

**Cal Poly TIER:  
Teaching for Inclusivity and Equity Residency Program**

A Proposal for the Teacher Quality Partnership Grant

United States Department of Education

Office of Elementary and Secondary Education

CFDA 84.336S

Submitted by:

Cal Poly Corporation

Dr. Briana Ronan



**CAL POLY**  
School of Education

**TABLE OF CONTENTS**

<b>California Polytechnic State University TIER: Teaching for Inclusivity and Equity Residency Program Narrative, Budget Narrative, Appendices</b>	
<b>Project Narrative</b>	<b>Page #</b>
Absolute Priority: Partnership to Establish Effective Teacher Residency Programs	1
Competitive Preference Priority 1: Spurring Investment in Qualified Opportunity Zones (QOZ)	4
<b>A. Project Design</b>	<b>5</b>
(i) Project rationale	5
(ii) Specified and measurable goals, objectives, and outcomes	18
(iii) Exceptional approach for meeting statutory purposes and requirements.	30
(iv) TIER partnership activities are strategically aligned with California’s educational reform activities that improve teaching and learning and support rigorous academic standards for students.	32
<b>B. Adequacy of Resources</b>	<b>33</b>
(i) Adequacy of support	33
(ii) Adequacy of budget	36
(iii) Costs are reasonable in relation to the objectives, design, and potential significance of the proposed project	36
(iv) Resources to operate the project beyond the length of the grant	37
<b>C. Management Plan</b>	<b>38</b>
(i) Management plan with defined responsibilities, timelines, and milestones	38
(ii) Commitment of partners	42
<b>D. Project Evaluation</b>	<b>43</b>
(i) The extent to which the methods of evaluation will provide valid and reliable performance data on relevant outcomes.	43
(ii) The extent to which the methods of evaluation are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project.	47
<b>Abbreviations</b>	
<b>Bibliography</b>	
<b>Budget Narrative</b>	

# CAL POLY TIER PROGRAM

Appendices
<p>Appendix A: TQP Program Checklists                      A1: Absolute Priority Checklist                      A2: Application and General Program Checklist                      A3: Eligibility Checklist &amp; IHE Eligibility narrative</p>
<p>Appendix B: Needs Assessment</p>
<p>Appendix C: Logic Model (Rationale)</p>
<p>Appendix D: Resumes/CVs for Key Personnel                      Dr. Briana Ronan, PI                      Dr. Leah Wood, Co-PI                      Dr. Tina Cheuk, Co-PI                      Dr. Kevin Taylor, SOE Director</p>
<p>Appendix E: Letters of support &amp; partner MOU(s)                      District letters of support                          E1: Santa Maria Bonita School District (SMBSD)                          E2: Santa Maria Joint Union High School District (SMJUHSD)                          E3: Lucia Mar Unified School District (LMUSD)                      Institutional letters of support                          E4: School of Education, Cal Poly University                          E5: College of Science and Mathematics, Cal Poly University                          E6: College of Liberal Arts, Cal Poly University                          E7: Office of the Provost, Cal Poly University                      External letters of support                          E8: San Luis Obispo County Office of Education (SLOCOE)                          E9: Santa Barbara County Education Office (SBCEO)                          E10: Center for the Advancement of Reading and Writing (CAR/W)                          E11: San Luis Obispo County Special Education Local Plan Office (SELPA)                          E12: Office of the Chancellor, California State University (CSU)                      Partner district MOUs                          E13: SMBSD 19/20 MOU                          E14: SMJUHSD 19/20 MOU</p>
<p>Appendix F: Approved Indirect Cost Rate Agreement</p>
<p>Appendix H: Other                      H1: Mock IEP Resources (Observer checklist &amp; Facilitation Tip Sheet)                      H2: Course of Study                      H3: Clinical Practice Observation Rubric and Tool                      H4: TIER Work plan                      H5: TIER Organizational Chart                      H6: Cal Poly Learning Module Protocol                      H7: Cal Poly School of Education of Report of Findings from Accreditation Visit                      H8: Cal Poly School of Education Clinical Practice Effectiveness Reports                      H9: Cal Poly School of Education Comprehensive Assessment Plan                      H10: EdTPA outcomes for graduates (2018-2019)</p>

***Absolute Priority: Partnership to Establish Effective Teacher Residency Programs***

The primary goal of Cal Poly’s **Teaching for Inclusivity and Equity Residency (TIER)** program is to develop and implement a multi-disciplinary, post-baccalaureate teaching residency program at California Polytechnic State University (Cal Poly) in San Luis Obispo in partnership with schools across two high-need counties on the Central Coast of California. Our partners include: 1. Santa Maria-Bonita School District (SMBSD), a PreK-8 district in Northern Santa Barbara County, 2. Santa Maria Joint Union High School District (SMJUHSD) also in Northern Santa Barbara County, and 3. High-need schools Lucia Mar Unified School District (LMUSD), the largest PreK-12 school district in San Luis Obispo County. Schools in these districts serve a significant population of Latinx students, emergent bilinguals and students with disabilities (See Table 1). For full information on the partners and their high-need schools, see 2020 Local Educational Agency (LEA) Eligibility Partners (in Appendix B).

**Table 1. Demographics of Partner Districts**

Location	Latinx (2019-2020)	Emergent Bilinguals (2019-2020)	SPED (2017-2018)
Santa Maria-Bonita School District	94.9%	50.5%	8.4%
Santa Maria Joint Union High School District	85.8%	19.5%	8.0%
Lucia Mar Unified School District	46.2%	12.1%	13.8%
California	54.9%	18.6%	12.9%

Source: California Department of Education (CDE) DataQuest  
 Notes: CDE label “Hispanic” is referenced as “Latinx” within this narrative. CDE label “English Learners (ELs)” is referred to as “Emergent Bilinguals” within this narrative.

California, like the rest of the country, is experiencing a critical shortage of teachers particularly in areas of special education (SPED) and bilingual education (Aragon, 2016; Espinoza et al., 2018; U.S. Department of Education, 2020). One impact of the lack of qualified

## CAL POLY TIER PROGRAM

teachers is that many districts are not meeting proficiency benchmarks in reading, math and science. The need for high-quality teachers is most acute in schools that serve a high proportion of at-risk minority students, emergent bilinguals and students with disabilities, such as those located in Qualified Opportunity Zones (QOZ) on the semi-rural Central Coast of California. See Appendix B & Figure 1 for QOZ details.

The purpose of Cal Poly's TIER program is to synergistically draw from both bilingual education and SPED in order to meet the purposes outlined in section 201 of the Higher Education Act of 1965: 1. Improve student achievement for emergent bilinguals and students with disabilities, 2. Improve the quality of the current and future teaching force by improving the preparation of prospective teachers and enhancing professional development (PD) activities, 3. Prepare teachers who are highly competent, and 4. Recruit highly qualified individuals, including minorities, into the teaching workforce. To this end, Cal Poly's TIER program is designed to meet the following goals and outcomes:

1. Develop a residency program that effectively recruits and trains 44 new teachers in the critical shortage areas of SPED and bilingual education. **Expected Outcomes:**
  - 85% of the teaching residents will complete an Education Specialist Mild/Moderate OR a Multiple/Single Subject credential with a Bilingual Authorization as well as a master's degree in their respective fields of SPED or Curriculum & Instruction.
  - All teaching residents will train closely with mentor teachers in partner districts to implement Evidence-Based Practices (EBPs) in SPED and Culturally Relevant Teaching (CRT). At least 85% of residents will demonstrate improved understanding and implementation of EBPs and CRT by the end of the program.

## CAL POLY TIER PROGRAM

2. Create sustainable partnerships with local districts and high-need schools in ●OZs in order to promote continuous improvement and increase capacity of both the teaching residents and

mentor teachers. **Expected Outcomes:**

- 3-year retention rate of 85% or higher for residency graduates in high-need partner schools.
- K-12 emergent bilingual and students with disabilities in classrooms with graduates of residency program schools receive high-quality instruction resulting in improved academic outcomes compared to other new teachers in the same Local Educational Authorities (LEAs).
- Sustained collaboration within partner schools and replication to new partner schools and districts.

Across all five years of the program, TIER will train and mentor 44 teaching residents who will be engaged in year-long site-based residencies that feature clinical rotations to develop specialized competencies in teaching for equity and inclusivity. The TIER program framework infuses Culturally Relevant Teaching (CRT) and Evidence Based Practices (EBPs) in behavioral and academic interventions for emergent bilinguals and students with disabilities. See section on Curriculum & Professional Development (PD) on page 13 for details on the framework and associated CRTs and EBPs. TIER will also feature a two-year, formalized induction program in collaboration with partnership districts that integrates a New Teacher Learning Community (NTLC) for new teachers. The NTLC includes high-quality mentoring and professional learning opportunities with the objective of increasing teacher retention in the critical shortage areas of bilingual education and SPED. Moreover, we will provide ongoing training and mentorship to at least 15 experienced teachers annually who will serve in the capacity of mentor teachers. Cal

CAL POLY TIER PROGRAM

Poly’s TIER program brings a team of committed partners together to create a dynamic collaborative system that will enhance our collective capacity to supply a high-quality teacher workforce in bilingual education and SPED across 30 high-need schools within a region that includes four QOZs (see Table 2).

**CPP 1: Spurring Investment in Qualified Opportunity Zones (QOZ)**

**Figure 1. Map of Qualified Opportunity Zones Served by the TIER Program**



The TIER partnership includes two high-need school districts in Santa Maria, California Santa Maria Bonita PreK-8 School District (SMBSD) and Santa Maria Joint Unified High School District (SMJUHS) as well as high-need schools in Lucia Mar Unified School District (LMUSD), a designated QOZ. The program will provide support to up to 30 high-need schools reaching a region that serves 1672 teachers and 38,557 K-12

students. The partnership reaches students in schools that overlap with four distressed communities designated as QOZs by the Secretary of Treasury under section 1400Z-1 on the Internal Revenue code. Table 2 provides the census tract number of the QOZs as well as the high-need schools whose borders overlap or lie within the QOZs. The districts in this TIER partnership have a high population of families living at poverty levels above 20%, compounded with high teacher need in the areas of SPED and bilingual education (see Appendix B Needs

CAL POLY TIER PROGRAM

Assessment). Additionally, seven high-need schools within the LMUSD, a district overlapping a designated QOZ, also have a high teacher need in both areas of bilingual education and SPED. Within each district, 10% of the teachers hold emergency/provisional certification in SMDSD, 3% within SMJUHSD, and 6% within LMUSD. Our TIER program will provide services to schools and districts that overlap with these QOZs as follows: 1. Host teacher residents within these four QOZs during their first year of clinical practice placement, 2. Provide professional development opportunities with mentor teachers, and 3. Work with school and district leaders in placing new teacher residents within these QOZs.

**Table 2: Qualified Opportunity Zones and High-Need School Overlap**

High-Need Schools located within the QOZ	School District	Census Tract Number(s)
Oceano Elementary Mesa Middle School	LMUSD	06079012200
Liberty Elementary Adam Elementary Miller Elementary Sanchez Elementary Fairlawn Elementary Fesler Junior High School Arellanes Junior High School	SMBSD	06083002101 06083002403 06083002404
Santa Maria High School Pioneer Valley High School	SMJUHSD	06083002101 06083002403 06083002404

**A. Project Design**

*(i). Project rationale.*

Widespread teacher shortages in SPED and bilingual education continue to limit access to high-quality instruction for emergent bilinguals and students with disabilities. States across the nation, including California, indicate severe teacher shortages in these two fields (Billingsley et al., 2019; Espinoza et al., 2018). Unfortunately, it is not likely that this will improve in the

## CAL POLY TIER PROGRAM

coming years as enrollment numbers in teacher preparation programs are currently an all-time low (NCES, 2020).

The resulting situation in local schools is that 80% of California school districts are currently trying to hire SPED teachers with few qualified applicants for these openings. In fact, in 2016-2017, approximately two-thirds of all new SPED teacher hires were on sub-standard credentials (Darling-Hammond et al., 2018). In their analysis of teacher shortages in California, the Learning Policy Institute summarized the SPED situation in California as “a five-alarm fire,” in which “the most vulnerable students – students with the greatest needs who require the most expert teachers – are those with the least qualified teachers” (Darling-Hammond et al., 2018, p.11). Further compounding these shortages is the fact that many SPED teachers leave teaching at higher rates than their general education peers (Goldring et al., 2014). The impact of these specialized teacher shortages is dire. These students are in classrooms with teachers who have limited training, resulting in compounded inequities over time that severely limit the educational and life outcomes of students with disabilities.

The shortage needs are not only in the field of SPED, but also in the area of bilingual education. Most recently in 2016, California electors approved the expansion of bilingual programs in K-12 schools under Proposition 58. This increase in public demand for bilingual education has not been met with increased numbers of qualified bilingual educators. In 2015-2016, California authorized just 700 new bilingual teachers, which is *less than half* the number of bilingual educators the state authorized in the 1990s, when bilingual education was at its peak (Carver-Thomas & Darling-Hammond, 2017).

Residency programs are uniquely positioned to address these teacher shortages in bilingual education and SPED. Nationally, 32% of residency graduates taught English learners

## CAL POLY TIER PROGRAM

(ELs) and/or students with special needs (Guha et al., 2016). In addition to addressing crucial hiring needs, research suggests that residencies bring greater gender and racial diversity into the teaching workforce. Across teacher residency programs nationally, 45% of residents in 2015-16 were people of Color (Guha et al., 2016). The Cal Poly TIER program is designed to address these identified issues by: 1. Increasing the number of diverse teacher residents to be highly qualified bilingual education and/or SPED teachers and 2. Meeting local hiring demands of partnership sites, as a core part of a successful residency program. Our Logic Model (see Appendix C) shows how our residency program will leverage school, district, community, and institutional resources and inputs to achieve intermediate and long-term outcomes that address the issues of recruitment and retention of SPED and bilingual educators in high-need partner schools. Each component of the TIER program is guided by specific relevant research:

**Residency Model:** Cal Poly's TIER model draws on current research on the benefits of residency-based teacher preparation. The Learning Policy Institute's report, *The Teacher Residency: An Innovative Model for Preparing Teachers* identifies eight main characteristics of effective teacher residency programs: 1. Strong district/university partnerships, 2. Coursework about teaching and learning tightly integrated with clinical practice, 3. Full-year of clinical-based student teaching alongside a master teacher integrating pedagogy with the practical demands of classroom instruction and management, 4. High-ability, diverse candidates recruited to meet specific district hiring needs in teacher shortage areas, 5. Financial support for residents in exchange for a three-year teaching commitment, 6. Cohorts of residents placed in schools that model good practices with diverse learners and are designed to help novices learn to teach, 7. Expert mentor teachers who co-teach with residents, and 8. Ongoing mentoring and support for graduates (Guha et al., 2016).

CAL POLY TIER PROGRAM

Over the course of years 2-5 of the grant, the program will enroll 44 residency teachers in either the SPED strand or Bilingual Education strand of the TIER program. Each strand of the program represents a cohort in which teacher residents will be placed to facilitate professional collaboration. See Table 3 for total number of enrollees by strand and year. Residents will have earned a bachelor’s degree before entering the residency program. Through Ca lPoly TIER, residents will enter a fifth-year post-baccalaureate residency with graduate program to provide stronger content knowledge, extended induction support (for 2 years), and a living wage stipend. For residents in the bilingual general education strand, successful completion of the program will include the attainment of a Single Subject OR Multiple Subject teaching credential with a Bilingual Authorization, a Master of Arts in Curriculum & Instruction, meeting all state credentialing requirements, and placement and retention in partnering high-need schools. For residents in the SPED strand, successful completion of the program will include the attainment of an education specialist mild/moderate credential with an optional bilingual authorization, a Master’s of Science in SPED, meeting all state credentialing requirements, and placement and retention in partnering high-need schools.

**Table 3. Target Recruitment Projections**

<b>Program Strand</b>	<b>Year 1</b>	<b>Year2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Total NEW Residents</b>
Bilingual General Ed	0	+6	+6	+7	+8	+27
SPED	0	+2	+2	+2	+3	+9
Bilingual SPED	0	+1	+2	+2	+3	+8
<b>Total</b>	<b>0</b>	<b>+9</b>	<b>+10</b>	<b>+11</b>	<b>+14</b>	<b>+44</b>

## CAL POLY TIER PROGRAM

Unique to this program design is the integration of Evidence Based Practices (EBPs) and Culturally Responsive Teaching (CRT) for meeting the needs of Spanish-speaking emergent bilinguals and students with disabilities. Students from culturally and linguistically diverse (CLD) backgrounds are notoriously overrepresented in SPED, especially in disability categories that rely on professional decision making with higher levels of subjectivity such as learning disabilities and emotional and behavioral disorders (Annamma et al., 2014; Travers et al., 2002; Krezmein, 2018). In contrast, these students are often underrepresented in disability categories that are less influenced by social variables or professional judgments such as visual impairments and autism spectrum disorders (Travers et al., 2013). Ideally, all teachers who work with emergent bilingual students should have understanding of first and second language acquisition, clear training on the SPED referral and Individual Educational Plan (IEP) processes as well as sociocultural considerations when implementing EBPs and multi-tiered systems of support for emergent bilinguals (Orosco, 2010). Cal Poly TIER will meet these needs by training all TIER candidates in EBPs through ongoing professional development and coursework. Cal Poly TIER candidates will also participate in a mock IEP event, structured around a case study of an emergent bilingual student with a disability (See Appendix H1).

In addition to EBPs, general education and SPED teachers need to understand how to integrate culturally relevant practices in their instruction to support emergent bilinguals. The TIER model of CRT draws on a Funds of Knowledge framing (González et al., 2006) as well as disability critical race theory (DisCrit), an intersectional framework that aims at dismantling interlocking systems of oppression (Crenshaw, 1989). CRT will guide teacher residents to account for the ways racism, language, geography, citizen, and ableism are interconnected and

## CAL POLY TIER PROGRAM

collusive normalizing processes in schools and classrooms (Annamma et al., 2013). Details regarding specific CRT and EBPs are described on page 13 in the section on Curriculum & PD.

The program will employ clearly defined recruitment and retention strategies to ensure residents meet high academic standards and demonstrate a record of success prior to acceptance and through to completion of the residency program. Prospective residency teachers must demonstrate the following criteria in their application to the TIER residency program: (a) completion of a bachelor's degree with a minimum higher education cumulative GPA of 2.67 and a certificate of clearance/background check; (b) two letters of recommendation from an Institute of Higher Education (IHE) faculty or previous employers; (c) strong verbal and written communication skills as demonstrated by passing of required basic skills test (e.g., CBEST); (d) strong content knowledge demonstrated through the passage of subject matter competency (e.g., CSET); (d) completion of prerequisite courses for the credential program; (e) a successful interview with the recruitment team; and (f) admission to the Cal Poly credential and Master's degree programs. All teacher residents will sign an agreement at the start of the program to serve as a full-time teacher in a partnership high-need school for a period of not less than three years immediately after successfully completing the residency. In the event that a teacher resident is unable or unwilling to complete the service obligation, they are subject to repayment of their stipend with interest at a rate specified in the agreement. Any repayment received from a candidate who is not able to complete the service agreement will be used to carry out additional activities that are consistent with the meeting objectives as outlined in the Absolute Priority. Upon selection and contractual agreement for the scholarship and acceptance of program rules and guidelines including terms of repayment, the resident will enter a graduate course of study in either the bilingual general education cohort or SPED (with optional Bilingual Authorization)

## CAL POLY TIER PROGRAM

cohort while at the same time participating in an intensive residency with a master teacher (See Course of Study in Appendix H2).

The TIER program will provide 44 residents with a living wage salary of \$27,000 through a 12-month contract for program recruits; provide a one-year residency experience with a master teacher while the resident completes their credential coursework; arrange for a university supervisor, an experienced teacher to supervise and support teacher residents in their clinical practice placement and serve as liaison to the Cal Poly and the school district; provide two years of research-based induction support for 44 beginning teachers; and provide on-going professional development in EBPs and CRT for clinical practice triads (i.e., mentor teachers<sup>1</sup>, teacher residents and university supervisors<sup>2</sup>). Teacher residents who receive stipends will agree to provide verification of employment from the chief administrative officer of a high-need partner district at the beginning and completion of each of their three years of service after completion of their credential.

With guidance by university supervisors and mentor teachers, residents will analyze their own and fellow cohort members' instructional efficacy, using in-person observation and video-based supervision technology, such as EdThena and GoReact (both technologies are funded and supported by Cal Poly). Our use of video-based professional learning provides the opportunity for teacher residents to observe, model, and reflect on their own (and each other's practices) so that they can adapt EBPs and CRT for use in their own classrooms (Gaudin & Chaliès, 2015; Es & Sherin, 2008). The technology allows for interactive feedback on performance-based skills

---

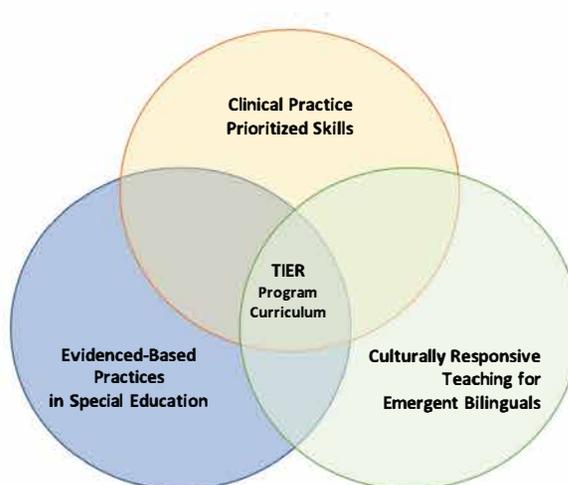
<sup>1</sup> **Mentor teacher**'s responsibilities fall into three categories: planning and communication with regards to teaching and learning in their placement classroom, support of the resident's learning in their classroom, and mentoring resident's progress as a novice teacher. This is also commonly referred to as "cooperating teacher".

<sup>2</sup> **University supervisors** serve as a liaison between the resident, the mentor teacher, and the university. Supervisors meet regularly with their residents to observe, assess, conference with, and support residents in their classroom placement.

## CAL POLY TIER PROGRAM

tied to Cal Poly's Danielson-aligned clinical observation tool (see Appendix H3). Additionally, residents will be pre-post assessed on their knowledge of EBPs and CRT using a survey to be developed by the Cal Poly SPED and Bilingual Education faculty that will gauge skills needed and attained during the program. Finally, Cal Poly faculty will also work with residents to meet California licensure requirements, including passage of Education Teacher Performance Assessment (EdTPA). For Special Education teacher residents this also includes qualifications described in section 612(a)(14)(C) of the IDEA. Prior to the conclusion of the residency, the TIER Induction Team consisting of faculty and district representatives will identify vacancies and facilitate hiring and induction. During residents' induction period, new teachers will receive ongoing professional development through participation in a New Teacher Learning Community (NTLC), and coaching visits from district-based Teacher Induction Program (TIP) mentors in collaboration with Cal Poly faculty. By the end of a two-year period of teaching, mentoring, and PD support, the residents will have acquired extensive pedagogical and professional educational skills to positively impact learning outcomes of emergent bilinguals and students with disabilities.

**Figure 2. Cal Poly TIER Curricular Framework**



**Curriculum and Professional Development:** The overall TIER curriculum is informed by research that integrates EBPs in SPED and CRT for emergent bilinguals and students of Color (Alim & Paris, 2017; Annamma, 2016; Annamma & Morrison, 2018; Ladson-Billings, 1995; Lucas & Villegas, 2013; Paris, 2012). This two-pronged approach is aligned to Cal Poly's established Danielson-Aligned Clinical Practice Observation Tool (See Appendix H3). The TIER program includes core research-based EBPs (e.g., modeling, prompting and reinforcement, systematic and explicit instruction, and scaffolding) that have shown promising results in improving teaching practice for emergent bilingual learners and students with disabilities (Cook & Cook, 2013; National Clearinghouse on Autism Evidence and Practice, 2020; Sam et al., 2019; Walqui, 2006; Walqui & van Lier, 2010).

In SPED, the term Evidence-Based Practice (EBP) functions as both a noun and a verb. As a noun, it refers to specific, scientifically validated teaching approaches. As a verb, it describes an ongoing decision-making process, in which practitioners select and use teaching approaches that are verified for individual students through consistent progress monitoring (Cook, 2006). Several national databases vet and list specific EBPs that meet prescribed evidence thresholds, including the National Center on Intensive Intervention, The National Autism Standards Project, and the What Works Clearinghouse. EBPs in SPED include instructional approaches such as systematic and explicit instruction in literacy, modeling, and priming, as well as student-directed learning approaches such as self-management. Similarly, professional organizations and multi-university working groups have established clear guidelines for data-based decision making and determining response to intervention (see Kratochwill et al., 2010). At Cal Poly, TIER teacher residents will learn about specific EBPs in their methods courses and have opportunities to implement these treatments with fidelity in fieldwork

## CAL POLY TIER PROGRAM

placements. Similarly, through individual action research projects, residents will demonstrate their understanding of data-based decision-making by selecting, implementing, and calibrating a specific instructional approach for a particular student in a specific setting.

The TIER program also recognizes that existing curriculum for students with disabilities and emergent bilinguals are centered in whiteness and ableism. This curriculum leaves teacher candidates unprepared to dismantle the power imbalances found in the classrooms that are harmful for multiply-marginalized students of Color (Annamma & Morrison, 2018). A central goal of the TIER curriculum includes the: 1. Teaching of systematic inequities brought forth through racism, ableism, and intersecting oppressions and 2. Countering invisibilizing in the content areas through the inclusion of culturally responsive/sustaining practices. These practices include translanguaging pedagogies that draw on students' full linguistic repertoire (García, 2017), lesson design that centers family/community Funds of Knowledge (González et al., 2006) and culturally relevant literature (Compton-Lilly, 2010), and holistic, bilingual literacy assessment and components of literacy instruction for emergent bilinguals (Butvilofsky et al., 2020). In doing so, the TIER program provides opportunities for teachers to investigate and interrupt intersecting patterns of marginalization of emergent bilinguals and students with disabilities.

To ensure a strong coherence between this content which is covered academic coursework (See Course of Study in Appendix H2) and school-based clinical practice, the TIER Curriculum and PD team will design professional learning opportunities for clinical practice triads (i.e., teacher residents, mentor teachers and university supervisors) to participate in together (Forman et al., 2017). The design of these professional development focus on strengthening residents' content and pedagogical content knowledge and practices through active

## CAL POLY TIER PROGRAM

and reflective practices, collective participation of cohort members, and are sustained over time through mentorship and coaching by mentor teachers and university supervisors (Borko, 2004; Kardos & Johnson, 2010; Garet et al., 2001; Guskey, 2002; Lieberman, 1996; Sparks 2002).

**Clinical Practice/Mentorship:** During the residency program, teacher residents will train alongside an experienced mentor teacher in a year-long clinical placement. Experienced mentor teachers can help novice teacher residents master the elements of new instructional strategies through repeated trials and scaffolding over multiple observations and modeled teaching episodes (Desimone & Pak, 2017), with promising positive effects on instruction (Kraft et al., 2018). Finally, supportive feedback and critique are provided to teacher residents as they attempt the application of new skills and knowledge. Feedback is most helpful if it includes further modeling of critical elements of the professional development in need of practice (Woulfin & Rigby, 2017). A unique feature of our residency model is the use of clinical rounds (Teitel, 2020) and the use of in-person and video-based tools (i.e., EdThena and GoReact) to observe and reflect upon the residents' instructional practice through situated learning experiences (Lave & Wenger, 1991). The technology allows for interactive feedback on performance-based practices (EBPs and CRT) tied to Cal Poly's clinical Danielson-aligned observation tool (Santagata & Guarino, 2011; Sherin & van Es, 2009; Seidel et al., 2011; van Es et al., 2017).

**Induction:** Results from a preliminary local needs assessment (see Appendix B) indicate that high-need Local Educational Agencies (LEAs) are in need of quality induction programs, citing the cost of induction programs to be prohibitive for districts in addition to new teachers feeling like induction is a "hoop to jump through" rather than an enriching learning experience. These sentiments from our high-need partner districts resemble that of research on induction

## CAL POLY TIER PROGRAM

programs, which have resulted in little empirical effort to support the impact of induction programs on developing and retaining teachers (Glazerman et al., 2008; Ingersoll & Strong 2011; What Works Clearinghouse, 2015). In collaboration with partner districts, the TIER induction team will develop a two-year Teacher Induction Program (TIP) for residency graduates. An induction team consisting of university and partner stakeholders will determine the mode of delivery of the induction program with plans to include a New Teacher Learning Community (NTLC). The NTLC experience aims to support retention goals by creating a community whose content and focus are participant-driven, asset-oriented, with high-levels of self-reflection and continual learning among early career teachers (Bullough, 2012; Strong, 2009; Wong, 2004). Feedback from new teachers who participate in NTLCs report that “[Teacher communities play an important role in promoting teacher motivation and welfare believing they are instrumental in preventing teachers from leaving the profession,” (Webb et al., 2009, p. 412). Participation in the NTLC(s) will include shared fiscal support from both the partner district and the IHE (see Appendix E for letters of support). Additionally, NTLC sessions will be jointly planned and implemented by district and university faculty.

### **LEA Needs Assessment**

Cal Poly will partner with two districts in the high-need setting of Northern Santa Barbara County (i.e., SMBSD and MJUHSD) as well as 7 high-need schools located within San Luis Obispo County’s largest school district, LMUSD. The table in Appendix B shows these high-need qualifying districts and the number of students and teachers to be served in each district. Both counties are home to a significant Latinx population many of whom work in the agricultural industry (U.S. Census, 2010). Schools in the district not only serve U.S.-born Spanish-speaking students but also newcomer students whose families speak indigenous

## CAL POLY TIER PROGRAM

languages of Mexico, such as Mixteco and Zapotec (CDE, 2020). In San Luis Obispo County, where LMUSD is located, twenty-eight percent of the families survive on less than \$25,000 per year (U.S. Census, 2010).

Results from a partner district needs assessment (see Appendix B) reveal that 57% of schools find it “difficult or very difficult” to hire SPED teachers. Similarly, 79% of schools surveyed in partner districts reported it was “difficult or very difficult” to hire bilingual teachers. For example, one administrator stated, *“We have difficulty finding strong candidates for special education and bilingual education who possess strong academic skills, and are well prepared academically. Many promising candidates lack the ability to access high quality graduate level work due to financial considerations.”* In addition, high-need partner district administrators called for “more culturally and diverse teachers” as well as struggling to find “highly-qualified BCLAD [Bilingual Authorization] and dual immersion teachers,” identifying the California-specific teaching shortage area in bilingual education. Furthermore, high-need district partners expressed a need for “filling our classrooms with high-quality instructors.”

These data, collectively, indicate a critical need for teachers who can differentiate instruction to better serve emergent bilingual and students with disabilities. The relevant research, program components, and justification for addressing the extensive need for teacher development makes a strong case for Cal Poly’s TIER project design. The preparation of Cal Poly TIER program’s 44 new SPED and bilingual teachers will meet the needs of our partner districts and increase the hiring of culturally-responsive and highly effective teachers across the broader California Central Coast and inland region (Goe et al, 2008; Darling-Hammond, 2000; 2012). The TIER program will also contribute to the key role being played by the California

## CAL POLY TIER PROGRAM

State University (CSU) System in preparing a new generation of educators to serve in two of the most severe teacher shortage areas (CSU, 2020).

### ***(ii) Specified and measurable goals, objectives, and outcomes.***

The primary purpose of Cal Poly's TIER program is to improve the academic achievement of students with mild to moderate disabilities and Spanish-speaking bilingual students in K-12 partner schools. To achieve this purpose, our program has identified two goals aimed at increasing the quality and quantity of K-12 SPED and Spanish bilingual education teachers: 1) *Develop a residency program that effectively recruits and trains 44 new teachers in the critical shortage areas of SPED and Bilingual Education* and 2) *Create sustainable partnerships with local districts and high-need schools in OOZs in order to promote continuous improvement and increase capacity of both the teaching residents and mentor teachers.* Refer to Logic Model in Appendix C and Work Plan in Appendix H4 where we detail these two goals. Outcomes are aligned with the three acceptable inputs (ratio, percentage, or value) for the annual performance report measures. Some of the measurement tools include a score on quantitative and qualitative feedback from the Danielson-Aligned Clinical Practice Observation Tool, pre/post participation surveys for teacher residents and mentor teachers and hiring/retention rates as reported by partner districts.

### ***Goal 1: Developing a residency program that effectively recruits and trains 44 new teachers in the critical shortage areas of SPED and Bilingual Education.***

One of the first objectives is achieving our first goal is to develop the five teams to deliver our residency program: 1. Leadership Team, 2. Curriculum and Professional Development Team, 3. Clinical Mentorship Team, 4. Recruitment Team, and 5. Induction team. Each team will be responsible for a subset of objectives within each goal as detailed in the TIER Work Plan in Appendix H4. These teams will work in unison to ensure that we design and

## CAL POLY TIER PROGRAM

deliver Cal Poly's TIER program in a manner that prepares prospective SPED and bilingual education teachers with strong teaching skills and effectively builds their capacity to improve the academic achievement of students with disabilities and emergent bilinguals in our partner schools and districts.

*● Objective 1.1 To form five teams that will oversee design and implementation of all activities (Leadership, Curriculum/PD, Clinical Mentorship, Recruitment, and Induction).*

The **Leadership Team** will consist of individuals from both Cal Poly and partner districts who have the authority to make educational decisions on behalf of their agency. For example, Dr. Leah Wood, Co-Coordinator of the SPED Program at Cal Poly, Dr. Briana Ronan, Coordinator of Bilingual Education Program at Cal Poly and a yearly rotating district representative from the partnership. These individuals will be standing members of the Leadership Team across all years of TIER. Other Leadership members may include individuals who are serving as chairs for each of the other teams (i.e., Leadership, Curriculum/PD, Clinical Mentorship, Recruitment, and Induction). The purpose of the Leadership Team is to provide the overall leadership for the success of all TIER activities. Leadership Team members will meet twice monthly to establish systems and processes that facilitate and sustain collaboration within and across teams and the partnerships; collaborate with WestEd (external evaluator) to engage in continuous improvement, formative feedback, and share progress and impact of the project with various stakeholders including Advisory Committee. Members of the Advisory Committee are detailed on the TIER Organizational Chart in Appendix H5.

The TIER **Curriculum/Professional Development Team** will enhance the current SPED and bilingual authorization programs at Cal Poly to include content and pedagogy regarding EBPs and CRTs (Objective 1.2). The team will also design and deliver quarterly PD opportunities to the clinical practice triad of teacher residents, university supervisors and mentor

## CAL POLY TIER PROGRAM

teachers (Objective 2.1). The Curriculum/PD Team will consist primarily of faculty members from Cal Poly as well as the Director of Teaching and Learning from Santa Maria Bonita School District.

The TIER **Clinical Mentorship Team** will design high quality clinical practice experiences and clinical rounds for teaching residents (Objective 1.3) and create ongoing systems, materials, and activities to prepare district mentor teachers for mentorship of teacher residents (Objective 2.2). Some of these activities will include familiarizing mentors with roles and expectations of teacher residents as well as providing them with on-going training and support on coaching and mentorship practices. The Clinical Mentorship Team will consist of Cal Poly's Clinical Practice Coordinator, Cal Poly university supervisors and Santa Maria Bonita's Teacher on Special Assignment (TOSA) for New Teacher Development.

The TIER **Recruitment Team** will focus on the recruitment of 44 high-quality prospective teacher residents and 15 mentor teachers (Objective 1.4). The team will consist of Cal Poly Coordinators of Cal Poly's credential programs and Human Resources (HR) representatives from the local districts. They will also coordinate with the Cal Poly Office of Diversity and Inclusion (OUDI) to develop recruitment marketing materials that utilize images and language representative of a diverse set of ethnicities, races, and cultures. Additionally, the recruitment team will consult with faculty and staff from community colleges in the development of targeted pathways and recruitment strategies for students of color and underrepresented populations. Finally the **Induction Team** will provide two years of research-based mentor and induction support for the 44 new teachers who complete the residency program (Objective 2.3) The team will consist of district HR representatives from each partnering district and Cal Poly Multiple, Single and SPED program coordinators. The ongoing meetings and collaborative

## CAL POLY TIER PROGRAM

efforts of each team will lead to the formation of a sustainable partnership that has all of the systems, supports, and processes developed to effectively implement TIER activities, refine these activities based on research and evaluation data, and sustain the collaborative efforts after the conclusion of the grant project.

*Objective 1.2 To enhance the current SPED and bilingual authorization program at Cal Poly by infusing EBP and CRT models for instruction.*

**Outcome: 85% of teacher residents will demonstrate improved understanding of EBPs and CRT as measured by course-based assignments and surveys.**

The TIER Curriculum/PD Team will enhance the current SPED and bilingual authorization programs at Cal Poly to include content and pedagogy regarding EBPs and CRT by designing and implementing quarterly professional development (see Objective 2.1) and intentional reform of program coursework. Upon acceptance to the program, teacher residents will be enrolled in either the bilingual general education strand or the SPED strand (See Appendix H2 for the course of study for each strand). Those enrolled in the former will complete either a Multiple or Single Subject credential, a Bilingual Authorization in Spanish, and a Master's of Arts in Curriculum & Instruction over the course of six academic quarters that span 18 months. The timeline for the year-long teacher residency in a partnering high-need school spans from August through June. After completing the credential portion of their residency program in June, residents will then complete their remaining Master's degree coursework in the summer and fall quarters. During these last two quarters of their Master's program, they will be employed as first year teachers in a partner district school and also benefiting from a two-year induction support provided by the TIER program. Teacher residents enrolled in the Special Education strand will complete a Mild/Moderate Educational Specialist credential, an optional Bilingual Authorization in Spanish, and a Master's of Science in Special Education over the course of four academic

## CAL POLY TIER PROGRAM

quarters that span 11 months. The timeline for the year-long teacher residency in a partnering high-need school spans from August through June.

**Outcome: Implement a bilingual Mock IEP within Cal Poly's annual Mock IEP event to be led by bilingual SPED and Bilingual Education teacher residents.**

In addition to the professional development all teacher residents will participate in a bilingual Mock IEP event, which will be held annually in the spring quarter of the program and will serve as a culminating experience for the credential program. The bilingual Mock IEP event builds on a successful project that has been institutionalized at Cal Poly (see Appendix H1 for more details). The Mock IEP event brings together faculty and students from across credential programs to participate in a simulation of an IEP meeting. The Mock IEP will be further refined to include a case study of an emergent bilingual student with disabilities and will be conducted entirely bilingually to better equip teacher candidates with the skills of communicating with Spanish-speaking families.

**Outcome: At least 3 courses (1 in SPED, 1 in Spanish Authorization and 1 in Curriculum & Instruction program) will be redesigned to integrate CRT and EBPs.**

In addition to the common PD that residents receive, all residents completing their master's coursework in the SPED and the Bilingual/Curriculum & Instruction will also complete an action research final project in which they identify a problem or issue related to teaching emergent bilinguals and/or students with disabilities, conduct literature review, select potentially beneficial EBPs to use with their students, and then design an instructional intervention with data collection procedures to evaluate the impacts of said practice on student performance. To aid them in the development of this project, three courses across the Spanish Authorization program, Curriculum & Instruction, and SPED credential programs will be redesigned to integrate both EBPs and CRT.

## CAL POLY TIER PROGRAM

*Objective 1.3 To provide high quality year-long clinical practice experiences and clinical rounds for 100% of teaching residents*

**Outcome: 85% of teacher residents will demonstrate improved implementation of EBPs and CRT as measured by field-based observation protocol.**

The TIER Clinical Mentorship Team will lead efforts to create stronger alignment between coursework and clinical practice through the creation of crosswalk documents for EBPs and CRTs that align with existing prioritized skills and observation tools for clinical practice. Cal Poly has made recent improvements to our clinical experience by developing and implementing in all three credential programs a Danielson-Aligned Clinical Practice Observation Tool (see Appendix H3) grounded in high-leverage teaching practices and prioritized skills. Faculty have embedded these prioritized skills from the Danielson-Aligned Observation tool in their courses in order to ensure alignment between coursework. The Clinical Mentorship Team would continue to refine this tool by creating supporting documents and a crosswalk that aligns EBPs and CRT with the existing prioritized skills. These materials will then be used to assess teaching residents' performance in their residency placement and as coaching tools for mentor teachers.

**Outcome: Increased opportunities for teacher residents to practice new skills in clinical placements with mentor teachers as measured by number of lessons taught using EBPs and CRT.**

To provide teaching residents' with multiple opportunities to practice new skills, the TIER Clinical Mentorship team will create a plan for clinical rotations that will allow residents to develop specialized competencies. Given the variety of instructional contexts that SPED and bilingual teachers may be expected to teach in throughout their careers, clinical rotations provide important opportunities for teacher residents to teach in contexts outside of their year-long residency placement (Ball & Forzani, 2009; Forzani, 2014; Zeichner, 2010). These contexts can include dual immersion classroom settings, English Language Development (ELD) pull-out

## CAL POLY TIER PROGRAM

classes, resource and intervention classes, Special Day classes and general education classes.

These additional settings will also allow for increased opportunities to practice new skills in CRT and EBPs with students of varying needs. It is expected that each teacher candidate will complete a minimum of 12 completed clinical practice observation sessions annually as measured by Danielson-aligned observation tool (see Appendix H3).

*●bjective 1.4 To recruit 44 high-quality prospective teacher residents and 15 mentor teachers over the course of Years 2-Year 5.*

**Outcome: 85% of teacher residents complete the teacher residency with a credential and Master's degree in their respective disciplines as well as necessary state credentialing requirements, such as passing of EdTPA.**

In order to recruit a highly competitive pool of prospective teacher residents, the TIER Recruitment Team will develop marketing materials to recruit from two potential pathways: 1. Undergraduate students at Cal Poly and 2. Bilingual and SPED para-professionals and instructional assistants in partnering LEAs to meet the following recruitment outcomes:

- At least 61% of teaching residents will complete a multiple/single subject credential with bilingual authorization
- At least 20% of teaching residents will complete SPED mild/moderate credential
- At least 18% of teaching residents will complete both a SPED credential and bilingual authorization

It is a particular goal of the TIER program to prioritize the recruitment of individuals who have previous experience working in the district as paraprofessionals or instructional aids. Several studies have shown that credentialed teachers who were first recruited as teacher aide and paraprofessional were more effective in elementary grades in reading and math and more likely to remain as classroom teachers when compared to teachers who do not have previous teaching experiences (Fortner et al., 2015; Abramovitz & D'Amico, 2011). Additionally, the TIER program focuses on the development of a crucial subset of teachers – bilingual special educators. There is a pressing need for in-service and preservice teachers who have the interdisciplinary

## CAL POLY TIER PROGRAM

knowledge about the educational needs and rights of emergent bilingual students with disabilities (Kangas, 2017).

Additionally, the recruitment team will visit partner schools to present roadshows and informational sessions to attract prospective mentor teachers. These materials will be developed by December of 2020. In order to identify high quality teacher mentors, the TIER program draw from effective practices used in the Newark Montclair Urban Teacher Residency (NMUTR) program, in which mentor teachers were selected through a collaborative process with district administrators identifying potential mentors, and university faculty and program staff observing those potential mentors in their classrooms (Guha et al, 2016). In the NMUTR program, mentor teachers were asked to submit a letter of interest, review a video of someone teaching, and demonstrate how they would provide teaching advice to residents in the program. Through a similar process, the Cal Poly TIER program will also observe mentor teachers in the classroom for demonstration of effective: 1. Planning and preparation practices, including demonstrated knowledge of content, particularly in areas of literacy and mathematics as the apply to SPED and bilingual education, 2. Assessment practices and analysis of student learning using valid and reliable measures, 3. Differentiated instruction, 4. Collaboration and communication skills to improve instruction.

***Goal 2: Creating sustainable partnerships with local districts and high-need schools in QOZs in order to promote continuous improvement and increase capacity of both the teaching residents and mentor teachers.***

Our vision for the TIER residency program prioritizes establishing deliberate and sustainable partnerships across multiple contexts and stakeholders to promote a collaborative view of teacher preparation. Historically in teacher preparation, universities “partner” with local schools for the purpose of placing prospective teachers in the field. However, these placements often feel disjointed from teacher education coursework and are more out of convenience rather

## CAL POLY TIER PROGRAM

than resulting in the mutual interests of both the teacher preparation program and the district. Our proposed approach between teacher preparation programs and school districts significantly enhance the quality of recruitable and retainable teachers. Through partnering, districts have the opportunity to develop talent from the beginning of a teacher's training and collaboratively work together to train and support their teachers to better meet the specific needs of their population of students (CSU Chancellor's Office, 2020; García, 2017; Luczak et al., 2016). The TIER program plans to create and sustain collaborative partnerships between teacher preparation programs and high-need partner districts who have a mutual interest in training highly-qualified teachers and supporting K-12 learning for emergent bilinguals and students with disabilities. Furthermore, the TIER program will align with the federal statutes of teacher quality partnership programs and the design principles for clinically-based teacher preparation found within the NCATE Blue Ribbon Panel (2012) publication, *Transforming Teacher Education Through Clinical Practice: A National Strategy to Prepare Effective Teachers*.

The TIER partnership will be guided by high quality teacher professional development, comprehensive mentor-mentee learning throughout the clinical and induction period with partner districts, and data-driven practice and continuous improvement throughout the teaching preparation continuum. In the interest of continuous improvement, Cal Poly will use teacher and student data to determine efficacy of the residency program and make reforms based on areas for growth, drawing on an improvement science approach (Bryk et al., 2015; Bryk, 2020). As our project evolves, we will collaboratively engage in data-driven improvement cycles to revise and enhance project goals, outcomes, and activities, ensuring the delineation of clear roles and responsibilities for mutual benefit (See Section D. Project Evaluation). Furthermore, our partnership focuses on sustainability efforts, including leveraging resources and developing

## CAL POLY TIER PROGRAM

structures that will not only meet the following objectives but also continue to support the mutual needs of all partners beyond project funding.

*Objective 2.1 To provide 100% of teacher residents and mentor teachers with high-quality professional development conducted by Cal Poly faculty and district partners.*

**Outcome: 75% of teacher residents will demonstrate improved self-efficacy to teach students with disabilities and/or emergent bilinguals as measured by participant surveys.**

The TIER program, led by the Curriculum & PD team will plan and implement quarterly PD in hybrid format, which will be attended by the clinical practice triad teams, consisting of teacher residents, university supervisor and mentor teachers. To develop teacher capacity to support emergent bilinguals and students with disabilities, each training will focus on a pairing of 1. EBPs that research has shown to improve the academic achievement and behavioral interventions for K-12 students with disabilities (Cook & Cook, 2013; National Clearinghouse on Autism Evidence and Practice, 2020; Sam et al., 2019; Walqui & van Lier, 2010) and 2. Key practices in CRTs for emergent bilinguals (Paris & Alim, 2017; García & Kleifgen, 2010). Some PD topics will include: bilingual assessment practices, culturally and linguistically responsive IEP goal setting, and culturally responsive Positive Behavior Intervention and Supports (PBIS). To measure the impact of the PD, all teacher residents and mentor teachers will participate in a pre/post assessment of their knowledge of EBPs and CRT to be developed by Cal Poly bilingual education and SPED faculty.

**Outcome: Establishment of an annual summer event that will extend beyond the life of the project to support prospective and current Cal Poly students across programs as well as clinical practice partners in the high-need areas of SPED and culturally responsive teaching.**

In addition to quarterly PD opportunities, the TIER Curriculum & PD team will also plan and implement an annual summer event that will extend beyond the life of the project to support

## CAL POLY TIER PROGRAM

prospective and current Cal Poly students across programs as well as clinical practice partners in the high-need areas of SPED and culturally responsive teaching. The summer event is intended to introduce teacher residents (and other pre-service teachers), new teachers, and mentor teachers to the residency program as well as provide an introduction to EBPs and CRT. The summer event will serve as an annual kick-off for incoming teacher residents and culminating event for completing residents. Each year we plan to have completing residents present their Master's program action research projects. We will also establish peer mentorship opportunities with incoming teacher residents mentees and completing resident mentor pairs. It is our expectation that this summer event will become institutionalized and supported beyond the life of the grant, thus providing a much-needed home for teacher summer professional development on the California Central Coast.

*● Objective 2.2 To create ongoing systems, materials, and activities to prepare district mentor teachers for mentorship of teacher residents.*

In order to support district mentor teachers, the TIER Clinical Mentorship team will create mentoring expectations, processes, and procedures that will promote ongoing and effective mentorship for resident teachers

**Outcome: 100% of mentor teachers will attend initial training on how to mentor new teachers during the Summer Institute**

During the summer institute, mentor teachers will receive training from the TIER Clinical Mentorship team on expectations, processes, and procedures that are feasible to implement within the typical workloads of the mentors' current position and are perceived to be an acceptable means in which to support prospective teachers. Mentor teachers will provide and receive feedback on mentorship progress at least six times annually from the Clinical Mentorship team, which consist of individuals experienced in adult learning and coaching strategies,

## CAL POLY TIER PROGRAM

including university supervisors, Cal Poly Clinical Practice Coordinator. During the school year, Mentor teachers will be relieved from their classroom teaching duties in order to attend these professional development and mentorship opportunities. Execution of these mentorship support processes will be evaluated through the development of a mentorship and coaching questionnaire to be developed by the TIER Clinical Mentorship Team and administered to mentor teachers and teacher residents (Ingersoll & Strong, 2011; Kraft et al., 2018; Lipton & Wellman, 2014).

*Objective 2.3 In collaboration with district partners, provide two years of research-based mentor and induction support for 100% of new teachers who complete the residency program.*

The TIER residency program not only supports the learning of teaching residents throughout the year-long clinical experience, but also extends to collaborating with the partnership to provide a two-year induction program. Currently induction programs in our partnerships are managed by county offices of education. We plan to enhance these programs for completers of the teaching residency through the establishment of a New Teacher Learning Community (NTLC).

**Outcome: 85% of residency completers will complete 2 year induction program including participation in New Teacher Learning Community (NTLC).**

New teachers are challenged by the difficult transition from a teacher preparation program into the first years of employed teaching (Johnson, 2004; Kardos & Johnson, 2007). The TIER program includes support for teacher residents through these first two years of employment. All TIER residents will be invited to participate in a New Teacher Learning Community (NTLC) during the first and second years of their employment with a partner district. These NTLCs are spaces for new teachers to engage in addressing common problems of practice, deepening their knowledge of advanced practices and content area knowledge (Achinstein & Aguirre, 2008; Glazerman et al., 2008; Haynes 2014). A community of practice is

## CAL POLY TIER PROGRAM

a group of individuals who mutually engage in social activities for shared and sustained collective learning (Wenger, 1998). In addition to self-efficacy surveys, the impact of the NTLC will be measured by the following target outcomes:

- 3-year retention rate of 85% or higher for residency graduates in partner LEAs.
- K-12 emergent bilinguals and students with disabilities in classrooms with TIER residency graduates receive high-quality instruction resulting in improved academic outcomes compared to other new teachers in the same LEA.

### *(iii) Exceptional approach for meeting statutory purposes and requirements.*

To address our goals and outcomes, the TIER program builds upon both the existing infrastructure and long-standing partnerships with Santa Maria-Bonita School District (SMBSD) and Santa Maria Joint Union High School District (SMJUHSD) through a current Teacher Quality Partnership (TQP) (2014-2019) grant entitled “El Camino Education Alliance.” Formal partnership with Lucia Mar has been historically supported by public and private foundation funds (i.e., California State University-Next Generation of Educators Initiative (CSU-NGEI) Teacher Preparation Partnership at approximately \$600,000 from 2016 to 2018). As a result, our team members have established mutual trust and collegiality across partnership districts and schools and have instituted a robust professional learning network that includes our current teacher education candidates, mentor teachers, and university supervisors. Our team also has well-developed tools (e.g., observation and assessment protocols [see Appendix H3]), to support clinical practice prioritized skills, and online video modules (e.g., Using Assessment in Instruction; Using Questioning and Discussion Techniques; Supporting Emergent Bilinguals [see Appendix H6]) that are tailored to support hybrid learning for our teacher residents.

## CAL POLY TIER PROGRAM

Programmatically, Cal Poly School of Education earned the highest pass rate across the board during California's Commission on Teacher Credentialing site visit (2019). The School of Education has met and excelled in all five common standards (i.e., institutional infrastructure, candidate recruitment and support, course of study, fieldwork, and clinical practice, continuous improvement, and program impact) and have met all 61 program standards by the California Committee on Accreditation across six program areas, inclusive of bilingual authorization program, multiple and single subjects program and education specialist program in mild/moderate SPED [See Appendix H7 for Cal Poly School of Education of Report of Findings from Accreditation Visit]. Additionally, in our most recent formative assessment of our clinical practice program from 2019-2020 school year, our school is on track and succeeding in meeting programmatic goals in the area of continuous improvement, coaching and support, observations of high leverage practices [See Appendix H8 for Cal Poly School of Education (SOE) Clinical Practice Effectiveness Reports and Appendix H9 for SOE's Comprehensive Assessment Plan]. Lastly, our current teacher candidates' EdTPA resources are higher than both California and the national average across 7 metrics [See Appendix H10 for 2018-2019 EdTPA outcomes]. Together, these commendations signify the quality programming that currently exists for our team in expanding our programming to meet the needs of our community partners.

The TIER faculty are experts in the clinical model of teacher education, bilingual education, and SPED education (Cheuk et al., 2018; Cheuk, 2020; Crutchfield & Wood, 2018; Hardigree & Ronan, 2019; Guise et al, 2020; Santos et al., 2018; Wood et al., 2018; Wood et al., 2015). Both Principal Investigator (PI) Ronan and co-PI Wood have been principal investigators (PIs) and co-PIs on federally- and state-funded grants (i.e., Teacher Quality Partnership (TQP) grant; CSU-NGEI grant). Co-PI Cheuk currently serves on a state-level work group revising

## CAL POLY TIER PROGRAM

bilingual authorization standards. Collectively, the leadership team of tenured Associate Professors Ronan and Wood, and Assistant Professor Cheuk has over 50 years of teaching and research in K-12 settings with diverse student populations (i.e., emergent bilinguals and students with disabilities). Our expertise paired with our pre-existing partnership with schools and districts, model of clinical practice, and support tools that include both face-to-face and online-modes with bilingual and SPED teacher residents situate TIER well for achieving all of the purposes and requirements of the TOP residency program.

***(iv) TIER partnership activities are strategically aligned with California's educational reform activities that improve teaching and learning and support rigorous academic standards for students.***

The current educational priorities for emergent bilinguals and students with disabilities focus on full and meaningful access and participation in twenty-first century education from early childhood through grade twelve in meeting and exceeding rigorous California Common Core standards for achievement in both academic and socio-emotional competencies [and proficiencies in multiple language for bilingual and multilingual learners] (CDE, 2017; CDE, 2020). Historically, students from culturally and linguistically diverse racial and ethnic backgrounds and students with disabilities have underperformed their White peers without disabilities (Petek, 2019). The TIER program has been intentionally designed through the use of EBPs and CRTs to support local high-need districts and schools in providing equitable educational opportunities for students who are most historically underserved (i.e., students with disabilities and emergent bilinguals). Our core practices, centered in EBPs and CRTs, in conjunction with building a robust pipeline of SPED and bilingual educators who remain in the teaching profession is well aligned to the California's *English Learner Roadmap* (2017). These principles include: 1. Assets-oriented and needs-responses classrooms, 2. High intellectual quality of instruction and meaning access to Common Core standards-based instruction, 3. Responsive

## CAL POLY TIER PROGRAM

systems conditions that support teacher effectiveness, and 4. Alignment and articulation within and across K-12 systems. In the area of SPED, our activities are well-aligned with California's Special Education Local Plan Areas (SELPA) and State Standards. Our SPED faculty leadership has been collaborating with both San Luis Obispo County and Santa Barbara County SELPAs to ensure that our programs are aligned with local plans so that all students with disabilities are "guaranteed equal opportunity to become contributing members of society and ... [include] high quality educational programs and services for special needs students and training for parents and educators" (CDE, 2020). Collectively, Cal Poly's TIER program goals, objectives, activities, and outcomes strongly aligned with California's educational reform activities and priorities for emergent bilinguals and students with disabilities.

### **B. Adequacy of Resources**

#### ***(i) Adequacy of support.***

The support for this project exceeds adequacy, drawing on state-of-the-art facilities and resources at Cal Poly, a public university located in San Luis Obispo, California, one of 23 campuses in the California State University (CSU) system, the largest four-year public university system in the United States. First, the layout of Cal Poly facilities encourages collaboration and Cal Poly's motto of "learn by doing," supporting hands-on, interactive learning. Equipment at Cal Poly includes fully-equipped classrooms outfitted with cutting-edge technology, and a new School of Education technology lab that allows prospective teacher residents to gain experience with technology integration. Program team members and teacher residents have access to Swivel cameras and EdThena and GoReact software licenses for capturing video of classroom instruction and allow for critical reflection, mentoring, and feedback. Zoom video conferencing available to all program participants will enable communication, collaboration, and professional development to remote high-need partner districts.

## CAL POLY TIER PROGRAM

The School of Education (SOE), housed within the College of Science and Math at Cal Poly houses the three credential programs (elementary, secondary, special education) and the bilingual authorization included in this proposal. All three credential programs follow a cohort model with prospective teachers simultaneously completing their credential within three-quarters of coursework and a yearlong clinical experience, working collaboratively with a mentor teacher and university supervisor throughout the year. All of our credentialing programs are fully accredited through the Commission on Teacher Credentialing (CTC), meet all applicable State certification and licensure requirements, and adhere to the qualifications described in section 612(a)(14)(C) of the Individuals with Disabilities Education Act (IDEA).

Additional facilities support include Cal Poly's Office of Research and Sponsored Programs. This office provides post-award support for faculty to manage external grants. Supports for faculty include accounting (e.g., account set-up, partnership agreements) and communications with the funder (e.g., submission of reports, requests for budget revisions). In addition, the School of Education has its own post-award staff member who performs a number of grant-management tasks including: maintaining the grant's budget, placing vendor orders, and arranging faculty and clinical instructors' grant appointments.

The lead faculty involved in this proposal have a long history of collaboration. Both Ronan and Wood serve on the SOE Coordinating Council as coordinators of their respective Bilingual Education and SPED programs. Ronan also serves as a member in the leadership team in the Liberal Studies department within the College of Science and Mathematics (an undergraduate feeder program into the teacher credentialing program at the School of Education). As coordinators Ronan and Wood serve as subject matter advisors (in Bilingual

CAL POLY TIER PROGRAM

Education and SPED), and are responsible for ensuring all teacher residents who are part of the TIER program are highly effective teachers at their school sites.

The proposed TIER program builds on an extensive history of collaboration and partnerships with local county offices of education and districts in the California Central Coast in the preparation and support of K-12 teachers. This includes two successful TQP programs (2014 and 2018), CSU-New Generation of Educators Initiative grant (2016), and a U.S. Department of Education Institute of Education Sciences (IES) grant (2020)).

The TIER program will build upon resources that have already been established from previous partnership efforts with local high-need districts. This includes approximately \$200,000 of in-kind faculty and staff support for the preparation of K-12 teachers from Cal Poly and \$1.1 million from our partner districts (see Table 4 below and Budget Narrative).

**Table 4: Partner District Resource Contribution**

<b>In-Kind and Cost Share Budget</b>	<b>Amount</b>
Mentor Teacher Salaries-SMBSD & SMJUHSD (35% assign)	\$821,296
Director of Teaching & Learning-SMBSD (10% assign)	\$24,989
TOSA-Teacher Development-SMBSD (50% assign)	\$256,495
Assistant Superintendent of HR-SMBSD (10% assign)	\$24,989
Professional Development facilities, supplies & other resources	\$50,000
Mentor Teacher stipends & additional support	\$13,200
Total	\$1,190,969

Cal Poly School of Education alumni make up a large proportion of our network of mentor teachers and university supervisors, many serving as faculty, staff, and administrators in our partnership districts. During year one of planning, the Leadership Team along with the Advisory Committee will be working together to ensure the institutionalization and sustainability

## CAL POLY TIER PROGRAM

of project activities. Cal Poly and the partner districts are committed to supporting a successful implementation of the TIER program leading efforts in preparing bilingual and SPED teachers in the Central Coast region, supporting new teacher induction program, and provide ongoing professional learning opportunities for our local educators. As evidenced in Appendix E, we have a total of thirteen letters of support that include all three letters of commitment and Memoranda of Understandings (MOUs) from [REDACTED] districts (SMBSD, SMJUHSD, and LMUSD), four institutional letters of support from within Cal Poly (School of Education, College of Science and Mathematics, College of Liberal Arts, and Office of the Provost), as well as six external letters of support that include both County Offices of Education, the Center for the Advancement of Reading and Writing, the County Special Education Local Plan Office (SELPA), the Office of the Chancellor at California State University, and the California Department of Education (CDE).

### ***(ii) Adequacy of budget.***

A detailed budget narrative has been developed that outlines project funding and cost share with clearly defined categories, activities, and timeliness (See Budget Narrative). Cal Poly's Grants Development Office has completed a thorough internal review of the budget including cost share and line items and has found the budget to be adequate and reasonable to support the proposed project. Additionally the budget will be reviewed quarterly by the leadership team and district partners to identify progress in spending and budget revisions needed.

### ***(iii) Costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.***

The objectives, design and significance of the TIER program were developed to meet the identified partner districts and school needs while maintaining reasonable costs. The budget

## CAL POLY TIER PROGRAM

narrative details the costs requested for this project by category including those items that are planned contributions from district partners and on campus in-kind support. The TIER budget allocates the majority of the federal budget request for living wage stipends to teacher residents during clinical practice (Objective 1.3). These stipends will provide fiscal support that paraeducators and other undergraduates from Cal Poly need in order to offset living costs while participating in an 18 month residency and year-long clinical placement. Further support for the goals and objectives of the project is evidenced in the allocations for stipends to support mentor teachers working directly with teacher residents in high-need schools. Additionally a significant portion of cost share from district Local Control Accountability Plan (LCAP) funds have been included in our budget to contribute to the delivery of quality professional development for mentor teachers and residents in the program (Objective 2.1). For additional details on budget, see Budget Narrative, Table 4 (Partner district resource contribution) and letters of support from district partners (Appendix E).

### ***(iv) Resources to operate the project beyond the length of the grant.***

The long-term success of the project and continuing operations beyond the period of federal funding will be built into our planning year (i.e., Leadership Team and Advisory Committee) so that the TIER program activities are sustained beyond the grant period. We have developed a budget with sustainability in mind, including a multi-year scale up of program services that is co-supported by district partners and Cal Poly funding. Partners across the eligible partnership will share the costs for program personnel, mentor teacher salaries and professional development for this TIER program. This co-funding of mentor teacher salaries, professional development events and teacher resident stipends represents a demonstrated commitment of both Cal Poly and our partner districts. Additional evidence of broad support for

## CAL POLY TIER PROGRAM

this program can be seen in our cost share distribution (see Budget Narrative and letters of support [Appendix E] for more details). In kind support from the College of Science and Mathematics in the form of faculty and staff assigned time is evidence of college level support for this program. In addition to the leadership team, districts and the university will contribute assigned time for administrative directors and superintendents in Year 1 to ensure leadership can support the implementation of a sustainable [REDACTED] residency in Years 2-5.

Plans to ensure sustainability of the TIER program beyond the scope of funding will begin in Year 1. First, our program will capitalize on structures already in place at the district level and university to provide professional development to mentor teachers and coaching and support for teacher residents. We will also work with Cal Poly's Development and Advancement Office, which has dedicated staff who will work with programs to secure external funding sources as well as District Local Control and Accountability Plans (LCAP). Additionally, our project invests in people across the five years. Investing in people (e.g., university supervisors, mentor teachers, partner district administrators, university faculty) enables us to develop skills that surpass the length of the project and continue throughout the individual's involvement in teacher preparation. By building capacity for mentor teachers to provide quality coaching (for example), when funding is no longer available, mentor teachers will still be able to implement the research-based mentoring practices they developed. Finally, the Advisory Committee and partner district meetings will have a standing agenda item to discuss issues of sustainability. In addition, collaboration with other TOP awardees through the TOP-Technical Assistance Center can also help to generate ideas regarding building capacity and sustainability.

### **C. Management Plan**

***(i) Management plan with defined responsibilities, timelines, and milestones.***

## CAL POLY TIER PROGRAM

We have designed the Cal Poly TIER management plan so that the structures and processes necessary to manage and achieve our project objectives on time and within budget are both achievable and sustainable after the grant period (see the organization chart for project management in Appendix H5). Dr. Briana Ronan, Associate Professor of Bilingual Education at Cal Poly, will serve as Project Investigator and chair of the leadership team. Dr. Ronan will be responsible to the U.S. Department of Education for the achievement of project goals and objectives delineated in the TIER Work Plan (found in Appendix H4) and the prudent use of resources to achieve project ends. Other members of the leadership team will include two Co-Principal Investigators Dr. Leah Wood, Associate Professor of Special Education and Dr. Tina Cheuk, Assistant Professor of Science Education. In addition, Ms. Sarah Hegg will serve as Program Manager and Dr. Kevin Taylor, Cal Poly's School of Education Director will represent and advocate for the TIER program at the Cal Poly and CSU administration level, helping to remove any necessary institutional barriers. The leadership team also includes a representative from our three high-need partner districts. In addition to serving on the leadership team each PI and co-PI will serve as chair of the other program teams. Dr. Ronan will serve as chair of the Recruitment and Induction teams. Dr. Cheuk will serve as chair of the Curriculum & PD team. Dr. Wood will serve as chair of the Clinical Mentorship team. Descriptions of the composition and membership of the other teams are detailed in the TIER Organization Chart (Appendix H5). Specific details for all TIER activities, responsibilities, timelines, milestones, and deliverable outcomes are found in the Table 5 below as well as in the Work Plan in Appendix H4.

CAL POLY TIER PROGRAM

**Table 5. Project Management of Activities, Responsible Parties, and Deliverables**

Timeline	Program Activities	Responsible Parties	Program Deliverables
<p><b>Year 1</b> Aug. - Dec. 2020</p>	<ol style="list-style-type: none"> <li>1. Form Leadership Team, Curriculum and Professional Development Team, Clinical Mentorship Team, and Recruitment Team</li> <li>2. Leadership team meets biweekly to identify overarching processes and key objectives and timelines for all other groups</li> <li>3. Curriculum/PD Team, Clinical Mentorship Team, and Recruitment Team meet monthly to engage in respective work related to program design and recruitment efforts</li> </ol>	<ol style="list-style-type: none"> <li>1. PIs &amp; District Leaders</li> <li>2. Leadership Team</li> <li>3. Curriculum/PD Team; Clinical Mentorship Team; Recruitment Team</li> </ol>	<ul style="list-style-type: none"> <li>● <b>Leadership Team:</b> Systems and processes that facilitate and sustain collaboration within and across teams and the partnerships; collaborate with WestEd to develop residency program evaluation plan</li> <li>● <b>Curriculum Team/PD Team:</b> Curricular framework for residency program that infuses EBPs and CRT in existing coursework.</li> <li>● <b>Clinical Mentorship Team:</b> Clinical rotations and create cross-walk documents for EBPs and CRT that align with existing prioritized skills and observation tools for clinical practice</li> <li>● <b>Recruitment Team:</b> Recruitment and marketing materials for undergraduate students, bilingual and special education paras, and instructional assistants in partnering LEAs</li> </ul>
<p><b>Year 1</b> Jan. - April 2021</p>	<ol style="list-style-type: none"> <li>1. All teams meet biweekly to engage in respective work related to program design and recruitment efforts</li> <li>2. Recruitment of 1st Year cohort of teacher residents and mentor teachers</li> <li>3. Convene 1st meeting of Advisory Committee</li> </ol>	<ol style="list-style-type: none"> <li>1. All Teams</li> <li>2. Recruitment Team &amp; Clinical Mentorship Team</li> <li>3. Leadership Team</li> </ol>	<ul style="list-style-type: none"> <li>● <b>Recruitment Team:</b> Application materials and interview protocol for teacher residents and mentor teachers</li> <li>● <b>Clinical Mentorship Team:</b> Creation of policies, systems and procedures for clinical experience and selection criteria for teacher residents and mentor applicants</li> <li>● <b>Leadership Team:</b> Meeting agenda, minutes and presentation for Advisory Committee</li> </ul>
<p><b>Year 1</b> May - July 2021</p>	<ol style="list-style-type: none"> <li>1. All teams meet biweekly to engage in respective work related to program design and recruitment efforts</li> </ol>	<ol style="list-style-type: none"> <li>1. All Teams</li> </ol>	<ul style="list-style-type: none"> <li>● <b>Clinical Mentorship Team:</b> Table matching teacher residents with mentor teachers</li> <li>● <b>Clinical Mentorship Team:</b> Implement initial trainings for mentor teachers</li> </ul>

CAL POLY TIER PROGRAM

	<ol style="list-style-type: none"> <li>2. Selection of 1st year cohort of teacher residents and mentor teachers</li> <li>3. Convene 1st annual Summer Institute/residency kick-off</li> <li>4. Plan induction supports for residency teachers</li> </ol>	<ol style="list-style-type: none"> <li>2. Clinical Mentorship Team</li> <li>3. Curriculum/PD Team</li> <li>4. Induction Team</li> </ol>	<ul style="list-style-type: none"> <li>● <b>Curriculum/PD Team:</b> Protocols for virtual and in-person feedback; purchasing of GoReact or Edthena licenses</li> <li>● <b>Curriculum/PD Team:</b> Summer Institute/Residency kick-off programming and advertising to partnering schools</li> <li>● <b>Induction Team:</b> Design New Teacher Learning Communities model to support new teachers in partnering districts</li> </ul>
<p><b>Years 2-5</b> Aug.- July</p>	<ol style="list-style-type: none"> <li>1. Leadership team meets monthly to assess processes, key objectives and milestones</li> <li>2. Convene annual Summer Institute/Residency kick-off with each cohort prior to starting residency</li> <li>3. Recruitment and selection of Year 3-5 cohorts</li> <li>4. Implement induction support Years 3-5</li> <li>5. Convene annual Advisory Committee meetings</li> </ol>	<ol style="list-style-type: none"> <li>1. Leadership Team</li> <li>2. Curriculum/PD Team</li> <li>3. Clinical Mentorship Team</li> <li>4. Induction Team</li> <li>5. Leadership Team</li> </ol>	<ul style="list-style-type: none"> <li>● <b>Leadership Team:</b> Revision to systems and processes based as needed based on data-based decision-making</li> <li>● <b>Curriculum/PD team:</b> Plan and deliver quarterly PD in hybrid formats</li> <li>● <b>Clinical/Mentorship team:</b> Establishment of clinical placement cohorts for years 3-5; revision of policies, systems and procedures for clinical experience as needed based on continued improvement data</li> <li>● <b>Leadership team:</b> Meeting agenda, minutes and presentation for Advisory Committee</li> <li>● <b>Induction team:</b> Establishment of New Teacher Learning Community with cohorts in years 3-5, and extending beyond life of grant</li> <li>● <b>Leadership team:</b> Plan for sustaining partnership beyond life of grant; creation of annual reports, including summary of partnership impact</li> </ul>

## CAL POLY TIER PROGRAM

### *(ii) Commitment of partners*

The primary partners have provided in kind resources to ensure implementation, success, and sustainability of the Cal Poly TIER program. This included project cost share from district partners in the form of administrative time, mentor teacher time, and professional development funds. Cal Poly School of Education will also provide cost share in the form of faculty and staff in kind support and assignment. In addition, [REDACTED] from Cal Poly College of Science and Mathematics states in his letter of support (see Appendix E5) that Cal Poly is able to secure the cost share required up to \$1,000,000 annually beginning Year 1 of the grant. Resources provided by partners demonstrate needed buy-in and commitment to the five-year project. Providing additional resources during difficult financial times may be challenging. However, our TIER partnership recognizes that investing in teacher residencies is a long-term, cost-saving measure. As the NCATE Blue Ribbon Panel stated, “Estimates of savings to school districts of reducing teacher turnover and staff development costs suggest the overall cost effectiveness of this initial investment” (National Council for the Accreditation of Teacher Education 2010). Each partner’s financial commitment to the program is detailed in the budget narrative (See Budget Narrative) and in their letters of support (See Appendix E).

Our management plan will be implemented by an appropriate organizational structure that includes the necessary partners (See Organizational Chart in Appendix H5). The TIER program will have an Advisory Committee that serves to provide recommendations and input on key activities. The Advisory Committee will meet on an annual basis and will consist of membership from each district partner in the eligible partnership, district administration from the additional QOZ that overlaps with LMUSD, faculty from credential and masters programs within the school of education and the Dean of the college of science and mathematics. In addition to

## CAL POLY TIER PROGRAM

letters of support from partner districts, the TIER program has secured support and collaboration from the following entities: the CSU's Center for Advancement of Reading and Writing, California State University Chancellor's Office, Cal Poly College of Science and Math, Cal Poly College of Liberal Arts, San Luis Obispo County of Education, Santa Barbara County Office of Education, and San Luis Obispo County Special Education Local Plan Area (SELPA), California Department of Education.

### ***D. Project Evaluation***

WestEd will serve as partner and external evaluator for the TIER Program. Tapping into the expertise of evaluating other TOP grant projects, and specifically evaluations of teacher residencies, WestEd will implement both a study of program implementation and outcomes to evaluate the TIER. WestEd will collect and analyze quantitative data on Government Performance & Results Act (GPRA), Higher Education Act (HEA), and the proposed project goals, objectives and outcomes; and for a Quasi-Experimental Design (QED) assessing whether TIER Program results in improved student outcomes. WestEd will collect and analyze qualitative data to explain quantitative findings and maintain all data in a longitudinal database to assess progress and allow for longitudinal comparisons.

#### ***(i) The extent to which the methods of evaluation will provide valid and reliable performance data on relevant outcomes.***

WestEd will collect, analyze, and report on valid and reliable performance data on relevant outcomes. In addition to reporting on relevant GPRA, HEA, and project-based measures, the evaluation will include a study of program implementation and built-in support for continuous improvement to help ensure that implementation efforts are informed by data. Table 6 presents an aligned plan that includes the TIER goals, evaluation questions, and how the evaluation will collect valid and reliable performance data to report on relevant outcomes.

**Table 6. Project Goals, Evaluation Questions and Data Sources**

<b>TIER Project Goals, Evaluation Questions and Data Sources</b>	
<p>Goal 1: Effectively recruit and train 44 new teachers to obtain teaching credentials and Master’s degree in SPED (Education Specialist Mild/Moderate credentials) and bilingual education (multiple or single subjects credentials + Spanish authorization for bilingual educators) to teach K-12 students with disabilities and/or emergent bilinguals.</p>	
Evaluation Questions	Data Sources
<p><b>Implementation EQ1: How is the TIER...</b>                      1a) recruiting teacher residents?                      1b) preparing residents to teach students with disabilities and emergent bilinguals?                      1c) preparing residents to implement EBPs and CRT?                      1d) supporting residents’ clinical practice?</p>	<ul style="list-style-type: none"> <li>● Resident and mentor surveys and focus groups</li> <li>● Interviews with TIER Leadership and partner LEAs, school-site liaisons, principals, clinical practice supervisors, and Cal Poly faculty</li> <li>● Program data on total number applied, number accepted, number enrolled, including demographic data to identify prospective teachers from underrepresented groups</li> <li>● Data on EdTPA performance, Course assignments, and classroom observation data</li> <li>● Leadership and district partner interviews</li> <li>● Document review: Recruitment materials, lesson plan study, training materials and resources</li> </ul>
<p><b>Impact EQ2: To what extent is the TIER...</b>                      2a) impacting resident self-efficacy to teach students with disabilities and emergent bilinguals?                      2b) supporting residents to complete their credentials?                      2c) impacting academic outcomes of students with disabilities and emergent bilinguals taught by resident graduates compared to other new teachers in the same LEA?</p>	<ul style="list-style-type: none"> <li>● Pre/post resident self-efficacy surveys</li> <li>● EBP and CRT assessments</li> <li>● Preparedness surveys</li> <li>● Resident demographic and State certification/licensure data</li> <li>● Standardized assessment data for students in tested grades</li> <li>● Assessment data on learning outcomes for K-12 emergent bilinguals and students with disabilities</li> </ul>

CAL POLY TIER PROGRAM

<p><b>Measurable Outcomes</b></p> <ol style="list-style-type: none"> <li>1. Recruit 44 residents during grant period: a) 27 in Bilingual track; b) 9 in SPED; c) 8 in SPED+Bilingual</li> <li>2. Minimum of 12 clinical practice observations per resident annually</li> <li>3. At least 85% of residents demonstrate implementation of EBPs</li> <li>4. At least 85% of residents demonstrate implementation of CRT</li> <li>5. At least 75% of residents demonstrate improved self-efficacy to teach students with disabilities and/or emergent bilinguals</li> <li>6. At least 85% of residents complete residency with a credential and Master’s degree in their respective disciplines as well as necessary credential certifications, including EdTPA</li> <li>7. At least 61% of residents complete a multiple/single subject credential + bilingual authorization</li> <li>8. At least 20% of residents complete SPED mild/moderate credential</li> <li>9. At least 18% of residents complete both SPED credential + bilingual authorization</li> <li>10. K-12 emergent bilinguals and students with disabilities in classrooms with teachers who are graduates of the TIER program will receive high-quality instruction resulting in improved academic outcomes compared to other new teachers in the same LEA</li> </ol>	
<p>Goal 2: Create sustainable partnerships with local districts in order to promote continuous improvement and increase capacity of both the teaching residents and mentor teachers.</p>	
<p>Evaluation Questions</p>	<p>Data Sources</p>
<p><b>Implementation EQ3: How is the TIER...</b>            3a) collaborating with partner LEAs to develop sustainable residencies?            3b) recruiting and selecting mentor teachers?            3c) using data to refine the residency model?            3d) supporting new teachers?</p>	<ul style="list-style-type: none"> <li>● Mentor teacher and residency graduate surveys and focus groups</li> <li>● Leadership and district partner interviews</li> <li>● Induction participation data</li> <li>● Document review: Mentor teacher criteria and recruitment materials, mentor training and support materials, lesson plans, meeting and training agendas and materials, NTLC and other induction materials</li> </ul>
<p><b>Impact EQ4: To what extent is the TIER...</b>            4a) impacting mentor self-efficacy to teach students with disabilities and emergent bilinguals?            4b) impacting teacher retention rates in partner LEAs?</p>	<ul style="list-style-type: none"> <li>● Pre/post mentor self-efficacy surveys</li> <li>● Demographic data on graduates</li> <li>● Program and district HR data on hiring of completers, subjects taught, placement in high-need areas and schools</li> <li>● Grant expense budget reports</li> </ul>

**Measurable Outcomes**

1. At least 75% of mentors demonstrate improved self-efficacy to teach students with disabilities and/or emergent bilinguals
2. 1-year retention rate of 85% or higher for residency graduates in partner LEAs
3. 85% of graduates complete 2-year induction program
4. 3-year retention rate of 85% or higher for residency graduates in partner LEAs
5. Sustained collaboration with partner LEAs and replication to new partners

**Project Implementation.** WestEd, in collaboration with Cal Poly, will collect formative data on project implementation, including the collaboration with LEA partners, mentor teacher recruitment and training, resident recruitment and preparation, and induction support. A clear understanding of the TIER Program will enable WestEd to suggest ways in which outcomes may be related to specific project components, highlighting which components may be most critical, for whom, and under which conditions. Throughout the project period, WestEd will attend to the following: (1) grounding the evaluation in the program’s well-articulated logic model; (2) reviewing project documents and meeting often with leadership to ensure an up-to-date and complete picture of the relevant features of the residency; and (3) assessing the extent to which the project components are being implemented through surveys and interviews with relevant stakeholders, including residents, mentor teachers, program graduates, school-site liaisons, principals, clinical practice supervisors, Cal Poly faculty, and residency leadership at the university and districts, using protocols with open- and closed-ended questions.

Continuous Improvement. The formative evaluation will include the use of built-in methods supporting continuous improvement to ensure that implementation efforts are informed by data that help project staff make midcourse corrections as needed. We will draw on an improvement science approach (Bryk et al., 2015), which WestEd has been supporting within many teacher preparation programs. The theory underpinning this approach is that substantial, sustained improvement is most likely to result from sustained inquiry into the way a program produces its

## CAL POLY TIER PROGRAM

current outcomes and “testing” of changes that could lead to better outcomes. To establish and maintain effective feedback loops, WestEd will work with project staff to create a formal reporting cycle as well as ongoing informal collaboration and learning opportunities. All reporting of data and findings from the evaluation will be designed to help project staff use the information to reflect on current performance and assess high leverage opportunities on which to target ongoing improvement efforts.

*(ii) The extent to which the methods of evaluation are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project.*

The comprehensive evaluation approach is aligned to the two overarching goals of Cal Poly’s TIER Program and will utilize qualitative and quantitative data from a variety of sources to strengthen the validity of the results. For the duration of the study, WestEd will provide annual summaries of the quantitative teacher and student outcome measures, including the GPRA and HEA performance measures. WestEd will report progress on measures to U.S. Department of Education and program stakeholders through Annual Performance Reports (APRs) and annual evaluation reports. The performance data, including GPRA and HEA measures, are organized and described below according to the goals of the TIER.

**TIER Goal 1: Effectively recruit and train 44 new teachers to obtain teaching credentials and Master’s degree in SPED (Education Specialist Mild/Moderate credentials) and bilingual education (multiple or single subjects credentials + Spanish authorization for bilingual educators) to teach K-12 students with disabilities and/or emergent bilinguals.**

**Evaluation question 1 (implementation):** How and to what extent is TIER... 1a) recruiting teacher residents? 1b) preparing residents to teach students with disabilities and emergent bilinguals? 1c) preparing residents to implement EBPs and CRT? 1d) supporting residents’ clinical practice?

## CAL POLY TIER PROGRAM

To track implementation for goal 1, WestEd will conduct focus groups and interviews, administer surveys, and review relevant program documents and extant program data. To understand residency program development, including collaboration among partners, and resident and mentor teacher recruitment, training, and support, WestEd will interview TIER leadership and partner LEAs, school-site liaisons, principals, clinical practice supervisors, and Cal Poly faculty. WestEd will assess project measures on recruitment targets; selection rates (total number applied, number accepted, number enrolled); prospective teachers from underrepresented groups; prospective teachers' declared subject matter preparation area; prospective teachers' motivations for participating in the residency and teaching as a career; and attitudes about teaching in high-need areas. To assess participant experiences in the program, WestEd will conduct focus groups with and administer surveys to residents, mentor teachers, and, eventually, program graduates. Ongoing review of documents will be a necessary piece of the study of program development and implementation, including a review of recruitment materials, lesson plans, course assignments, and training materials and resources. To assess how residents are supported during their clinical practice, WestEd will collect and analyze data on course assignments and classroom observation data collected by their mentor teachers and clinical practice supervisors.

**Evaluation question 2 (impact):** To what extent is TIER... 2a) impacting resident self-efficacy to teach students with disabilities and emergent bilinguals? 2b) supporting residents to complete their credentials? 2c) impacting academic outcomes of students with disabilities and emergent bilinguals taught by resident graduates compared to other new teachers in the same LEA?

## CAL POLY TIER PROGRAM

To assess impact for goal 1, WestEd will use a variety of extant program data and self-reported surveys. WestEd will administer pre/post resident self-efficacy surveys and an annual preparedness survey to assess efficacy to teach K-12 emergent bilinguals and students with disabilities and feelings of preparedness to teach in a variety of contexts, assess students, and use technology effectively (addressing HEA measure 10). To assess their knowledge and ability to implement EBP and CRT, WestEd will rely on data from program-developed assessments of TIER residents.

To assess the impact of TIER on student learning, WestEd will calculate the learning growth of students taught by program completers using a QED in the final year of the evaluation (addressing GPRA Performance Measure 6: Student Learning). WestEd will work with the individual school districts to obtain de-identified, student-level assessment data for students in classrooms taught by TIER graduates and those taught by other new teachers in the same LEA. Waiting until the final year of the evaluation will allow WestEd to pool data from all available appropriate cohorts to increase the sample size. Student growth will be measured by an aggregate score based on a combination of end-of-year state assessments and common benchmarks assessments.

To assess passing of initial and necessary certification/licensure assessments, researchers will obtain residents' scores on the state licensure exams, including EdTPA, and program data from Cal Poly on degrees and specific teaching certifications (including authorized subject matter and grade spans) obtained by residents and dates awarded, to assess whether they were obtained within the measure-specified timeframe (addressing GPRA Performance Measure 1: Certification/Licensure). To assess achievement for prospective and new teachers as well as the improvement in the pass rates, WestEd will collect results from the EdTPA data on number of

## CAL POLY TIER PROGRAM

attempts by resident directly from the program and instructional observation data (addressing HEA measures 1 and 3).

**TIER Goal 2: Create sustainable partnerships with local districts in order to promote continuous improvement and increase capacity of both the teaching residents and mentor teachers.**

**Evaluation question 3 (implementation):** How is the TIER... 3a) collaborating with partner LEAs to develop sustainable residencies? 3b) recruiting and selecting mentor teachers? 3c) using data to refine the residency model? 3d) supporting new teachers?

To track implementation for goal 2, WestEd will conduct focus groups and interviews, administer surveys, and review relevant program documents and extant program data. WestEd will conduct focus groups and administer surveys to mentor teachers regarding their desire to participate as a mentor, the training and support they received to be an effective mentor, and review documents related to mentor teacher criteria and recruitment, mentor training and support, and lesson plans. Beginning in year 3, WestEd will follow-up with TIER graduates annually to see how the residency prepared them to teach students with disabilities and emergent bilinguals, and their use of EBPs and CRT in their daily instruction, in addition to their participation in the induction supports and New Teacher Learning Community. WestEd will also include items about mentor teacher selection, training and support during the interviews with TIER leadership and partner LEAs. To assess implementation of and participation in the induction supports and New Teacher Learning Community, WestEd will analyze participation data from the program and review relevant induction materials.

**Evaluation question 4 (impact):** To what extent is the TIER... 4a) impacting mentor self-efficacy to teach students with disabilities and emergent bilinguals? 4b) impacting teacher retention rates in partner LEAs?

## CAL POLY TIER PROGRAM

To assess impact for goal 2, WestEd will use surveys and extant program data on placement and retention. WestEd will administer pre/post mentor teacher self-efficacy surveys to assess efficacy to teach K-12 emergent bilinguals and students with disabilities. The evaluation team will compile data by district human resources (HR) departments on number of TIER graduates hired by the partner LEAs in addition to demographic data from the program, allowing an assessment of graduate placement in high-need areas and schools, subject areas taught, and grade levels by demographic categories including underrepresented status (addressing HEA measures 4-8). WestEd will assess measures of retention, specifically, the one-year and three-year retention rates for TIER graduates (addressing GPRA Performance Measure 4: One-Year Employment Retention and Performance, Measure 5: Three-Year Employment Retention, and HEA measure 2). Annually WestEd will collect data directly from partner districts' HR departments on program completers' teaching placements to determine the teachers retained in teaching from each cohort. Analyzing these data will yield findings for all retention measures. WestEd will also determine the cost per residency graduate in the final year of the project period by using grant expense budget reports to calculate the grant funds spent divided by the number of program completers (addressing GPRA Efficiency Measure: The Federal cost per program completer).

### Alphabetical List of Key Abbreviations

APR	Annual Performance Reports
BCLAD	Bilingual, Cross-Cultural, Language and Academic Development (also known as Bilingual Authorization)
Cal Poly	California Polytechnic State University
CBEST	California Basic Educational Skills Test
CDE	California Department of Education
CLD	Culturally and Linguistically Diverse
CRT	Culturally Relevant Teaching
CSET	California Subject Examinations for Teachers
CTC	Commission on Teacher Credentialing
DisCrit	Disability Critical Studies
EB	Emergent Bilingual
EdTPA	Education Teacher Performance Assessment
EL	English Learner
ELD	English Language Development
EBP	Evidence-Based Practices
GPRA	Government Performance and Results Act
HR	Human Resources
IDEA	Individuals With Disabilities Education Act
IEP	Individualized Educational Plan
IHE	Institution of Higher Education
LCAP	Local Control Accountability Plan
LEA	Local Educational Agency
LMUSD	Lucia Mar Unified School District
MSTEP	Multiple Subjects Teaching Education Program
MOU	Memorandum of Understanding
NMUTR	Newark Montclair Urban Teacher Residency
NCATE	National Council for Accreditation of Teacher Education
NGEI	Next Generation of Educators Initiative
NTLC	New Teacher Learning Community
ODI	Office of Diversity and Inclusion
PBIS	Positive Behavior Intervention and Supports
PD	Professional Development
PI	Principal Investigator
QOZ	Qualified Opportunity Zones
SABE	Spanish Authorization Bilingual Education
SELPA	Special Education Local Plan Areas
SMBSD	Santa Maria-Bonita School District
SMJUHSD	Santa Maria Joint Union High School District
SOE	School of Education
SPED	Special Education
SSTEP	Single Subject Teaching Education Program
TIER	Teaching For Inclusivity and Equity Residency
TIP	Teacher Induction Program
TOSA	Teachers on Special Assignment

## Bibliography

- Abramovitz, M., & D'Amico, D. (2011). *Triple payoff: The leap to yeacher program*. The City University of New York Murphy Institute.
- Achinstein, B., & Aguirre, J. (2008). Cultural match or culturally suspect: How new teachers of color negotiate sociocultural challenges in the classroom. *The Teachers College Record*, 110(8), 1505-1540.
- Alim, S. & Paris, D. (Eds.) (2017). *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world*. Teachers College Press.
- Annamma, S. A., Connor, D., Ferri, B. (2013). Dis/ability critical race studies (DisCrit): Theorizing at the intersections of race and dis/ability. *Race Ethnicity and Education*, 16(1), 1-31. <https://doi.org/10.1080/13613324.2012.730511>
- Annamma, S., & Morrison, D. (2018). DisCrit classroom ecology: Using praxis to dismantle dysfunctional education ecologies. *Teaching and Teacher Education*, 73, 70-80. <https://doi.org/10.1016/j.tate.2018.03.008>
- Annamma, S., Morrison, D., & Jackson, D. (2014). Disproportionality fills in the gaps: Connections between achievement, discipline and special education in the school-to-prison pipeline. *Berkeley Review of Education*, 5(1).
- Annamma, S. A. (2016). *DisCrit: Disability studies and critical race theory in education*. Teachers College Press.

- Aragon, S. (2016). Teacher Shortages: What We Know. Teacher Shortage Series. *Education Commission of the States*. <https://eric.ed.gov/?id=ED565893>.
- Artiles, A. J., Harry, B., Reschly, D. J., & Chinn, P. C. (2002). Over-identification of students of color in special education: A critical overview. *Multicultural Perspectives*, 4(1), 3-10.
- Ball, D. L., & Forzani, F. M. (2009). The work of teaching and the challenge for teacher education. *Journal of teacher education*, 60(5), 497-511.  
<https://doi.org/10.1177/0022487109348479>
- Billingsley, B. S., Bettini, E. A., & Williams, T. O. (2019). Teacher racial/ethnic diversity: Distribution of special and general educators of color across schools. *Remedial and Special Education*, 40(4), 199-212. <https://doi.org/10.1177/0741932517733047>
- Billingsley, B., Bettini, E., & Jones, N. D. (2019). Supporting special education teacher induction through high-leverage practices. *Remedial and Special Education*, 40(6), 365-379.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15.
- Bryk A.S., Gomez, L.M., Grunow, A., & LeMahieu, P. (2015). *Learning to improve: How America's schools can get better at getting better*. Cambridge, MA: Harvard University Press.

Bryk, A.S. (2020). Improvement in action: *Advancing quality in America's schools*. Harvard Education Press.

Bullough Jr, R. V. (2012). Mentoring and new teacher induction in the United States: A review and analysis of current practices. *Mentoring & tutoring: partnership in learning*, 20(1), 57-74. <https://doi.org/10.1080/13611267.2012.645600>

Butvilofsky, S. A., Escamilla, K., Gumina, D., & Silva Diaz, E. (2020). Beyond Monolingual Reading Assessments for Emerging Bilingual Learners: Expanding the Understanding of Biliteracy Assessment Through Writing. *Reading Research Quarterly*.

California Department of Education (2017). English learner roadmap. <https://www.cde.ca.gov/sp/el/rm/>

California Department of Education (2020). Special education enrollment by age and grade: Statewide report. [https://dq.cde.ca.gov/dataquest/SpecEd/SpecEd1c.asp?cChoice\\_SpecEd1c&cYear\\_2018-19&clevel\\_State&ReptCycle\\_December](https://dq.cde.ca.gov/dataquest/SpecEd/SpecEd1c.asp?cChoice_SpecEd1c&cYear_2018-19&clevel_State&ReptCycle_December)

California Department of Education (2020). Special education. <https://www.cde.ca.gov/sp/se/>

California State University (2020). Teacher and educator preparation. <https://www2.calstate.edu/impact-of-the-csu/teacher-education/Pages/default2.aspx>

Carver-Thomas, D. (2018). *Diversifying the teaching profession: How to recruit and retain teachers of color*. Palo Alto, CA: Learning Policy Institute. <https://learningpolicyinstitute.org/product/diversifying-teaching-profession-report>

- Carver-Thomas, D. & Darling-Hammond, L. (2017). *Addressing California's growing teacher shortage: 2017 update*. Palo Alto, CA: Learning Policy Institute.  
<https://learningpolicyinstitute.org/product/california-special-education-teacher-shortages-brief>
- Cheuk, T., Daro, P., & Daro, V. (2018). The language of mathematics and summative assessment: Interactions that matter for English learners. In *Language, Literacy, and Learning in the STEM Disciplines* (pp. 187-205). Routledge.
- Compton-Lilly, C. (2010). Breaking the Silence; Recognizing the Social and Cultural Resources Students Bring to the Classroom. *Education Review*. <https://doi.org/10.14507/er.v0.1278>
- Cook, B. G., & Cook, S. C. (2013). Unraveling evidence-based practices in special education. *The Journal of Special Education*, 47(2), 71-82.  
<https://doi.org/10.1177/0022466911420877>
- Crenshaw, K. W. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, 139-167.
- Crutchfield, S., & Wood, L. (2018). How to use self-management and cognitive behavioral interventions. In R. Simpson (Series Ed.), *Pro-Ed How To Series on Autism Spectrum Disorders* (book in series). Austin, TX: Pro-Ed.

Danielson Group. (2010). *Framework for teaching*. Retrieved from

<https://danielsongroup.org/framework>

Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education Policy*

*Analysis Archives*, 8, 1. <https://doi.org/10.14507/epaa.v8n1.2000>

Darling-Hammond, L. (2012). *Powerful teacher education: Lessons from exemplary programs*.

John Wiley & Sons.

Desimone, L. M., & Pak, K. (2017). Instructional coaching as high-quality professional

development. *Theory Into Practice*, 56(1), 3-12.

<https://doi.org/10.1080/00405841.2016.1241947>

Espinoza, D., Saunders, R., Kini, T., & Darling-Hammond, L. (2018). *Taking the long view:*

*State efforts to solve teacher shortages by strengthening the profession*. Palo Alto, CA:

Learning Policy Institute. <https://learningpolicyinstitute.org/product/long-view-report>

Forman, M. L., Stosich, E. L., & Bocala, C. (2017). *The Internal Coherence Framework:*

*Creating the Conditions for Continuous Improvement in Schools*. Harvard Education

Press.

Fortner, C. K., Kershaw, D. C., Bastian, K. C., & Lynn, H. H. (2015). Learning by doing: The characteristics, effectiveness, and persistence of teachers who were teaching assistants first. *Teachers College Record*, 117(11), 1-30.

Forzani, F. M. (2014). Understanding “core practices” and “practice-based” teacher education: Learning from the past. *Journal of Teacher Education*, 65(4), 357-368.  
<https://doi.org/10.1177/0022487114533800>

Gamoran Sherin, M., & Van Es, E. A. (2009). Effects of video club participation on teachers' professional vision. *Journal of Teacher Education*, 60(1), 20-37.  
<https://doi.org/10.1177/0022487108328155>

García, A. C. (2017). Building a sense of belonging through pedagogical partnership. *Teaching and Learning Together in Higher Education*, 1(22), 2-5.

García, O. (2017). Translanguaging in schools: Subiendo y bajando, bajando y subiendo as afterword. *Journal of Language, Identity & Education*, 16(4), 256-263.

García, O., & Kleifgen, J. A. (2010). *Educating emergent bilinguals: Policies, programs, and practices for English language learners*. Teachers College Press.

- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.
- Gaudin, C., & Chaliès, S. (2015). Video viewing in teacher education and professional development: A literature review. *Educational Research Review*, 16, 41-67.
- Glazerman, S., Isenberg, E., Dolfin, S., Bleeker, M., Johnson, A., Grider, M., & Jacobus, M. (2008). *Impacts of comprehensive teacher induction: Final results from a randomized controlled study* (NCEE 2010-4028). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Goe, L., Bell, C., & Little, O. (2008). Approaches to evaluating teacher effectiveness: A research synthesis. *National Comprehensive Center for Teacher Quality*.
- González, N., Moll, L., & Amanti, C. (Eds.). (2006). *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. Routledge.
- Goldring, R., Taie, S., & Riddles, M. (2014). Teacher Attrition and Mobility: Results from the 2012-13 Teacher Follow-Up Survey. First Look. NCES 2014-077. *National Center for Education Statistics*. [https://eric.ed.gov/?id\\_ED546773](https://eric.ed.gov/?id_ED546773)
- Grossman, P. (2018). *Teaching Core Practices in Teacher Education*. Harvard Education Press.

Guha, R., Hyler, M.E., and Darling-Hammond, L. (2016). *The Teacher Residency: An Innovative Model for Preparing Teachers*. Palo Alto, CA: Learning Policy Institute.

<https://learningpolicyinstitute.org/product/teacher-residency>

Guise, M., Hegg, S., Ronan, B., Flushman, T., & Grant, B. (2020). Supporting Emergent Bilingual Professional Development through Supervisor Feedback. *Journal of*

*Educational Supervision*, 3(1). <https://doi.org/10.31045/jes.3.1.5>

Guskey, T. R. (2002). Professional development and teacher change. *Teachers and teaching: Theory and practice*. 8(3-4), 381-391.

Hardigree, C. & Ronan, B. (2019). *Languaging and translanguaging for English language teaching*. In Goa, X. (Ed). *2<sup>nd</sup> Handbook of English Language Teaching*. Springer.

Haynes, M. (2014). On the path to equity: Improving the effectiveness of beginning teachers. Washington, DC: *Alliance for Excellent Education*.

Henry, G. T., Bastian, K. C., & Smith, A. A. (2012). Scholarships to recruit the ‘best and brightest’ into teaching: Who is recruited, where do they teach, how effective are they, and how long do they stay? *Educational Researcher*, 41(3), 83–92.

<https://doi.org/10.3102/0013189X12437202>

Individuals With Disabilities Education (IDEA) Act, 20 U.S.C. § 1400 (2004).

- Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research, 81*(2), 201-233. <https://doi.org/10.3102/0034654311403323>
- Johnson, S. M. (2004). *Finders and keepers: Helping new teachers survive and thrive in our schools*. Jossey-Bass.
- Kangas, S. E. (2017). ‘That’s where the rubber meets the road’: the intersection of special education and dual language education. *Teachers College Record, 119*(7), 1-36.
- Kardos, S. M., & Johnson, S. M. (2007). On their own and presumed expert: New teachers' experience with their colleagues. *Teachers College Record, 109*(9), 2083-2106.
- Kardos, S. M., & Johnson, S. M. (2010). New teachers’ experiences of mentoring: The good, the bad, and the inequity. *Journal of Educational Change, 11*(1), 23–44.  
<https://doi.org/10.1007/s10833-008-9096-4>
- Kraft, M.A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research, 88*(4), 547-588. <https://doi.org/10.3102/0034654318759268>
- Kratochwill, T. R., Hitchcock, J., Horner, R.H., Levin, J. R., Odom, S. L., Rindskopf, D. M., & Shadish, W.R. (2010). Single-case designs technical documentation. *What Works Clearinghouse*. <https://eric.ed.gov/?id=ED510743>

- Paris, D., & Alim, H. S. (Eds.). (2017). *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world*. Teachers College Press.
- Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2016). *Solving the teacher shortage: How to attract and retain excellent educators*. Palo Alto, CA: Learning Policy Institute. <https://learningpolicyinstitute.org/product/solving-teacher-shortage>
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465-491.
- Lambert, D. (2020, January 10). Amid shortages, schools settle for underprepared special education teachers. *EdSource*. <https://edsources.org/2020/amid-shortages-schools-settle-for-underprepared-special-education-teachers/621656>
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Lieberman, A. (Ed.). (1996). Practices that support teacher development: Transforming conceptions of professional learning. In M. W. McLaughlin & I. Oberman (Eds.), *Teaching learning: New policies, new practices* (pp. 185-201). Teachers College Press.
- Lipton, L., & Wellman, B. M. (2014). *Learning-focused supervision: Developing professional expertise in standards-driven systems*. MiraVia.

- Lucas, T., Villegas, A. M., & Freedson-Gonzalez, M. (2008). Linguistically responsive teacher education: Preparing classroom teachers to teach English language learners. *Journal of Teacher Education*, 59(4), 361-373. <https://doi.org/10.1080/00405841.2013.770327>
- Luczak, J., Horwath, B., Vaishnav, A., & Sanghani, P. (2016). *Ensuring high-quality teacher talent*. Education First.
- National Center for Education Statistics (2020). The condition of education: Students with disabilities. [https://nces.ed.gov/programs/coe/indicator\\_cgg.asp](https://nces.ed.gov/programs/coe/indicator_cgg.asp)
- National Center for Teacher Residencies. (2017). Part 3: Recommendations for state support for effective teacher residencies. <https://nctresidencies.org/recommendations-state-support-effective-teacher-residencies/> (accessed 6/11/20).
- National Clearinghouse on Autism Evidence and Practice (NCAEP) (2020). Evidence Based Practices. <https://autismpdc.fpg.unc.edu/evidence-based-practices>
- National Council for Accreditation of Teacher Education (2010). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*.
- Orosco, M. J. (2010). Sociocultural considerations when using rti with English language learners. *Theory Into Practice*, 49(4), 265-272.
- Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher*, 41(3), 93-97.

Petek, G. (2019). *Overview of special education in California*. Legislative Analyst's Office.

<https://lao.ca.gov/Publications/Report/4110>

Sam, A. M., Cox, A. W., Savage, M. N., Waters, V., & Odom, S. L. (2019). Disseminating information on evidence-based practices for children and Youth with Autism Spectrum Disorder: AFIRM. *Journal of Autism and Developmental Disorders*, 50, 1-10.

Santagata, R., & Guarino, J. (2011). Using video to teach future teachers to learn from teaching. *ZDM*, 43(1), 133-145.

Santos, M., Palacios, M. C., Cheuk, T., Greene, R., Mercado-Garcia, D., Zerkel, L., ... & Skarin, R. (2018). *Preparing English learners for college and career: Lessons from successful high schools*. Teachers College Press.

Seidel, T., Stürmer, K., Blomberg, G., Kobarg, M., & Schwindt, K. (2011). Teacher learning from analysis of videotaped classroom situations: Does it make a difference whether teachers observe their own teaching or that of others?. *Teaching and Teacher Education*, 27(2), 259-267. <https://doi.org/10.1016/j.tate.2010.08.009>

Sparks, D. (2002). *Designing powerful professional development for teachers and principals*.

National Staff Development Council. [https://eric.ed.gov/?id\\_ED470239](https://eric.ed.gov/?id_ED470239)

Strong, M. (2009). *Effective teacher induction and mentoring: Assessing the evidence*. Teachers College Press.

Teitel, L. (2020). *School-based instructional rounds: Improving teaching and learning across classrooms*. Harvard Education Press.

Travers, J.C., Tincani, M., & Krezmien, M. P. (2013). A multiyear national profile of racial disparity in autism identification. *The Journal of Special Education, 47*(1), 41-49.

Travers, J.C., Ayers, K., Simpson, R. L., & Crutchfield, S. (2016). Fad, pseudoscientific, and controversial interventions. In R. Lang, T. B. Hancock, N. N. Singh (Eds.), *Early intervention for young children with autism spectrum disorder* (pp. 257-293). Springer.

U.S. Department of Education. Teacher shortage areas.

<https://www2.ed.gov/about/offices/list/ope/pol/tsa.html> (accessed 6/11/20).

van Es, E. A., Cashen, M., Barnhart, T., & Auger, A. (2017). Learning to notice mathematics instruction: Using video to develop preservice teachers' vision of ambitious pedagogy. *Cognition and Instruction, 35*(3), 165-187.

<https://doi.org/10.1080/07370008.2017.1317125>

Van Scoy, I. J., (2012). NCATE's Blue Ribbon Panel Report and NAPDS: Working together. *School-University Partnerships, 5*(1) 7-12. [https://eric.ed.gov/?id\\_EJ974363](https://eric.ed.gov/?id_EJ974363)

- Walqui, A. (2006). Scaffolding instruction for English language learners: A conceptual framework. *International Journal of Bilingual Education and Bilingualism*, 9(2), 159-180.
- Walqui, A., & van Lier, L. (2010). *Scaffolding the Academic Success of Adolescent English Language Learners: A Pedagogy of Promise*. WestEd.
- Webb, R., Vulliamy, G., Sarja, A., Hämäläinen, S., & Poikonen, P. L. (2009). Professional learning communities and teacher well being? A comparative analysis of primary schools in England and Finland. *Oxford Review of Education*, 35(3), 405-422.
- Wong, H.K. (2004). Induction programs that keep new teachers teaching and improving. *NASSP bulletin*, 88(638), 41-58.
- Wood, L., Root, J., & Thompson, J. (2018). Academics. In B. Jimenez, J. Shurr, & E. Bouck (Eds.), *Evidence-Based Practices and Instructional Information for Students with Intellectual Disability & Autism Spectrum Disorders* (pp. xx-xx). Council for Exceptional Children.
- Wood, L., Browder, D. M., & Flynn, L. (2015). Teaching students with intellectual disability to use a self-questioning strategy to comprehend social studies text for an inclusive setting. *Research and Practice for Persons with Severe Disabilities*. Advance online publication. doi: 10.1177/1540796915592155

Woulfin, S. L., & Rigby, J. G. (2017). Coaching for coherence: How instructional coaches lead change in the evaluation era. *Educational Researcher*, 46(6), 323-328.

<https://doi.org/10.3102/0013189X17725525>

Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college-and university-based teacher education. *Journal of Teacher Education*, 61(1-2), 89-99. <https://doi.org/10.1177/0022487109347671>