

Preparing Effective Reading Specialists and Literacy Coaches at Fresno State

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About EdPrepLab

EdPrepLab, an initiative of the Learning Policy Institute and Bank Street Graduate School of Education, aims to strengthen educator preparation by supporting learning and sharing research and practices among programs, school districts, and policymakers. EdPrepLab supports programs and informs policies that incorporate the science of learning and development to enable deeper learning and equity, working to expand these approaches nationally and internationally.

About This Brief

This brief describes the Fresno State program that prepares educators to provide effective literacy instruction and literacy coaching for a specialized credential. The brief outlines and illustrates four foundational program principles: apprenticing candidates in the authentic work of coaches and specialists, situating candidate experiences within their districts, engaging in research-based practice and practice-based research, and modeling a culture of continuous improvement.

Introduction

Calls for a “science of reading” approach to literacy instruction have exploded across the nation in the past several years. Triggered by years of stagnant literacy assessment scores and amplified during the COVID-19 pandemic, this renewed focus on literacy skills seeks to implement research-based practices to support students’ reading and literacy development. Amid conflicting approaches to literacy development and a multimillion-dollar California statewide investment in developing reading specialists and literacy coaches, Fresno State’s Reading and Literacy Leadership Specialist Credential (RLLSC) program uses a comprehensive developmental approach to create a meaningful, context-specific, evidence-based, and practice-based method of preparing literacy specialists.

While some narrow interpretations of the “science of reading” may be limited to phonics and decontextualized skills-based literacy instruction, Fresno State’s RLLSC program includes all research-based elements of impactful literacy instruction. As prominent literacy researcher Tim Shanahan notes, research-based literacy instruction is more complex than explicit skills-based instruction. It includes—but is not limited to—phonemic awareness, systematic direct instruction in phonics, fluency, vocabulary, comprehension, disciplinary literacies, culturally and linguistically responsive reading materials and pedagogical practices, the reciprocal roles of writing and reading, differentiation of instruction for emergent bilinguals and students with special needs, dyslexia, text complexity, and text structure.¹

Candidates in Fresno State’s program learn to recognize students’ funds of knowledge as assets and provide skills-based instruction embedded in culturally sustaining materials and practices to ensure

equitable access to the curriculum.² This comprehensive approach (incorporating skills and meaning-making) allows candidates to develop their students' focal skills while also building relationships with high-interest, culturally sustaining materials. This enables candidates to see impactful results in literacy skills in just 1 to 6 weeks of one-on-one instruction with students who are struggling to read. Case studies of their students conducted by candidates enable them to learn about students' strengths, assess and identify students' literacy competencies and needs, and provide data-driven, targeted interventions grounded in meaningful content. [Table 1](#) reports the skills-based results of several candidates' case studies.

Table 1. Case Study Student Assessment Data

Focal student (pseudonym)	Grade level of focal student	Length of 1-on-1 instruction	Instructional focus	Baseline assessment and score	Post-instruction assessment score
Audrey	3rd	4 weeks	<ul style="list-style-type: none"> Selected vowel groups 	Star Reading: <ul style="list-style-type: none"> Preschool 	Star Reading: <ul style="list-style-type: none"> 2.8
Elizabeth	5th	1 week	<ul style="list-style-type: none"> Affixes Vowel patterns 	San Diego Quick: <ul style="list-style-type: none"> 1st grade Independent 2nd grade Instructional 3rd grade Frustration 	San Diego Quick: <ul style="list-style-type: none"> 3rd grade Independent 4th grade Instructional 5th grade Frustration
Kim	9th	3 weeks	<ul style="list-style-type: none"> Short u R-controlled words Selected digraphs Meaning-making Fluency 	San Diego Quick: <ul style="list-style-type: none"> 5th grade Independent 6th grade Instructional 7th grade Frustration 	San Diego Quick: <ul style="list-style-type: none"> 8th grade Independent 9th grade Instructional 10th grade Frustration
Javier	10th	5 weeks (2 times/week)	<ul style="list-style-type: none"> CVC words Blends Digraphs 	CAASPP IAB 8th grade reading: <ul style="list-style-type: none"> Below Standard 	CAASPP IAB 8th grade reading: <ul style="list-style-type: none"> Near Standard

Source: Provided by Lisa Bennett. (2024). Used with permission.

Program Overview

Fresno State, part of the California State University system, is a large, regional public university in California's Central Valley region that enrolls about 24,000 students per semester. Fresno State serves large populations of students who identify as Hispanic (58.5%) or Asian (11.6%), a majority of whom have Mexican or Hmong roots, are the first in their families to

graduate from college (66.2%), and/or receive federal Pell Grants (65%).³ Approximately 88% of Fresno State students hail from the Central Valley region, and about 80% of graduates remain in the area after graduation. Fresno State's Kremen School of Education and Human Development, which houses the RLLSC program, prepares a large proportion of all transitional kindergarten (TK) to grade 12 teachers in the surrounding districts, enrolling close to 500 teacher candidates each year.⁴

The program, which applies principles of the science of learning and development (SoLD) for teacher preparation,⁵ is a redesign of the previous program model, which was a lengthy advanced literacy credential integrated with a master's degree. The redesigned RLLSC program allows candidates to obtain their literacy specialist credential in 1 year, compared to 2.5 years in the previous model. This shortened timeline to credentialing better serves the needs of surrounding districts for literacy specialists and coaches. Upon completing the advanced credential, candidates may opt to continue for an additional year to complete a master's degree in reading instruction.

In addition, the program uses an online format to improve access for candidates who live and/or work in remote areas. Fresno State serves an area that spans five counties and hundreds of miles, and without online options, many of the region's teachers would not be able to pursue advanced licensure in reading and literacy, a high-need area in every part of California.⁶

The program is based on a clinical approach, which is widely accepted as playing a critical role in teacher preparation, efficacy, and retention.⁷ This brief describes four foundational principles of Fresno State's 1-year, online, clinically focused, advanced literacy credential program that prepares educators with a specialization in literacy instruction:

1. Apprenticing candidates in the authentic work of coaches and specialists
2. Situating candidate experiences within their districts
3. Engaging in research-based practice and practice-based research
4. Modeling a culture of continuous improvement

By applying these four principles, the program enables candidates to develop theoretical and research-based schema as well as contextualized adaptive expertise⁸—the ability to adjust instruction and modify materials in response to student needs—as they engage in a curated range of authentic and meaningful experiences related to the roles of reading specialist and literacy coach. These experiences help candidates develop the following skills:

- understand the interplay between psychological, sociolinguistic, and sociocultural aspects of literacy;
- employ asset-based approaches that draw upon students' funds of knowledge;

- provide effective interventions for all students, including younger, older, bilingual, and students with special needs;
- deliver phonology, morphology, orthography, and foundational skills instruction;
- develop students' comprehension, fluency, and vocabulary;
- understand and leverage the bidirectional relationship between reading and writing;
- identify disabilities, such as dyslexia, that have implications for literacy development;
- use effective strategies and practices for providing multiple levels of intervention based on assessment data; and
- infuse literacy skills instruction with authentic purpose, motivation, engagement, independence, and meaning-making.

The program is designed to prepare candidates to serve all literacy learners TK-12 and includes developmentally appropriate instructional practices for older students with severe reading challenges that may have gone unaddressed in the elementary grades.

Authentic, Meaningful, and Responsive Data-Driven Instruction

Melissa (all names are pseudonyms), a candidate in Fresno State's Reading and Literacy Leadership Specialist Credential program, focused one of her inquiries on Audrey, an 8-year-old emergent bilingual student who began 3rd grade scoring at the preschool level on several standardized tests. Melissa administered additional assessments to identify Audrey's specific needs and provide targeted interventions.

She found that Audrey was able to identify phonemes in words and blend and segment them orally, but when transitioning from phonemic awareness to phonics she was unable to connect three vowel sounds (i, o, u) with the correct letters. Using a phonics scope and sequence, Melissa engaged Audrey with [Elkonin boxes](#) and [word sorts](#) that built upon her current phonics knowledge and enabled her to demonstrate rapid growth in decoding.

When Audrey arrived at school one day with a marked change in demeanor, Melissa soon discovered that skills instruction, while essential, is insufficient. She learned that Audrey's mother and younger siblings had to travel to Mexico for an extended period for a family emergency, and Audrey missed her family. Melissa met with her site supervisor and instructor to discuss Audrey's changed circumstances. Together, the triad discussed the importance of incorporating Audrey's social and emotional needs into an intervention that focused on contextualizing literacy skills within a meaning-making approach.

Melissa designed an asset-based writing project that would allow Audrey to apply her newly developed skills while capitalizing on her funds of knowledge and love of drawing. Audrey created characters, settings, events, and illustrations to tell her story. She

included multiple instances of translanguaging, such as a character asking a question in English and another character responding in Spanish. The spelling demands of her story gave her an opportunity to put her developing phonics skills to use.

Melissa laminated and bound the completed book, and Audrey read it to her class. This sparked an interest among Audrey's classmates, and soon Melissa was guiding her whole class in drafting and publishing their own books. Melissa's site administrator was so impressed with the students' books that she arranged for them to attend a school board meeting to read excerpts to the board members.

Audrey went from scoring far below grade level to inspiring her classmates to make books of their own. Her post-intervention assessment reflected a leap from preschool to grade 2.8. Although she was making steady progress during skills instruction, it was the highly motivating, culturally sustaining activity of writing a book from her own perspective that enabled Audrey to apply and practice her developing skills and continue making progress. Engaging in self-expression made the literacy skills relevant. Melissa reflected that focusing on personal events and meaning-making reignited Audrey's desire to learn and increased her confidence in her writing abilities, especially after seeing her classmates cheer her on with such excitement and admiration.

Source: Provided by the Fresno State Reading and Literacy Leadership Credential program. (2024). Used with permission.

Apprenticing Candidates in the Authentic Work of Coaches and Specialists

Fresno State's RLLSC program is based on an apprenticeship model in which candidates learn by engaging in the authentic work of reading specialists and coaches, with faculty and district support. This model aligns with the SoLD design principles for teacher preparation by providing rich, experiential learning opportunities that position candidates to actively construct knowledge through experiences, relationships, and social contexts as well as through practical tasks. In addition, clinical experiences are most effective when they "simulate the actual practice of teaching that candidates will encounter."⁹ At Fresno State, this work involves administering assessments and using data to plan instruction, developing literacy pedagogy for real learners within a multi-tiered system of support, guiding family literacy events, leading professional development sessions, coaching teachers, presenting at conferences, and evaluating literacy programs—all typical tasks of reading specialists and/or literacy coaches.

Rather than separate courses focused on distinct topics (e.g., assessment, research and theory, foundational skills) taught by various instructors, the program uses an integrated model in which faculty and site-based supervisors mentor candidates. Authentic project-based

assignments scaffold candidates' practice as they apply new learning and integrate feedback and support from faculty and site supervisors who understand their specific teaching contexts. "[Course] concepts and assignments are immediately relevant to classroom instruction ... [and] candidates' integrated assignments deepen their learning," said one site supervisor.

The integrated four-course sequence begins with a broad survey of the literacy research and policy landscape, followed by two extended inquiry cycles with focal learners that enable candidates to build practice-based knowledge about literacy pedagogy. The sequence ends with district literacy curriculum evaluation and literacy coaching for other teachers. [Table 2](#) shows the course sequence and examples of the authentic project-based work that candidates engage in throughout the yearlong program.

Critically, the format and structure of the course meetings are designed to emulate the real-world experience of learning through a professional learning community (PLC). Candidates attend a virtual [PLC meeting](#) each week with the faculty instructor, where they have opportunities to collaborate, share data from their inquiries, support one another's analyses, structure their week's tasks and activities, engage in discussions about research, and co-construct new knowledge. This approach differs from traditional classes, where instructors often lecture about a topic and engage students in group work related to the focal concept. While the goal of a traditional class is often the successful completion of coursework, the focus of the Fresno State program is the development of a comprehensive repertoire of literacy coaching and reading specialist practices.

By the end of the 1-year program, candidates have a well-developed understanding of the various roles and tasks of reading specialists and literacy coaches and are ready to independently implement this learning in their local contexts. One candidate shared, "The thing that contributed to my success and growth was being able to do the work of an actual reading specialist." Candidates maintain portfolios of their work, which include multiple [professional development presentations and learning experiences](#) for their site and/or district colleagues, [case studies](#) of older and younger learners, documentation of school-based [family literacy events](#), documentation of [coaching](#), and [literacy evaluation reports](#).

Situating Candidate Experiences Within Districts

Another foundational principle in Fresno State's program design is that candidates' learning experiences are situated within their local school and district contexts. This approach aligns with the SoLD teacher preparation design principle of communities of practice, affirming that genuine learning communities promote engagement among individuals, ideas, and resources.¹⁰ Candidates benefit from shared learning experiences, supportive relationships, and a sense of collective purpose as their preparation program and school become a collaborative community.

The program's clinical model incorporates the tools and curriculum of candidates' schools and districts in multiple ways. First, candidates link research to their site-specific textbook adoptions, literacy assessments, and supplemental Tier 2 and Tier 3 intervention materials so that they develop an understanding of how their district materials approach each area of literacy instruction and assessment. They are then able to use this work to provide their colleagues with professional development about the elements of literacy instruction in tandem with district-specific materials.

The case studies that candidates conduct as part of their training are focused on assessing and instructing individual focal learners and small groups. These involve the use of district assessments and instructional resources whenever possible, with supplemental materials used when no district option is available. During the final course in the program, candidates create rubrics that include culturally sustaining pedagogy and student interest along with typical elements such as phonics and meaning-making. They then use the rubric to critically evaluate their site-based literacy programs and provide a professional report to their site administrator.

Candidates [meet weekly](#) with a district-appointed site supervisor to share course content, analyze student data, and plan for implementing program activities. Candidates model the agendas for these meetings on the PLC course meetings and include time to share the week's work and content, debrief the candidate's teaching activities, and collaboratively analyze student data. Candidates serve as conduits for a bidirectional flow of information between the university and the district as they bring new strategies to their district, share promising practices from the field in class, and facilitate quarterly data collection from their supervisors to track the program's impact and gather input.

Research-Based Practice and Practice-Based Research

A third foundational principle of Fresno State's program is to engage candidates in both research-based practice and practice-based research. While research-based practice refers to the application of educational research conducted by external researchers, practice-based research involves teachers engaging in the systematic and intentional collection and analysis of student data in order to effect positive change.¹¹ This principle encourages candidates to develop SoLD-aligned habits, mindsets, and skills as equitable educators.¹² Research-based practice ensures that teachers know about effective approaches for supporting literacy development, while practice-based research ensures that they can flexibly apply approaches with a broad range of students and strategies. While research-based practice serves as the foundation for curriculum development and pedagogical practice, it is only through practice-based research that teachers can learn to identify how the practices are impacting their students.

Research-based practice requires fundamental knowledge about literacy development and an understanding of the research base for a comprehensive “science of reading.” To support such learning, candidates begin the program by consuming and reflecting critically on a wide array of research, theory, policy (such as state standards and frameworks), news media, popular literature, and other multimodal resources as they develop their understanding of literacy topics.

Each week, as candidates immerse themselves in readings, they draft structured abstracts¹³ that include summaries of the readings and reflections on how the research informs their practice. Each candidate and the instructor then engage in a [written dialogue](#) that extends the candidate’s thinking. This process provides candidates with a structure for effectively developing mental schema around the reading research base. As one candidate explained:

The structured abstracts were helpful in looking at the information we were reading about and how to break it down logically and extract that key information. The act of writing about the topic, and then reflecting on it and how it applies to me, was incredibly helpful to build that background knowledge (schema) and to move this new information from my working memory into my long-term memory. This process has even shaped *how* I read articles.

During the first 2 months of PLC sessions, candidates use their weekly readings to collaboratively construct a [comprehensive literacy website](#). Each week, candidates are assigned to a workgroup and tasked with designing a segment of the week’s focal area for the website. Candidates draw from a curated set of resources to draft their assigned sections collaboratively. Building the website engages candidates in collaboratively processing and distilling research and theory that can deepen their understanding of their practice.

The completed website also serves as the foundation for the professional development sessions that candidates provide at their sites and is a lasting resource that candidates’ colleagues can reference to support their practice. A site supervisor shared that the website project was “another example of the usefulness of this program’s design. ... The candidate’s colleagues are enthusiastic about having this resource.” Rather than seeing research and theory as separate from practice, candidates learn to use research and theory to inform their practice and that of their colleagues.

Practice-based research involves teacher-generated knowledge gleaned through the systematic and intentional collection and analysis of student data. In Fresno State’s program, candidates learn to evaluate the efficacy of a range of literacy approaches with focal early and intermediate learners. They use cycles of data collection, analysis, instruction, and reflection to help them shift from rigid implementation of research-based practices to recognition that instructional decisions must be informed by evidence (i.e., practice-based research).

Using Practice-Based Research to Inform Decisions

Kimberly collected baseline data on Olivia, a 5-year-old kindergartener diagnosed with autism, finding that “[b]ased on the assessment data, Olivia knows her letters and sounds and is beginning to decode [consonant-vowel-consonant] words with some success.” Kimberly investigated research-based strategies for teaching phoneme segmentation and found two studies that supported using [Elkonin boxes](#) for students with autism. Based on Olivia’s data, the district’s scope and sequence, and the research literature, Kimberly implemented phoneme segmentation instruction with Elkonin boxes.

Although Kimberly’s choice to use Elkonin boxes was research-based, she found that Olivia was distracted by the moving counters and confused with the task. Kimberly “decided to wrap the lesson up early so as to not frustrate the student and attempt a different approach for the next lesson.” Next time, Kimberly switched to using a [blending binder](#).

Olivia successfully blended and segmented words using the blending binder, confirming for Kimberly that she had identified a more impactful pedagogical approach and providing her with practice-based evidence to back her decision to shift. Without practice-based research to inform Kimberly about her student’s experience, she might have continued to use the first approach, even though it was not working, simply because it is backed by some external research. Kimberley’s growth demonstrates that she is moving toward adaptive expertise, as she is using ongoing assessment to determine which approaches work best for individual learners rather than applying a one-size-fits-all approach.

Source: Provided by Fresno State RLLSC Program. (2024). Used with permission.

Ultimately, as candidates investigate the impacts of research-based literacy practices on their learners, they develop an understanding that they must have data-driven justifications for their instructional decisions and that they must remain focused on the goal of student success.

Modeling a Culture of Continuous Improvement

The fourth foundational principle is that candidates experience a culture of continuous improvement within the program to help them develop an inquiry orientation. When implemented in teacher education, inquiry—or the systematic and intentional exploration of teaching and learning—has the potential to “produce richly detailed and unusually insightful analyses of teaching and learning from the inside.”¹⁴ However, for candidates to develop an inquiry orientation, they must come to see it as an ongoing reflective process inherent in good teaching rather than a time-bound project. By keeping the focus on the iterative

process of planning, acting, and reflecting, using student data and research literature to drive decision-making for next-steps planning, candidates begin to see the role of inquiry in a teacher's ability to diagnose and address student literacy needs.

Program design plays a significant part in candidates' development of an inquiry stance. Teachers cannot enact instructional methods they have not experienced; thus, in their preparation, candidates should experience the very kinds of teaching strategies they are expected to develop.¹⁵ Fresno State's program intentionally prepares candidates using the same pedagogical practices they are learning to implement. For example, as they built the comprehensive literacy website, candidates experienced firsthand how activating prior knowledge, reading multimodal text sets with a range of complexity, and writing about their learning assisted them in schema development and improved their comprehension of literacy research. After reading research and completing the website project, the candidates reflected on how the use of multimodal text sets enabled them to build and deepen their schema and access complex academic research by introducing concepts in more accessible ways. Candidates then considered how they might implement such an approach with their learners to facilitate comprehension.

The Fresno State program also aims to create a culture of inquiry through instructor modeling of data-driven, research-based practice. The instructor regularly seeks candidate perspectives via surveys and questionnaires, sharing findings with the candidates. At the beginning of the program, the instructor administered a baseline assessment to determine what the candidates already knew about literacy instruction and literacy theory. At the following PLC meeting, the instructor showed candidates how she coded the raw data, shared the findings, and discussed how the information informed her planning. At the end of the first course, candidates were asked to reflect upon their progress from the baseline. One candidate shared:

I was able to see how far I have come in my knowledge of theories and literacy instruction. When I completed my baseline assessment, I couldn't name one theory. I knew that there were multiple factors to effective literacy instruction, but I couldn't name one of those important factors. ... As educators, we need to consider ourselves lifelong learners. [I]t is important to know where you are in your learning, how much you have learned, and what the next steps should be for your learning.

This example demonstrates one candidate's perspective of her learning trajectory, as well as the role that guided reflection played in her developing metacognition about her own learning. Her response demonstrates her assimilation of the inquiry process (i.e., where you are, how much you've learned, and next steps) in relation to her own learning.

Creating a culture where candidates come to value reflective practice involves ongoing, scaffolded engagement with the process in a setting where the process is being modeled and implemented. This enables candidates to see how inquiry shapes teaching and learning

for both the instructor and student. If the program advocates for an approach that includes inquiry and continuous improvement as high-leverage practices, then the program must model those practices for the candidates in addition to advocating for them.

Conclusion

The “science of reading” extends beyond phonics-only instruction. It is a comprehensive body of evidence that points to the importance of attending to a comprehensive set of research-based elements that produce impactful literacy instruction. While large bodies of research and evidence support the critical role of decoding, there is also research and evidence to support students’ funds of knowledge, culturally and linguistically responsive materials and practices, vocabulary, reciprocity between writing and reading, and individualized assessment and instructional differentiation. “Research-based instruction” means there is evidence that the approaches have helped students, but the approaches still need to be tailored to the individual learner, which means fitting them to student needs, carefully observing student responses, and making adjustments as needed.

The Fresno State RLLSC program provides a concrete example of an effective model of advanced literacy preparation that can inform both policy and other programs that are seeking to prepare impactful specialists and coaches in a 1-year program. This work has the potential to significantly impact literacy outcomes for districts by streamlining the preparation of reading specialists and literacy coaches at a time when California has pledged millions of dollars for preparing and hiring specialists and coaches to serve in California’s public schools.

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