individually, students completed a venn diagram.

Like the fourth grade class, the Kindergarten class analyzed two main story characters. After using venn diagrams to analyze characters, both classes used sentence frames to explain their analyses. The PT included written sentence frames for the fourth graders to use in their paragraphs as “some of them, especially a couple of the ELs, would be really lost without them”. The PT explained, “I had one boy who would be like, "How do I start this?" if I hadn't given him one.” The last thing we did was sentence frames. For the Kindergarteners, verbal sentence frames were included. The PT

explained, “I would have them say it to me. I would stop and model. Then, they would do it.” In like manner, a second grade pre-service teacher also included a lot of sentence frames in addition to “repetition---making sure they say it in their own words, making sure they tell a partner---so that you know that they say what you want them to say and have multiple opportunities to practice the language”. These are examples of using multiple strategies, especially scaffolding and repetition, to help students comprehend information, especially literature.

To ensure that students in the lower grades had a solid understanding of vocabulary terms and mathematical symbols, one class spent almost the entire first day of the lesson series working through word problems and reviewing what students knew about addition and subtraction from previous lessons. During this time, the pre-service teacher modeled and emphasized key vocabulary and students engaged in conversations about word problems, discussing what words or phrases within the problems indicated whether to use addition or subtraction. Word walls were also provided during the first two lessons to help students use key vocabulary, but this resource was eliminated during the final lessons to “challenge advanced learners to correctly identify and use the vocabulary and discourse independently”. Meanwhile, students who needed extra linguistic support were given post-its with terms in order to help aid their explanations of selected methods. Additionally, sentence frames were provided orally and on worksheets for students daily to help them explain.

For other students in the lower grades, pre-service teachers often created a small group of students to provide extra support while their classes engaged in independent work. Many pair sharing and whole group conversations occurred to emphasize the

vocabulary and academic language found within word problems prior to students doing independent problem solving. Word walls were also visible for students to reference academic vocabulary and sentence frames for proper language support. With these scaffolds, by the end of the lesson series, students were able to not only solve word problems and show their work in multiple ways, but also able to explain their reasoning as to how they arrived at their answers.

Most of the edTPA portfolios included assessments, which revealed that gradually building in academic language use throughout the series was essential for teaching ELs. Referring to her first edTPA lesson, one first grade PT stated,

The vast majority of the lesson includes several oral scaffolds both in solving the problems and using the academic language forms and functions to formulate an explanation as to how each one was solved.

After reviewing results from students' exit tickets included in an initial edTPA lesson, a fifth grade PT identified and worked with a small group of students who struggled with math and needed extra support. This group included a beginning EL who struggled with math language, especially with comprehending word problems. According to the PT, "This student often needs me to translate word problems for him. He has shown that he understands the math concepts but struggles with the language." During the following lesson, students worked in groups to solve a fraction story problem. Groups were composed of students with different abilities as the PT stated,

It is important for my students to work with fellow peers who have similar learning needs and strengths. I want my students to feel comfortable and challenged but not left out.

Facilitating small group work (with students of differing abilities) and translating were strategies that PTs used to help students who struggled. It is also important to highlight that one of the students understood math concepts although he struggled with the math language, which was common among English Learners.

**Native language.** One focus student spoke Spanish a lot when talking to his peers. This was fascinating to his PT because when she talked to her CT about it, the CT was not aware of this, which was probably because he mainly spoke in English at stations during the rotations. The only station that he did not speak Spanish in was the one in which he read with the CT. While observing this student, the PT noticed he felt more comfortable talking in Spanish. Moreover, Adrian, a fifth grade focus student for another EL case study, often used “a bit of Spanish” while speaking. According to his PT, “Adrian doesn’t speak Spanish in full on sentences, but he inserts little phrases here and there like “that was easy, easy, facil””. Adrian’s productive and receptive language was at an average level and his grammar “was not the best, especially in his writing”, his PT determined.

When choosing Axel as a focus student for the EL case study, his PT asked the CT several questions about him and discovered that she was worried about him and was having a difficult time working with him because he was not only low in English, but he also tested very low in Spanish (his primary language) and would eventually be tested to see if there is something else besides the language barrier that impedes his academic success. Axel’s PT mentioned that this can be very tricky because he would be tested in English. The PT wondered, “how will that yield accurate results?” The PT stated, “I think it is very difficult to acquire accurate data when the language barrier exists.” Since Axel

and his PT shared the same native language, the PT often translated his speaking and writing into English. For example, in a poetry session, Axel dictated his poem in Spanish and the PT wrote it for him in English. According to the PT,

It is important to remember that he has ideas and things to share, and that that should not be taken away from him because of the language barrier. Lynne Diaz-Rico mentions that giving EL students the opportunity to write poetry is an empowering experience because it gives students a voice.

With assistance from his PT, Axel was able to produce a poem on par with his peers, unlike in other poetry sessions in which he turned in a blank piece of paper “with ideas in his mind”. Moreover, the PT expressed,

I think that when he is the only beginning EL student in the class it is easy for him to fall in between the cracks because he might not be getting all the scaffolds and supports he gets during his pullout classes.

When Axel asked the PT to help him, he spoke in Spanish often and asked him/her to translate some words for him. One can see that Axel was a beginning EL who struggled with his native language and the target language, but his PT used translation and individual assistance to augment his English language acquisition and ability to perform academic tasks. Having two adults in the classroom made it easier for the PT to work one-on-one with Axel, but this made the PT wonder how (s)he would provide him the same support if (s)he was the only teacher. This has implications for differentiated instruction.

Caylee, an EL mentioned earlier who is fluent in both English and Korean, wrote in a weekly family journal to engage in constant dialogue with her parents. Caylee’s

parents wrote a handwritten page in Korean weekly, and Caylee read it and wrote back in English. Caylee's PT mentioned,

I know that by Caylee continually improving her Korean abilities that helps make her English stronger. I think it is great that she is getting so much practice in both languages. I know the more she practices her Korean the stronger she is going to become in both languages.

One can see that the use of native language was permitted by pre-service teachers to support ELs' English language acquisition

To help students become familiar with using strategies and be able to justify their strategies, one fifth grade class used the sentence frame "I chose \_\_\_\_ strategy because \_\_\_\_." This series provided a conceptual foundation of strategies used to multiply a whole number by a fraction through investigation and classroom discussion. When students in another fifth grade class engaged in group work, their PT walked around asking them to explain and justify their reasoning through the exploration they did with their partners. She stated, "Students at any level of understanding can ask me their questions to help themselves. These questions will all be acknowledged, and I will act as a support for students with questions related to the content." Here, both teacher and student-generated questions were helpful for students as they explored solutions to their math problems. For another fifth grade class that struggled with vocabulary, students made a vocabulary grid, practiced the vocabulary using sentence frames, and had a word wall. Unfortunately, "regardless of these supports, some students did not complete the activity correctly". This is an issue that should not be overlooked. Despite the resources

incorporated to provide vocabulary support, students still struggled and did not complete the activity.

According to a pre-service teacher who taught first, second, and fifth grades, similar expectations existed between the upper and lower grades. For instance, students were expected to talk to their partners, and if called on, they should have had something to say. “They talk a lot about being a member of the community. You are a part of this community and you are expected to fulfill these expectations”, said the PT referring to the students in her first and second grade combo class. In fifth grade, however, “it was a lot more rigorous as to what you were supposed to be sharing”, noted the PT. She explained “Well, how did you get to your answer? How do you know that?” Explaining your thinking.” While students in the upper and lower grades had to explain their thinking, more emphasis was placed on justifying answers and explaining the process in fifth grade. Regarding science specifically, the PT stated,

You’re talking about chemical reactions and things that require having a better understanding of academic language. ELs might be able to say the answer, but not how they got there, even coming up with more language. In my fifth grade, students had to agree or disagree and respond to each other. It could be definitely a lot more intimidating.

Another PT who taught fifth grade ELs expressed,

I would say things and they just wouldn't know.... It was a challenge not knowing where they were in understanding because you think they're fine and they're not. With assessments, sometimes they wouldn't understand the questions because of

big words-describe, analyze-even if they did understand the task, they couldn't give an answer.

“Definitely going over each question before so that they were prepared to take the test” was an accommodation that this PT used to help her ELs understand assessment tasks and expectations.

To help students comprehend content, the PT in the previous example suggested creating lessons that are cross-curricular so that things flow well. She explained,

It's not like during math, we do this. During LA, we do this. Because when it's structured that way, I feel like, during math, this is the way you ask, but when it all becomes one, it's like a better environment for them to develop skills and understand that things aren't just in one setting

To effectively integrate content across the curriculum teachers must be aware of students' prior knowledge and know to build upon it between lessons.

**Prior knowledge.** Findings from edTPA indicate that pre-service teachers in the lower grades explicitly targeted students' prior knowledge through teaching foundational literacy skills such as vocabulary and sentence structure, while those in upper grades used realia to integrate math with other content areas. Knowing that her Kindergarten students may not have had direct instruction on weight and weight comparisons between two objects, one PT designed her lesson series with an informal assessment at the beginning of the initial lesson to give students a chance to discuss and share their prior knowledge and understanding or experiences with weight. Perhaps students “encountered weight in some aspect of their lives---be it the doctor or at the grocery store with their parents”. Considering that many of the English Learners were five or six years old, the PT stated,



“they may not have developed the schema for the concept of ‘lighter,’ making it more difficult for them to access that information and incorporate it into their academic vocabulary”. She further stated,

It would be vital to start with vocabulary and sentence frames in order to allow the students to begin to understand and eventually be able to discuss, and compare and contrast objects using weight. Additionally, because of the age of my students and because half of them speak English at home, I realized it would be especially important to practice using relevant sentence frames and provide kinesthetic, visual, and verbal instruction.”

Although not mentioned in the quote above, these students already had experience comparing the amount of objects in different groups as the class previously covered “less than” and “greater than”. However, it was now important for students to be able to compare and contrast two objects. Providing students with the appropriate vocabulary and sentence frames helped them expand their skill of comparing during this lesson series to include another attribute they can use to accomplish learning tasks.

It was very common among the lower grades for pre-service teachers to conduct pre-assessments to determine students’ prior academic learning and prerequisite skills before engaging in the edTPA lesson series. Kindergarten student’s prior academic learning and prerequisite skills related to most of the edTPA series included counting (on from a given number), while those of first grade related most to basic addition, subtraction, and solving word problems. Lessons for second grade continued to build upon the foundational skills introduced in previous grades. For the edTPA series for upper grades, lessons focused more on students’ conceptual and procedural fluencies.

When asked about the challenges of creating lessons that build upon English Learners' prior knowledge, a pre-service teacher who taught Kindergarten and fifth grade said, "I think for Kindergarten, it's a lot of basics. It's easy to make it relevant. Everything is relevant to them. In fifth grade, to make it relevant, it has to be sports." This PT mentioned that every lesson can be made relevant to ELs' outside experiences when they're in the lower grades. For example, if students have been outside, then, they have seen a plant or animal before, and teachers can build upon this to teach science. For the upper grades, it was easy to build upon ELs' knowledge when sports were mentioned. A PT who taught fourth grade connected her geometry lessons to ELs' background knowledge when she discussed the shape, angles, and lines in a soccer field. She declared, "The students definitely made connections between geometry and soccer. This showed me that they needed a familiar context." While both of these pre-service teachers found it easy to connect content with English Learners' background knowledge, the vast majority found this necessary, but challenging.

One PT mentioned that students' attending different ELD groups presents a challenge to teachers because they "don't necessarily know what the other ELD groups are doing, or if it relates to their lessons". Therefore, "it can be hard to build upon that new knowledge". Another PT explained, "If I'm teaching, I can know that I hit that, and I don't know what my students are getting over in that other classroom". In comparison, another PT expressed that it is difficult to design lessons that build on ELs' prior knowledge because teachers cannot assume that because a student is from a certain place or speaks a certain language that they have had certain experiences or have certain knowledge. For instance, "some students might not be literate in their home language; so

certain strategies wouldn't help them", stated the PT. One PT who taught first and fourth grades mentioned that "It's hard to anticipate what they know" and another PT who taught first and third grades mentioned the importance of "figuring out what their prior knowledge is and not making assumptions." She added,

Depending on how they articulate their prior knowledge, you could underestimate or overestimate their prior knowledge. Maybe they repeat language that they hear, but don't know what it means. I think that's with all students. It's hard to determine where they're at with their prior knowledge and what's going to make a connection for them---what's important and interesting to them.

Another PT who taught second and fifth grades expressed,

I feel like it's kind of difficult to build things upon prior knowledge because you just don't know what they actually took from the lessons before. So, I always had to reteach---reminding them what we did the previous day, a week ago---cause I couldn't expect them to remember or continue on from there. So, even if I was building upon prior knowledge, it was always a reteach.

All of these sentiments show that building upon ELs' prior knowledge can be challenging as teachers cannot anticipate nor assume what students already know. Not only should teachers not underestimate what ELs know, they should also not assume that because they have been taught something that they remember or understand it.

**Informal assessments.** Teachers familiarized themselves with students and used informal assessments to discover and build upon English Learners' prior knowledge.

"Once you know their interests and experiences, it is fairly easy to relate things to them (especially with younger students and less complex language skills)", one PT affirmed.

For her lesson on weight, one Kindergarten pre-service teacher implemented an informal assessment at the beginning for students to discuss and share their prior knowledge and understanding or experiences with weight. To determine students' prior academic learning and prerequisite skills, a first grade PT conducted a math pre-assessment. Assessment results revealed who could count (by 1s and 10s to 100), who struggled to count (by 1s beyond 39), and who understood place value. A PT who taught first and fourth grades also informally assessed students during math.. She assessed their abilities to identify shapes, lines, angles, which demonstrated their prior knowledge or lack thereof regarding geometry. This teacher also listened to student conversations about geometric figures to determine their background knowledge and understanding. As a result, she noticed which students recognized various shapes, lines, and segments These are examples of informal assessments implemented to discover ELs' prior knowledge to build upon while teaching.

One PT expressed, "I think that you really have to use student's prior knowledge during lessons and make them hands on". Her students performed well when they were given lessons that were hands on. For example, her math unit was extremely hands-on as students used rulers, yarn, and manipulatives to understand geometry. All of these were familiar tools that they used to engage with new content. On the other hand, another fourth grade PT lamented, "I spent so much time trying to pull on prior knowledge that we didn't get to the main thing. I think it's important to access prior knowledge before, or they get bored and do not get into it." She also mentioned, "honoring their language and culture (e.g. In Spanish or in Mexico)". Another PT mentioned the importance of understanding and using ELs' cultural references and to infuse them into lessons. This

reiterates the importance of teachers familiarizing themselves with their ELs and informally assessing them to discover their prior experiences and background knowledge, both of which support their comprehension.

### **Assignment reflections**

**ELD lessons.** Although most of the PTs did not teach their ELD lessons, it is important to regard how the ones who did reflected upon their instructional experiences. Although the time varied across classes and grades, most of the pre-service teachers felt that ELD should have been longer. One PT mentioned that by the time students enter their classrooms, ELD only ends up being around 20 minutes and while all time is valuable, “it is difficult for students to practice and get the repetition they need as well as learn new concepts and create an effective learning environment in a 20-minute window”. Another PT who taught ELD in a class that received instruction for 30 minutes daily expressed that it is really important for students to have this time to feel comfortable to participate, but they also have to be supported during the rest of the day. She stated,

If 30 minutes of the day is spent on ELD and we forget about it during the rest of the day, it’s not going to help that much. So, we need that specific time for ELD, but support them throughout the rest of the day. Using that time to prepare them for something that we’re going to do would be a good use of that time.

A PT who taught content ELD 30 minutes per day for three times per week expressed that “it wasn't enough”. Her ELD instruction was integrated with science, but she was unsure of how much this benefited the students because they were taught science vocabulary, but they did not receive language assistance with speaking and listening. One

PT who taught fourth grade ELD for 30 minutes for five days per week for third grade and four days per week for first grade expressed,

I think it's nice to have that set group of time to focus just on that and have the time to have students work with students at a similar level. Oftentimes, I heard of students who were quiet in their regular class, but talk and participate more in their ELD class.

Another PT who taught fourth grade ELD for 30 minutes daily expressed,

I feel like it's this other thing that we have to do. It's not like this sacred time that everyone really respects. When something else is more important, that gets pushed to the side. It's not necessarily prioritized, especially at the end of the year.

This PT felt that ELD was not equally prioritized with other subjects at her site. These are just some examples of how pre-service teachers felt about ELD instruction time across grade levels. One can see that time and priority of ELD varied across classes, but PTs recognized the importance of this subject.

Since students were often grouped according to linguistic ability for ELD instruction, pre-service teachers' opinions regarding this structure were solicited. While some of them expressed the academic benefits of this structure, a few highlighted the social implications of it. For explicit ELD instruction, according to a pre-service teacher who taught ELD in Kindergarten, first and second grades, students of all grades should be grouped based on ability level (e.g. advanced class, intermediate, etc), allowing students to practice language skills at an appropriate level for them". This PT also expressed that students also need ample time to communicate with speakers at other language levels. So,

for other subjects, she used mixed groups during instruction. Another PT taught second and fifth grades and expressed,

I kind of like that they were grouped based on ability within the ELD class. There have been so many studies that we've been learning about that it kind of benefits students to be in different groups sometimes so they can scaffold each other cause if you're in the same homogenous group, then they're just kind of stuck. There's no one to help or support them. So, I feel like sometimes it benefits them to do that, but with certain activities, you kind of need to mix it up a little.

Both of these pre-service teachers recognized the benefits of grouping students according to ability level for ELD instruction, but they also acknowledged mixing students according ability level, albeit for other subjects and activities.

A PT who taught ELD in Kindergarten and fifth grade stated, "I think it's good to address specific gaps in understanding, but socially it has different implications." This PT frequently thought about the social implications of class activities. She explained,

The native Spanish speakers are grouped together, the EOs together and groups in between based on their language proficiencies. One of the groups that is more English proficient goes to the computer and does work there, but it looks like a privilege.

Another PT who taught Kindergarten and third grade admitted,

I have seen positive effects of the grouping, everyone is learning at the point they need to be learning and are able to speak out more without the pressure of others talking more due to their language comprehension. However, I have also seen a

negative socio-emotional effect to the groupings; students calling themselves negative terms and degrading others.

Teaching ELD in their first placements was one of the major opportunities afforded to pre-service teachers during the ELD section of the INT 23 course. Their ELD reflections reveal their feelings about the benefits and teaching challenges of ELD instruction.

**edTPA.** Explaining was the primary academic language function that pre-service teachers mentioned that they would do more of or should have done more. This function was primarily discussed among pre-service teachers in the lower grades, although it was common among fifth grade PTs as well.

One Kindergarten PT identified a missed opportunity to have students write out example equations of their own and explain their computations. “This would look like students writing their unique equation on their personal small white board and each student then getting to share with a partner, then sharing with the class”, said the PT. Another Kindergarten PT mentioned that for both the whole group and individual focus students, she would provide more opportunities for oral presentations. To share their observations and findings of weight comparisons between two objects, students would be given “the scaffolds necessary” and they would repeat after the PT or “practice making different observations together as a class” while she slowly removed certain supports. The PT explained,

In this I would make sure that I provided appropriate time, patience, and practice to allow students to become comfortable using the appropriate vocabulary and sentence frames before they were expected to demonstrate a mastery of the skill.



Additionally, I believe students needed more time being exposed to the ‘lighter than’ vocabulary as many of them had trouble recalling the phrase and word during their formal assessment. In order to provide access to all students including English Language Learners, I would have the students act out what it would feel like picking up something lighter than a heavy rock.

While both examples of next steps to create additional opportunities for students to present their findings to the class involve explaining, the ladder example also includes comparing and contrasting. Vocabulary is also highlighted, and for both of these next steps, students would need the proper vocabulary support.

Explaining place value was another common next step identified by pre-service teachers in the lower grades. A first grade PT stated, “I think it is important for me to probe students’ thinking more and push them to explain how they arrive at the total or the number of tens and ones.” She explained,

According to Lev Vygotsky, verbalizing your thinking helps clarify and deepen your understanding. Thus, describing how they reached their answer will give them a deeper understanding and using the manipulatives in their explanations will help them connect the concrete and abstract aspects of place value.

This PT highlighted research that supported the role of students articulating their reasoning to increase their comprehension. She further informed, “many of my students appear to understand the procedures of finding the total or finding the number of tens and ones, but they don’t necessarily understand why those are the procedures. Pushing students to explain their thinking and the repetition will help students understand the concepts behind the procedures.” Here, the PT highlighted the importance of repetition as

students use manipulatives to explain their process to develop procedural fluency. If given the opportunity, this PT stated that she would implement a small group activity focused on place value with the use of manipulatives. She explained, “On a small whiteboard, I would write down a number (ex. 36) and ask students to model it with a manipulative. I would ask the students how many tens there are and how many ones there are.” She further detailed, “

As a class we would brainstorm the different ways to show/explain how to determine the number of tens and ones. After we brainstormed a few different ways, I would put students into mixed groups, give them a number, and have them create a poster showing how to show your work in as many different ways as possible.

This is an example of a re-teaching activity that would give students multiple opportunities to explain place value.

The previous examples mentioned correlate with two other primary strategies that pre-service teachers across grade levels mentioned: explicit instruction with manipulatives and small group practice. To support the whole class, especially students with specific needs “who are still developing an understanding that “a ten” is a bundle of ten ones, I would do more explicit instruction with manipulatives”, said a first grade pre-service teacher. This PT’s whole class analysis showed that many students struggled with understanding the definition of “a ten.” Thus, “it is important to practice with manipulatives and then support students to do the same tasks without the manipulatives”, she argued. She also mentioned that the repetition in this activity is important for both English Learners and students who are below grade level in math because “they typically

need extra exposure to concepts to develop a deep understanding.” She further wrote, “H. Douglas Brown argues that meaningful learning can occur “by making abstract learning more concrete.”” One can see that using manipulatives made place value more concrete, and it was very important to “make the connections between the concrete and the abstract explicit for students” in order to deepen their understanding of concepts.

To best meet student’s needs, one third grade pre-service teacher mentioned that she would like to have a pull out group of about four identified students who performed the lowest on the final assessment of the lesson series. With them, she informed, “I would focus on their individual learning needs and learn more about what their misconceptions or struggles are from closely watching them perform tasks”. This PT mentioned that she would also have a few students who did very well on the assessment use academic vocabulary and model multiple ways to calculate the area of objects. She stated, “I would like to pull them as a small group and create meaningful extensions for them”. Referring to her lesson on creating story problems, one fifth grade PT asserted,

Choosing to do small group instruction would be the best use of instructional time because students all demonstrated varied levels of understanding and it would not be beneficial to teach whole class the same thing that some students clearly don’t need.

She further stated,

The group of students who I would pull to reteach in a small group are usually the ones who are very quiet during whole class discussion and I don’t always get insights into their thinking because they are not the ones sharing aloud. This is why in this small group, students would feel more comfortable sharing their

thinking and I would get to have more insights into their thinking. Having them share would hopefully bring out common misconceptions.

The above quotes from this PT have implications for small group instruction increasing participation among students who are less likely to speak during whole group instruction, unless called upon. It is essential that the teacher knows what students' needs are in order to best support them, and often differentiated instruction is needed to accomplish this task. Incorporating differentiated small group instruction is useful for catering to students' affective filters, and it provides timid students with a more intimate space to articulate their thoughts to their peers and their teacher, giving everyone insight into all ideas which could be beneficial for learning for all parties involved.

Moreover, one fifth grade PT planned to review a concept as a whole group and touch bases with students in "a small group or one-on-one setting in order to support them as much as possible". For a re-teaching segment, another fifth grade PT aspired to create a small group to review strategies and help her students "make sense of the process in each strategy". She explained,

I want to break down the steps for them and while I am teaching them I would have them do practice problems. By doing so, students might encounter some misunderstandings and I will be able to address them for them and provide instant feedback.

Small group instruction can also be used for students to practice concepts that they understand. For instance, one first grade pre-service teacher mentioned she would include an activity that involved more explicit practice with adding two-digit numbers for individuals, pairs, or small groups who have demonstrated a strong

understanding of the concepts of place value. For this activity, she would ask “How can you combine the tens and then the ones to find the total? Why is this helpful?” Small group instruction often succeeded whole group instruction as a strategy to help students apply their understanding of concepts. This type of instruction often serves as an informal assessment and provides insights into students’ thinking, which is essential for the teacher to understand in order to help them learn. It can also be used for students to engage in additional practice with concepts that they understand.

Something evident from reflections across all edTPA commentaries is that students, especially English Learners and others who struggled with academic language, would benefit from “continued exposure and practice” in the words of one fifth grade pre-service teacher. Noticing that most students had a good understanding of the content from the first two lessons of her edTPA series, another fifth grade PT mentioned that as a whole class, she would like to review problems and concepts from previous activities. This PT stated that she would also spend more time working with the academic language (e.g. using word sorts, playing matching games etc.) especially for “students who did not demonstrate understanding and diverse learners who preferred to continue working with manipulatives”.

Since the majority of her class struggled with the academic language forms and sentence frames provided as well as with the word ‘lighter’ “(not the concept, just the vocabulary word surprisingly)”, a Kindergarten PT felt the need to work with the whole class on reviewing the use of complete sentences to give “students a chance to use all of the sentence frames (lighter than/heavier than/same weight as) orally.” This PT mentioned that students would continue working on activities introduced during this

series, but focus on practicing using complete sentences that incorporate the vocabulary (lighter than/heavier than/same weight as) into their predictions and observations.

Another support this PT mentioned giving students is the ability to record themselves on iPads and using the school wide parent square program to send information to their parents. This would help students practice academic vocabulary outside of school. For instance, while at the grocery store, students could compare products. (e.g. “This banana is lighter than that banana).” Since most of the ELs struggled with academic language, the PT believed that “listening and watching themselves practice on video would provide a new and exciting way to motivate them to work on academic language central to lesson content”. Perhaps teachers at schools that do not have ipads nor parent square programs could incorporate other ways for students to record and listen to themselves using academic language.

Based on an analysis of student learning, one third grade PT identified labeling area with units squared as a major next step for her class. This PT believed that modeling and reminding students to use the academic language in their sentences as they conversed about area would reinforce the concept of unit labeling, She mentioned that the class could talk more about appropriate units for measuring certain spaces. For example, “we could have a conversation about which units we would use for a soccer field, a state, a desk, or a rug in order to understand the importance of labeling our areas properly”, she said. Perhaps through modeling and using academic language, students would realize that stating the numeric value for an area is always followed by units squared, which would hopefully help them “make the connection of how we label area”. Furthermore, the PT identified looking at shapes that are not perfect rectangles or squares as an additional next

step for this class. For example, trying to find the area of an L or T shaped flat surface. The PT mentioned that counting the area for shapes like these would be an appropriate next step since students had a “solid group working definition and understanding that area is the space inside a shape. “ Perhaps extending labeling area to include irregular shapes in addition would be great practice to enhance students’ “mathematical and computational strategies for calculating area with a little more complexity”.

### **EL case study reflections**

Equally important to understanding what pre-service learned about English Learners while shadowing these students is what they learned about their own awareness to inform their future instructional practices.

While shadowing a sixth grade EL student, it became apparent to one pre-service teacher that although the focus student could read fluently, he did not comprehend the text. Referring to the EL case study, the PT stated,

“It made me realize that you have to look carefully and not take things at face value cause he was a great reader when he read out loud like that. Did he understand most of it? Probably not, but he could easily fool you. So, that became very clear.”

Another PT regarded the case study as an immediate reflection for her. While shadowing a third grade EL, she noticed that her student “was participating a lot, yet did not have the vocabulary to express her thoughts”, which proved to be very frustrating for the student. Upon this realization, the PT incorporated much more vocabulary into and prior to each lesson that she taught. The PT also became extremely focused on pre-teaching vocabulary and noticed the “extreme” benefit of having EL students talk to their partners.

Regardless of the pre-teaching, the PT found that some ELs spoke more than others. In order to prompt ELs who rarely spoke into speaking more, the PT provided sentence frames on the board with vocabulary to choose from and asked them to turn to their elbow partners and talk or work with them. “After they would do this I would choose from the fair-sticks in order to try to get participation from all students”, she said. This PT’s shadowing experience caused her to reflect upon increasing EL participation, which she did through incorporating partner work and sentence frames in addition to pre-teaching vocabulary.

Referring to the EL case study, one PT who shadowed a third grade student mentioned that it made her “notice subtle things that are hard to notice while teaching”. Once she became aware of those subtle things, she could pick up on them while teaching because she looked for them. For example, her focus student “sometimes paused for half a second during choral responses. So, she said it slightly behind everyone else”. Noticing this, the PT could focus more on “things to look for and think about”.

When asked “Did you notice absence of opportunities for the EL that you shadowed or other ELs to use academic language or participate?” One PT who shadowed a Kindergarten student replied, “Yes, I noticed that a lot.” She mentioned that her student

Stares off or looks at her shoelaces. When she notices that her classmates are doing something, then she does it (e.g. raises her thumb when she see others do it), but at no point does she buy into what they're actually doing.

The PT added, if the EL that I shadowed is paired with a White male English only student, he shares and she stares.” She further informed, “In 5th grade, ELs were more



likely to participate in small group. Whole class instruction? No!” However, ELs were more likely to participate in math in Kindergarten than in fifth grade.

While shadowing a fifth grade struggling and Beginning EL, one PT became more aware of her cooperating teacher’s and focus student’s behaviors.” Like how is he taking in what the teacher is saying? Does it even reach him?” In her case study, she mentioned,

A lot of times he was getting up to get a Kleenex, going to the restroom, playing with his erasers. The teacher's not aware of it because she's teaching the rest of the class.

The PT primarily noticed how little her focus student spoke. She said,

I feel like he was silent the whole time, especially when the teacher would say "Okay". Talk to your partner about your answer." He would turn and look at them, but they would talk to him. He wouldn't say alot back to them, if anything.

In her case study, the PT pointed out that her focus student was always the listener.

Although the teacher expected everyone to talk to their partners, this student was often silent. Also, the PT could not recall seeing him raise his hand to share something or ask a question, “even if he was lost”. Knowing that “he was lost, but never raised his hand, the PT wondered, "How is he being supported? Does he even feel a part of this?” This resulted in her teaching a lesson and asking him to share his answer with the class.

Although initially hesitant, the student was willing to participate after the PT affirmed him saying, "Your work is right." She further detailed:

So, he got up in front of the whole class and that was the first time he had ever done that. I was standing next to him and whispering to him if he got stuck

because I was aware that he needed that. So, I think he would've definitely benefited from a lot more scaffolding-sentence frames-so that he could feel a part of the discussion.

While most of the PTs became more conscious to include opportunities for academic oral language use into their lessons as a result of shadowing an EL, one PT viewed it as another tedious exercise since she had already done something similar for a language arts course. She explained,

We had to choose an EL or LEP to do a literature assessment on. So, the EL case study felt like a lesser version of that and I felt like I had already done it before. I think the case study helped gain insight about one student and generalize it for others, but it kind of felt like one more thing we had to do.

**Summary:** What can we learn from preservice teachers' reflections of their instructional practices for working with English Learners in light of California's ELD standards? Findings indicate that academic language use was a challenge, even when the concept was understood, and academic language use should be explicitly taught. Because academic language is increasingly difficult across grades, students, especially ELs, need more exposure to it. More specifically, students need explicit instruction in academic vocabulary and grammar to enhance their academic language use. Unfortunately, emphasis on academic language is reduced and increasingly focused on content as students reach the upper grades. There is also more of an emphasis on learning language and skills in the lower grades and more of an emphasis on applying skills in the upper grades. Overall, consistent exposure to vocabulary, sentence structure, and grammar across contexts is essential for helping students access and understand academic

vocabulary across subjects. Gestures are also helpful for supporting students' academic language development

Moreover, using hands-on experiences focused on meaning of vocabulary, language, and content in addition to keeping students active were keys to pre-service teachers' supporting students' academic language development during instruction. Individual attention was also helpful for English Learners who struggled with reading and those who needed help to engage in dialogue using academic language. While hands-on activities such as games and art-related projects were helpful for meaning vocabulary, reading, and solidifying content for students, PTs realized that they must be mindful of the rigor involved in such tasks. They also discovered that, unfortunately, hands-on activities are reduced or nonexistent in the upper grades as the focus shifts more to sitting quietly to read, write, or briefly discuss content.

Most of the English Learners across all of the grade levels were native Spanish speakers, and language transfer was easier for ELs whose native languages were similar to English. Given the diversity of students and wide range of proficiency levels across classes, differentiated instruction was essential for teaching English Learners. Of the multiple strategies implemented in upper and lower grades, repetition and scaffolding were found to be key instructional supports across grade levels. Frontloading vocabulary was a strategy often used to help students understand lesson concepts across grade levels, although PTs had different experiences with this strategy as it was overwhelming for some students, particularly ELs. Having word walls was also a reference that PTs used or identified as a measure that they should have used to familiarize students with academic vocabulary. Posters, word walls, and gestures are resources that can also be used to

familiarize students with academic vocabulary. Overall, visuals and repetition were common best practices for teaching in the upper and lower grades.

For edTPA, all of the pre-service teachers created and taught a series of three math lessons for their second classroom placements. Findings from edTPA indicate that pre-service teachers explicitly targeted students' prior knowledge through teaching foundational literacy skills such as vocabulary and sentence structure, while those in upper grades used realia to integrate math with other content areas. For the lower grades, vocabulary and discourse were the primary challenges for students, especially ELs. For these students, pre-service teachers often implemented small group instruction, pair sharing, and whole group dialogue prior to students doing independent problem solving. These strategies were used to emphasize the vocabulary and academic language found within word problems. Word walls were also visible for students to reference academic vocabulary and sentence frames for proper language support.

For the upper grades, vocabulary, labeling items with the appropriate units, and writing (to explain strategies or create word problems) were student challenges reported by pre-service teachers. These students constructed their own understanding based on personal experiences. So, tapping into prior knowledge was the primary strategy that PTs used to support these students during edTPA. Moreover, math lessons across grade levels often involved hands-on activities to teach students different problem-solving strategies. Of significant importance, something evident from reflections across all edTPA commentaries is that students, especially English Learners and others who struggled with academic language, would benefit from continued exposure and practice. Vocabulary

support, explicit instruction with manipulatives and small group practice were common next steps identified by pre-service teachers.

Findings from the EL case study showed a wide range of learning needs and abilities among English Learners within the same classes. Students' wide range of linguistic abilities confused some of the PTs as their ELD placements seemed misaligned with their assessment results. Moreover, academic language use was an aspect of focus for some of the EL case studies. English Learners often struggled with blending, vocabulary and writing. A major form of academic language that English Learners in the lower grades struggled with was sight words, and for ELs in the upper grades, reading was also a challenge. Games, art-related activities, individual attention, and native language use proved helpful for English Learners who struggled with reading. In addition, creating a low-stakes environment, encouraging meaningful interactions among students, and checking in with students helped ELs engage in academic language use.

EL case study findings revealed that English Learners' participation varied according to the linguistic demands accompanied by subject areas. Findings also indicate that working in small groups and pairs also contributed to ELs' confidence to participate. Also, incorporating scaffolds to reduce language demands in addition to providing explicit directions for tasks and modeling were supports used to promote EL participation. While many of the PTs had lingering questions after conducting case studies, they expressed how helpful this activity was for gaining insight into how to support English Learners as they were able to learn about one student and generalize findings for others.

## CHAPTER VI

### DISCUSSION

The purpose of this study was to gain insight into how pre-service teachers acquired the knowledge and skills necessary to provide comprehensive academic language instruction for English Learners. Specifically, this study sought to examine how the PTs planned, implemented, and reflected upon their lessons. Data derived from INT 23 provided the population of interest---elementary pre-service teachers enrolled in a public traditional teacher education program. Course assignments such as observations, lesson plans, assessment portfolios, and EL case studies were used to explore how the pre-service teachers learned about language pedagogy and how to support English Learners' academic language development. Data were also collected to examine the challenges that these PTs faced while teaching ELs. The intent of this chapter is to summarize the study and findings (according to PTs' coursework activities within the context of the literature), and inform the field of teacher education of how to better prepare teachers to support English Learners' academic language development.

#### **Research Question One**

What were the opportunities afforded to pre-service teachers during their ELD/SDAIE training, and how were they taken up?

#### **INT 23: ELD section and activities**

The INT 23 course commenced in August and culminated in March, with ELD during the fall and SDAIE during the winter. The main difference between ELD and SDAIE is that ELD focuses on language, while SDAIE focuses on content with the primary objective being concept development. In January, the PTs undertook the SDAIE section of the course and remained at their assigned school sites, but switched grades

from lower (K-2) to upper (3-6) or upper to lower. ELD observations, ELD and SDAIE lesson plans, and EL case studies were primary assignments submitted for INT 23.

Although not a sole requirement of the INT 23 course, but for the teacher education program overall, edTPA portfolios were also submitted by PTs while undertaking this course.

Observations and field notes of the INT 23 course were collected and examined to discover primary course topics and assignments that pre-service teachers engaged in to comprehensively instruct and support English Learners. Major ELD course topics included ELD standards, strategies for supporting and assessing ELs' academic language development and lesson plan components focused on language and literacy. During the ELD section, PTs observed ELD at their school sites and reported their findings. Findings from the PT's ELD observations show that for the lower grades, parts of speech were primary language forms, and identify, compare, and contrast were the primary functions emphasized during ELD instruction. Additionally, the primary strategy utilized for the lower grades was sentence frames, with spelling and academic vocabulary being the primary language skills that ELD instruction focused on. This is important given that vocabulary development should be the immediate and distal learning objectives for ELs (Calderón et al., 2005), and vocabulary performance is a leading predictor of language arts performance (Snow et al., 2010 as cited in DiCerbo et al., 2014).

For ELD instruction observed in the upper grades, language forms and functions were extended to include more complex activities and skills to focus on providing details, and the primary skill of focus was writing. A significant gatekeeper for academic advancement, academic writing is characterized by the use of specialized vocabulary,

complex syntax and disciplinary-specific genres (Bailey, Butler, Stevens & Lord, 2007; Coker & Lewis, 2008; Flower, 1994; Snow & Uccelli, 2009; Scarcella, 2003 as cited in Orellana & Bailey, PI & Co-PI, submitted IES grant). Emphasizing writing is critical as this is a subject and skill that ELs have historically underperformed in on standardized assessments (Orellana & Bailey, PI & Co-PI, submitted IES grant).

To apply what they learned from the ELD section, the PTs created grade-appropriate activities and lesson plans that addressed academic language components emphasized in the course. These included language functions, forms, supports, and objectives. In addition, the strategies that PTs learned about ranged from word walls and sentence frames to group work and discussions involving venn diagrams. Although most of the PTs did not teach their ELD lessons, these lesson plans were examined to see which aspects were most attended to. ELD lesson plans for the lower grades often included choral recitation and repetition, while ELD lesson plans for the upper grades often included graphic organizers and writing. Lesson strategies for both lower and upper grades included: pre-teaching vocabulary, think-pair-share, reviewing, and application. It is clear that engaging in coursework such as observing ELD instruction on site and developing lesson plans and grade-appropriate activities were opportunities afforded to pre-service teachers during the ELD section of INT 23, and these opportunities were taken up at the university and in the field, allowing PTs to connect theory with practice.

While the pre-service teachers incorporated many of the strategies into their ELD lesson plans that they were taught as well as those that they observed during ELD instruction, they did not incorporate the following strategies into their ELD lesson plans: Chunk and Chew, bilingual dictionaries, and Google Translate. Chunk and chew consists



of chunking information and allowing students time to process it. Most of the lessons included time frames for different lesson aspects (e.g. Attention Grabber, Pre-Assessment, Modeling, and et cetera), but they did not explicitly include time for students to process information, especially between modeling and guided practice or independent work. This is something that should not be overlooked as processing time plays a huge role in academic language development and comprehension. Also, very few lessons included bilingual dictionaries as a resource and only one case study recorded that a student was allowed to use a translation device for a limited time period. However, bilingual dictionaries and Google Translate are essential instructional tools for promoting use of native language to develop the target language, especially for students whose native languages are not Latin-based. Perhaps unused bilingual dictionaries and Google Translate could be due to resource limitations, or PTs could have overlooked these strategies altogether. These are just a few strategies that pre-service teachers learned about, but did not incorporate into their ELD lesson plans to support ELs' academic language development.

Preparing and training teachers to think and act linguistically requires reexamining the content of the coursework and experiences that both preservice and in-service teachers engage in (DiCerbo et al., 2014). Gee (2005) contends that meaning in language is cinched to context and contact, which cannot always be replicated in schools (as cited in DiCerbo et al., 2014). Nevertheless, once teachers understand the academic demands placed on ELs, they will be able to integrate them with their developmental needs. While PTs' field experiences for working with English Learners are helpful for informing their instructional practices for these students, they will not be able to replicate

these experiences when they become in-service teachers. However, they will have expanded their repertoires for working with linguistically diverse students and be able to make informed decisions.

### **Research Question Two**

How did pre-service teachers support English Learners' academic language development as evident in their course assignments?

#### **INT 23: SDAIE section and activities**

Major SDAIE topics covered for INT 23 included: Principles of SDAIE, commonalities and distinctions of ELD/SDAIE, content and language objectives, academic language and assessment for edTPA, and analysis of English Learner student work. During the SDAIE section, candidates learned how to distinguish between ELD and SDAIE features as they explicitly incorporated content objectives and language objectives into their lesson plans. The class also discussed developing rubrics for lesson planning and evaluative criteria. To apply what they learned about academic language, candidates created SDAIE lesson plans with academic language functions, forms, and vocabulary development strategies to target and support ELs' learning needs.

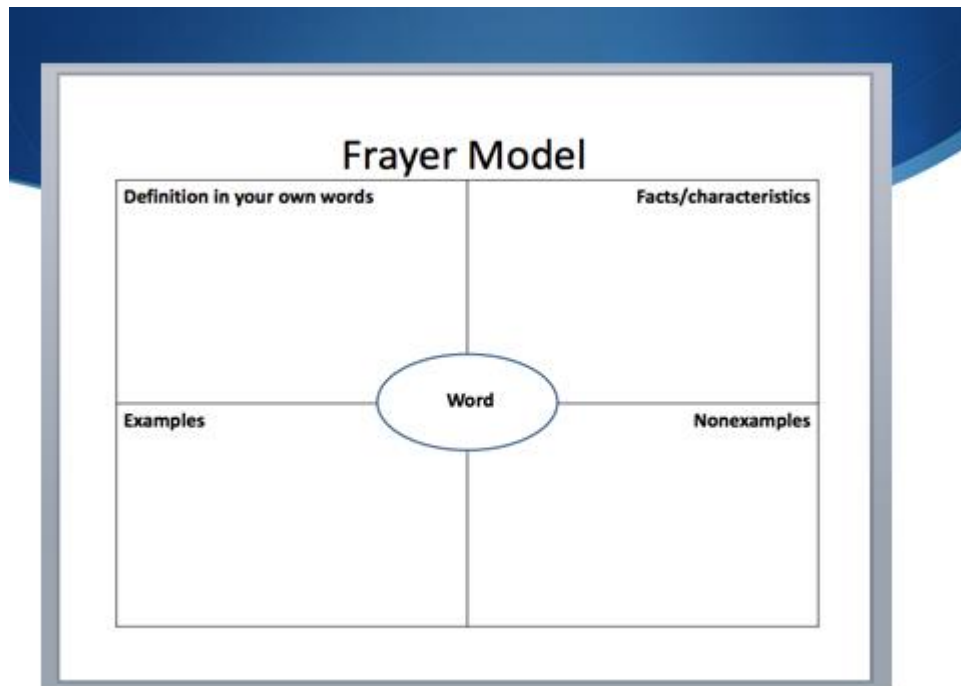
To answer the second research question, I analyzed how aspects of PTs' SDAIE lessons addressed ELs' needs to support their learning. Most of the content objectives for the lower grades focused on addition and transferring skills of addition and subtraction across math activities, and most of the language objectives focused on comparing and counting numbers and decoding. In addition, modeling, manipulatives, gestures, and sentence frames were common strategies implemented for these grades. Other strategies for lower grade SDAIE lessons that were less common included: pre-teaching

vocabulary, teacher-led small group instruction, discussion, review, graphic organizers, and students as subjects of lessons to increase academic language acquisition and use for engaging in content. Also, strategies such as pair sharing and drawing pictures were used to specifically accommodate diverse learners in a few of the SDAIE lessons.

SDAIE lessons for the upper grades included content objectives focused on math conventions and content vocabulary, and the language objectives focused on identifying and analyzing important information. Findings indicate that group work and questioning were highly infused into SDAIE lessons to provide language support for students in these grades. In addition, drawing was widely used for upper grade SDAIE lessons to help students connect with content. By looking at the content and language objectives and strategies used to teach these objectives in the upper and lower grades, it is clear that pre-service teachers created and implemented SDAIE lessons based on the instruction that they received during the INT 23 course to support English Learners' academic language development. Overall, looking at the topics, activities, and class assignments for INT 23 gives insight into multiple learning opportunities that were afforded to pre-service teachers regarding ELD and SDAIE for English Learners' academic language support.

While the pre-service teachers incorporated many of the strategies into their SDAIE lesson plans that they were taught during INT 23, they did not incorporate the following strategies into their SDAIE lesson plans: vocabulary development in context (highlighting, underlining, color coding) or after exploration, format modification, and vocabulary cards. Although this study revealed PTs' mixed feelings toward pre-teaching vocabulary, none of the lessons included vocabulary development in context or after exploration as alternative methods, even after teachers realized that pre-teaching

vocabulary was overwhelming for some English Learners. A few of the lesson plans included context clues, but PTs were not explicit about what the context clues included or how they appeared to support students' concept development. One of the major vocabulary development strategies that PTs were explicitly taught, but did not incorporate into their SDAIE lessons was the Frayer Model-a graphic organizer for building student vocabulary.



*Figure 8.* Frayer Model

With this technique, students define target vocabulary and generate examples and non-examples that could involve drawing pictures to express word meanings. This information is placed on a chart that is divided into four sections to provide a visual representation for students (Scalzo, 2016a). It is interesting that many of the PTs reiterated the effectiveness of using visuals and drawing to support ELs' academic language development, but not of them used the Frayer Model to support students'

vocabulary development. This is ironic given that this technique is one of the least cognitively demanding ways to explicitly reinforce vocabulary comprehension. This is a strategy that can be implemented both during and after reading to apply vocabulary meaning. Moreover, format modification includes considering the amount of text on a page and modifying it to prevent students from being overwhelmed by the amount of text on a page. It takes their cognitive loads into consideration as they are engaging with content. Vocabulary cards which include words, definitions, and visuals, were also not used to reinforce the target language to ELs. This strategy could have also included different meanings in both ELs' native languages and English to help them make connections across languages. However, PTs did not incorporate these strategies to support English Learners' vocabulary development.

Wong, Filmore, and Snow (2005) suggest that all teachers should understand the operation of language modalities across disciplinary contexts and develop the linguistic knowledge and ability to assist students in developing fluency in each modality within the academic discipline(s) they teach. While INT 23 did not require PTs to engage in a foreign language, it did provide opportunities for them to learn about the operation of the four language modalities. While most, if not all, of the lesson designed by PTs provided opportunities for two way interactions, whether with partner, small or whole group discussions, they did not aim for all aspects of language: listening, speaking, reading, and writing. This is important to point out given that Common Core emphasizes language as action and implies that students develop proficiency in the modalities as they use them. I noticed that most of the lower grade lessons incorporated oral language use throughout lessons, while upper grade lessons included speaking opportunities during whole group

discussion, I also noticed that most of the lessons that required reading did not require writing and vice versa. However, academic language development is a holistic process and must include using all modalities in tandem as students apply their academic skills.

Moreover, the PTs learned about the CCSS ELD proficiency descriptors and they were well-informed of how ELs' proficiency levels can range across modalities. They were also able to see this first hand, especially when they shadowed ELs to conduct case studies. However, I argue that it would have been nice to see the instructor implement an activity in a foreign language to give PTs an idea of how challenging it is for ELs to learn academic English and content simultaneously. For example, the instructor could have shown a video in a foreign language with subtitles or required the class to read a book in a foreign language with a translation tool or scaffolds in place to promote empathy and compassion for ELs, as well as emphasize the importance of comprehensible input among the PTs.

### **Research Question Three**

What can we learn from preservice teachers' reflections of their instructional practices for working with English Learners in light of California's ELD standards? To answer this question, I examined edTPA commentaries and EL case studies to reveal how PTs discussed ELs and their academic language development. More specifically, I analyzed data to discover the supports that pre-service teachers incorporated into their instruction or identified as measures that could have improved their instruction.

### **edTPA and EL case studies**

In a study to examine what can be learned regarding teacher candidates' preparation for working with linguistically diverse students, Bunch et al. (2009) documented how

eight elementary teacher candidates from teacher preparation programs throughout California discussed issues related to language and learning for ELs in their extensive written materials about their teaching and their students' learning submitted as part of their PACT Teaching Events. It is important to state that Bunch's study inspired an aspect of this study: examining how PTs articulated their understandings of supporting English Learners' academic language development as reported in their edTPA commentaries. Similarly to Bunch et al. (2009), this study looked at strategies that PTs used to support ELs' academic language development as well as measures that they should have taken, and next steps for improving their mathematics instruction. Additionally, my study expands upon Bunch's findings to include EL case study analyses along with edTPA commentaries of pre-service teachers to provide implications for preparing pre-service teachers to effectively support the academic language development of ELs in light of the California ELD standards.

**edTPA.** For edTPA, all of the pre-service teachers created and taught a series of three math lessons for their second classroom placements. Descriptions of English Learners and math instructional practices within edTPA commentaries were analyzed to discover how preservice teachers supported these students' academic language development across grade levels. Most of the English Learners across all of the classes were from Spanish-speaking homes, with a few other language backgrounds represented. The ELs in both lower and upper grades ranged across all linguistic proficiencies, which affected teaching. This is important to note given that according to Gandara et al. (2005) widely varying levels of proficiency of ELs in one class was a challenge identified by more than two dozen teachers of ELs in California. Given the diverse proficiencies across

ELs, differentiated instruction for academic language support was critical to teaching English Learners.

Gandara et al. (2005) outlined other difficulties mentioned by more than two dozen teachers of ELs in California: insufficient time to teach English and content; missed class time for students, ELs being pulled out for language support; and lack of essential instructional resources (as cited in Lucas & Grinberg, 2008, p. 608). These were also similar instructional challenges highlighted by PTs in this study. Insufficient instructional time was a sentiment across PTs in lower and upper grades. Perhaps this is why none of their lesson plans included pacing strategies. edTPA lessons, specifically, did not include extend time nor task reduction, perhaps due to the already limited amount of time allotted per lesson. In addition, teachers cannot always account for students' missed class time, and while they understand that ELs may need to leave class for language support, this is often inconvenient for both teachers and ELs as they have to work together to get ELs caught up on instruction that they missed during pull-out. Insufficient instructional resources, especially for ELs whose native languages were not Spanish, was also an issue. This has major implications for implementing CCSS-aligned instruction effectively.

One common reality highlighted across edTPA commentaries is that ELs understood math concepts, but often struggled with math language. Strategies used to help struggling students included small group work (with students of differing abilities) and translating. Small group instruction often followed whole group instruction as a strategy to help students apply concepts. This type of instruction also served as an informal assessment to provide insight into students' thinking, something critical for the



teacher to gain in order to support learning. One strategy that pre-service teachers were introduced to, but did not use when they noticed that ELs struggled with math language is the checklist for students' oral language (see Appendix O). It would have been helpful if PTs would have taken anecdotal notes of ELs' oral language participation (e.g. the kinds of questions they asked and the ways they explained answers) during the edTPA series to inform their next steps. In addition, edTPA findings revealed that incorporating small differentiated group instruction is useful for catering to students' affective filters, and it provides timid students with a more intimate space to articulate their thoughts to the class, something mutually beneficial for everyone. During edTPA, pre-service teachers could have also used the checklist for oral language participation to observe whether or not students appeared to listen attentively to peers. Observing ELs' oral language participation would have helped PTs notice patterns in these students' understandings of math language across modalities in order to better support their math language development and comprehension.

Furthermore, translating aligns with the study by Bunch et al. (2009) which documented how elementary teacher candidates throughout California discussed issues related to language and learning for ELs. Some of the candidates utilized strategies that viewed students' native languages as resources to augment ELs' learning and language development. Not only is translating a strategy for helping ELs, it is also a skill that is essential for them to develop in the elementary grades, for translating---articulating thoughts in standard written English---is a cardinal challenge among secondary students (Llosa et al., 2010 as cited in Orellana & Bailey, PI & Co-PI, submitted IES grant). So, translating is beneficial for ELs immediately and long term. Pre-service teachers could

have also used the checklist for oral language to document whether or not English Learners spoke audibly, as well as used their native languages or code switched while engaging with math content.

It was very common among the lower grades for pre-service teachers to conduct pre-assessments to determine students' prior academic learning and prerequisite skills before engaging in the edTPA lesson series. This coincides with the study by Bunch et al. (2009) in which elementary teacher candidates identified connecting to students' schemata as a key support for English Learners in their PACT materials. Findings from edTPA revealed strengths among students in lower grades in comparing weights, counting, identifying place value, and using correct operations for problem solving, while strengths among students in upper grades were understanding how to solve problems using targeted language demands. edTPA results among students in the lower grades indicate that most students could count by ones and tens to 100, and these students demonstrated a wide range of place value schemata. It was common for first grade students to correctly identify the number of tens and ones, master basic addition and subtraction, and use the correct operations to solve two word problems, skills heavily reinforced in the upper grades.

Unlike Bunch et al. (2009) who explained the challenges of teaching and learning mathematics in linguistically diverse classrooms in terms of how teacher candidates viewed: a) the nature of language in learning math and learning math in English, b) the language and learning demands, and c) how they attempted to support ELs' learning, my study uses pre-service teachers' edTPA reflections to gain insight into implications for implementing academic language development to ELs in light of the California ELD

standards. This is evident by analyses of edTPA findings according to California's ELD principles: A) Interacting In Meaningful Ways; B) Learning About How English Works; and c) Using Foundational Literacy Skills. While most of the challenges in Bunch et al.'s (2009) study were attributed to students' dispositions, family support, and instructional contexts, this study revealed student challenges specifically focused on academic language aspects.

For students in the lower grades, vocabulary and discourse were major challenges, and place value was a minor challenge. Results showed that while the majority of students in the lower grades could count to 100, there were students who struggled to count beyond 39. As it pertained to place value, some students could not correctly identify the number of tens and ones that composed various numbers, and among those who could, some could not explain how or why. When they tried to explain how or why, their "explanations did not show that they understood that the tens place represents physical groups of tens and the ones place represents single objects not grouped into tens." For students in the upper grades, vocabulary, labeling items with the appropriate units, and writing to explain strategies or create word problems were challenging. Of importance, when seeing parallel and perpendicular lines, fourth grade students recognized that they are different, but did not understand the differences in attributes of these lines when they heard them described. This shows the need for pre-service teachers to be trained to explicitly teach context-specific vocabulary and discourse (to help students distinguish between geometric figures). This also affirms the study by Bunch et al. (2009) in which teacher candidates attributed the credit to explicit teaching as a key strategy for supporting students' academic language development.

For their edTPA portfolios, pre-service teachers had to identify one language function for supporting students' mathematics development through language. The primary functions identified by pre-service teachers for the lower grades were explain, compare, contrast, and describe, while the primary functions identified for the upper grades were explain, justify, describe, and classify. Explaining was the language function essential for students to develop conceptual understanding and procedural fluency across all grade levels. Regarding the upper grades, explaining was essential for students to develop conceptual understanding, procedural fluency, mathematical reasoning, and problem solving skills. Another language function essential for students to develop was classifying. All of these skills were introduced in the lower grades and expanded upon in the upper grades to perform more sophisticated tasks. One of the skills that edTPA lessons did not emphasize is "evaluate"---the highest Bloom's Taxonomy skill in which students identify criteria and explain value judgments or priorities. Being that Common Core aims to prepare students to be college and career-ready, pre-services should be trained to explicitly teach students how to evaluate information as this is a skill that they will need to be successful in college and the workforce.

Reflecting upon their edTPAs, explaining was the primary academic language function that pre-service teachers mentioned that they would do more of or should have done more. For next steps, pre-service teachers identified explaining place value for students in the lower grades and providing vocabulary support for all grades. Recognizing that the type of vocabulary instruction and extent to which it occurs in classrooms is insufficient for language minority students, Schleppegrell (2012) highlights the need for supporting students in meaningful learning experiences that enable them to

increase their vocabulary across all content areas. edTPA findings showed that using manipulatives makes place value more concrete, and it is very important to “make the connections between the concrete and the abstract explicit for students” in order to deepen their understandings of concepts. On a similar note, edTPA findings show that students across grade levels were enthusiastic about learning mathematics because they saw “the ways in which they can use it in everyday life, and also enjoyed how hands-on it can be”. It was very typical for math lessons across grade levels to involve the use of manipulatives, games, and activities, all of which students used to learn many different strategies to approach solving math problems.

Something evident from reflections across all edTPA commentaries is that students, especially English Learners and others who struggled with academic language, would benefit from “continued exposure and practice”. Also, most of the edTPA assessments revealed that gradually building in academic language use throughout the series was essential for teaching ELs. Of significant importance, findings show that teachers must know what students’ needs are in order to best support them, and supporting their needs often involves differentiated instruction. For students in the lower grades, pre-service teachers explicitly targeted students’ prior knowledge through teaching foundational literacy skills such as vocabulary and sentence structure, while those in upper grades used realia to integrate math with other content areas. Small group instruction was also used for students across grade levels to engage in additional practice with concepts.

**EL case study.** Findings from EL case studies were analyzed to gain insight into how PTs described instructional practices and provided recommendations for enhancing

ELs' academic language development as a result of shadowing them across learning contexts in their second field placements. EL case study findings also revealed ELs' academic challenges and questions that pre-service teachers raised as a result of shadowing focus students. Soto-Hinman (2011) advises training teachers in EL shadowing to identify patterns involving who speaks frequently in classrooms and recognize the absence of opportunities for academic oral language use. As seen from this study, this strategy enabled pre-service teachers to reflect on their instructional practices and their impact on student academic oral language development.

Major forms of academic language that English Learners in the lower grades struggled with were sight words, blending, vocabulary and writing. ELs were often unable to recognize words previously read and repeated (e.g. and, the, did), even when appearing on the same page. Even when English Learners were able to decode words, blending and vocabulary still presented challenges, especially if concepts were unfamiliar. For ELs in the upper grades, reading was also a challenge. Findings from EL case studies showed that activities such as games and art-related projects in addition to individual attention and native language use were helpful for English Learners who struggled with reading and academic language acquisition.

Academic language use was an aspect of focus for some of the EL case studies. Findings from the EL case study showed that creating a low-stakes environment, encouraging meaningful interactions among students, and checking in with students were strategies proven to be effective for helping ELs engage in academic language use. Some case studies showed that creating a low stakes environment is one way that helped ELs participate. Findings also showed that working in small groups and pairs was helpful for

ELs gaining increased confidence to participate. This coincides with the study by Bunch et al. (2009) which indicated using a variety of grouping strategies as an effective strategy for supporting students. Of significant importance, analyses of EL case studies revealed that English Learners' participation is not solely based on the subject; but also on the language demands, which explains English Learners' participation variation according to the linguistic demands embedded in content and tasks.

At the summation of the EL case study, PTs reflected upon this exercise and raised questions and suggestions for supporting ELs' academic language development while expressing how helpful this activity was in helping them gain insight into how to support English Learners. Many of the questions and suggestions regarding instructional practices for improving ELs' academic language development often centered on EL classification and how to increase these students' participation and academic language use. Findings from the EL case study showed a wide range of learning needs and abilities among English Learners within the same classes. This realization led to some of the PTs' misunderstandings of ELs' classifications as these students' ELD placements often seemed misaligned with their assessment scores. A primary recommendation for EL placement was to assess ELs based on their classroom work in addition to summative assessments to more accurately place these students in their proper ELD classes. Another common recommendation among EL case study findings is that when ELs are asked to speak with their partners, the teacher should monitor them to make sure they speak and understand how to use the academic language in order to fully participate in the dialogue.

Overall, this study examined the learning opportunities afforded to pre-service teachers as a result of being enrolled in INT 23. More specifically, we see what the PTs

learned as a result of coursework and what they learned in the field while working with English Learners. Findings from the PTs' edTPA and EL case study reflections help us understand: a) how PTs supported ELs, b) how PTs reflected upon their instructional practices, and c) next steps that PTs identified for improving EL instruction.

Moreover, Ball and Cohen (1999) suggest the use of professional learning tasks as vital requirements in preservice programs. A professional learning task (PLT) is a sequence of exercises in which the curricula are established in the activities, inquiries, and problems of practice, and facilitates "the development of a disposition of inquiry" (p.27 as cited Galguera, 2011). While the EL case study allowed PTs to shadow and write about an EL of concern and develop questions regarding said student, it would have been nice to see the PTs engage in more-inquiry based activities focused on language to challenge their understandings of students', especially ELs', academic language development. It would have also been nice to see more PT collaboration for supporting ELs' academic language development. While PTs were required to collaborate to conduct the CPM presentation and some of them worked together to create ELD and SDAIE lesson plans, I do not recall them meeting to discuss the outcomes of these lessons. While this is true, I did witness PTs often working on activities together based on their school placements. For instance, PTs paired to discuss oral language development observations of ELs they shadowed, and the class often engaged in reading responses in which PTs separated into groups of three to share their responses to class texts. One example is their read and response to Shin's "Educating English Language Learners. After reading this text, the class discussed policies and pedagogical issues for teaching ELs. Then, PTs discussed their responses and wrote two minute reflections about what they thought and



learned as a result of discussing the reading with their classmates. While these activities are beneficial for professional and personal development, I would have also liked to witness more collaboration among PTs who taught the same grades or taught ELs from similar linguistic backgrounds. So, this would have been a form of a community of practice established to better support the academic language development of ELs in addition to the instruction and field experiences that they received.

Villegas (2007) emphasizes the need for teacher education programs to examine PTs' dispositions related to social justice, and Bransford et al. (2005) contend that all teachers have underlying theories of learning which must be made explicit to improve practice. All too often pre-service teachers generally fail to challenge their beliefs throughout their training, (Rathis, 2001; Zeichner & Tabachnick, 1981; as cited in Villegas, 2007), but it is the responsibility of teacher educators to provide and facilitate opportunities for PTs' to demonstrate their dispositions, especially as they pertain to their expectations for disadvantaged students. Perhaps it is beyond the scope of INT 23 and it would have added to the workloads of the instructor and PTs, but it would have been helpful for PTs to engage in activities that assessed their dispositions toward teaching ELs.

It is important to mention that the class took a survey on the myths regarding ELs, and they discussed these myths to debunk them. After PTs submitted their survey responses, they read the answers and explanations regarding each myth and discussed them among their table groups. They specifically discussed responses that surprised them, and connections to their own knowledge, understandings, and experiences. However, I would have liked to see the class engage in more activities that required

bringing their dispositions or biases to the forefront for them to challenge and discuss, especially as it pertained to developing their edTPA portfolios and engaging in other challenging activities throughout the course. I argue that this would have provided better insight into their learning trajectories for working with ELs over the span of two quarters. Not only would it have informed findings for this study; it would have provided enhanced self-reflections for the PTs, as well as better informed the course instructor for future course activities.

## CHAPTER VII

### CONCLUSIONS AND RECOMENDATIONS

This study revealed how mainstream elementary pre-service teachers of one traditional teacher education program in a large western university acquired the knowledge and skills necessary to provide comprehensive academic language instruction for English Learners. The purpose of this study was to explore and describe the opportunities afforded to pre-service teachers and how the PTs undertook said opportunities. In this study, I explored, how PTs planned, implemented, and reflected upon their lessons for supporting ELs' academic language development. The primary aim of this research was to contribute to the body of teacher education literature by extending the research on bridging theory and practice to promote pre-service teacher's language pedagogy for teaching English Learners. Specifically, the study sought to examine how pre-service teachers learned how to support English Learners' academic language development as they engaged in their coursework and taught English Learners, and the challenges that PTs faced while teaching ELs.

Chapter I of this study provided an overview of the background of the problem, the problem statement, and statement of purpose for this study. As stated in Chapter I, this study examined and explored: a) how pre-service teachers made sense of what they learned from coursework and observed at their school sites; and b) how they helped students, especially English Learners, develop academic language. This study also highlighted the complexity of pre-service teachers' capacities and constraints for working with ELs, as well as explored how they reflected upon their learning and instructional

experiences in both the university and field settings. Chapter I also specified and explained the research questions guiding this study.

Chapter II presented an overview and description of the Common Core State Standards and California's English Language Development standards, which correspond to the CCSS. This chapter highlighted and explained the theoretical underpinnings of this study. While multiple second language acquisition theories exist (as evident in Chapter II), theoretical underpinnings of the Common Core were deemed most relevant for studying how elementary pre-service teachers were trained to support English Learners academic language development. These theories naturally compelled me to consider the language and literacy demands placed on English Learners, and pre-service teachers' training for linguistically supporting students.

In Chapter III, literature relevant to the current study was reviewed. This included varied orientations to academic language, the complex linguistic demands placed on ELs by the Common Core, and the purposes of ELD instruction. This chapter also included a review of literature on teacher preparation for academic language development, a detailed explanation of pedagogical language knowledge and the necessity to possess this quality for teachers working with diverse learners, along with research on professional development for teachers and teacher educators, and the dichotomy between theory and practice pertaining to teacher education.

Chapter IV explained the methods of this study. Data such as observations and document analysis were the primary sources of evidence, and interviews were secondary. Observations of the INT 23 course were focused on understanding the topics discussed within the whole group setting and learning opportunities afforded to pre-service

teachers. The study also utilized document review to learn more about the standards and objectives of the INT 23 course, and assignments submitted by PTs which explain supports that they used for working with ELs. In addition, the interviews were semi-structured (Merriam, 2009) and focused on the following three areas: learning opportunities afforded to a group of elementary pre-service teachers enrolled in INT 23, how PTs supported English Learners' academic language development, and instructional practices that PTs highlighted as supports for working with ELs (see Appendix A ).

These interviews were conducted after all other data were collected. Chapter IV also described the instructional context of the INT 23 course to provide a lens into the topics, assignments, and expectations of INT 23 for supporting English Learners' English and academic language development. A phenomenological study design allowed me to examine how PTs learned about and supported ELs' academic language development. This design also allowed me to explore instructional practices that PTs identified as improvements for working with ELs. Course field notes were analyzed according to topics that were discussed followed by assignments which were collected and analyzed in the order they were submitted. Finally, issues of trustworthiness, the significance of the study, and limitations were addressed in this chapter.

Chapter V presented the findings of the study. This chapter began with a description of the ELD section of the INT 23 course including topics that were covered relevant to this research and major course assignments that the PTs engaged in during the fall. Following the ELD section is the same information for the SDAIE section-relevant course topics and analyses of major assignments that were completed during the fall. Findings were determined after coding and analyzing field notes, documents, and

interview data from 12 interviews of elementary pre-service teachers in summer 2016. To be clear, the initial findings developed after I sat in on all of the class sessions during fall 2015 and winter 2016 and reviewed all of the assignments, including edTPA portfolios, which were submitted by pre-service teachers. Phase 2 findings were ascertained after coding and analyzing interview data which was collected after all of the assignments were analyzed. Findings are presented according to the research questions guiding this study.

Chapter VI presented a discussion of findings given the multiple vignettes that illustrated pre-services teachers' instructional practices and reflections of their experiences. The chapter was organized in accordance with the research questions presented in Chapter 1. Preservice teachers' learning opportunities and instructional experiences were discussed in light of the INT 23 course and PTs' course assignments.

This chapter, Chapter VII, serves as an overview of the chapters of the study. Finally, implications for pedagogical practice and future research are presented.

### **Implications for Pedagogical Practice**

Given the learning opportunities afforded to elementary pre-service teachers and their reflections from teaching English Learners, what lessons can be learned regarding instructional practices for supporting ELs' academic language development? Here, I consider overarching themes that emerged from the findings and delineate them according to the principles of California's ELD standards--- "Interacting in meaningful ways", "Learning about how English works", and "Using foundational literacy skills". Interacting in meaningful ways, or meaning making, is at the heart of ELA/literacy and ELD instruction and is the central purpose for

interacting with text, participating in discussions, and giving presentations. Using foundational literacy skills enables students to independently interact with and produce text for multiple purposes (Fenner, 2015). Strategies for supporting comprehension are utilized to augment students' language development-the cornerstone of literacy and learning-by which students' receptive and expressive skills allow them to interact with each other and texts. It is clear (in the definitions of the ELD principles and preceding analysis of findings) that all of these themes overlap to support students' academic language development according to the Common Core expectations for language arts, literacy and language development.

**Interacting in meaningful ways.** Using hands-on experiences focused on meaning of vocabulary, language, and content in addition to keeping the students active are keys to supporting students' academic language development during instruction. These activities are especially useful for engaging students in the lower grades. Whether in upper or lower grades, hands-on experiences must involve information that is explicit, centered around collaboration, and immediately relevant to students, which optimizes ELs' and other language minority students' learning (DeCapua and Marshall, 2011). Of importance, grouping students and tapping into their prior knowledge support their comprehension. While whole group instruction is the most widely used structure across all lessons and grades, partnering and small group instruction can be equally effective for helping English Learners comprehend content. Allowing students to work with partners or in small groups is often helpful for promoting effective expression by which students engage as writers, discussion partners, and presenters and gain control over language conventions and manipulate them accordingly. Of significant importance, teachers must

be aware of students' prior knowledge and know to build upon it across lessons in order to effectively integrate content across the curriculum. While this is true, building upon ELs' prior knowledge can be challenging as teachers cannot anticipate nor assume what students know. To learn more about their students' prior knowledge, teachers can use informal assessments. Furthermore, while hands-on activities may be used to solidify content for students to comprehend, teachers must be mindful of the rigor involved in such tasks. Engaging students in hands-on activities helps reduce and manage the rigor involved in understanding concepts. Keeping students engaged in the content contributes significantly to language development and is fundamental to learning about how the English language works as students interact with concepts.

**Learning about how English works.** To understand how pre-service teachers perceive the role that language plays, it is important to consider how they discuss English Learners, the role of (native) language, and academic language. In California, most English Learners across all of the grade levels are native Spanish speakers, and language transfer is easier for these students since Spanish and English are similar. Strategies such as translating and allowing ELs who speak the same native language to be resources for each other can help optimize their learning experience. Teachers who do this hold affirming views of linguistic diversity and bilingualism (Lucas and Grinberg, 2008). Bowers et al. (2010). discuss the significant benefit of using students' native language as a resource to enhance their literacy development. Permitting ELs' use of native languages lowers their affective filters and increases their likelihood of smooth comprehension and engagement (Calderón et al., 2011), However, they must also be explicitly taught how to transfer skills between their primary language and English (NRC, 2010). This implies



that teacher educators should probe pre-service teachers to get an idea of their perceptions of the roles that language---both native and academic---play within language acquisition, and teacher education programs should foster pre-service teachers' ability to help English Learners develop the needed awareness and competencies for academic language usage.

**Using foundational literacy skills.** Vocabulary and grammar are the academic language challenges among English Learners. Knowing that reading, writing, and discussing texts involve higher-order skills and challenge all students, foundational literacy skills must be explicitly taught and constantly emphasized for ELs across all content areas and grades. But, what does it mean to explicitly teach academic language? This pedagogical process extends beyond focusing on academic content and goals, but requires tying language forms and functions to students' experiences as richly as possible. This implies no longer thinking about language windows in a narrow way, but embracing the complex ways in which students operate in the world outside of the classroom such as negotiating, code switching, and translating information to perform authentic tasks.

Of importance, decoding appropriately best positions ELs to make significant strides in meaning making, language development, effective expression, and content knowledge, all of which are needed to achieve the CCSS. Also, consistent use of familiar and new vocabulary across contexts is essential for helping students access and understand academic vocabulary across subjects. Regarding strategies for supporting comprehension, frontloading vocabulary can help some students understand lesson concepts, while overwhelm others. However, visuals such as posters and word walls were

useful for students' academic vocabulary development across grade levels. To support ELs' comprehension, it is best to implement as many strategies as possible for each lesson. Of the multiple strategies appropriate for supporting students' academic vocabulary development in upper and lower grades, repetition and scaffolding are key instructional supports. Student's vocabulary development is essential to their overall language development, for it enables them to listen, speak, read, and write effectively across divergent contexts.

These are some implications and recommendations of instructional practices for supporting English Learners' academic language development based on findings from this study relevant to the main components of the ELD standards that correspond to the CA CCSS ELA/Literacy framework. As content and language are interwoven, the three components of the CA ELD Standards (Interacting in Meaningful Ways; Learning About How English Works; and Using Foundational Literacy Skills) are explicated harmoniously to call attention to the robust instructional practices for supporting English Learners' academic language development. While the two initial components call attention to meaning, interaction, and a focus on developing linguistic knowledge of English, the later delineates foundational literacy skills ELs may need to enhance their literacy and educational trajectories. Of equal importance, these themes are especially beneficial in illuminating the need for pre-service teachers' to develop pedagogical language knowledge to support ELs' academic language development.

### **Implications for Professional Development**

The findings of this study have implications for stakeholders involved in any capacity of teacher education. Given the opportunities afforded to pre-service teachers

and their reflections on instructional practices for working with English Learners relevant to California's English Language Development standards, I offer implications for teacher education and professional development for pedagogically training pre-service teachers to support English Learners in California in particular. Although each teacher education program differs in course structure and curricula significantly, current and future instructors of language courses throughout CA and in other states may find some implications relevant to their teacher education programs and instruction as well.

For pre-service teachers to possess linguistic knowledge necessary to appropriately select instructional tools and materials that support students' development of increasingly sophisticated language abilities, teacher education programs must foster opportunities that facilitate PTs' content and procedural knowledge. This will enable them to plan instructional activities that promote students' academic language use in increasingly meaningful ways. By explicitly teaching the components of the ELD standards (Interacting In Meaningful Ways, How English Works, Fundamental Literacy Skills, and EL Proficiency Levels), teacher educators are able to strongly emphasize the purpose of language use (functions, forms, and objectives), text types, and supports to inform pre-service teachers' pedagogical practice. To apply information that they learn about aligning their instruction with ELD standards to support ELs, PTs should create grade appropriate activities that address each component of an ELD standard, including identifying the purpose, text type(s), and audience for developing their lessons. In addition, Gage (1978) recommends watching and analyzing videos of realistic events to better inform pre-service teachers' procedural knowledge. An example of this is the INT 23 class watching the video of a first grade ELD lesson from which they learned that

language forms enable students to perform language functions. The class also watched a video of a Kindergarten number sense lesson and analyzed the lesson based on SDAIE features.

Further examination of events and collection of evidence are useful for teacher educators and PTs, and could create a model for teacher education and professional development programs to demonstrate the capacities needed to work with diverse students (Howard and Aleman, 2008). Examples of this are EL case studies and edTPA portfolios. While all teacher education programs require assessment portfolios to demonstrate competency for teaching students, not all of them require EL case studies. EL case studies can be utilized in teacher education programs for PTs to become more conscious to include opportunities for academic oral language use into their lessons. Moreover, edTPA is a high-stakes preservice teacher performance assessment designed to evaluate teacher candidates to determine whether or not they meet certain guidelines related to teaching and learning. edTPA commentaries are a primary component of this robust account, for they are written reflections in structured formats that summarize activities PTs engaged in. As shown by this study, edTPA can also be used to examine how PTs articulate their understandings and challenges relevant to teaching ELs.

Since documenting best practices is essential for PTs of diverse learners, Howard and Aleman (2008) propose that teacher researchers develop a “culture of evidence”, documenting critical learning moments for PT learning. Both the EL case study and edTPA exemplify the use of professional learning tasks for teacher education to discover pre-service teachers’ awareness of academic language development, and it contributes to the literature on teacher preparation for academic language development. Faltis and

Valdes (2016) submit that self-reflection and pre-service teachers' critical awareness of language diversity are enhanced through activities that require examining their dispositions toward language, language variation, and educational experiences with linguistically diverse children.

Bransford et al. (2005) offer that teacher education programs require candidates to show evidence of student learning as a result of their instructional practices. However, teacher educators must consistently create tasks that require candidates to show proof of their practices and evaluation of students' performance as a direct result of their course instruction. Examples of these tasks include lesson plans, student work, and written reflections, all of which were incorporated within INT 23. Furthermore, I argue that teacher education programs should exceed beyond single course requirements to incorporate professional learning tasks that integrate content and procedural learning across all of the courses. For example, teacher education courses should require lesson plans for all content areas to include evidence of SDAIE components. So, even if a math course requires a math lesson, it should involve academic language features and strategies to support ELs. To promote this, teacher education programs should promote and require collaboration among teacher educators to inform EL instruction as educating ELs is a systemic endeavor, not the sole responsibility of "language" teachers, for all teachers are language teachers as perceived by the Common Core.

### **Implications for Future Research**

Multilingualism is evolving in California as it appears that there will be an increase with other languages side by side with English. This may present challenges and expectations for how we approach teacher preparation. One question that remains given

this reality is what is academic language? While this study defines academic language as the formal communication used within an academic discipline, it is important to keep in mind that this phenomenon is recognized as distinct, yet perceived to be nebulous as educators and researchers from different orientations and perspectives grapple with what it is, how it is used, and how it should be taught. No matter how one defines it, it is my goal that from this study, one realizes that academic language implies language for learning in schools. It is also important to recognize that as multilingualism continues to evolve, we must be mindful of the label “English Learner” as this is a sociopolitical term that is viewed differently across audiences, leading to a push for shifting to use “multilingual learner” instead. This label eliminates deficit framing for identifying learners whose native language is not English while privileging other languages they speak.

Emerging from concerns that U.S. schools, particularly those with high populations of English Learners, are receiving an inadequate education is the current reform effort---the Common Core (Amos, 2014b). This initiative views literacy as advanced proficiency in all four language domains and includes “fewer, higher and deeper” learning goals among states and the District of Colombia that have adopted them to prepare students for college and the workforce. While the Common Core State Standards (CCSS) hold high expectations for all students as they require literacy within and across the content areas, they are even more challenging for English Learners. Although potentially promising, successful implementation of the CCSS accompanies changing definitions of literacy that mandate a shift in pedagogical practices and include implications for teacher preparation. Given the expectation for teachers to help student

reach Common Core state, what is the opportunity cost? Where are the opportunities for teachers to learn with their and from their students? This points to students' funds of knowledge that teacher education programs can train pre-service teachers to tap into.

To help students achieve the goals of the CCSS, teachers need a wide span of competencies and a comprehensive understanding of linguistic and content knowledge. Teacher competencies are the knowledge, abilities and dispositions that motivate them to teach effectively and efficiently (MONE, 2008 as cited in Koksal & Cogmen, 2013). This includes not only content and disciplinary knowledge, but knowledge about language as well, both how it works and how students develop it as "learning, learning language, and learning through language are simultaneous processes" (Halliday, 1993 as cited in Ball & Tyson, 2011, p. 406). Unfortunately, language is often overlooked in both the university and the field, and teachers rarely specify their language expectations for students (Ball & Tyson, 2011). However, this must change as the Common Core State Standards require students to reason using academic language skills which vary across content areas as each subject includes language and tasks unique to its own discipline (Amos, 2014b). I believe that what is missing from the teacher education program within which this study is situated is providing PTs with the opportunity for cultivating learning communities with the classroom and how this shapes the learning experience. I also believe it is safe to assert that one cannot learn how to teach ELs without understanding ELs' language development or tapping into these students' funds of knowledge. Possible questions for future research could be what funds of knowledge do students bring to school, and how can teachers learn from these sources?

As the population of English Learners (ELs) continues to increase coupled with the challenges that English Learners face while becoming fluent in academic English as well as vying to meet the demands presented by the Common Core, we must think about how teachers are being prepared to teach in a diverse society. University-based initial teacher education is designed to uncover the importance of theory and link it with practice to help beginning teachers develop the knowledge, skills, and competencies needed to teach all students effectively (Anderson & Freebody, 2012). A persistent problem of practice in teacher education in the US is that teachers continue to teach as they were taught in schools”, contributing to the problem of ELs lacking the academic support that they need because classrooms are more diverse than ever before (Cuban, 1993; Richardson, 1996; Tyack & Cuban, 1995 as cited in Jimenez-Silva & Olson, 2012, p.335). In order to ensure educational equity, teachers must be aware of students’ linguistic and cultural backgrounds, and teacher educators must assess the knowledge, skills, and dispositions that PTs possess (De Jong, Coady, & Harper, 2013).

To teach effectively, teachers need to understand the cultural, linguistic and social challenges that their students face, and how to connect new information to students’ background knowledge and experiences in ways that their students can comprehend (Darling-Hammond, 2011). To do this, teachers must recognize the critical role that language plays and how to optimize this process for their students’ learning. This reiterates the importance of teachers familiarizing themselves with their ELs and informally assessing them to discover their prior experiences and background knowledge, both of which support their learning. Moreover, interest in examining literacy teacher preparation is far more recent as the CCSS require shifts in pedagogical



practices for both oral and written discourse. However, the current literature on pre-service teacher education for diverse classrooms vacillates widely between relying upon empirical research versus non-empirical expertise (Faltis & Valdes, 2016). Whether we glean knowledge from empirical studies or personal experiences, we still arrive at the same conclusion: we must rethink pre-service teacher preparation in order to meet the linguistic and academic demands of ELs, as educating this population of students is a systemic issue, which must be addressed in teacher education programs (Coady, Harper, & de Jong, 2011; Vogt, 2009).

A prevailing issue involving teacher education is the dichotomy between theory and practice. At present, more research on teacher education that addresses EL education is needed as well as that which focuses on the nature of pedagogical language knowledge (Bunch, 2013). Of importance, teacher education has been under heavy scrutiny as it pertains to implementing practices that are relevant to the realities of the classroom, evident by US Secretary of Education, Arne Duncan, stating that “many, if not most of the nation’s 1,450 schools, colleges, and departments of education are doing a mediocre job of preparing teachers for the realities of the 21<sup>st</sup> century classroom.” (Kumashiro, 2015, p.1). Based on the scholarship informing this dissertation, I believe it is safe to assert that one cannot learn how to teach ELs without understanding ELs’ language development or tapping into these students’ funds of knowledge. Similarly, one cannot teach these students effectively based on theory alone; but also by understanding that emerges through application, or knowledge in action.



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## **APPENDICES**

Appendix A: Interview Guide

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## APPENDIX A: Interview Guide

Topic: Academic language Instruction for English Learners

For the researcher:

**Purpose:** I seek to learn about the informant's role as an ELD pre-service teacher. I am particularly interested in:

The informant's role as a decision-maker, particularly how (s)he plans and teaches academic language instruction.

Introduction

- Thank the interviewee for participating.
- Establish rapport
- Obtain verbal and written consent to record the interview and take notes
- Inform the interviewee of the (explicit) purpose of the interview (see above)

### Getting an idea of the ELD Structure-Time and Grouping

**Context-Oral language development:** According to research, devoting additional instructional time to oral communication produced improved listening and speaking skills

1. ELD is usually at least 30 minutes for 4 days per week. What are your thoughts regarding the amount of time allotted for ELD instruction? (**Probes:** Is it enough time? Should it be increased?)

**Context:** ELs are often grouped according to linguistic abilities based on assessment scores.

2. What are your thoughts about grouping ELs for ELD instruction? (**Probes:** Should they be grouped according to ability level? Do you think it depends on grade level (e.g. K v. 5/6<sup>th</sup> grade?)
3. How helpful or harmful is grouping for ELs in other content areas? (**Probes:** Do you think that small groups help ELs learn better than whole group instruction? Is pair/share more effective than small group instruction in helping students practice certain language skills?)

### Getting an Idea of the interviewee's SDAIE and edTPA instruction



**Context-PLK:** Identifying the role that language plays in concepts and content presented to students is critical to implementing language pedagogy to ELs effectively. Explain the common underlying proficiency (CUP) and emphasize the importance of acquiring the native language in order to transfer into the target language.

4. How do the similarities and/or differences between ELs' primary language(s) and English impact their academic language learning? (**Probe:** Are there instances where students are encouraged to draw on their native language(s) to understand English or accomplish academic tasks?)

### **Researching regarding academic tasks**

**A. Context:** Meaning-making emerges from the daily tasks that individuals engage in, rather than the grammar of language, and ELs' language development results from their social interactions within and beyond the classroom

**B. Context:** The demands associated with promoting and facilitating the use of academic vocabulary varies according to academic expectations and tasks (e.g. switching grades)

5. What did you notice about ELs' tasks, interactions, and academic language development between grade levels?

### **Teaching Challenges**

**Context:** Numerous teachers, especially those who are not bilingual, find explicitly teaching language to be challenging as linguistic features and demands which may seem clear to them may not be clear for their English Learners.

6. How challenging was it to accommodate ELs' linguistic demands for activities and/or assessments? (**Probe:** What aspects of language do ELs struggle with? Were lesson concepts challenging to teach ELs?)
7. Based on your experiences, what are the challenges of creating lessons that build upon ELs' prior knowledge?
8. Based on your experiences, what are the challenges of scaffolding lessons for ELs? (**Probe:** Was it necessary to include (or exclude) supports that were not planned?)

### **Instructional Materials/Strategies**

9. From the transitions between grade levels, what were the main differences between expectations, rigor, and focus on language? (**Probe:** What were the main

pedagogical shifts in instructional practices and strategies between grade levels that you taught?)

10. What strategies proved to be key instructional supports for each of the grade levels that you taught? (**Probes:** using a variety of participation structures (whole group, small group, and partnering), supporting use of students' native languages, and connecting to students' schemata and community knowledge.)

**EL case study**

— Raising awareness of the relationship between PTs' knowledge, actions, and academic language use

11. As a result of shadowing an EL, how did you reflect on your instructional practices and their impact on ELs' academic oral language development? (**Probes:** Were you able to identify patterns surrounding who speaks the most in classrooms, and recognize the absence of opportunities for academic oral language use in the classroom? Did native speakers tend to dominate conversations? Did you become more conscious to include opportunities for academic oral language use into your lessons?)

**Learning Outcomes**

12. Given the outcome(s) of your SDAIE and edTPA lessons, what are the implications for helping ELs develop ALD? (**Probes:** Upon reviewing and reflecting upon these lessons, what did you learn? Did you receive any feedback for this lesson (from your CT or supervisor)? What are your personal takeaways?)

**Opinion questions**

**Context:** Teachers should understand how language works in all 4 domains- listening, speaking, reading, and writing- across disciplinary contexts in order to assist students in developing fluency in each domain within discipline(s).

13. In your opinion, what specific knowledge should teachers of language learners possess? (**Probe:** What do you think teachers of language learners need to know to teach effectively?)
14. In your opinion, how prepared do you feel to implement academic language instruction for ELs?
15. What was your experience in providing language support while teaching? (**Probes:** Was it fun? Challenging? What's challenging about teaching language?)



## **APPENDIX B: Interview Consent Form**

### **Researcher Contact Information**

Name: Lois Harmon  
Department: Girvitz Graduate School of Education  
University: University of California, Santa Barbara  
Phone: (352) 219-4584  
Email: lharmon@education.ucsb.edu

### **Background:**

You are being requested to participate in an interview for a research study. Before participating in the interview, it is important that you understand why the interview is being performed and what it entails. Please read the following information carefully, and ask the interviewer to clarify any information that is unclear to you.

The purpose of this interview is to discover the structure and implementation of English Language Development (ELD) instruction within your classroom. The primary focus of the interview is on your role as a pre-service teacher within your field placement. The insights that you provide may include, but are not limited to, your experiences, decisions, practices, and professional development.

### **Study Procedure:**

I have observed ELD/SDAIE in your class (on campus) and I will interview you to discover how ELD instruction was implemented in your classes (at your site), particularly for English Learners (ELs). Of importance, the interviews will be used to discover your perspective(s), experiences, and practices that pertain to academic language instruction as well as the challenges that ELs face.

### **Risks:**

The risks for the interviews are minimal. The interview questions may be unexpected and may potentially make you feel as if your instruction and classroom practices are being evaluated. If you feel uncomfortable or become upset, you may opt out at any time by refusing to answer any or all questions presented to you. Your declination will not cause any harm to you.

### **Benefits:**

With the results of this interview and the overall study, the researcher aspires to benefit both the research and practice communities by providing greater insight on the

perspectives of pre-service teachers and the challenges that they notice that their students, particularly their ELs, face regarding English language development.

**Contact Person:**

Should you have any questions about the interview or any related matters, please contact the interviewer (see above).

**Institutional Review Board:**

If you have questions regarding your rights as an interview participant, or if concerns arise that you do not wish to discuss with the Interviewer, please contact the UCSB Institutional Review Board Office at (805) 893-4188.

**Consent:**

By signing this consent form, I confirm that I have read and hereby understand the information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without penalty. I understand that I will be given a copy of this consent form. I voluntarily agree to participate in this interview.

Signature \_\_\_\_\_ Date \_\_\_\_\_

## APPENDIX C: edTPA Consent Form

### Researcher Contact Information

Name: Lois Harmon  
Department: Girvitz Graduate School of Education  
University: University of California, Santa Barbara  
Phone: (352) 219-4584  
Email: lharmon@education.ucsb.edu

### Background:

You are being requested to allow copies of some of your edTPA lesson plans and reflections/commentaries to be collected and examined for a research study. Before allowing your lesson plans and commentaries to be collected and examined, it is important that you understand why the researcher is requesting these materials and what the examination entails. Please read the following information carefully, and ask the researcher to clarify any information that is unclear to you.

The purpose of collecting and examining some of your lesson plans and commentaries is to discover: 1) how you conceptualize and implement ideas about academic language; 2) the demands placed on English Learners and teachers; and 3) the instructional practices that support English Learners' academic language development.

The primary focus of examining your lesson plans is to identify the standards, objectives, and tasks of the lessons as well as the scaffolds for English Learners. The primary purpose of the commentaries is to supplement information that is visible from the lesson plans, specifically the planning and enactment. The commentaries provide a voice that gives insights into instructional opportunities and challenges of teaching ELD instruction to English Learners. The insight that you provide may include, but are not limited to, your experiences, decisions, practices, and professional development.

### Study Procedure:

I will continue observing INT 23 for the remainder of this quarter and I will collect copies of your lesson plans and corresponding commentaries. If possible, I will interview you to ask questions pertaining to your lesson plans and commentaries. The overall purposes of collecting and examining the lesson plans and commentaries is to discover how ELD instruction is implemented in your class (at your site), particularly for English Learners (ELs). Of importance, the lesson plans and commentaries will be used to discover your perspective(s), experiences, and practices that pertain to ELD instruction as well as the challenges that you face while working with English Learners.

**Risks:**

The risks for collecting and examining the lesson plans and commentaries are minimal. Collecting and examining your lesson plans and written commentaries may potentially make you feel as if your instructional practices are being evaluated. If you feel uncomfortable or become upset, you may opt out at any time by refusing to provide any or all lesson plans and commentaries. Your declination will not cause any harm to you, and edTPA scores and grades will in no way be affected whether they consent or not.

**Benefits:**

With the results of your lesson plans and commentaries and the overall study, the researcher aspires to benefit both the research and practice communities by providing greater insight into the perspectives of pre-service teachers and the challenges that they face while planning, teaching, and learning about English language development instruction for English Learners.

**Contact Person:**

Should you have any questions about the lesson plan and commentary collection and examination or any related matters, please contact the interviewer (see above).

**Institutional Review Board:**

If you have questions regarding your rights as a participant, or if concerns arise that you do not wish to discuss with the Interviewer, please contact the UCSB Institutional Review Board Office at (805) 893-4188.

**Consent:**

By signing this consent form, I confirm that I have read and hereby understand the information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without penalty. I understand that I will be given a copy of this consent form. I voluntarily agree to give access to copies of my lesson plans and commentaries to the researcher.

Signature \_\_\_\_\_ Date \_\_\_\_\_

## APPENDIX D: Example of a Common Core Standard

Table 1

*Common Core Third Grade Knowledge of Language Standard*

**Knowledge of Language:**

*CCSS.ELA-Literacy.L.3.3*

Use knowledge of language and its conventions when writing, speaking, reading, or listening.

*CCSS.ELA-Literacy.L.3.3.a*

Choose words and phrases for effect.\*

*CCSS.ELA-Literacy.L.3.3.b*

Recognize and observe differences between the conventions of spoken and written standard English.



**APPENDIX E: ELD Lesson Analysis Using Lesson Design Frame  
Academic Language (AL)**

AL Considerations	Questions	Responses
Language Functions	<ul style="list-style-type: none"> <li>• What are students <b>doing with language</b> (compare-contrast, infer, inquire, retell, explain...) in the lesson?</li> </ul>	
Language Forms	<ul style="list-style-type: none"> <li>• What are <b>key content words</b> in this lesson?</li> <li>• What are the <b>key language structures and grammar</b> (sentence frames)?</li> </ul>	
Supports	<ul style="list-style-type: none"> <li>• What kinds of <b>scaffolding</b> and <b>contextualization</b> are provided (use of students' prior knowledge and experiences, visuals, realia, graphic organizers, sentence frames, pair/group work, hands-on activities, modeling...) so that students can access and practice AL to participate in the lesson?</li> </ul>	
Language Objectives	<ul style="list-style-type: none"> <li>• What are students expected to <b>do</b> with language (identify, give examples, compare, use, design, judge)?</li> </ul>	<p>You may use the following sentence frame:</p> <p>Given <b>(supports)</b>, the learners will <b>(function)</b> in order to <b>(connection to learning objectives and content standards)</b>.</p> <p><b>Write the language objective here:</b></p>

## Further lesson analysis

<p>What opportunities did students have to <b>practice</b> using the language (think opportunities for two way interactions)? Please list specific activities.</p>	
<p>For each activity, list what you think the <b>purpose</b> was.</p>	
<p>What <b>assessment</b> opportunities were provided?</p>	
<p>How would you <b>adapt</b> this lesson?</p>	

## APPENDIX F: SDAIE Analysis Grid

LESSON COMPONENTS	Yes or Some	No or Little	Evidence+Notes/ Questions
<p style="text-align: center;"><b>Language Functions</b></p> <p>Are language functions identified and linked to learning objectives? Are language functions taught?</p>			
<p style="text-align: center;"><b>Linguistic forms</b></p> <p><i>Is Key or Academic Vocabulary identified? Taught?</i></p> <p><i>Are key linguistic forms (e.g., sentence frames, writing samples, models) identified? Taught?</i></p>			
<p style="text-align: center;"><b>Prior Knowledge</b></p> <p><i>Does the lesson assess and build on students' prior knowledge about the topic? Does the lesson make connections between the topic and students' lives and experiences?</i></p>			
<p style="text-align: center;"><b>Support</b></p> <p><i>Are scaffolding and contextualization provided through the use of visuals, realia, graphic organizers, sentence frames, pair and group work, hands-on activities, etc.? Does the lesson provide ways in which scaffolds can be eventually removed?</i></p>			
<p style="text-align: center;"><b>Language Components</b></p> <p><i>Are listening, speaking, reading and writing all included in the lesson?</i></p>			
<p style="text-align: center;"><b>Grouping Strategies</b></p> <p><i>Do the grouping strategies utilized in the lesson promote multiple and varied opportunities for social interactions (e.g., teacher-student, students-student, whole-class, etc.)? Do the grouping strategies provide students with multiple opportunities to practice academic language and engage in social interaction?</i></p>			
<p style="text-align: center;"><b>Critical Thinking</b></p> <p><i>Does the lesson include questions/activities that engage students with higher-level cognitive tasks?</i></p>			
<p style="text-align: center;"><b>Assessment</b></p> <p><i>Does the lesson include varied ways to assess student learning and participation?</i></p> <p><i>Does the lesson consider the multiple and varied learning styles of the students providing them with multiple opportunities to demonstrate knowledge?</i></p>			

Adapted from Project Crossroads: Sally Kingston, Bridget Lewin & Sabrina Tuyay

## APPENDIX G: edTPA Planning Rubric 4: Identifying and Supporting Language Demands

Planning Rubrics continued

### Rubric 4: Identifying and Supporting Language Demands

How does the candidate identify and support language demands associated with a key mathematics learning task?

Level 1	Level 2	Level 3	Level 4	Level 5
<p>Language demands<sup>3</sup> identified by the candidate are not consistent with the selected language function<sup>4</sup> OR task.</p> <p><b>OR</b></p> <p>Language supports are missing or are not aligned with the language demand(s) for the learning task.</p>	<p>Language supports primarily address one language demand (vocabulary and/or symbols, function, discourse, syntax).</p>	<p>General language supports address use of two or more language demands (vocabulary and/or symbols, function, discourse, syntax).</p>	<p>Targeted language supports address use of</p> <ul style="list-style-type: none"> <li>• vocabulary and/or symbols,</li> <li>• language function, <b>AND</b></li> <li>• one or more additional language demands (discourse, syntax).</li> </ul>	<p>Level 4 plus: Language supports are designed to meet the needs of students with different levels of language learning.</p>

<sup>3</sup> Language demands include: language function, vocabulary and/or symbols, syntax, and discourse (organizational structures, text structure, etc.).

<sup>4</sup> Language function refers to the learning outcome (verb) selected in Planning Commentary Prompt 4a (e.g., categorize, describe).

**APPENDIX H: edTPA Planning Rubric 14: Analyzing Students' Language Use and Math Learning**

**Rubric 14: Analyzing Students' Language Use and Mathematics Learning**

How does the candidate analyze students' use of language to develop content understanding?

Level 1	Level 2	Level 3	Level 4	Level 5
<p>Candidate identifies student language use that is superficially related or unrelated to the language demands (vocabulary and/or symbols, function,<sup>6</sup> and additional demands).</p> <p><b>OR</b></p> <p>Candidate's description or explanation of language use is not consistent with the evidence submitted.</p>	<p>Candidate describes how students use only one language demand (vocabulary and/or symbols, function, discourse, syntax).</p>	<p>Candidate explains and provides evidence of students' use of</p> <ul style="list-style-type: none"> <li>the language function <b>AND</b></li> <li>one or more additional language demands (vocabulary and/or symbols, discourse, syntax).<sup>7</sup></li> </ul>	<p>Candidate explains and provides evidence of students' use of</p> <ul style="list-style-type: none"> <li>the language function,</li> <li>vocabulary and/or symbols, <b>AND</b></li> <li>additional language demand(s) (discourse, syntax)</li> </ul> <p>in ways that develop content understandings.</p>	<p><b>Level 4 plus:</b></p> <p>Candidate explains and provides evidence of language use and content learning for students with varied needs.</p>

<sup>6</sup> The selected language function is the verb identified in the Planning Commentary Prompt 4a (categorize, describe, interpret, etc.).

<sup>7</sup> These are the additional language demands identified in the Planning Commentary Prompt 4c (vocabulary and/or symbols, plus either syntax or discourse).

**APPENDIX I: Peer Analysis and Feedback Worksheet  
SDAIE Lesson Assignment**

Name of Reviewer: \_\_\_\_\_

Name of Lesson Author(s): \_\_\_\_\_

Subject/Grade: \_\_\_\_\_ School Site: \_\_\_\_\_

Lesson Title: \_\_\_\_\_

Demographic make-up of the class: For example, how many ELs and what are their proficiency levels?

<b>Lesson feature</b>	<b>Evidence + additional ideas for consideration</b>
Lesson includes content and ELD standards	
Includes content objective	
Includes language objectives	
Includes academic language <b>function(s)</b>	
Includes academic language <b>forms</b> (vocabulary and sentence frames)	
Additional language supports/scaffolding	

Provides comprehensible input	
Provides opportunities for student to use the language (two way interactions)	
There are multiple ways for students to show what they know (assessment opportunities)	

**APPENDIX J: Data Sets (From Mainstream MST Candidates)**

<b>Type</b>	<b>Amount Submitted</b>
ELD Observations	28
ELD Lessons	28
SDAIE lesson plans	30 (some candidates co-constructed lesson plans)
edTPA portfolios	16 9 from Interviewees 7 from non-interviewees
EL case studies	19 ➤ 10 from Interviewees ➤ 6 from PTs who submitted edTPA portfolios ➤ 3 from others
Interviews	13 ➤ 9 in person ➤ 4 via email

**Note:** Others are PTs who initially volunteered to participate in the interviews, but did not follow through.



**APPENDIX K: List of Pre-service Teachers Who Were Interviewed**

<b>Name</b>	<b>Demographics</b>	<b>School</b>	<b>Grades</b>	<b>Documents Analyzed</b>
Rudy (via email)	<ul style="list-style-type: none"> <li>• Female</li> <li>• Caucasian</li> <li>• Understands Spanish</li> </ul>	Duval	(K, 5)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• edTPA</li> <li>• EL Case Study</li> </ul>
Vivian (in person)	<ul style="list-style-type: none"> <li>• Female</li> <li>• Latina</li> <li>• Bilingual-English &amp; Spanish</li> <li>• Former EL</li> </ul>	Duval	(5, K)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• edTPA</li> </ul>
Will (in person)	<ul style="list-style-type: none"> <li>• Male</li> <li>• Latino</li> <li>• Bilingual-English &amp; Spanish</li> <li>• Former EL</li> </ul>	PK Younge	(6, K)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• edTPA</li> <li>• EL Case Study</li> </ul>
Hilary (via email)	<ul style="list-style-type: none"> <li>• Female</li> <li>• Latina</li> <li>• Bilingual-English &amp; Spanish</li> </ul>	PK Younge	(1, 4)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• edTPA</li> <li>• EL Case Study</li> <li>• Emailed Transcript</li> </ul>
Ashley (in person)	<ul style="list-style-type: none"> <li>• Female</li> <li>• Black &amp; Caucasian</li> </ul>	Metcalfe	(3, 1)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• EL Case Study</li> </ul>
Pam (in person)	<ul style="list-style-type: none"> <li>• Female</li> <li>• Caucasian</li> </ul>	Roosevelt	(2, 5)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> </ul>
Khadijah (in person)	<ul style="list-style-type: none"> <li>• Female</li> <li>• Korean</li> <li>• Bilingual-English &amp; Korean</li> <li>• Former EL</li> </ul>	Peabody	(2, 6)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• EL Case Study</li> </ul>

Sinclair (in person)	<ul style="list-style-type: none"> <li>• Female</li> <li>• Latina</li> <li>• Bilingual-Taught English &amp; Spanish</li> <li>• Former EL</li> </ul>	Lake Forest  (Dual Immersion School)	(6, 1)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• edTPA</li> <li>• EL Case Study</li> </ul>
Regine (in person)	<ul style="list-style-type: none"> <li>• Female</li> <li>• Latina</li> <li>• Bilingual-English &amp; Spanish</li> </ul>	The Rock	(2, 5)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• edTPA</li> <li>• EL Case Study</li> </ul>
Gina (via email)	<ul style="list-style-type: none"> <li>• Female</li> <li>• Caucasian</li> </ul>	The Rock	(5-6 combo, K)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• edTPA</li> <li>• EL Case Study</li> <li>• Emailed Transcript</li> </ul>
Tia (via email)	<ul style="list-style-type: none"> <li>• Female</li> <li>• Caucasian</li> </ul>	Alachua	(3, 1)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• edTPA</li> <li>• EL Case Study</li> <li>• Emailed Transcript</li> </ul>
Tamera (in person)	<ul style="list-style-type: none"> <li>• Female</li> <li>• Caucasian</li> </ul>	Alachua	(2. 6)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• EL Case Study</li> </ul>
Regina (via email)	<ul style="list-style-type: none"> <li>• Female</li> <li>• Caucasian</li> </ul>	Alachua	(K, 3)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• EL Case Study</li> <li>• Emailed Transcript</li> </ul>

**APPENDIX L: List of Pre-service Teachers Who Submitted edTPA Portfolios**

<b>Name</b>	<b>Demographics</b>	<b>School</b>	<b>Grades</b>	<b>Documents</b>
Lovita	<ul style="list-style-type: none"> <li>• Female</li> <li>• Caucasian</li> </ul>	PK Younge	(5, 1)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• EL Case Study</li> </ul>
Nikki	<ul style="list-style-type: none"> <li>• Female</li> <li>• Caucasian</li> </ul>	Metcalfe	(1, 6)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• EL Case Study</li> </ul>
Kim	<ul style="list-style-type: none"> <li>• Female</li> <li>• Caucasian</li> </ul>	Waldo	(5, K)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• EL Case Study</li> </ul>
Jay	<ul style="list-style-type: none"> <li>• Female</li> <li>• Latina</li> <li>• Bilingual-taught English &amp; Spanish</li> </ul>	Lake Forest  (Dual Immersion school)	(K, 5)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• EL Case Study</li> </ul>
Carlton	<ul style="list-style-type: none"> <li>• Male</li> <li>• Latino</li> <li>• Bilingual-English &amp; Spanish</li> </ul>	The Rock	(Unknown, 5)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• SDAIE lesson</li> <li>• EL Case Study</li> </ul>
Katie	<ul style="list-style-type: none"> <li>• Female</li> <li>• Caucasian</li> </ul>	The Rock	(K, 3)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson (K)</li> <li>• SDAIE lesson (K)</li> <li>• EL Case Study</li> </ul>
Jennifer	<ul style="list-style-type: none"> <li>• Female</li> <li>• Caucasian</li> </ul>	Alachua	(2, 5)	<ul style="list-style-type: none"> <li>• ELD Observation</li> <li>• ELD lesson</li> <li>• SDAIE lesson</li> <li>• EL Case Study</li> </ul>

**APPENDIX M: List of Pre-Service Teachers Who Submitted EL Case Studies**

<b>Name</b>	<b>School</b>	<b>Grade</b>	<b>Student Demographics</b>	<b>Analyzed Documents</b>
Ashley	Metcalfe	1	<ul style="list-style-type: none"> <li>• Name: Jessica</li> <li>• Classification: Beginner</li> </ul>	<ul style="list-style-type: none"> <li>• edTPA Portfolio</li> <li>• Interview Transcript</li> </ul>
Rudy	Duval	4	<ul style="list-style-type: none"> <li>• Name: Neal</li> <li>• Language: Spanish</li> <li>• At grade level</li> </ul>	<ul style="list-style-type: none"> <li>• edTPA Portfolio</li> <li>• Interview Transcript</li> </ul>
Sinclair	Lake Forest	1	<ul style="list-style-type: none"> <li>• Name: Gavin</li> <li>• Spanish learner</li> <li>• Son of bilingual parents</li> <li>• Struggled to comprehend Spanish</li> </ul>	<ul style="list-style-type: none"> <li>• edTPA Portfolio</li> <li>• Interview Transcript</li> </ul>
Hilary	PK Young	4	<ul style="list-style-type: none"> <li>• Jeremy</li> <li>• Conversational English</li> </ul>	<ul style="list-style-type: none"> <li>• edTPA Portfolio</li> <li>• Interview Transcript</li> </ul>
Will	PK Young	K	<ul style="list-style-type: none"> <li>• Name: Elsie</li> <li>• Language: Spanish</li> <li>• Classification: Beginner</li> </ul>	<ul style="list-style-type: none"> <li>• edTPA Portfolio</li> <li>• Interview Transcript</li> </ul>
Regine	The Rock	5	<ul style="list-style-type: none"> <li>• Name: Axel</li> <li>• Below grade level in English &amp; Spanish</li> </ul>	<ul style="list-style-type: none"> <li>• edTPA Portfolio</li> <li>• Interview Transcript</li> </ul>
Gina	The Rock	K	<ul style="list-style-type: none"> <li>• Name: Alejandro</li> <li>• Age: 5</li> <li>• Language: Spanish</li> <li>• Low English proficiency</li> </ul>	<ul style="list-style-type: none"> <li>• edTPA Portfolio</li> <li>• Interview Transcript</li> </ul>
Tamera	Alachua	6	<ul style="list-style-type: none"> <li>• Name: Alex</li> <li>• Age: 12</li> <li>• Classification: Intermediate</li> </ul>	<ul style="list-style-type: none"> <li>• Interview Transcript</li> </ul>
Tia	Alachua	1	<ul style="list-style-type: none"> <li>• Name: Daisy</li> <li>• Conversational English</li> <li>• Had an IEP for speech</li> </ul>	<ul style="list-style-type: none"> <li>• edTPA Portfolio</li> <li>• Interview Transcript</li> </ul>
Khadijah	Waldo	6	<ul style="list-style-type: none"> <li>• Name: Adrian</li> <li>• Language: Spanish</li> </ul>	<ul style="list-style-type: none"> <li>• Interview Transcript</li> </ul>

Kim	Waldo	K	<ul style="list-style-type: none"> <li>Name: Julian</li> <li>Classification: Beginner</li> </ul>	<ul style="list-style-type: none"> <li>edTPA portfolio</li> </ul>
Jennifer	Alachua	1	<ul style="list-style-type: none"> <li>Name: Bob</li> <li>Language: Mandarin</li> <li>No English proficiency</li> <li>No prior schooling</li> </ul>	<ul style="list-style-type: none"> <li>edTPA portfolio</li> </ul>
Nikki	Metcalfe	6	<ul style="list-style-type: none"> <li>Name: Chris</li> <li>Language: Spanish</li> <li>Classification: RFEP</li> </ul>	<ul style="list-style-type: none"> <li>edTPA portfolio</li> </ul>
Lovita	PK Young	1	<ul style="list-style-type: none"> <li>Language: Spanish</li> <li>Below grade level</li> </ul>	<ul style="list-style-type: none"> <li>edTPA portfolio</li> </ul>
Jay	PK Young	5	<ul style="list-style-type: none"> <li>Name: Lizzete</li> <li>Age: 11</li> <li>Language: Spanish</li> <li>Classification: Beginner</li> <li>Conversational English</li> </ul>	<ul style="list-style-type: none"> <li>edTPA portfolio</li> </ul>
Leipsic	The Rock	3	<ul style="list-style-type: none"> <li>Name: Caylee</li> <li>Language: Korean</li> <li>Classification: Advanced</li> </ul>	<ul style="list-style-type: none"> <li>edTPA portfolio</li> </ul>
Carlton	The Rock	5 <sup>th</sup> /6 <sup>th</sup> combo	<ul style="list-style-type: none"> <li>Name: Oscar</li> <li>Age: 11</li> <li>Grade: 5</li> <li>Classification: RFEP</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Jasmine	Alachua	K	<ul style="list-style-type: none"> <li>Age: 6</li> <li>Language: Spanish</li> <li>Classification: Intermediate</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Mike	Roosevelt	1	<ul style="list-style-type: none"> <li>Name: Mairely</li> <li>Language: Spanish</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>

## **APPENDIX N: Adaptations for English language learners**

### **Presentation and assessment of content**

Simplify the language

Modeling

Gestures

Use manipulatives

Use graphic organizers

Realia (stuff)

Word banks

Sentence frames

“Chunk and Chew” (Chunk of information, then allow processing time)

Create opportunities for students to process small bits of what is being learned  
(turn to a partner)

Vocabulary development in context or after exploration

Front load vocabulary (this means teaching vocabulary before a reading or lesson)

Bilingual dictionary

Google translate

Emphasize core concepts

Pair share

Read/say sentence frame to a partner

Repetition of language, new vocabulary, sentence frames in multiple contexts  
(practice, practice, practice)

Read assessment questions aloud to students

Modify assignments offering a word bank, sentence frames

Rehearsal time (share with partner)

Draw before writing

Use pictures, visuals

Support text with pictures

Highlight

Underline

Color code

Consider the amount of text on a page: modify format

Vocabulary cards

Hands on

Provide opportunities for two way interactions (e.g. Give One, Get One)

Aim for all aspects of language: listening/speaking/reading/writing

### **Pacing**

Extend time requirements

Reduce assignment requirements

### **Affective Filter**

Use positive and concrete reinforcement

Grouping students

Pairs

Peer tutoring

Have students repeat directions (chorally)

Choral response

### **Assignments**

Give directions in small, distinct steps

Number steps

Shorten assignment

Use writing to support oral directions (e.g. write/draw steps on the board)

Use gestures

Read directions to students

Have students repeat back

Model steps

## APPENDIX O: Checklist for Student's Oral Language

Student name  
 Date(s) of observation  
 Lesson/task(s)

	<b>Informal situations</b> (i.e. Small group, pair work, recess, transitions)	<b>Formal situations</b> (i.e. Whole group, presentations)
<p><b>Does the student participate orally?</b></p> <p><b>What kinds of oral participation do you see?</b></p> <ul style="list-style-type: none"> <li>• Asking/answering questions</li> <li>• Asks clarifying question</li> <li>• Explains</li> <li>• Describes action/object/event</li> <li>• Persuades</li> <li>• Commands</li> </ul>		
<p><b>Does the student appear to listen attentively to peers?</b></p>		
<p><b>Are the student's oral contributions relevant/responsive to the topic?</b></p> <ul style="list-style-type: none"> <li>• Initiates a topic</li> <li>• Elaborates a topic</li> <li>• Maintains a topic</li> <li>• Initiates a topic</li> </ul>		
<p><b>Does the student speak audibly?</b></p>		



<b>Do the student use L1 or code switch?</b>		
<b>Does the student change oral language style in different situations?</b>		