RESEARCH REPORT: JUNE 2015

Clinically Oriented Teacher Preparation

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Project Management: This project involved staff members from across UTRU. Research and writing efforts were led by Shari Dickstein Staub, with support from Sarah Scott Frank. Editing and production efforts were led by Anissa Listak and Tamara Azar, in partnership with Jeff Hall Design.

Design: Jeff Hall Design

Message from the Executive Director

For many years, Urban Teacher Residency United (UTRU) has supported the development and sustainability of high-performing teacher residency programs across the nation. UTRU proliferates a specific model—one that leads to and fosters a true paradigm shift in the ways in which institutions of higher education and school districts partner to develop effective teachers. Today, we continue to hone the UTRU teacher residency model using data focused on the impact and implementation of the core programmatic components from our Network of 19 residencies.

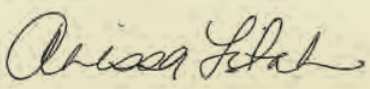
To support continuous learning, UTRU produced *Building Effective Teacher Residencies (BETR)* in 2014, a seminal paper that elevates the analysis of these core programmatic components through an in-depth study of two successful teacher residencies. *BETR* allowed UTRU to deeply and comprehensively examine the individual application of the components of the model. From this work, UTRU identified five elements of residency program implementation that inform—and are in fact, crucial to—success, and now use these elements to drive the support UTRU provides to existing residencies in the Network and to similarly minded teacher preparation programs around the nation.

UTRU's mission to improve student achievement is two-fold: to build and support teacher residencies, and to impact and inform the transformation of teacher preparation writ large.

Key learnings from existing UTRU Network partners, the *BETR* paper, and UTRU's ongoing new site development efforts have produced an unparalleled wealth of knowledge about residencies and clinically minded teacher preparation. *Clinically Oriented Teacher Preparation* enhances that knowledge base by examining how preparation programs in a variety of settings are innovating residency model components, placing practice at the center of their work.

Dozens of teacher preparation programs across the country are focused on transitioning their approach to new teacher development to one that is more clinically rich and dynamic. The programs featured in this paper will add color to these practices, providing living examples of how this important work is being implemented nationwide.

Sincerely,



Anissa Listak
Founder & Executive Director
Urban Teacher Residency United

Innovative programs have embraced the research calling for coordination between teacher preparation programs and partnering school districts.

Executive Summary

An era of unprecedented change is underway in both K–12 and teacher education across the United States. As states focus their attention on preparing students to be college and career ready, teacher education programs are also in a time of renewal—exploring the question of how to prepare teacher candidates for the demands of teaching and learning in the 21st century.

Research confirms that the quality of instruction students experience day-to-day matters for student achievement more than any other school-based factor. Yet teachers beginning their careers across a range of contexts—rural, urban, and suburban—routinely report that they are unprepared to enact high-quality instruction on day one.[1] Minority students and students living in poverty are disproportionately affected by this reality, given the inequitable tracking and sorting of teachers in schools and districts serving large populations of historically marginalized youth.[2]

These inequities are compounded when juxtaposed with the associated costs of high teacher mobility and turnover incurred in high-poverty and high-minority districts.[3] Such costs are felt most heavily in math and science, where serious difficulties filling teacher vacancies abound and there exists a general lack of sufficient qualified teachers to compensate for teacher turnover in schools and districts serving students with the highest needs.[4] To address these issues, some teacher educators across traditional and alternative pathways are joining together to invest in high-quality clinical teacher preparation in order to ensure the candidates they prepare are profession-ready at the start of their careers.

Research reveals that purposeful coordination between teacher preparation programs and the school districts with which they partner, tightly aligned curricula and field experiences, and extensive clinical practice can improve teacher preparedness.[5] In fact, a 2010 National Research Council report went so far as to cite the field or clinical experience as one of three aspects of teacher preparation likely to *"have the highest potential for effects on outcomes for*

1 **Teach Plus. (2015).** *Teach plus teacher preparation flash poll summary.* Available at http://www.teachplus.org/sites/default/files/downloads/Documents/flash_poll_one_pager_with_graphics_udpate_jennie.pdf

2 **See Glazerman, S., & Jeffrey, M. (2011).** Do low-income students have equal access to the highest-performing teachers? *NCEE Evaluation Brief* (Document No. PP11-23a). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance; **Wolf, R. (2015).** *Teacher sorting and tracking within and between schools.* Paper prepared for the Association for Education, Finance and Policy's 40th Annual Conference.

3 **Goldring, R., Taie, S., & Riddles, M. (2014).** *Teacher attrition and mobility: Results from the 2012–13 teacher follow-up survey* (NCES 2014-077). Washington, DC: U.S. Department of Education, National Center for Education Statistics. Available at http://nces.ed.gov/pubsearch

4 See, for example, **Ingersoll, R., & Perda, D. (2010).** Is the supply of mathematics and science teachers sufficient? *American Education Research Journal, 47*(3), 563–594; **U.S. Department of Education, National Center for Education Statistics**, Schools and Staffing Survey. (2013). Public school teacher data file, 1987–88 through 2011–12; Private school teacher data file, 2011–12.

5 See also **Boyd, D., Grossman, P., Lankford, H., Loeb, S., & Wyckoff, J. (2008).** *Teacher preparation and student achievement.* Washington, DC: Urban Institute, Center for Analysis of Longitudinal Data in Educational Research. Working Paper, 20; **Darling-Hammond, L., in collaboration with Fickel, L., Macdonald, M., Merseth, K., Miller, L., Ruscoe, G., Silvernail, D., Snyder, J., Whitford, B.L., & Zeichner, K. (2006).** *Powerful teacher education: Lessons from exemplary programs.* San Francisco, CA: **Jossey-Bass; Darling-Hammond, L., & Bransford, J. (2007).** *Preparing teachers for a changing world: What teachers should learn and be able to do.* San Francisco, CA: Jossey-Bass.

students." [6] In response, dozens of articles and reports over the past five years have called for a transformation in the way teachers are prepared, including the former National Council for Accreditation of Teacher Education's Blue Ribbon Panel report, *Transforming Teacher Education Through Clinical Practice*.[7, 8] Innovative programs across diverse contexts have embraced this research, placing practice at the center of teacher preparation and integrating a clinical orientation into the teacher education landscape.

Despite a growing body of evidence that a clinical approach is part of the narrative of the evolution of teacher preparation, few studies to date provide tangible insight into the practical application of this evolution—in other words, insight into what programs actually do as they transition to a clinically oriented approach. What does the shift toward practice look like in teacher preparation? What can be learned from numerous programs across the nation making such a shift? How can this learning facilitate the creation of a robust system of practice-oriented teacher education in the United States? *Clinically Oriented Teacher Preparation*, investigates these questions, based on interview data and document review from 22 teacher preparation programs that self-identify as having significantly altered the nature of clinical preparation experienced by their teacher candidates.

***Clinically Oriented Teacher Preparation* aims to:**

1. Orient the reader to the teacher education landscape through a brief discussion of the literature on the role of clinical preparation in teacher learning, specifically for pre-service teachers.
2. Identify key shifts toward clinical teacher preparation across this landscape and examine the practices that undergird these shifts.
3. Delineate the conditions necessary for these shifts to occur.
4. Identify common challenges programs face as they shift toward clinical teacher preparation.
5. Recommend high-level policies to support innovation in clinical teacher preparation.

The findings show that enhancing the clinical preparation of teachers means much more than lengthening the amount of time candidates spend in schools. Across the 22 programs interviewed, the shifts that were routinely identified make clear how fundamentally different clinically oriented teacher preparation is when compared with a more traditional approach that views academic knowledge about teaching as both authoritative and separate from practice.[9] Programs described that shifting toward clinically oriented preparation was often disruptive and hard, requiring faculty and district personnel to collaboratively engage in the preparation of teachers in new and different ways. It became quite clear that clinically oriented teacher preparation is not a *"business as usual"* approach to teacher education but one that necessitates the following shifts:

1. **Rethinking the nature of the clinical experience** by positioning teacher candidates as co-teachers; emphasizing candidate performance and accountability through competency-based assessments and the use of district or state-aligned evaluation tools; increasing mentor selectivity; focusing on mentor development; and devising new, clinically based roles to accommodate programmatic changes.
2. **Reimagining coursework, pedagogies, and pathways to program entry**, including tighter theory-to-practice integration, using simulations and rehearsals, and designing unique routes to program entry that attract individuals into the profession who otherwise might not consider teaching as a career possibility.

6 **National Research Council. (2010).** *Preparing teachers: Building evidence for sound policy.* Report by the Committee on the study of teacher preparation programs in the United States. Washington, DC: National Academies Press.

7 NCATE merged with the Teacher Education Accreditation Council (TEAC) to form the Council for the Accreditation of Educator Preparation (CAEP) in July, 2013.

8 **Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning (2010).** *Transforming teacher education through clinical practice.* Washington, DC: NCATE. See also **AACTE (2010).** *The clinical preparation of teachers: A policy brief.* Washington, DC: Author; **Freedberg, L., & Rice, S. (2015).** *Preparing world class teachers: Essential reforms of teacher preparation and credentialing in California.* Oakland, CA: EdSource; **Perlstein, L. (2015).** *Building effective teacher residencies.* Chicago, IL: Urban Teacher Residency United; **Teacher Preparation Task Force (2012).** *Raising the bar: Aligning and elevating teacher preparation and the teaching profession.* Washington, DC: American Federation of Teachers; **Dailey, C.R., with Watts, E., Charner, I., & White, R. (2013).** *Partnering to prepare tomorrow's teachers: Examples from practice.* Durham, NC: FHI 360; **McDonald, M., Kazemi, E., & Kavanagh, S. (2013).** Core practices and pedagogies of teacher education: A call for a common language and collective activity. *Journal of Teacher Education, 20*(10), 1–9.

9 **Zeichner, K. (2010).** Re-thinking the connections between campus courses and field experiences in college and university-based teacher education. *Journal of Teacher Education, 61*(1), 89–99.

3 **Underscoring the importance of authentic collaboration and partnership** between and across schools, school districts, and institutes of higher education.

These shifts have the potential to improve teacher candidates' ability to be profession-ready on day one, thus ensuring a pipeline of teachers prepared for the demands of teaching and learning in the 21st century.

Every year in the United States alone there is a need for 3.1 million practicing classroom teachers.[10] Thus it is crucial to create a robust system of teacher preparation across the nation so that candidates from every program can be excellent from the start of their careers. Such a system of teacher education must be built on a strong knowledge base that is continuously improved over time. By highlighting innovation in the clinical preparation of teachers across 22 diverse programs around the nation, this report supports the development of this knowledge base and aims to embolden teacher educators as they work to develop 21st century-ready practitioners.

Participating Programs

1 Arizona State University ITeachAZ

2 CSU Chico Rural Teacher Residency Program

3 CSU Dominguez Hills California STEM Institute for Innovation & Improvement STAR Program

4 CSU Fresno

5 CSU Fullerton

6 CSU Long Beach UTEACH Academy

7 CSU Northridge ACT-R

8 Heritage University's HU105 Program

9 Jacksonville Teacher Residency

10 Lipscomb University

11 Los Angeles Urban Teacher Residency

12 New Visions for Public Schools–Hunter College MASTER

13 NYC Teaching Collaborative

14 Relay Teaching Residency

15 Seattle Teacher Residency

16 Texas Tech University TechTeach

17 University of Central Florida

18 University of SD/ South Dakota Initiative

19 University of Southern California

20 UTeach Austin

21 UTeach National

22 Urban Teacher Education Program at University of Chicago

10 Institute for Education Sciences. (2014). *Back to school statistics: Fast facts.* Available at http://nces.ed.gov/fastfacts/display.asp?id=372

Choosing effective teachers as mentors strengthens the likelihood that candidates will emerge profession-ready from their preparation experience.

Introduction and Overview

The changing landscape of K–12 education in the United States commands a different kind of teacher—one prepared to be successful with diverse learners and the demands of new standards and expectations on day one.[11]

In response, teacher educators across the United States are focused on fundamentally rethinking the nature of teacher training, especially the clinical components of their teacher preparation programs. The purpose of *Clinically Oriented Teacher Preparation* is to illustrate this transition and to identify and examine how programs across diverse contexts create dynamic, clinically based preparation experiences for pre-service teachers, strengthening teacher candidates' ability to be profession-ready at the start of their careers.[12] By carefully documenting the work of existing programs and examining the conditions and challenges to consider as programs design and implement clinically oriented teacher preparation, this report serves as a catalyst to highlight, spur, and strengthen innovation in teacher preparation across the nation.

Clinically Oriented Teacher Preparation does not intend to be an exhaustive analysis of every innovative program in the United States nor a comprehensive review of every interviewed program. On the whole, however, this report captures the sea change currently underway in teacher preparation across the United States.[13]

University-based teacher education programs are routinely criticized as a relatively weak degree option—one that lacks intellectual rigor and fails to prepare teachers who are as effective as their peers entering the profession through other avenues.[14] Similarly, alternate route certification programs, including Teach for America, The New Teacher Project's Teaching Fellows, and others, are positioned as all-too-quick *"trial by fire"* approaches that also do not prepare individuals for careers in teaching.[15]

11 The need for better-prepared teachers exists most heavily in the STEM fields, especially math, given the significant national shortage of well-prepared secondary mathematics teachers who can support their students in achieving the Common Core State Standards for Mathematics. See, for example, **Ingersoll, R. & Perda, D. (2010).** Is the supply of mathematics and science teachers sufficient? *American Education Research Journal, 47*(3), 563–594; **U.S. Department of Education, National Center for Education Statistics**, Schools and Staffing Survey (SASS), *"Public School Teacher Data File,"* 1987-88 through 2011-12; *"Private School Teacher Data File,"* 2011-12; **Banilower, E., Smith, P.S., Weiss, I.R., Malzahn, K.A., Campbell, K.M., & Weiss, A.M. (2013).** *Report of the 2012 National Survey of Science and Mathematics Education.* Chapel Hill, NC: Horizon Research, 1–309; **Markow, D., Macia, L., & Lee, H. (2013).** *The MetLife Survey of the American Teacher: Challenges for school leadership.* New York, NY: Metropolitan Life Insurance.

12 Throughout this report the terms *"pre-service teachers"* and *"teacher candidates"* refer to individuals who are enrolled in a teacher preparation program and are not the teacher of record in the classroom.

13 This project began by contacting via email 25 teacher education programs believed to have shifted to a clinical orientation; 22 programs responded. The data informing this paper include semi-structured, 45- to 60-minute telephone interviews with these 22 programs. All programs participated in an initial interview, and eight programs participated in a second (and in one case third) follow-up conversation. The research team also conducted a document review of materials published by and about each program; these documents were typically provided directly by interviewed programs.

14 See, for example, **Levine, A. (2006).** *Educating school teachers.* Washington, DC: Education Schools Project. Available at http://www.edschools.org/pdf/Educating_Teachers_Report.pdf; **National Council on Teacher Quality. (2013).** *Teacher prep review 2013: A review of the nation's teacher preparation programs.* Available at http://www.nctq.org/dmsStage/Teacher_Prep_Review_2013_Report

15 See, for example, **Holmes Group. (1986).** *Tomorrow's teachers: A report of the Holmes Group.* East Lansing, MI: Author; **Goldhaber, D.D., & Brewer, D.J. (2000).** Does teacher certification matter? High school teacher certification status and student achievement. *Education Evaluation and Policy Analysis, 22.* 129–45; **Hootnick, A. (2014, April 21).** Teachers are losing their jobs, but Teach For America's expanding. What's wrong with that? *The Hechinger Report.* New York, NY: Teachers College, Columbia University; **Rochkind, J., Ott, A., Immerwahr, J., Doble, J. & Johnson, J. (2007).** *Working without a net: How new teachers from three prominent alternate route programs describe their first year on the job.* New York: Public Agenda Foundation. http://www.publicagenda.org/citizen/researchstudies/education

Many of the critiques of extant teacher preparation programs are accompanied by calls for organizing teacher education around practice and clinical experiences, much like the residency model that is now standard in medical education.[16] The thinking is that individuals must learn to teach by teaching, and they need to do so alongside expert teachers for prolonged periods of time, with multiple opportunities to engage in teaching practice that is embedded in contexts that parallel the realities of the classroom.

This report examines programs that have worked to heed these calls, emphasizing and intensifying the clinical components of teacher preparation. By investigating these programs, *Clinically Oriented Teacher Preparation* provides guidance to those interested in shifting their approach to align with research-based best practices and contemporary calls to transform teacher preparation. Importantly, this report is agnostic with regard to program type—that is, clinically oriented practices were examined across a range of undergraduate and post-baccalaureate programs, including those in which a majority of coursework is completed online; teacher preparation housed in universities, non-profits, charter and traditional public school districts were all considered.

While pockets of innovation in teacher education have recently received considerable attention, these programs,[17] and the knowledge they encompass, are accessible to relatively few very qualified candidates. In the United States alone there is a need for 3.1 million practicing classroom teachers annually; thus we must imagine pathways to teaching across the teacher preparation landscape that ensure that all pre-service candidates are profession-ready when they begin as teachers of record.

Understanding the Current Teacher Preparation Landscape

To better understand the nature of teacher preparation in the United States, the following two vignettes are drawn from the experiences of individuals who completed teacher education programs as undergraduates. The first example typifies a non–clinically focused university- based teacher preparation program,[18] and the second features a university-based teacher preparation program highlighted in this paper that has made significant shifts toward clinically oriented preparation and can serve as a model for the nation. While the names of the two teachers are fictitious, the details are drawn from observations, interviews, and document reviews. These two stories set the stage for the discussion of clinically oriented teacher preparation programs.

TRADITIONAL TEACHER PREPARATION: THE CASE OF MS. REYNOLDS

Elizabeth Reynolds completed her student teaching in a teacher preparation program in Ms. Meyer's ninth-grade classroom in the suburban town where she grew up, where students were mostly like her, and in a high school with a strong academic reputation. In her 120-credit undergraduate program for secondary Biology, Ms. Reynolds was required to take 36 credits of teacher education courses and 12 credits of student teaching in addition to the general education and biology courses required by her major. Student teaching was a capstone experience that took place during the final semester of her undergraduate training.

Student teaching began at the end of January and spanned twelve weeks. She began the semester by observing her cooperating teacher and slowly took on increasing levels of responsibility for instruction. In the last two weeks of student teaching, she completed her *"full-time teach"* where she taught for the entire day. Ms. Reynolds was the first student teacher that Ms. Meyer had mentored, though Ms. Meyer had not received training in mentoring or coaching.

Ms. Reynolds's university supervisor came three times during the semester to observe and evaluate her teaching. Additionally, Ms. Reynolds attended an hour-long weekly teaching practicum class with other student teachers in her program to talk about their experiences and offer each other support. This was the only course she took with direct connections to her practicum experience during her time as a student teacher.

16 **Grossman, P. (2010).** *Learning to practice: The design of clinical experience in teacher preparation* (Policy brief). Washington, DC: Partnership for Teacher Quality.

17 See, for example, **Rich, M. (2014, October 10).** As apprentices in classroom, teachers learn what works. *New York Times*, p. A1; **Crow, R. (2012).** *Getting better at teacher preparation and state accountability: Strategies, innovations, and challenges under the federal Race to the Top Program.* Washington DC: Center for American Progress.

18 For more on this type of program, see **Zeichner, K. (2010).** Re-thinking the connections between campus courses and field experiences in college and university-based teacher education. *Journal of Teacher Education, 61*(1), 89–99.

There were no open teaching positions in the district where Ms. Reynolds student taught (and the district rarely hires first-year teachers). Students at Ms. Reynolds's university typically land their first teaching jobs at challenging and underperforming schools nearby, which is exactly where Ms. Reynolds landed a seventh-grade science teacher position. She was excited for her first teaching job and felt she had the content and instructional knowledge needed to teach the required topics in the school's Next-Generation Science Standards aligned curriculum. Her first month, however, proved exceptionally difficult. Despite having received an honors distinction and consistently strong evaluations from her university supervisor during student teaching, Ms. Reynolds reports feeling inadequately prepared for the challenges she faces on a daily basis in her classroom. She has almost no support in her school to guide her as she navigates her first year of teaching science to students who do not have strong science backgrounds. Ms. Reynolds wants her students to be successful in science but does not know how to achieve this goal and does not know where to turn for support.

CLINICALLY ORIENTED TEACHER PREPARATION: THE CASE OF MS. WILLIAMS

Contrast Ms. Reynolds's student teaching experience with the experience of Keesha Williams, a new sixth-grade science teacher in Toppenish, Washington. Ms. Williams recently graduated from Heritage University's HU105 program, a residency-based approach to teacher preparation where she spent four semesters student teaching in a middle school in one of the program's partner districts. The students served by HU105's partner schools and districts live in an area of central Washington with the second highest poverty level in the state.

In lieu of traditional courses during her preparation, Ms. Williams was held accountable to a set of core competencies through rigorous performance assessments driven by HU105's Professional Competency Assessment Instrument (PCAI). Throughout her clinical experience, she was part of a four-member Teaching and Learning Team consisting of three candidates learning to teach at different stages of development and one Core Teacher who went through a rigorous selection process as well as continuous training on coaching and mentoring. Ms. Williams had regular opportunities to teach independently, co-teach, and receive feedback. She met daily with her team to discuss lessons, rehearse and role-play teaching scenarios, problem-solve particular instructional challenges, and receive support to progress on her individual PCAI goals.

In addition to the on-site support received from her team, Ms. William's Site Advocate (an HU105 faculty member who supports a cohort of teams in a school or group of schools) visited her classroom one to three times a week to provide additional guidance on assessments, classroom management, instructional design and implementation, and school operations and expectations as well as to co-teach or model particular practices when needed. Ms. William's teaching team and Site Advocate worked collaboratively to assess and evaluate her practice throughout her clinical experience.

Graduates of the HU105 program are often hired by the schools where they apprentice (if there are openings) and almost always by the district. The school where Ms. Williams now teaches is a few miles away from where she completed her residency. Having had hundreds of *"at bats"* in science teaching in a supportive environment with an abundance of feedback on her teaching practice, she began her school year confident to take on a position in another school. Her first month of school was not easy, but because she had seen two school years launch, she worked hard to establish solid management routines and relationships with her students, 100% of whom passed her first end-of-unit assessment.

The learning and teaching opportunities afforded to Ms. Williams during her HU105 experience are consistent with the shifts toward clinically oriented teacher preparation being made by many programs across the country. This report documents the work of over 20 such programs.

"I had never been content with the early field clinical experience that teacher candidates have been historically conducting, where they are required to meet X number of hours of observation. So the candidate goes to a school, asks to conduct classroom observations in a classroom of a teacher he or she's never met before, completes the observation hours, and submits a signature form to confirm that he or she conducted the required hours. There is no monitoring of such a process other than the signature form. How does one know if the observations were really conducted appropriately? How is the quality of such observations ensured? Did any of the teachers observed or anyone else engage the candidate in reflective conversations about the classroom experiences to help them fully understand and make meaning of what they observed? This traditional model has existed for years and continues to exist.... We decided to do away with this model and radically changed the clinical experience for our candidates."

—Director, CSU Dominguez Hills California STEM Institute for Innovation and Improvement

Key Shifts toward Clinically Oriented Teacher Preparation

Analysis of interview data and program-related documents revealed three key shifts as programs moved toward a clinically oriented approach to teacher preparation. In many cases, these shifts represent a dramatic departure from how the interviewed programs have traditionally conducted teacher training.

Key Shifts

1. **Rethinking the nature of the clinical experience—structure, time, quality, and accountability**
2. **Reimagining coursework, pedagogies, and pathways to program entry**
3. **Emphasizing authentic partnerships between and across schools, districts, and institutes of higher education**

SHIFT 1
Rethinking the Nature of the Clinical Experience

In the vast majority of teacher education programs around the nation and internationally, the student teaching semester has historically been the capstone and only extended clinical experience for candidates, usually taking place in the final semester of their preparation.[19] Of late, this approach has been criticized as a problematic and inadequate system of preparing teachers, leading to a sense of ill-preparedness and high turnover rates among novices nationwide—particularly in the content areas with the greatest teacher shortages, like science and math.[20, 21]

The programs described in this paper are transforming student teaching by rethinking the very nature of the clinical experience. Beyond revising the structure and amount of time candidates spend learning and teaching in schools and classrooms throughout their preparation, the programs have strengthened the quality of the candidate experience in the clinical realm, shifting away from traditional student teaching in five concrete ways:

- Positioning candidates as co-teachers
- Emphasizing candidate performance through competency-based assessments and the use of district or state-aligned evaluation tools
- Increasing mentor selectivity
- Strengthening mentor development
- Devising new clinically based roles to accommodate programmatic changes

POSITIONING CANDIDATES AS CO-TEACHERS

Many of the clinically oriented programs participating in this report require mentor teachers and teacher candidates to co-teach. In a co-teaching arrangement, the classroom teacher and candidate both assume responsibility for jointly planning and delivering instruction. The collaborative

19 **Ronfeldt, M., & Reinninger, M. (2012).** More or better student teaching? *Teaching and Teacher Education, 28*(8), 1091–1106.

20 **Fraser, J., & Watson, A.M. (2014).** *Why clinical experience and mentoring are replacing student teaching on the best campuses*. Princeton, NJ: Woodrow Wilson National Fellowship Foundation.

21 According to the **National Center for Educational Statistics (2011)**, 1 in 12 mathematics teachers leaves the profession every year, with another 1 in 16 changing schools. The attrition rate is particularly high for teachers with 3 years or less of experience. See also Footnote 1.

structure of co-teaching facilitates ongoing problem solving and interaction between the candidate and mentor, or cooperating,[22] teacher while also strengthening student outcomes. A four-year study conducted at St. Cloud University found that in reading and math, students in co-taught classrooms statistically outperformed students in classrooms with a non-co-teaching model of student teaching and students in a classroom with a single teacher.[23] In **California State University (CSU) Chico's Rural Teacher Residency program (RTR)**, trend data suggest similar outcomes;[24] program faculty recently received a two-year grant to conduct more formal research to corroborate this trend data.

At **CSU Fresno**, co-teaching is now emphasized across every credential pathway in the school of education. Program faculty note that co-teaching mitigates the anxiety mentor teachers often felt during traditional student teaching when they needed to step aside for a period of time to allow candidates to implement lessons. Program faculty at **CSU Fullerton** note that the co-planning/co-reflection components of co-teaching strengthen the intentionality with which candidates select pedagogy and lesson design, as well as their skills as collaborative educators. The many programs studied that embrace co-teaching (**see Table 1**) commend the approach for bringing the question *"Are students learning?"* into sharp focus for mentors and candidates alike. Placing such a targeted emphasis on classroom-level results represents a shift in and of itself for many teacher preparation programs; co-teaching has facilitated critical discussion about whether and how students are learning and the role of both co-teachers in that learning.

EMPHASIZING CANDIDATE PERFORMANCE

In shifting the nature of the clinical experience, programs also shifted outcome expectations for candidates by focusing on performance—what a candidate demonstrates the capacity to do when interacting with students—rather than relying on proxy measures such as taking a test about particular teaching practices or writing a lesson plan or reflection about a teaching experience. By focusing on actual performance, programs can address the oft-made critique by school districts that institutions of higher education are long on theory without attention to practice.

The **TechTeach program at Texas Tech University**, for example, uses performance assessments aligned to a set of instructional competencies associated with greater student achievement gains to evaluate candidate performance through a video capture system called Teachscape.[25] The competencies also align to measures used by the program's partner districts. TechTeach's focus on outcomes extends to the students the candidates teach: Student perception surveys serve as an additional measure to assess candidate practice, and the program has made a promise to its district partners that the achievement gains of students in TechTeach candidates' classrooms will be more significant than if the mentor teacher had been in the classroom alone. Further, if partner districts hire candidates after graduation, TechTeach aims to demonstrate that they have value-added scores above the district average after two years of teaching. These bold commitments stem from the level of confidence program officials have in the preparation candidates receive through TechTeach and the mechanisms used to assess and evaluate candidate performance.[26]

A number of clinically oriented programs studied provide guidance for others interested in using performance assessments. For example, performance outcomes drive the **CSU Northridge ACT-R** program, a residency program designed to train special educators. Given the exclusive focus on developing special education teachers, program faculty have worked to design assessment tools that align with existing tools in the partner district (Los Angeles Unified School District) and that are tailored to the work special educators must do, such as develop individualized education plans and collaborate with classroom teachers, specialists, and parents. These assessment tools have proven

22 The terms *"mentor"* and *"cooperating teacher"* are often used interchangeably in teacher preparation.

23 **Bacharach, N.L., Heck, T.W., & Dahlberg, K. (2010).** Changing the face of student teaching through co-teaching. *Action in Teacher Education, 23*(1), 3–14.

24 The trend data shows that in grades 3–6, students taught by co-teacher teams in the **CSU Chico State Rural Teacher Residency program** earned the highest average state standardized test scores in English and math in comparison to students taught in classrooms with a non-co-teaching model of student teaching. Program leadership is conducting more formal research to investigate this trend.

25 **Cranford, L. (2013).** Innovative TechTeach program aims to better prepare teaching candidates. *Texas Tech Today.* Available at http://today.ttu.edu/2013/10/innovative-techteach-program-aims-to-better-prepare-teaching-candidates/

26 TechTeach launched in 2011. The first cohort of candidates completed the program in May 2014, and the college is currently assessing data from the classrooms.

TABLE 1

Structure of Clinical Experience in Participating Programs

In some programs, the structural shifts identified here occurred through multiple pathways in one institution; in other programs, this shift occurred in a particular program or pathway.

Program Name	Yearlong (or more) Residency	Two Semesters Student Teaching	Range of Intense Clinical Experiences	Use of Co-Teaching Model*
ASU-ITeachAZ	•			•
CSU Chico Rural Teacher Residency Program	•			•
CSU Dominguez Hills California STEM Institute for Innovation & Improvement STAR Program	•			
CSU Fresno (various credential pathways)	•	•	•	•
CSU Fullerton (various credential pathways)		•		•
CSU Long Beach UTEACH Academy	•			•
CSU Northridge ACT-R	•			
Heritage University's HU105 Program	•			•
Jacksonville Teacher Residency	•			
Lipscomb University			•	
Los Angeles Urban Teacher Residency	•			
New Visions for Public Schools–Hunter College MASTER	•			
NYC Teaching Collaborative			•	
Relay Teaching Residency	•			
Seattle Teacher Residency	•			•
Texas Tech University TechTeach	•			•
University of Central Florida		•		
University of SD/South Dakota Initiative	•			•
University of Southern California			•	
UTeach Austin			•	
UTeach National			•	
Urban Teacher Education Program at University of Chicago	•			

Note: *In a co-teaching arrangement, teacher candidates and the cooperating teacher share the planning, organization, delivery, and assessment of instruction as well as the physical space. Both adults are actively involved and engaged in all aspects of instruction at all times. It is a model of clinical practice used with intention by many clinically oriented programs. In programs using this model, candidates and cooperating teachers typically use seven or more co-teaching strategies adapted from the work of faculty at St. Cloud University.

Prioritizing Outcomes and Performance

The **Relay Teaching Residency at the Relay Graduate School of Education** uses student learning as a metric for measuring teacher candidate performance. During the first year of the residency, candidates spend time lead teaching in mentor classrooms. During that time they are required to demonstrate how much their students have learned. As teachers of record the following year, and in order to get their master's degree, Relay-trained teachers working in elementary classrooms are required to show that their students demonstrated, on average, a year's growth in reading and 70% mastery on a year's worth of state or Common Core Standards in one other subject. Middle school teachers are held to the same standard—70% mastery on a year's worth of state or Common Core Standards—in their specialty area.

Performance outcomes drive the **Seattle Teacher Residency (STR)** program, which has devised a number of *"gateway"* assignments that require candidates to demonstrate specific competencies at set time points. These gateways act as benchmarks for performance outcomes that fall along a continuum of development for residents and must be successfully completed in order to show progress, meet the criteria for completing the residency program, and receive credit for the field practicum course each quarter. While formative in nature, they also serve as a summative tool aligned with the teacher evaluation framework used by Seattle Public Schools, edTPA, and the STR program's Core Practices, which articulate the program's vision of effective teaching. Successful completion of all gateways is one component of the requirements necessary for residents to receive a Washington State teaching certificate.

Candidates complete five gateways over the course of the residency year. They demonstrate various competencies by annotating video of their actual teaching practice, self-evaluating their performance using a progress evaluation tool, and then making the video, annotations, and self-evaluations available online to program faculty (who are also their instructional coaches). All videos and annotations are scored according to a standardized rubric that candidates know and understand, and mentors, residents, and coaches meet to discuss resident performance after each gateway to identify next steps. (**See Appendix B for a sample gateway task.**)

valuable not only for assessing teacher candidates but also for supporting conversations with mentor teachers. One program faculty member explained that the tools allowed them to be specific and explicit with mentors regarding expectations for candidate outcomes and resulted in more focused support from the mentor teachers to the candidates. (**See Appendix C for more information.**) ACT-R's emphasis on candidate performance has become a norm throughout all credential pathways in the special education department; for example, every course assignment is linked to a practical component that candidates execute in the field and is observed and evaluated by the course instructor.

Heritage University's HU105 residency program serves as another strong example of performance-driven preparation. The program has abandoned all formal coursework and course titles in favor of the Professional Competency Performance Assessment (PCAI), now in its seventh edition. Since 2010, Heritage faculty, staff, core teachers, candidates, and administrators have worked collaboratively to identify competencies that lead to the formation of powerful and effective first-year teachers. Importantly, the evaluation process is designed to align with the English language learning standards and the standards for special education in their partner districts as well as the evaluation process used in Washington State public schools.[27]

While programs noted that devising district or state-aligned evaluation frameworks was an important way to hold candidates accountable for particular knowledge and skills, the tools also signaled a desire to create coherence with district expectations and strengthen key partnerships, a shift examined in depth later in this report.

INCREASING MENTOR SELECTIVITY

Many programs explained that effectively shifting the nature of the clinical experience necessitated the thoughtful and deliberate selection of mentor teachers, heeding calls that the placement and pairing of candidates with mentor teachers during traditional student teaching has historically been

27 More information on the PCAI can be found here: hu105.org./index.php?option=com_content&view=article&id=97&Itemid=211

haphazard and has not adequately delineated the *"discrete skills employed in mentoring aspiring teachers well."*[28]

In some cases, increased mentor selectivity involved a rigorous selection process wherein teachers applied and participated in a thorough interview process. **The Rural Teacher Residency at CSU Chico** offers one such example; the **Jacksonville Teacher Residency (JTR)** offers another. At CSU Chico, the interview for mentor teachers focuses on the program mission as well as the teachers' comfort with technology integration, co-teaching, collaboration, and ability to communicate with adult learners, among other things. CSU Chico works to help potential mentor teachers understand how the mentor teacher role in the Rural Teacher Residency program differs from the cooperating teacher role they have historically utilized in their traditional teacher preparation program. (**See Appendix D for more information.**)

Leaders of the JTR program, a partnership between University of North Florida and the Duval County Public Schools, highlight their mentor teacher selection process as one of the strongest components of their approach. The process is extensive. First, potential mentors must meet minimum qualifications, including three years of teaching experience in an urban school, completion of step one of Duval County Public Schools mentor training, and demonstration of value-added measure scores that are at or above average. Florida is one of just three states that require that student performance be considered as part of the mentor teacher selection process.[29] Once potential mentor teachers meet these criteria, they complete an application, which includes an essay, the recommendation of the principal, and letters of support from students. Strong applicants are moved forward to a phone interview. Finally, the process ends with JTR program staff visiting the potential mentor's classroom to observe and debrief instruction. JTR was one of a handful of programs across the 22 interviewed that included classroom observations of mentor teachers as part of the mentor selection process.

The development of sound and rigorous selection processes by participating programs highlights the crucial role that mentor selection—and mentoring—plays in high-quality clinical preparation. Choosing teachers as mentors who have achieved and can model effective practice, explain the rationale behind their instructional moves, and demonstrate an affinity for adult learning and collaboration strengthens the likelihood that candidates will emerge profession-ready from their preparation experience.

FOCUSING ON MENTOR DEVELOPMENT

Research emphasizes that the degree of impact mentors have on pre-service teacher learning, efficacy, and effectiveness is as dependent upon mentors' capacity to teach and coach effectively as the mentoring supports provided to them by the preparation program.[30] Thus, for many programs profiled in *Clinically Oriented Teacher Preparation*, a heightened focus on mentor selection went hand in hand with a shift toward more thoughtful and ongoing mentor development.

Most of the programs profiled herein include summer training institutes for candidates and mentors where participants learn about co-teaching and the performance-based competencies that serve as program outcomes. Some take this training further, however, by providing mentors with intensive and ongoing support, both in the classroom and through off-site professional development meetings. For example the **New York City Teaching Collaborative**, a uniquely structured residency program in which residents begin their preparation in January, offers mentors intensive professional development throughout the fall to strengthen their coaching skills. On-site support for mentors continues through the remainder of the school year as candidates engage in an intensive residency assignment in the spring semester. **The Urban Teacher Academy (UTEACH) at CSU Long Beach** has historically offered a master's degree in curriculum and instruction on site for mentor teachers working with candidates in the program, empowering and incentivizing mentors to improve their own practice and

28 **Fraser, J., & Watson, A.M. (2014).** *Why clinical experience and mentoring are replacing student teaching on the best campuses.* Princeton, NJ: Woodrow Wilson National Fellowship Foundation.

29 **National Council on Teacher Quality. (2014).** *State teacher policy yearbook.* Available at http://www.nctq.org/dmsView/2013_State_Teacher_Policy_Yearbook_National_Summary_NCTQ_Report. Rhode Island and Tennessee are the other two states.

30 See, for example, **Carver, C.L., & Katz, D.S. (2004).** Teaching at the boundary of acceptable practice: What is a new teacher mentor to do? *Journal of Teacher Education, 55,* 449–462; **Feiman-Nemser & Parker (1992).** *Mentoring in context: A comparison of two U.S. programs for beginning teachers*. East Lansing, MI: National Center for Research on Teacher Learning; **Holloway, J. (2001).** The benefits of mentoring. *Educational Leadership, 58*(8), 85–86; **Wang, J., & Fulton, L.A. (2012).** Mentor-novice relationships and learning to teach in teacher induction: A critical review of research. *REMIE: Multidisciplinary Journal of Educational Research, 2*(1), 56–104.

Rigorous Mentor Selection

Learning from the **ACT-R program at CSU Northridge** has transformed mentor selection across the entire Department of Special Education. Prior to implementing ACT-R, faculty in the department knew that tremendous variability existed in the quality of support that candidates received from their mentor teachers, driven in part by the fact that geographic proximity to candidates' residence was a primary factor when pairing them with mentors. This is no longer the case given the rigorous mentor selection process developed through ACT-R. In partnership with their liaisons from ACT-R's partner district (Los Angeles Unified), program leadership worked to develop an approach to selection that included the development of key criteria for effective mentoring of prospective special educators in high-need schools and an observation instrument aligned to the district's teacher evaluation framework but specific to the special education context. These tools continue to inform interviews and observations with every potential mentor for the department, resulting is a cadre of exceptionally committed mentor teachers.

At the **New York City Teaching Collaborative (NYCTC)**, finding the right partner schools and mentors is an important part of the program's model. Conversations with potential mentor teachers and school sites begin a year in advance. Before observing and interviewing potential mentors, program staff members work with school principals to assess program *"fit"* with the goals and culture of the school. The school's instructional approach and expectations for teacher candidates must sync with the demands of NYCTC's intensive residency. Once sites are chosen, potential mentors are identified and NYCTC staff observe them teach. In some cases, staff members provide constructive feedback on the instruction they see and return to see whether and how their feedback has been incorporated.

development while also strengthening candidate practice. As part of their degree requirements, mentor teachers in the master's program study their own classrooms and conduct action research in collaboration with teacher candidates. The master's degree option for mentors upholds the program's founding principle as a fully articulated *"teaching hospital"* that provides on-site training and education for teachers at all levels of pre- and in-service teaching. The on-site master's for mentors is on temporary hiatus as every mentor involved in the program has completed a degree; program leadership expects that the program will launch again soon.

In **CSU Northridge's ACT-R program**, the primary focus of monthly mentor training sessions is data-driven decision making. Sessions focus on English/language arts assessment, data collection and analysis, and the use of data to guide specific instructional interventions. Monthly meetings also support mentors in the development of mentoring strategies that facilitate effective collaboration, coaching, and consultation. Annually, each cohort of mentors is also supported in building knowledge, skill, and community by attending, as a group, a Language and Literacy Institute with presentations by nationally recognized speakers. In the **New Visions for Public Schools–Hunter College MASTER program (MASTER)**, mentors enroll in a 20-hour course designed to develop their capacity to act as teacher educators in supporting the growth and learning of new teachers, as well as to increase mentors' ability to use assessment and data to drive instruction and improve student learning outcomes. The program offers additional on-site coaching and support for participating mentors throughout the year. Additionally, in partnership with the New York Hall of Science and the New Visions math initiative, the program provides professional development opportunities for mentors to develop their pedagogical content knowledge and address content-specific novice teacher development. Residents use the museum to conduct inquiry labs and customize additional modules to test in their classrooms. These components are designed to strengthen the pedagogical content knowledge of both mentors and residents, a key goal of the program. Importantly, all math mentors in the MASTER program teach in schools participating in the New Visions math initiative, a math Common Core project in thirty schools across the New Visions network.[31]

31 The New Visions math initiative is a partnership with the Silicon Valley Mathematics Initiative (SVMI), funded by an Investing in Innovation (i3) grant from the U.S. Department of Education called *"Accessing Algebra through Inquiry"* (a2i). The goal of the a2i initiative is to maximize student and teacher learning in mathematics through the use of formative assessments, performance assessments provided by SVMI, teacher-led inquiry, and ongoing professional development. A2i is designed as an on-ramp and pathway toward students achieving Common Core State Standards in mathematics.

Other programs have sponsored professional development workshops that are open to all teachers in the district. For example, the **California STEM Institute for Innovation and Improvement (CSI³) at CSU Dominguez Hills** sponsors a Professional Development Academy each week that is open to teachers in LA Unified as well as teacher candidates in the residency program. The optional academy meets at a partner school, and program faculty bring in experts to facilitate and present on teacher-generated topics of interest such as problem-based learning and classroom management.

DEVISING NEW CLINICAL ROLES FOR FACULTY, STAFF, AND MENTOR TEACHERS

Restructuring the nature of the clinical experience compelled many programs to devise new clinical roles and responsibilities for faculty, staff, and mentor teachers to support candidate success in the field. Programs created a range of positions, most of which are hybrid in nature, with no clear delineation between faculty, supervisor, and mentor; instead, the roles ask individuals to bridge theory and practice in new and innovative ways.

Changing expectations for mentor teachers has come with new titles for the role, such as Clinical Resident Mentor or Clinical Teacher Educator, as well as new responsibilities for mentors, such as holding weekly 1:1 meetings with their candidates, using data to drive coaching, and co-developing action plans to strengthen candidate practice. At the **University of Chicago's Urban Teacher Education Program (UChicago UTEP)** mentors hold the title of Clinical Instructor. UChicago UTEP describes these educators as accomplished, practicing teachers and leaders who host and guide residents during half-year placements in their classrooms. They model and observe instruction, provide constructive feedback, and help residents set realistic instructional goals to improve their practice in order to ensure development of a pipeline of teachers ready to meet the demands of teaching Chicago Public Schools students in context-specific ways. They are considered, first and foremost, teacher educators in the clinical realm and are tasked with providing practical instruction on how to apply theoretical knowledge in the classroom setting. Apropos of their title, Clinical Instructors meet regularly with Residency Instructors to maintain shared understandings about their residents' progress. They receive monthly mentor training and support from the Residency Instructors as well.

At **iTeachAZ at Arizona State University** and **TechTeach at Texas Tech University,** mentors have access to a data dashboard that allows them to upload and view trends in their candidates' teaching practice. Site Coordinators (key program staff roles at both of these programs) use this data in monthly training sessions to focus mentors on how to coach candidates. This provides mentor teachers with strategies for coaching candidates on particular areas of struggle and strengthens their skills as data-driven teacher educators. Beyond planning and facilitating monthly mentor and weekly resident sessions and acting as the personalized coach for both, TechTeach's Site Coordinators (SCs) are responsible for making all clinical placements for the "pod" of schools under their purview in a particular district partnership across the state. According to program leadership, this requires the SCs to get to know potential mentors, administrators, and school contexts exceptionally well. The university uses the position as a way for a very large teacher preparation program to make thoughtful placements of teacher candidates with mentor teachers, to ensure the health and strength of those placements, and to fully immerse into a partner district and school. While compensated by the university, SCs are considered (and consider themselves) to be employees of the districts with whom TechTeach partners. At iTeachAZ, the SCs lead quarterly governance meetings attended by partner school principals and district superintendents as well as program administrators—including the Program Specialist, whose job it is to coach and develop SCs. SCs use data at these meetings to demonstrate trends in candidate performance, and all parties present discuss how to maximize assets across the partnership to address challenges faced by candidates and mentors.

Many other programs have established entirely new roles for the clinical realm. Consider, for example, the Teaching Associate role at the **Seattle Teacher Residency**, in which a majority of the program's instructional team also serve as on-site coaches who observe and coach residents weekly. This means that the person teaching courses also observes residents on site, allowing residents to experience a strong level of coherence between what they are learning in their courses and the feedback they are receiving on their teaching practice. The role also allows instructors to tweak course content in order to meet resident needs and reference relevant examples from the field as they introduce new material and information. Individuals in this role must be capable of managing multiple contexts as they move across various Seattle Public Schools, and they must be skilled instructors and instructional coaches.

SHIFT 2
Reimagining Coursework, Pedagogies, and Pathways to Program Entry

While teaching is, at its core, interactive work, many teacher learning opportunities in more traditional teacher education settings could be characterized as exclusively non-interactive: reading texts assigned by university faculty, writing detailed unit plans, and examining student work. The assumption is that teacher candidates will be able to transfer what they have learned from these academic contexts into work that is deeply interactive and experiential during the student teaching semester. However, this approach is not well supported by the research literature. First, research indicates that teacher education students have difficulty integrating the theory that is espoused in university coursework with the practical knowledge that is gained through work with children in actual classrooms.[32] There is also the *"problem of enactment,"*[33] a term coined to refer to the phenomenon of novice teachers having a wealth of content knowledge and commitment to principles and ideals but being unable to enact these principles in their teaching practice beyond the university classroom.[34]

In response to these criticisms, clinically oriented programs are intentionally redesigning coursework and pedagogies to heed the trajectory of novice teacher development, modifying candidate entry processes, and implementing instructional innovations to ensure that teacher candidates can skillfully enact high-quality instruction.

ATTENDING TO SHIFTING TRAJECTORIES OF NOVICE TEACHER DEVELOPMENT

The developmental trajectories of teacher candidates shift in a clinically oriented approach, and the programs described in this report shared a need to accommodate this shift. Given their early and frequent exposure to schools, classrooms, and teaching, clinically intensive program candidates are often much more advanced in what they can do and when throughout the course of their preparation, in comparison to candidates in programs with a more traditional student teaching approach. But candidates' increased exposure to the clinical realm also changes the nature of, and time they have to *"do,"* their work. A redesigned clinical experience often means that candidates have less time for lengthy course readings, multiple-page lesson plans, or writing and research assignments not grounded in practice. Overall, course redesign efforts in the programs studied here recognized these realities, acknowledging the need to be responsive to the changing demands of immersive field placements. Time—or lack of it—was a very real constraint for their candidates, and thus programs shifted the scope and sequence of courses as well as their course expectations to honor these constraints.

Several programs operating residencies and/or requiring multiple semesters of student teaching follow a 4:1 weekly schedule, with candidates in district schools four days and in coursework one full day each week. This shift in course delivery requires out-of-the-box thinking on the part of program officials. For example, when the **University of South Dakota** moved to a full-year residency model for program seniors, the program needed to integrate a semester's worth of senior-year courses into a one-day-a-week schedule. Hence, courses traditionally offered twice weekly over the course of a semester are now offered in four-hour increments eight different times on coursework days throughout the residency year. Other program innovations pointed to new or different conceptualizations about a particular *"course,"* such that a traditional three-credit course, for example, was deconstructed into three one-credit units of study spanning the entire year. Program faculty in **CSU Chico's Rural Teacher Residency** deconstructed a general education course focused on planning into three one-credit components, which allowed them to return to the topic of planning throughout the entire year rather than focusing on the topic only when students were enrolled in the three-credit course. They also moved a course about working with struggling readers to the fall semester of their program so that candidates could maximize

32 See, for example, **Darling-Hammond, L., & Hammerness, K. (2005).** The design of teacher education programs. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world* (pp. 390–441). San Francisco, CA: Jossey-Bass; **Goodfellow, J., & Sumsion, J. (2000).** Transformative pathways: Field-based teacher educators' perceptions. *Journal of Education for Teaching, 26*(3), 245–257; **Wilson, S.M., Floden, R.E., & Ferrini-Mundy, J. (2001).** *Teacher preparation research: Current knowledge, gaps, and recommendations.* Seattle: University of Washington, Center for the Study of Teaching and Policy.

33 **Kennedy, M. (2005).** *Inside teaching.* Cambridge, MA: Harvard University Press.

34 **Grossman, P., & McDonald, M. (2008).** Back to the future: Directions for research in teaching and teacher education. *American Educational Research Journal, 45*(1), 184–205.

Unique Field Experiences

Secondary education teacher candidates at the **University of Central Florida (UCF)** may have their first student teaching experience in the Florida Virtual School (FVS). While candidates quickly find that teaching in a virtual context is difficult and demanding, the asynchronous setting also provides them with time and space to make decisions and receive advice and feedback on difficult situations without the immediacy of in-person classroom teaching. Requiring candidates to student teach in a statewide virtual environment has the added benefit of strengthening candidate readiness to teach in a changing world, in which they will likely teach a course online and/or provide students with some level of instruction using a virtual platform before they end their careers. In fact, every child who graduates from a Florida public school must experience one online class during his or her tenure as a public school student. The FVS has franchised its courses to districts across the state, and UCF program leaders have data showing that a majority of these districts hire their graduates to teach these online courses in the public schools. Importantly, over 90% of all student teachers at UCF are supervised remotely using live remote observation tools that do not record their teaching. Remote supervision has resulted in supervisors doubling the number of observations they make and has enabled them to provide immediate feedback through Skype or Adobe Connect.

In the various teacher pathways housed in the **California STEM Institute for Innovation and Improvement (CSI³) at CSU Dominguez Hills**, early field experiences were radically changed by requiring candidates to complete a certain number of hours in the institute's Lab School under the guidance of faculty and master teachers. Lab School, which takes place at three different sites across Los Angeles, operates on Saturday during the school year and Monday through Thursday during the summer and is a required component of the field experience for all candidates participating in CSI³ teacher pathways at Dominguez Hills. An instructional team that includes an expert teacher and several teacher candidates teaches every lab school class. Instruction is organized around a theme. While the expert teacher initially takes the lead, novice teachers soon follow and receive feedback on their teaching. At the end of each day, instructional teams meet to debrief what worked well and modifications for next time as well as the progress of each teacher candidate. The lab school affords teacher candidates opportunities to work with one group of students, with mentoring and feedback, in a designed setting. While student outcomes provide important feedback on candidate performance, they also serve as an important source of feedback for program design.

the knowledge and skills gained in the course in the field as they worked with students one-on-one and in small groups throughout the fall.

UChicago UTEP at the University of Chicago has based its program on the trajectory of novice teacher learning in a clinically oriented approach. During their first year in the program, candidates are exposed to a variety of clinical experiences while simultaneously engaging in coursework. The approach offers candidates multiple opportunities to negotiate these experiences in the context of the theory they are learning in real time, creating *"an internal dialogue between what's studied and what's experienced"* [35] in the actual classroom. One key aspect of novice teacher development that the program attends to in the first year is the soul strand. This strand provides a space for interns to analyze critically how forms of privilege and oppression impact their identities and perspectives and ultimately affect teaching and learning in the educational system. Two half-year residency placements follow in the second year of the program, enabling candidates (who commit to teach in Chicago for three years after graduating from the program) to immerse themselves in a Chicago public school and gain content area expertise and/or the field experience needed for additional endorsements to their credential.

Reimagining coursework and pedagogies went beyond tweaks to the scheduling of particular courses. Some programs underwent complete overhauls of their approach. For example, as the **University of Southern California's (USC) Rossier School of Education** shifted to a clinically oriented model, more than 30 full-time faculty members came

35 See page 2, **Fraser, J., & Watson, A.M. (2014).** *Why clinical experience and mentoring are replacing student teaching on the best campuses.* Princeton, NJ: Woodrow Wilson National Fellowship Foundation.

together as a community to re-conceptualize the program's definition of an effective teacher. Faculty identified common domains and components of instructional practice and worked together to thread these throughout every course they teach—particularly the program's Guided Practice course, the clinical cornerstone of its MAT curriculum. At **Lipscomb University**, in Tennessee, undergraduate students majoring in secondary education complete coursework that is very similar and at times identical to what a major in the discipline (content area) takes. For example, math education majors take all but two courses alongside math majors to ensure they gain deep content knowledge. The rigorous and content-specific coursework required of secondary education majors in particular disciplines compelled the university to undertake a comprehensive redesign of its clinical experience, transforming the traditional student teaching semester into three long-term clinical placements to allow all education majors to complete in schools the teaching hours needed for state certification.

In other programs, changes to the teams responsible for designing and teaching courses occurred. Team-teaching by district and university staff became an integral part of many programs in order to be more district-responsive, better prepare teachers to meet the context-specific needs of students, and more tightly align theory and practice. In the **Fresno Teacher Residency** program, a partnership between Fresno Unified School District (FUSD) and CSU Fresno, every course has been restructured with an FUSD lens and every faculty member is paired with an FUSD partner to team-teach every class. A similar shift occurred as district and university stakeholders conceptualized the **Jacksonville Teacher Residency**, a partnership between the University of North Florida (UNF) and the Duval County Public Schools (DCPS), whereby UNF faculty and DCPS staff co-teach each course. For these programs, team-teaching university coursework changed the nature of the faculty partnerships with the district and the ways in which faculty approach their own instruction. Modeling and parallel pedagogy became much more commonplace as partners gained comfort in their instructional collaborations, demonstrating a shift from faculty talking about teaching toward doing the work of teaching themselves.[36]

UNIQUE PATHWAYS TO PROGRAM ENTRY

While some universities have reimagined coursework and pedagogies, others have modified candidate entry processes in unique and different ways. **University of Texas-Austin's UTeach Austin** program has a distinctive approach to admission. Its STEM-specific teacher preparation program casts a wide net across the university, encouraging all STEM majors, especially those who may have never considered it, to try out teaching. It recruits students by piquing their interest in teaching with two one-credit courses that offer school-based opportunities to teach inquiry-based lessons; potential candidates prepare and rehearse the lessons multiple times with peers under the guidance of faculty before going out and delivering those lessons in elementary and middle school classrooms. Those who decide they want to continue still get a degree in a STEM subject area such as biology, mathematics, or chemistry, while simultaneously receiving teacher certification in their content area of choice. This ensures that candidates possess sufficient content knowledge alongside a strong foundation in instruction and pedagogy, and a teaching pipeline where STEM candidates do not have to choose between teaching and a degree in a STEM field. Those candidates who choose to continue in the program are required to satisfy a variety of requirements, including a minimum GPA, satisfactory field teaching in every course, and a preliminary and final portfolio. **Lipscomb University** also has a *"secondary admit"* policy for candidates, whereby students who want to major in teaching go through an admissions process at the end of their freshman year or beginning of their sophomore year. The university requires a higher GPA requirement than the minimum state requirements for entry into its teacher education program, an in-person interview, and participation in a weekend retreat that frontloads the program's philosophy, conceptual framework, and what the learning-to-teach process will look like over next three years. According to program leadership, this practice allows for heightened selectivity and program candidates who are ready to embark on a clinically intensive approach to learning to teach.

36 See, for example, **Schön, D.A. (1983).** *The reflective practitioner: How professionals think in action.* New York, NY: Basic Books; **Ball, D.L., & Cohen, D.K. (1999).** *Developing practice, developing practitioners.* In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession* (pp. 3–32). San Francisco, CA: Jossey-Bass.

INSTRUCTIONAL INNOVATIONS

Clinically oriented programs also have adopted a range of instructional innovations focused on creating opportunities for safe practice that approximate instruction in classrooms with support and feedback, leading to tighter theory-to-practice alignment. *"Safe practice"* is a reference to medical training simulations in which doctors in training conduct medical procedures in simulated settings in advance of doing the procedure on a live patient.[37] Historically, teacher education pedagogies most often involved direct contact with students—the equivalent of a medical student practicing on a live patient. Safe practice opportunities highlighted by interviewed programs include the use of a digital classroom simulator and the use of rehearsals with coached feedback.

The **University of Central Florida** creates opportunities for safe practice in advance of teacher candidates working directly with students through the use of TeachLivE, a mixed-reality simulation tool developed with an interdisciplinary team of researchers that allows pre-service teachers to teach in a simulated classroom environment.[38] In the TeachLivE environment, a teacher candidate walks into a room that looks like a middle school classroom. Instead of real students, however, there are avatars. This setting allows multiple teacher candidates to practice the same skill during six- to ten-minute simulations over the course of a single class session. TeachLivE's primary purpose is to develop teacher candidates' knowledge of classroom management, pedagogy, and content.

Rehearsals of teaching in a university classroom also build on the principle of *"do no harm."* In the **Seattle Teacher Residency** and UTeach Austin's STEM teacher preparation program at **University of Texas-Austin**, rehearsals of practice with coached feedback are an important pedagogy in a number of courses. The **Relay Teaching Residency** also relies on rehearsals of classroom enactment with no students present. In these programs, a teacher candidate enacts a lesson plan by saying and doing exactly what he or she would do in interaction with students and receives feedback on this enactment from an expert prior to enacting the lesson with actual students.[39] The use of simulations and rehearsals is responsive to contemporary calls for teacher education coursework that is focused on what teachers do in their daily work.[40]

Teaching any subject well is a complex coordination of planning, pedagogical skill, on-the-spot judgment, and knowledge of cognitive and child development. The deliberate shifts toward reimagining coursework and pedagogies taken by the clinically oriented programs in this report run counter to the popular notion that talent, coupled with one's own school experience, prepares one to be a good teacher. These programs rest on the conceptualization of teaching as an interactive practice that is learned in experience with guidance from an expert.

SHIFT 3
Emphasizing Authentic Partnerships Between and Across Schools, Districts, and Institutes of Higher Education

A majority of programs interviewed underscored the many ways in which shifting to a clinically oriented approach required them to work differently across their partnerships in order to accomplish their goals. As one program leader stated, *"No longer could we say we have five student teachers and then find teachers who are willing to mentor. We needed to partner with the district and with schools. As a result we work with fewer districts but more deeply."* Many programs situated at an institution of higher education (IHE) characterized past relationships with districts as passive or worse—that local education agencies felt that

37 **Schaeffer, J.J., & Gonzales, R. (2000).** Dynamic simulation: A new tool for difficult airway training of professional health care providers. *American Journal of Anesthesiology, 27*, 232–242.

38 **Dieker, L.A., Rodriguez, J., Lingnugaris-Kraft, B., Hynes, M., & Hughes, C.E. (2014).** The potential of simulated environments in teacher education: Current and future possibilities, *Teacher Education and Special Education, 37*(1), 21–33.

39 See, for example, **Kazemi, E., & Hubbard, A. (2008).** New directions for the design and study of professional development: Attending to the coevolution of teachers' participation across contexts. *Journal of Teacher Education, 59*(5), 428–441; **Lampert, M. (2005).** *Preparing teachers for ambitious instructional practice: Learning to listen and to construct an appropriate response*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada; **Scott, S.E., & Benko, S. (2010).** *Coached rehearsals in pre-service teacher education: What's coachable?* Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.

40 See, for example, **Ball, D.L., & Forzani, F.M. (2009).** The work of teaching and the challenge for teacher education. *Journal of Teacher Education, 60*, 497–511; **Ball, D.L., Sleep, L., Boerst, T.A., & Bass, H. (2009).** Combining the development of practice and the practice of development in teacher education. *Elementary School Journal, 109*(5), 458–474; **Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E., & Williamson, P. (2009).** Teaching practice: A cross-professional perspective. *Teachers College Record, 111*(9), 2055–2100.

institutions of higher education actively did not value their perspective. To alter this characterization, the programs in this paper embraced the mindset that districts were both partners and clients, or consumers, of the teachers that IHEs prepare.

In the evolution toward true partnership, programs described three trends that signal a commitment to authentic partnership: designing curriculum that is responsive to district-identified needs, changing faculty roles, and creating intentional structures that signal commitment to district partnership.

DESIGNING CURRICULUM THAT IS RESPONSIVE TO DISTRICT-IDENTIFIED NEEDS

Historically, university courses have been created with considerable autonomy among faculty, often with little or no input from any hiring school district. With the view of the district as the *"client"* of teacher preparation, however, clinically oriented teacher education programs shifted this practice. A number of programs featured here designed courses in collaboration with their district partners, at times in planning sessions prior to launching a new program and at others by gathering direct input from existing program mentors on what was needed or not working in their extant curriculum. Depending on the program, some mentor teachers co-wrote new curricula. According to university and district personnel, successful collaborative redesign efforts required compromise by both partners but, when done well, worked to increase coherence and tighten theory-to-practice integration.

For example, in the **Fresno Teacher Residency (FTR)** program, teacher education courses typically used Bloom's taxonomy as a framework for teaching questioning skills.[41] Meanwhile, Fresno Unified School District relied on Webb's Depth of Knowledge (DOK) in question planning, which is aligned with the Common Core State Standards. This led the individuals designing FTR courses to incorporate the use of Webb's DOK in place of Bloom's taxonomy when they teach questioning. By shifting to focus on DOK in its coursework, the program created greater coherence in the candidate experience. Programs have also made shifts that proved more logistically difficult in order to foster greater coherence, such as following the district calendar to demonstrate a clear commitment to the partnership and to enable candidates to experience the full cadence of the school year.

Collaborative curriculum redesign has also allowed programs to prepare teachers for context-specific work. In the full-year residency for teacher education program seniors at the **University of South Dakota**, as well as candidates in **CSU Chico's Rural Teacher Residency** program and **Heritage University's HU105 program**, candidates learn to teach and work in the context of rural schools. Careful attention to collaborative curriculum design in these programs (i.e., in the form of mentor and principal input) has helped candidates understand what it means to live rurally and work with rural students while responding to the needs of underserved learners, including English language learners and students in special education. Other programs described their partnership similarly. A central focus of the **Los Angeles Urban Teacher Residency (LAUTR)**, for example, is equipping teacher candidates with the knowledge and skills to enact culturally relevant pedagogy in the Los Angeles Unified School District. Curriculum redesign efforts have helped candidates move beyond cultural assumptions and develop specific skills that support candidates to teach in a way that honors the backgrounds, experiences, and talents students bring to the classroom. Importantly, LAUTR has established strong partnerships with a number of different community organizations with whom it works to help teacher candidates more deeply understand the communities in which their students live.

CSU Fullerton placed a similar focus on developing a teacher education curriculum that fosters competence in culturally relevant pedagogy. Program faculty and district personnel note that teacher candidates exit their programs with a competence and cultural proficiency enabled by a curriculum that is responsive to the contexts in which candidates teach. **UChicago UTEP at the University of Chicago** found that its context-specific approach to teacher preparation is a crucial reason why candidates are so successful in working in Chicago Public Schools after graduation.[42]

41 **Bloom, B.S. (1956).** *Taxonomy of educational objectives, handbook I: The cognitive domain.* New York, NY: David McKay.

42 **Hammerness, K., & Matsko, K.K. (2013).** When context has content: A case study of new teacher induction in the University of Chicago's Urban Teacher Education Program. *Urban Education, 48*(4), 557–584.

New Faculty Roles

As **Heritage University** shifted to a clinical program with HU105, faculty hires have been made primarily from the most talented practitioners in the program's partner districts. The former classroom teachers are responsible for teaching courses in HU105's nontraditional competency-based curriculum and working as site advocates, representing one school or a group of schools in the district depending on the number of teacher candidates. In their role as site advocates, faculty are in schools and classrooms at least three days per week, working to support candidates and core teachers in HU105's various Teaching and Learning teams to successfully enact their roles. They also inform and coordinate with school principals on all issues relevant to school personnel, instruction, and HU105 operations. In addition to working in their roles as site advocates, clinical faculty spend 10% of their time dedicated to supporting school districts through professional development in their areas of expertise at no cost to the districts.

UTeach-National's Master Teacher role exists in every STEM- focused preparation program in the UTeach network. Master Teachers are secondary-level practitioners with advanced degrees who are hired as full-time, non-tenured clinical faculty for UTeach programs. They supervise candidates' multiple field experiences and act as informal mentors and advisors to candidates, teach multiple courses on practice, are paired with research faculty in all courses with a field component, model effective and efficient classroom instruction throughout the candidate experience, serve as the bridge between the university program and the local public schools, facilitate all candidate and host teacher placements, and support cooperating or host teachers to understand how to give feedback to the candidates who share their classrooms. They are exclusively dedicated to student support and program success. They also provide customized, on-demand induction support during the first two to three years of teaching.

A longitudinal study found that pre-service teachers who have been prepared in programs that pay particular attention to context are more likely to remain in teaching.[43] Indeed, this same research suggests that UChicago UTEP's targeted preparation may be particularly important to candidates' commitments, practices, and decision to stay in teaching.[44]

CHANGING FACULTY ROLES

From collaborating on curriculum development to teaching courses at school sites, faculty in many of the programs studied are more connected than ever before with the districts where their teacher candidates work and learn to teach. Changes in teaching schedules, hiring practices, and the professional development that faculty willingly engage in to stay current with district practices all demonstrate how changing faculty roles fosters greater program coherence and stronger, more authentic partnerships.

Changes in Teaching Schedules

Coursework in a clinically oriented program does not often align with typical university scheduling structures. Courses might be taught within a compressed time frame (e.g., every day for two weeks), or take place at times that might be considered inconvenient (e.g., early on a Friday morning) or in site-based locations far removed from the university (e.g., 90 minutes away at a rural school). The flexibility and willingness of faculty members to modify traditional teaching schedules to meet the needs of candidates proved essential to the success of the clinically oriented programs participating in this project.

Changes in Hiring Practices

Some programs have recognized the need to hire *"differently."* The dean at **CSU Fresno's Kremen School of Education**, for example, interviews every potential job candidate to learn more about his or her willingness to collaborate in teaching courses, serve as a liaison between the university and a

43 **Tamir, E. (2009).** Choosing to teach in urban schools among graduates of elite colleges. *Urban Education, 44*(5), 522–544; **Tamir, E. (2014).** Choosing teacher as a career in urban public, Catholic and Jewish schools by graduates of elite colleges. *Journal of Educational Change, 15,* 327–355; **Feiman-Nemser, S., Tamir, E., & Hammerness, K. (2014).** *Inspiring teaching: Context-specific teacher preparation for the 21st century.* Cambridge, MA: Harvard Education Press.

44 **Matsko, K.K., & Hammerness, K. (2014).** Unpacking the "urban" in urban teacher preparation: Making a case for context-specific teacher preparation. *Journal of Teacher Education, 65,* 128–144.

partner district, and teach courses on site, which may require driving considerable distances. This represents a significant shift away from the typical hiring approach in many institutions of higher education.

University Faculty Professional Development

University leadership and faculty also recognize the need to strengthen instructional knowledge of current practices in K–12 settings, especially as a majority of states usher in the Common Core State Standards. In response, programs and whole schools of education have taken on professional development initiatives to heighten awareness and strengthen course relevance in the current climate. For example, the entire **School of Education at Lipscomb University** is dedicated to the intentional integration of the Common Core into its coursework. Faculty spend considerable time in meetings and professional development discussing what they will do to shift toward teaching to the Common Core and how assignments will reflect this change.

CSU Fresno leaders describe their approach to clinical teacher education as an "all-in approach" by faculty. On multiple occasions a busload of teacher education faculty have visited partner districts for tours of targeted schools. It is not unusual for the dean of the school to join. In fact, the dean also takes research faculty, educational administration faculty, the engineering and undergraduate dean, and faculty from math, science, and arts on once-monthly walk-throughs in the Fresno Unified School District (FUSD); they visit a different school and, in conversation with FUSD's curriculum and instruction leadership, including the Associate Superintendent, visit different classrooms and debrief after each classroom visit. Having a range of higher education faculty and leadership in a school district monthly is a dramatic departure from business as usual in teacher education.

Heritage University's HU105 program expects faculty to use data to drive candidates' training. The program's entire faculty and staff meet from 8 a.m. until noon every Monday to make decisions about program design and support plans based on data; these plans are then posted on the program website for all core teachers and candidates to see. Faculty/site advocates work to identify problem issues and red flags and to propose solutions. Other programs report similar systematic use of data and intentional work to strengthen the data literacy of clinical and research faculty, including **iTeachAZ at ASU**, **TechTeach at Texas Tech**, **UTeach Austin at the University of Texas-Austin**, **USC's Rossier School of Education**, the **New Visions for Public Schools–Hunter College MASTER** program, and the **Relay Teaching Residency**. The TechTeach program, for example, uses Tableau, a platform that can pull data from various sources and create multiple displays and dashboards. The design of TechTeach's data management system allows for the collection and analysis of candidate and student performance data given the program's emphasis on student impact, and provides all stakeholders across the partnership with access to important information about program implementation. To galvanize program staff to use Tableau effectively, the dean of the school of education instituted *"data days"* in which he individually meets with every Site Coordinator in the program so that he can better understand how they are using data to make decisions about how best to support their teacher candidates.

CREATING INTENTIONAL STRUCTURES THAT SIGNAL COMMITMENT TO DISTRICT PARTNERSHIP

Conversations across a range of programs highlighted that leaders in both IHEs and districts must understand the complex challenge of growing effective teachers in a clinically oriented approach. To do so, programs established intentional structures to support and foster an authentic partnership in the following ways:

- Ensuring that every meeting scheduled includes members from the partner local education agency, an advisory board, and university faculty
- Scheduling weekly meetings where faculty and university partners co-plan and evaluate student progress
- Using learning management systems with teacher candidates, cooperating teachers, and university supervisors that allow for constant communication and collaborative discussion among stakeholders
- Establishing monthly standing meetings between district superintendents and school of education deans
- Collaborating in knowledge building, for example, by inviting faculty and teacher education candidates to professional development that is sponsored by the district

Data-Driven Decision Making

The accessibility of resident performance and overall implementation data at the **New Visions for Public Schools–Hunter College MASTER** program has heralded groundbreaking changes to course content as well as to how research and clinical faculty work together to revise and strengthen that content. For example, upon reviewing math resident performance data during year one of the program, the chair of the math department at the School of Arts and Sciences invited a team of research and clinical faculty to rework the design and delivery of a summer-term geometry course in the program. Together, the team was able to create a very different and unique experience for the math residents in year two of the program, one that emphasized pedagogical content knowledge (a key program focus) and strengthened residents' readiness to meet learner needs.

Arizona State University's iTeach AZ program uses the App+Data dashboard, enabling program staff to use formative data in real time to improve candidate learning and performance. Program staff can print out data dashboards daily, identify data-based trends, and immediately adjust their courses and coaching. For example, when a Site Coordinator noticed a common struggle with a particular indicator on the program's teacher performance rubric after several candidate observations, she tweaked her course session plan that week in order to model the indicator. Prior to implementing the program's new data management system, Site Coordinators spent full days each week writing reports from their offices and making data available online. With the facility of the program's new technology and dashboard, Site Coordinators can maximize their time in classrooms and schools, upload data in the moment, and address real-time challenges with ease. Additionally, all program staff can look across 30 cohorts in the state at any time and be well positioned to make data-based decisions to drive performance improvements.

Clinically oriented programs strengthen teacher candidates' ability to make data-driven instructional decisions by intentionally focusing on data literacy in the curriculum. In the **Los Angeles Urban Teacher Residency (LAUTR)**, residents first study the persistent and entrenched achievement gap that exists in the district and the role of high expectations in mitigating this gap. In coursework, residents analyze achievement data by subgroup and work to identify trends across math and literacy achievement for their students. Faculty and staff then support residents as they consider the role of high-quality instruction to improve instructional outcomes and what specific actions they can take to improve achievement outcomes for their students. Residents create action plans, teach, and reflect on the impact of their data-based instructional choices on student learning.

The above systems and processes work to build, reinforce, and expand the commitment that programs and partner districts have made to create a teacher education experience that results in well-prepared beginning teachers. For example, in the co-teaching partnership between **CSU Fullerton's** elementary education credential program and the Fullerton School District, both the district and university co-plan and deliver joint professional development because of a desire to establish a shared vision and a common language as they support candidates through the clinical experience. The collaboratively planned sessions also strengthen participants' facility with the district's data systems, instructional processes, and teacher evaluation expectations and are typically attended by supervisors, teacher candidates, cooperating teachers, and university faculty whenever possible. Finally, program stakeholders across the partnership use Titanium, CSU Fullerton's learning management system, for co-teaching support and collaboration as well as a co-teaching community website that houses videos, documents, and ideas for co-teaching in the classroom and forums for discussion and sharing.

Regardless of the structures in place, programs characterized their partnerships as a mutual sharing of professional responsibilities. In many cases, faculty and district partners described that their willingness and desire to engage with the program were driven by the authenticity of the partnership between the IHE and the district.

Clinically oriented programs are redesigning coursework and pedagogy to ensure teacher candidates can skilfully enact high-quality instruction.

Considerations for Shifting toward Clinically Oriented Preparation

Change management in teacher education is not easy or automatic. The programs in this report are at different stages of shifting toward a clinical approach to teacher education, with some just in their first year of implementation and enduring a steep learning curve.

Across all programs, however, clear conditions surfaced that made the shifts possible, and recurring challenges had to be negotiated at the district, state, and program levels to ensure the shifts took hold. Below we examine four conditions for success: leadership, financial sustainability, program faculty buy-in, and data use and data sharing. We pair each condition with a discussion of potential barriers and recommendations for policy that might mitigate these barriers.

Leadership

Programs repeatedly pointed to unprecedented leadership moves that enabled transformation at the university and district levels. Time and again, the data revealed how chancellors, provosts, deans, department chairs, superintendents, and principals with strong visions for shifting toward practice in teacher education also made tremendous efforts to execute their visions across university, school, program, and, in a few cases, state contexts. In the **Jacksonville Teacher Residency**, for example, the presence of the Superintendent of Duval County Public Schools and the Chair of the Foundation and Secondary Department at the University of North Florida contributed at several key planning and implementation meetings to faculty and district staff's desire to engage in the partnership and to the development of shared impact goals for the program. Similar leadership commitments exist at the **Seattle Teacher Residency (STR)**; the College of Education dean, faculty leaders, associate deans, and assistant superintendents from Seattle Public Schools all serve on various STR leadership committees and were vocal participants in multi-day planning sessions prior to the program's official launch in 2013. At **CSU Long Beach**, the College of Education Dean and the Superintendent of Long Beach Unified meet monthly to discuss key issues and to strategize on next steps, while the Dean at **Lipscomb University** makes teacher education and the sharing of best practices in integrating the Common Core part of every faculty meeting.

In some cases, invested leaders expanded the scope and reach of their clinically oriented teacher education programs to increase impact. For example, successful implementation of the **Los Angeles Urban Teacher Residency** compelled the Dean of CSU Los Angeles (CSULA) Charter College of Education to make the teacher residency model the primary means of preparing all CSULA education students to become teachers, transforming the way that the college prepares all of its teacher candidates. A similar transformation under the guidance of strong leadership happened at **CSU Fullerton**, where all teacher education students are now prepared in a clinically oriented model of teacher education that requires two semesters of student teaching in a co-teaching environment. By Fall 2015, all credential pathways at CSU Fullerton will follow the district calendar, not the university calendar, so teacher candidates experience classrooms for a full school year. This approach is already in place in CSU Fullerton's Department of Secondary Education. At the **University of Southern California**, pioneering leadership ushered in an innovative online program that mirrors the on-campus program. Finally, at **iTeachAZ at Arizona State University**

and TechTeach at Texas Tech, the leadership of pioneering deans made it possible to scale intensive clinical preparation statewide. Leadership committed to clinically oriented teacher education makes innovation possible.

BARRIERS TO IMPLEMENTATION

Unstable leadership—at institutions of higher education or partner districts—can make implementing a clinically oriented teacher education program very difficult. For example, if there is no permanent dean for multiple years, or a new district superintendent every year, as was the case in two participating programs, implementing change and getting strong faculty and district buy-in can prove difficult if not impossible.

Multiple approaches to preparation at a single institution can also serve as a barrier to long-term success in shifting toward a clinical orientation. Leaders that have adopted a single approach, or that have supported the shift toward practice across multiple credential pathways in their organizations, have been able to scale, grow, increase reach, maintain faculty buy-in, and implement real change in programs. At sites where this has not occurred, the positive impacts of a clinically oriented shift have been felt only by a handful of candidates in a particular department or content area. By committing to the power of a clinically oriented approach as the way to prepare teachers, programs can confidently state that this is how they "do" teacher education, build coherence, gain momentum, and let innovation take hold.

POLICY RECOMMENDATIONS

- State and national higher education associations should provide leaders who are transitioning to clinically based preparation programs with a professional learning community that facilitates sharing of best practices.
- K–12 and higher education leaders should examine how to reinvent their relationship to support and facilitate clinically based teacher preparation and to build a mutually beneficial value proposition that advances the quality of new teachers.
- P–16 partnerships should examine how professional development investments can be better tailored to meet the needs of incoming teachers and novice teachers. By collecting and analyzing district-level data that clearly defines the professional development needs of teachers in their first three years of teaching, preparation providers can make data-driven changes to programming in order to better address those needs during the clinical preparation. This also allows school districts and school building leaders to provide more tailored professional development for novice teachers once they are teachers of record, and in accordance with other school-specific goals.
- States should examine teacher preparation program approval and certification requirements to ensure extended, clinically based experiences are a core component of approved programs and to allow for innovation in preparation curriculum and delivery that is not constrained by overly prescriptive content or course-hour requirements.
- Institutions of higher education should adopt a unified, clinically based approach to teacher preparation and adjust policies for preparation programs, faculty engagement, and financing to reflect this priority.

Financial Sustainability

A majority of interviewed programs received supplemental financial support to fund redesign efforts as well as to pay stipends for mentor teachers and teacher candidates (e.g., grants from foundations, states, and the federal government such as the Teacher Quality Partnership (TQP) and Transition to Teaching grant programs). Program staff universally acknowledged that such support made a shift toward clinical practice possible. Understandably, seed and other sources of external funding are often necessary to the initial planning and launch of a redesigned teacher education program. To endure over the long term, however, clinically oriented preparation programs require financial sustainability based on existing sources. Finite sources of funding in the form of multi-year grants or one-time gifts from foundations or private, philanthropic donors do not support financial sustainability over the long term. In fact, some of the programs in this report that launched due to initial rounds of TQP grants in 2009 and 2010 will sunset in the 2015–16 academic year due to a lack of funding.[45]

45 These include the ACT-R program at CSU Northridge and the Urban Teacher Residency program at CSU Dominguez Hills.

Several programs are rethinking their program design with an eye toward a sustainable financial model. For example, some programs are considering creating, or have already created, cost-sharing models with partner districts, especially hard-to-staff districts that view the program as a recruitment pipeline. Some programs have developed new initiatives and partnerships in concert with complementary initiatives with an eye toward sustainability. For example, New Visions for Public Schools has been able to integrate the math and science teacher residency program with its a2i math initiative by ensuring that all math mentor teachers in the **New Visions for Public Schools–Hunter College MASTER** program work in an a2i school.[46] Finally, other programs have engaged in efforts to redesign their original initiatives. For example, when the New York City Department of Education launched the New York City Teaching Residency for School Turnaround in 2012 (now the **New York City Teaching Collaborative**), a two-year federal School Improvement Grant made it possible for the then yearlong residency program to provide residents with a $23,000 stipend, plus another $20,000 in benefits per resident. Once the grant was over, this level of funding was not sustainable. To decrease costs, the program moved to a dual residency model spanning January to August;[47] residents receive a stipend of $13,000. The dual residency from January to August not only is more sustainable financially but also allows program staff to do induction work with program graduates in the fall and to spend time coaching mentor teachers before residents share their classrooms full-time, which they previously had no capacity for in the original program design.

BARRIERS TO IMPLEMENTATION

Shifting to a more clinically oriented programmatic approach can have unforeseen, temporary financial implications. Dramatic curriculum shifts such as moving to a full-year clinical placement or introducing more rigorous performance measures can lead to an initial decreased enrollment and thus reduced income for programs. At **ASU's iTeachAZ** program, enrollment initially decreased when the dean made the decision to shift whole-scale toward a clinically oriented, full-year residency approach; it took three years to return to typical levels. The same happened at **TechTeach at Texas Tech**, where it took two years for program enrollment to return to typical levels and recover.

At **CSU Dominguez Hills**, the time to degree has historically been, on average, six to seven years because students typically work full-time while pursuing their degree. An immersive clinical teaching experience that requires full-time, yearlong commitments from candidates makes it impossible for students to also work a full-time job. Some programs have mitigated the cost of being in a full-time clinical placement by negotiating paid teaching associate positions with partner districts, providing scholarships from private foundations, and supporting students to apply for FAFSA and need-based scholarships as well as federal loan forgiveness programs.

POLICY RECOMMENDATIONS

- Programs and partnerships should investigate hybrid student-teacher roles in school systems that can provide monetary support for candidates while reflecting the in-training, learner position of teacher candidates who work in schools in a clinically oriented program.
- States and the federal government should invest in both need-based and merit-based scholarships and grant opportunities to ease the transition for candidates and providers to a clinically based training model.
- The federal government should create a STEM-focused career-to-teacher grant, similar to Troops to Teachers, to attract and support career professionals transitioning into teaching.
- State-level programs should be created that mirror the federal Teacher Quality Partnership grant competition, providing living stipends for program participants.
- Institutions of higher education should reduce tuition rates for teacher candidates during full-time, clinically based periods of preparation.
- State and national higher education associations should provide university and program leaders with professional development on forming partnerships with other education stakeholders, including local philanthropy, business, and community leaders, in order to build diverse financial models to support the transition to clinically oriented teacher preparation.

46 a2i stands for Accessing Algebra through Inquiry and is a U.S. Department of Education–funded grant under the Investing in Innovation (i3) grant program.

47 Residency one spans January–June; residency two spans June–August.

Program Faculty Buy-In

Programs noted the significance of strong collaboration among research and clinical faculty when conceptualizing and implementing clinically oriented shifts. This was true even at large research institutions, like the **University of Southern California** and the **University of Texas-Austin**, which houses the UTeach Austin STEM preparation program. An explicit program goal of the **New Visions for Public Schools–Hunter College MASTER** program is to unite faculty from the Schools of Arts and Sciences and Education to work collaboratively on the program. At **CSU Long Beach**, educator preparation is seen as a university-wide responsibility; while the credential programs are housed in the College of Education, faculty in content areas teach in the credential program to ensure that future teachers have deep content expertise. All faculty members involved in teacher preparation have engaged in their own professional development around the Common Core State Standards.

Moreover, many of the programs interviewed did not rely primarily on adjuncts or graduate students to teach courses; more often, tenured faculty members and district practitioners committed to the long-term success of a clinically oriented approach were the primary course instructors.

BARRIERS TO IMPLEMENTATION

Innovation in teacher education is not easy. Expecting a small number of faculty to shoulder the burden of an entirely new approach to clinical preparation is not recommended given the insights provided by interviewed programs. Programs that do not commit the necessary funds to staff a clinically oriented program sufficiently can run soft on quality and overall faculty and staff satisfaction. Additionally, some universities do not allow master's level courses to be taught by individuals who do not have a doctorate; this serves as a barrier for clinically oriented programs that want to hire practicing teachers and other district staff to teach or co-teach courses.

POLICY RECOMMENDATIONS

- States, universities, districts, and programs should ensure that their policies do not prevent or discourage high-quality clinical staff from supporting teacher preparation programs, including district-based staff or adjunct faculty that do not have doctorates.
- Institutions of higher education (IHEs) should include participation in clinically oriented teacher preparation as part of annual review evaluations and tenure requirements for all program faculty; IHEs should incentivize faculty participation through financial or other professional growth opportunities.
- University- and district-based faculty should be included as key stakeholders in programmatic discussions about transitioning to a clinically oriented preparation model.

Data Use and Data Sharing

Data-driven decision making enabled by data sharing between programs and districts has the power to inform the quality of clinical teacher preparation. Intentional use of data can allow programs to measure impact on a host of measures as well as transform the nature of conversations between districts and their higher education partners and mentors and teacher candidates.

The ability to measure the impact of teacher preparation, however, has been elusive. This is because the norms of data sharing across IHEs and partner districts do not always support this goal and because strong systems for data management do not always exist at either organization. Further, partners are often unclear on what constitutes the *"right"* data to share and when to share it. Programs that have made progress toward measuring impact create clear memoranda of understanding (MOUs) from the start that outline shared goals for what constitutes data, how that data should be used, and clear plans for the collection, management, and analysis of shared data.

Leaders of **Texas Tech University's TechTeach** program cite their various MOUs with partner districts as a central condition for success. The memoranda stipulate how partners will share benchmark assessment data, student perception data, and teacher performance data as measured by the TxBess[48] Activity Profile (TAP) from candidate classrooms, as well as comparative value-added data for TechTeach graduates.

Across the board, programs highlighted key data considerations to incorporate into partnership agreements:

48 The *Texas Beginning Educator Support System's Activity Profile* (TAP) is a data gathering process designed to help beginning teachers reflect on and improve their teaching practice, and is based on the TxBess Framework, which contains performance standards and a developmental continuum for beginning teachers.

- What data will be collected and shared?
- What are the goals of data sharing?
- How will the data shared be used?
- Who is responsible for collecting the data?
- Who will have access to the data, and when?
- How will the data be packaged?
- How will teacher candidates be identified?
- How will students be identified?

BARRIERS TO IMPLEMENTATION

Beyond a lack of clear and comprehensive memoranda of understanding, additional barriers to data sharing include a lack of coherence between program and district assessment and evaluation tools. Aligning program frameworks with those used by district partners enables cross-stakeholder conversations and reflects a shared responsibility for teacher candidate learning.

Programs also noted that even when a commitment to the collection and analysis of impact data exists across a partnership, the necessary evaluation tools don't always exist. For example, **New Visions for Public Schools-Hunter College MASTER** program has made attempts to measure teachers' pedagogical content knowledge (PCK), given that strengthening the PCK of mentors and candidates is a central goal of the program.[49] It has collaborated with an external evaluator to develop such tools, but creating valid assessment tools to measure PCK at the secondary level has been challenging.

POLICY RECOMMENDATIONS

- Memoranda of understanding between universities, districts, and other third parties entering a teacher preparation partnership should clearly define data needs, sources, uses, and a clear timeline for data-sharing in order to assess program impact and guide improvement; these memoranda should be signed by all involved parties and updated annually to maintain relevance and ensure data needs are continually met.
- Teacher preparation partnerships between universities and districts should align program and district evaluation tools to evaluate candidates and as a condition for meeting program completion requirements.
- States should require districts to evaluate and report graduate effectiveness back to preparation providers.
- States should require evidence of program implementation and impact in program approval standards.

49 See **Shulman, L. (1986).** Those who understand: Knowledge growth in teaching. *Educational Researcher, 15*(2), 4–14.

Conclusion

In their seminal piece *"A Knowledge Base for Teaching: What Would It Look Like and How Can We Get One,"* Hiebert, Gallimore, and Stigler highlight that in the United States, educators often do not use what is already known about best practices to build on and continue to improve education, resulting in a constant reinvention of the wheel.

To foster systemic change toward clinically oriented preparation, the teacher preparation landscape needs comprehensive, sophisticated, and continual knowledge management, data sharing, and collaboration. The goal of *Clinically Oriented Teacher Preparation* is to contribute to a knowledge base of best practice in clinical teacher preparation so that others interested in building clinically rich programs can learn from those who have gone before them.

The programs highlighted in this paper acknowledged the need to attend to many different facets and operations in order to implement a clinically oriented approach—including increased mentor selectivity, the introduction of new clinical roles, a focus on mentor development and site-based training, as well as thinking very differently about coursework and the partnership between preparation programs and hiring school districts. Shifting toward clinically oriented teacher preparation is not just a matter of placing students in classrooms for longer periods of time, hoping they will emerge as better prepared beginning teachers. The programs interviewed for this report suggest that it is a deliberate effort, characterized by innovative pedagogies and talented human capital, to ensure that beginning teachers are well prepared for the challenges of teaching and learning in the 21st century.

Appendix A

Clinically Oriented Teacher Preparation Program Snapshots

Below is a brief overview of the clinically oriented preparation programs that participated in this paper. It is important to note that in California, post-baccalaureate is the only option for teacher certification. Some schools have strong pathways into teaching that include prerequisite courses as part of the undergraduate experience, but students must complete their baccalaureate degree before completing a teaching credential program.

Arizona State University-ITeachAZ (Statewide Initiative)

Arizona State University's residency program is one of the largest teacher education programs in the United States. ASU-ITeachAZ is an undergraduate teacher preparation program that includes a full-year residency in students' final year. The program utilizes performance assessments and a data-sharing tool that facilitates data-driven decision making by program staff and mentor teachers.

CSU Chico (Chico, CA)

The Rural Teacher Residency at CSU Chico is a yearlong residency. Teacher candidates, called "residents," co-teach in one of four partner rural school districts and complete coursework necessary for a master's degree with a multiple-subject or education specialist preliminary credential.

CSU Dominguez Hills STEM Institute for Innovation and Improvement (Carson, CA)

The teacher education program at Dominguez Hills includes multiple pathways into teaching, one of which is the newly launched STAR urban teacher residency program, set to train its first cohort of candidates in 2015. This STEM-focused program, situated in the California STEM Institute for Innovation and Improvement (CSI3), lasts 18 months and includes a yearlong teaching residency in a middle or high school located in south Los Angeles. Students receive a $30,000 stipend during their residency year and upon program completion earn a subject credential in math or science at the middle and high school levels as well as a Master of Arts in Education. Prior to STAR, CSI3 housed the math and science–focused Urban Teacher Residency program at CSU Dominguez Hills, which accepted its last cohort of candidates in 2014.

CSU Fresno (Fresno, CA)

The Fresno Teacher Residency is one of multiple pathways to teaching at CSU Fresno. It is a 15- to 18-month residency program in partnership with the Fresno Unified School District. The middle grades residency program helps prepare new teachers for the classroom with an emphasis on math and science instruction. It combines rigorous master's-level coursework, teacher credentialing coursework, and a yearlong apprenticeship in a classroom with a mentor teacher supported by a comprehensive professional development curriculum in order to develop and support new teachers. Residents receive a $12,500 stipend during the training period and make a commitment to teach in the Fresno Unified School District for a minimum of three years after completing the program. Other Fresno pathways include CalTeach (online), a small traditional credential program in the evening for working candidates and interns, additional partnerships through the Central Valley Partnerships for Exemplary Teachers: Linked Learning with the Porterville Unified, and teacher preparation partnerships in Clovis, Central, Sanger, and Washington districts.

CSU Fullerton (Fullerton, CA)

This clinically oriented program utilizes a co-teaching model in strong partnership with a small number of local school districts. Candidates can earn a variety of credentials at the elementary level (including a multiple-subjects credential with bilingual authorization), single-subject credentials at the

middle and high school levels, and special education certification. All pathways emphasize a cohort model, and candidates complete two semesters of student teaching aligned to the district, not university, calendar.

CSU Long Beach: Urban Teaching Academy (Long Beach, CA)

CSU Long Beach's Urban Teaching Academy (UTEACH) program is a yearlong residency designed in partnership with Long Beach Unified School District. The UTEACH model has been in existence for ten years. Teacher education coursework is taught on site where the students are doing their residency, and students are placed in a classroom with a master teacher. Candidates who complete this program typically teach Grades K–8. UTEACH is one of multiple credential pathways offered at CSU Long Beach.

CSU Northridge: ACT-R Residency Program (Northridge, CA)

ACT-R is a combined 24-month credential/master's degree program offered collaboratively by California State University, Northridge (CSUN) and the Los Angeles Unified School District (LAUSD). The program prepares teachers to serve students with disabilities in high-need schools. Candidates obtain a credential in one year through full-time study as a teacher in residence. Mentors for the program are selected through a rigorous process that includes application, interview, and observation of their teaching practice. In the second year of the program, graduates are employed in LAUSD and complete their master's degree while on the job. With an additional semester, candidates may obtain an Education Specialist Clear Credential. Candidates in ACT-R are eligible for a stipend of up to $35,000 and have an obligation to teach in a special education position in an LAUSD high-need school for three years.

Heritage University: HU105 Program (Toppenish, WA)

Heritage University-105 (HU105) is a 1.5- to 2-year residency program in partnership with Educational Service District 105, which serves children in the Yakima Valley, an area of central Washington plagued by dire and endemic poverty. Undergraduate and graduate candidates who complete the program are considered proficient in the competencies required to be an elementary teacher and have an endorsement in teaching English language learners.

Jacksonville Teacher Residency (Jacksonville, FL)

The Jacksonville Teacher Residency (JTR) is a program that involves a yearlong STEM-focused residency in the classroom of an experienced math or science teacher and coursework leading to a master's degree in education. Candidates must already have a bachelor's degree in math or science or a STEM-related field prior to admittance to the residency program. The program is a partnership between Duval County Public Schools and the University of North Florida. JTR is supported by the Jacksonville Public Education Fund.

Los Angeles Urban Teacher Residency (Los Angeles, CA)

The Los Angeles Urban Teacher Residency is an intensive program that leads to earning a teaching credential and master's degree at California State University Los Angeles (CSULA). Designed to equip future teachers in secondary math, science, and special education to close the achievement gap in high-need urban schools, the 18-month graduate-level program offers an opportunity for teacher residents to work alongside outstanding mentor teachers for an entire school year. Program partners include CSULA, the Center for Collaborative Education, and the Los Angeles Unified School District.

Lipscomb University (Nashville, TN)

This clinically focused undergraduate teacher preparation program is built on a co-teaching model and includes three different clinical placements, each building in intensity and expectations for the teacher candidate. Lipscomb's faculty has worked collaboratively to infuse the Common Core State Standards across the teacher education program and has designed massive open online courses (MOOCs) that are widely used across Tennessee and available for free nationally.

New Visions for Public Schools–Hunter College MASTER (New York, NY)

The MASTER (Math and Science Teacher Residency) program is a 14-month residency with a secondary math and science focus. Residents earn a stipend while learning in a cohort model and are paired with experienced mentor teachers who receive intensive professional development and training on mentoring adult learners. A partnership among New Visions for Public Schools, Hunter College, and the New York Hall of Science allows science teacher candidates to get coached by subject matter experts from the New York Hall of Science and math teacher candidates to get coached by New Visions' instructional coaches; all engage in subject matter inquiry at the college and the museum. Upon successful completion, candidates earn their initial teaching certification in New York City and a master's in adolescent education from Hunter College.

New York City Teaching Collaborative (New York, NY)

NYC Teaching Collaborative, an eight-month residency program for secondary teacher candidates (Grades 7–12) at the graduate level, is run by the New York City Department of Education. The program offers candidates a dual-residency model that includes a six-month spring residency and a second six-week summer residency. Residents receive a stipend of $13,000 during their eight-month training period and begin coursework toward a master's degree at St. John's University at the start of the summer term.

Relay Teaching Residency (New York, NY; Houston, TX; Chicago, IL; Newark, NJ)

This 2-year graduate program is a partnership between the Relay Graduate School of Education and high-performing charter networks in cities across the country, such as Achievement First, KIPP, Blue Engine, and the Noble Network. In year one, candidates complete a teaching residency and simultaneously enroll in Relay, where they take classes on core teaching techniques and content-specific instruction, then rehearse those techniques and receive expert feedback during weekly practice sessions with faculty and classmates. In year two, candidates transition into being teachers of record while completing their coursework at Relay, leading to a master's degree. The program uses a blended learning model, with 45% of coursework available online and 55% in person.

Seattle Teacher Residency (Seattle, WA)

The Seattle Teacher Residency prepares candidates to become Seattle Public Schools (SPS) teachers through a curriculum that combines a full-year residency embedded in a mentor teacher's classroom with graduate-level coursework through the University of Washington. Candidates take courses one evening and one full day each week and spend four days each week working in their placement classroom. The program is a partnership between SPS, the University of Washington, the Seattle Education Association, and the Alliance for Education.

TechTeach Across Texas at Texas Tech University (Statewide Initiative)

TechTeach is a fast-track, one-year undergraduate teacher preparation program combining intense clinical experiences with applicable online courses in district-based partnership around the state. The program allows students to complete a bachelor's degree and earn their teacher certification in one calendar year. All TechTeach students must successfully complete a series of competency-based performance assessments. Program outcomes are aligned with the Texas Teacher Advancement Program, the teacher evaluation system used statewide.

University of Central Florida (Orlando, FL)

In this clinically oriented program, candidates complete two semesters of student teaching in the final year of their undergraduate teaching studies. Secondary education candidates may complete at least one of their student teaching semesters in the Florida Virtual School, a statewide online school. All cooperating teachers in the program must complete a certification course, which is offered by UCF, and university professors supervise 90% of all student teachers remotely. UCF is also pioneering the use of virtual simulations in teacher preparation through TLE TeachLivE, a patented simulation and training program.

University of South Dakota (Statewide Initiative)

Undergraduate students at USD receive a bachelors' degree in Elementary Education, Secondary Education, or Special Education through a four-year program that includes a full-year residency during candidates' senior year. This 3+1-year residency program for undergraduate students began at the University of South Dakota and is currently being scaled to all public universities in the state. For the first time ever, teacher candidates are learning to teach in rural parts of the state that do not have universities and are completing coursework through virtual courses and virtual supervision.

University of Southern California (Nationwide/International)

The MAT program at USC's Rossier School of Education is a primarily online program that involves students placed in 700 districts and 4,000 schools across the United States and internationally. Credential tracks are offered at the elementary (multiple subject) and secondary (social studies, science, English, and math) levels. The Special Education Credential, Gifted Certificate, and Bilingual Authorization for Spanish Certificate may be obtained through optional additional coursework. Candidates complete coursework that blends theory with a variety of hands-on, field-based teaching experiences throughout their time in the program, allowing them to build positive classroom environments to meet the challenges of today's high-need schools.

UTeach Austin at the University of Texas-Austin (Austin, TX)

The founding UTeach program is designed specifically to prepare middle and high school STEM teachers. The unique collaboration between the Colleges of Natural Science and Education at the University of Texas-Austin is designed to give undergraduate students the opportunity to explore the profession of teaching in a hands-on way. Students studying mathematics, science, engineering, or computer science receive both a degree in their major and teaching certification without additional time or cost. Beginning in the first semester of the program, candidates engage in practice teaching experiences in local classrooms and complete three additional required field experiences prior to completing their apprenticeship teaching.

UTeach National (National Initiative)

UTeach National builds off of the founding UTeach program at the University of Texas-Austin and, as of January 2015, is serving 44 universities across 21 states and the District of Columbia.

Urban Teacher Education Program at the University of Chicago (Chicago, IL)

The graduate-level Urban Teacher Education Program (UChicago UTEP) prepares elementary (K–9) as well as secondary biology and mathematics students to work in urban schools throughout Chicago. It is a five-year experience that integrates rigorous academic and methods coursework with ongoing teaching experiences that broaden in scope as candidates progress through an initial two-year MAT program. During the first year (the foundation year), teacher candidates complete tutoring experiences in one of the four University of Chicago–affiliated charter schools. In year two, the residency year, teacher candidates complete an intensive yearlong clinical residency in two placements that is complemented by a professional teaching seminar and related coursework, including a final Transitions to Teaching course taught by induction coaches. After graduation, residents are assigned a coach and receive up to three years of induction support that includes in-classroom coaching, workshops, inquiry groups, and access to an online professional community—all of which create leadership learning opportunities that bridge to the role of Clinical Instructor.

Appendix B

Sample Gateway Assessment From the Seattle Teacher Residency

STR Evaluation Tool; Gateway 2; Adopted Sept 2014 Adapted from Washington State Criteria (http://tpep-wa.org/wp-content/uploads/Danielson-Rubrics-by-criteria.pdf), Danielson Framework, and University of Washington Secondary Education Program 2011-2012

Resident _____ **Content Area** _____ **School** _____ **Grade** _____

Coach _____ **Date Coach Evaluation Completed** _____

Mentor Teacher _____ **Date Mentor Feedback Provided** _____

This progress evaluation is intended to provide the Resident with an opportunity to self-reflect AND receive feedback on his/her progress in developing the ability to successfully integrate the components of teaching as defined by the STR Core Practices and SPS evaluation framework. Successful completion of this Gateway accounts for 35% of the fall quarter Field Experience course (EDTEP 502).

PROCESS FOR COMPLETION OF THE GATEWAY:

1. Resident submits teaching portfolio to Canvas (details of this portfolio can be found on STR Home — "Gateway #2" page) — **(by November 30)**
2. Coach reviews Resident materials scores, adds their scores and justification **(Completed by December 4)**
3. Mentor reviews Resident and Coach scoring and provides input *as needed where discrepancies occur (they do not provide scores).*
4. Coach, Resident, and Mentor meet to debrief lesson **(Completed by December 12)**
5. Evaluation form is submitted to STR Field Director and kept in Resident file **(Coaches Complete by December 15)**
6. If concerns arise, Resident and Coach will meet with Field Director to develop a plan or modified plan for program completion.

SPS Teacher Evaluation Framework Aligned with STR Core Practices

Residents will be measured against the SPS evaluation criteria that align with the Core Practices for a particular Gateway. The measured criteria for Gateway #2 are indicated in tan.

Criterion 1 Centering Instruction on High Expectations for Student Achievement	Criterion 2 Demonstrating Effective Teaching Practices	Criterion 3 Recognizing Individual Student Learning Needs and Developing Strategies to Address Those Needs	Criterion 4 Providing Clear and Intentional Focus On Subject Matter Content and Curriculum
2b: Establishing a Culture for Learning **3a:** Communicating with Students **3c:** Engaging Students in Learning **STR Core Practice:** Orient students to the content. Position students as competent.	**3b:** Using Questioning and Discussion Techniques **4a:** Reflecting on Teaching **STR Core Practice:** Teach towards instructional goals.	**1b:** Demonstrating Knowledge of Students **3e:** Demonstrating Flexibility and Responsiveness **Student Growth Criterion 3** **Student Growth 3.1:** Establish Student Growth Goals (s) **Student Growth 3.2:** Achievement of Student Growth Goal(s) **STR Core Practice:** Teach with each student in mind.	**1a:** Demonstrating Knowledge of Content and Pedagogy **1c:** Setting Instructional Outcomes **STR Core Practice:** Orient students to the content. Position students as competent.
Criterion 5 **Fostering and Managing a Safe, Positive Learning Environment**	**Criterion 6** **Using Multiple Student Data Elements to Modify Instruction and Improve Student Learning**	**Criterion 7** **Communicating and Collaborating With Parents and the School Community**	**Criterion 8** **Exhibiting Collaborative and Collegial Practices Focused On Improving Instructional Practice and Student Learning**
2a: Creating an Environment of Respect and Rapport **2c:** Managing Classroom Procedures **2d:** Managing Student Behavior **2e:** Organizing Physical Space **STR Core Practice:** Establish a community of learners.	**1f:** Designing Student Assessments **3d:** Using Assessment in Instruction **4b:** Maintaining Accurate Records **Student Growth Criterion 6** **Student Growth 6.1:** Establish Student Growth Goal(s) **Student Growth 6.2:** Achievement of Student Growth Goal(s) **STR Core Practice:** Assess student understanding to guide instruction.	**4c:** Communicating with Families **STR Core Practice:** Invest in the school community to support student learning.	**4d:** Participating in a Professional Community **4e:** Growing and Developing Professionally **4f:** Showing Professionalism **Student Growth Criterion 8** **Student Growth 8.1** Establish Team Student Growth Goal(s) **STR Core Practice:** Invest in the school community to support student learning.

SPS Teacher Evaluation Framework Aligned with STR Core Practices *(continued)*

DIRECTIONS:

- For each item, Resident and Coach will indicate a score (from 1 to 4) and provide justification for that score.
- Mentors will provide additional feedback if any scoring discrepancies arise.

CRITERION 1: Centering Instruction On High Expectations for Student Achievement

2b: Establishing a Culture for Learning

Unsatisfactory – 1	Basic – 2	Proficient – 3	Distinguished – 4	Resident	Coach	Mentor Input
The classroom culture is characterized by a lack of teacher or student commitment to learning and/or little or no investment of student energy into the task at hand. Hard work is not expected or valued. Medium or low expectations for student achievement are the norm, with high expectations for learning reserved for only one or two students.	The classroom culture is characterized by little commitment to learning by teacher or students. The teacher appears to be only going through the motions, and students indicate that they are interested in completion of a task, rather than quality. The teacher conveys that student success is the result of natural ability rather than hard work; high expectations for learning are reserved for those students thought to have a natural aptitude for the subject.	The classroom culture is a cognitively busy place where learning is valued by all, with high expectations for learning being the norm for most students. The teacher conveys that with hard work students can be successful. Students understand their role as learners and consistently expend effort to learn. Classroom interactions support learning and hard work.	The classroom culture is a cognitively vibrant place, characterized by a shared belief in the importance of learning. The teacher conveys high expectations for learning by all students and insists on hard work. Students assume responsibility for high quality by initiating improvements, making revisions, adding detail, and/or helping peers.			

3a: Communicating with Students

Unsatisfactory – 1	Basic – 2	Proficient – 3	Distinguished – 4	Resident	Coach	Mentor Input
The instructional purpose of the lesson is unclear to students, and the directions and procedures are confusing. The teacher's explanation of the content contains major errors. The teacher's spoken or written language contains errors of grammar or syntax. The teacher's vocabulary is inappropriate, vague, or used incorrectly, leaving students confused.	The teacher's attempt to explain the instructional purpose has only limited success, and/or directions and procedures must be clarified after initial student confusion. The teacher's explanation of the content may contain minor errors; some portions are clear; other portions are difficult to follow. The teacher's explanation consists of a monologue, with no invitation to the students for intellectual engagement. Teacher's spoken language is correct; however, his or her vocabulary is limited, or not fully appropriate to the students' ages or backgrounds.	The teacher clearly communicates instructional purpose of the lesson, including where it is situated within broader learning, and explains procedures and directions clearly. Teacher's explanation of content is well scaffolded, clear and accurate, and connects with students' knowledge and experience. During the explanation of content, the teacher invites student intellectual engagement. Teacher's spoken and written language is clear and correct and uses vocabulary appropriate to the students' ages and interests.	The teacher links the instructional purpose of the lesson to student interests; the directions and procedures are clear and anticipate possible student misunderstanding. The teacher's explanation of content is thorough and clear, developing conceptual understanding through artful scaffolding and connecting with students' interests. Students contribute to extending the content and help explain concepts to their classmates. The teacher's spoken and written language is expressive, and the teacher finds opportunities to extend students' vocabularies.			

SPS Teacher Evaluation Framework Aligned with STR Core Practices *(continued)*

DIRECTIONS:

- For each item, Resident and Coach will indicate a score (from 1 to 4) and provide justification for that score.
- Mentors will provide additional feedback if any scoring discrepancies arise.

CRITERION 1: Centering Instruction On High Expectations for Student Achievement						
3c: Engaging Students in Learning						
Unsatisfactory – 1	**Basic – 2**	**Proficient – 3**	**Distinguished – 4**	**Resident**	**Coach**	**Mentor Input**
The learning tasks and activities, materials, resources, instructional groups and technology are poorly aligned with the instructional outcomes or require only rote responses. The pace of the lesson is too slow or too rushed. Few students are intellectually engaged or interested.	The learning tasks and activities are partially aligned with the instructional outcomes but require only minimal thinking by students, allowing most to be passive or merely compliant. The pacing of the lesson may not provide students the time needed to be intellectually engaged.	The learning tasks and activities are aligned with the instructional outcomes and designed to challenge student thinking, the result being that most students display active intellectual engagement with important and challenging content and are supported in that engagement by teacher scaffolding. The pacing of the lesson is appropriate, providing most students the time needed to be intellectually engaged.	Virtually all students are intellectually engaged in challenging content through well-designed learning tasks and suitable scaffolding by the teacher and fully aligned with the instructional outcomes. In addition, there is evidence of some student initiation of inquiry and of student contribution to the exploration of important content. The pacing of the lesson provides students the time needed to intellectually engage with and reflect upon their learning and to consolidate their understanding. Students may have some choice in how they complete tasks and may serve as resources for one another.			

SPS Teacher Evaluation Framework Aligned with STR Core Practices *(continued)*

DIRECTIONS:

- For each item, Resident and Coach will indicate a score (from 1 to 4) and provide justification for that score.
- Mentors will provide additional feedback if any scoring discrepancies arise.

CRITERION 2: Demonstrating Effective Teaching Practices

3b: Using Questioning and Discussion Techniques

Unsatisfactory – 1	Basic – 2	Proficient – 3	Distinguished – 4	Resident	Coach	Mentor Input
Teacher's questions are of low cognitive challenge, require single correct responses, and are asked in rapid succession. Interaction between teacher and students is predominantly recitation style, with the teacher mediating all questions and answers. A few students dominate the discussion.	Teacher's questions lead students through a single path of inquiry, with answers seemingly determined in advance. Alternatively, the teacher attempts to frame some questions designed to promote student thinking and understanding, but only a few students are involved. Teacher attempts to engage all students in the discussion and to encourage them to respond to one another, but with uneven results.	Although the teacher may use some low-level questions, he or she asks the students questions designed to promote thinking and understanding. Teacher creates a genuine discussion among students, providing adequate time for students to respond and stepping aside when appropriate. Teacher successfully engages most students in the discussion, employing a range of strategies to ensure that most students are heard.	Teacher uses a variety or series of questions or prompts to challenge students cognitively, advance high-level thinking and discourse, and promote metacognition. Students formulate many questions, initiate topics, and make unsolicited contributions. Students themselves ensure that all voices are heard in the discussion.			

4a: Reflecting on Teaching

Unsatisfactory – 1	Basic – 2	Proficient – 3	Distinguished – 4	Resident	Coach	Mentor Input
Teacher does not know whether a lesson was effective or achieved its instructional outcomes, or he/she profoundly misjudges the success of a lesson. Teacher has no suggestions for how a lesson could be improved.	Teacher has a generally accurate impression of a lesson's effectiveness and the extent to which instructional outcomes were met. Teacher makes general suggestions about how a lesson could be improved.	Teacher makes an accurate assessment of a lesson's effectiveness and the extent to which it achieved its instructional outcomes and can cite general references to support the judgment. Teacher makes a few specific suggestions of what could be tried another time the lesson is taught.	Teacher makes a thoughtful and accurate assessment of a lesson's effectiveness and the extent to which it achieved its instructional outcomes, citing many specific examples from the lesson and weighing the relative strengths of each. Drawing on an extensive repertoire of skills, teacher offers specific alternative actions, complete with the probable success of different courses of action.			

SPS Teacher Evaluation Framework Aligned with STR Core Practices *(continued)*

DIRECTIONS:

- For each item, Resident and Coach will indicate a score (from 1 to 4) and provide justification for that score.
- Mentors will provide additional feedback if any scoring discrepancies arise.

CRITERION 4: Providing Clear and Intentional Focus On Subject Matter Content and Curriculum

1a: Demonstrating Knowledge of Content and Pedagogy

Unsatisfactory – 1	Basic – 2	Proficient – 3	Distinguished – 4	Resident	Coach	Mentor Input
In planning and practice, teacher makes content errors or does not correct errors made by students. Teacher's plans and practice display little understanding of prerequisite relationships important to student's learning of the content. Teacher displays little or no understanding of the range of pedagogical approaches suitable to student's learning of the content.	Teacher is familiar with the important concepts in the discipline but displays lack of awareness of how these concepts relate to one another. Teacher's plans and practice indicate some awareness of prerequisite relationships, although such knowledge may be inaccurate or incomplete. Teacher's plans and practice reflect a limited range of pedagogical approaches to the discipline or to the students.	Teacher displays solid knowledge of the important concepts in the discipline and the ways they relate to one another. Teacher's plans and practice reflect accurate understanding of prereq-uisite relationships among topics and concepts. Teacher's plans and practice reflect familiarity with a wide range of effective pedagogical approaches in the discipline.	Teacher displays extensive knowledge of the important concepts in the discipline and the ways they relate both to one another and to other disciplines. Teacher's plans and prac-tice reflect understanding of prerequisite relation-ships among topics and concepts and provide a link to necessary cogni-tive structures needed by students to ensure understanding. Teacher's plans and practice reflect familiarity with a wide range of effective pedagogical approaches in the discipline, anticipating student misconceptions.			

1c: Setting Instructional Outcomes

Unsatisfactory – 1	Basic – 2	Proficient – 3	Distinguished – 4	Resident	Coach	Mentor Input
Outcomes represent low expectations for students and lack of rigor, and not all of them reflect important learning in the discipline. Outcomes are stated as activities rather than as student learning. Outcomes reflect only one type of learning and only one discipline of strand and are suitable for only some students.	Outcomes represent moderately high expectations and rigor. Some reflect important learning in the discipline and consist of a combi-nation of outcomes and activities. Outcomes reflect several types of learning, but teacher has made no attempt at coordination or integration. Most of the outcomes are suitable for most of the students in the class in accordance with global assessments of student learning.	Most outcomes represent rigorous and important learning in the discipline. All the instructional outcomes are clear, are written in the form of student learning, and suggest viable methods of assessment. Outcomes reflect several different types of learning and opportunities for coordination. Outcomes take into account the varying needs of groups of students.	All outcomes represent rigorous and important learning in the discipline. The outcomes are clear, are written in the form of student learning, and permit viable methods of assessment. Outcomes reflect several different types of learning and, where appropriate, represent opportunities for both coordination and integration. Outcomes take into account the varying needs of individual students.			

SPS Teacher Evaluation Framework Aligned with STR Core Practices *(continued)*

DIRECTIONS:

- For each item, Resident and Coach will indicate a score (from 1 to 4) and provide justification for that score.
- Mentors will provide additional feedback if any scoring discrepancies arise.

CRITERION 5: Fostering and Managing a Safe, Positive Learning Environment

2a: Creating an Environment of Respect and Rapport

Unsatisfactory – 1	Basic – 2	Proficient – 3	Distinguished – 4	Resident	Coach	Mentor Input
Patterns of classroom interactions, both between the teacher and students and among students, are mostly negative, inappropriate, or insensitive to students' ages, cultural backgrounds, and developmental levels. Interactions are characterized by sarcasm, put-downs, or conflict. Teacher does not deal with disrespectful behavior.	Patterns of classroom interactions, both between the teacher and students and among students, are generally appropriate but may reflect occasional inconsistencies, favoritism, and disregard for students' ages, cultures, and developmental levels. Students rarely demonstrate disrespect for one another. Teacher attempts to respond to disrespectful behavior, with uneven results. The net result of the interactions is neutral, conveying neither warmth nor conflict.	Teacher-student interactions are friendly and demonstrate general caring and respect. Such interactions are appropriate to the ages of the students. Students exhibit respect for the teacher. Interactions among students are generally polite and respectful. Teacher responds successfully to disrespectful behavior among students. The net result of the interactions is polite and respectful, but impersonal.	Classroom interactions among the teacher and individual students are highly respectful, reflecting genuine warmth and caring and sensitivity to students as individuals. Students exhibit respect for the teacher and contribute to high levels of civil interaction between all members of the class. The net result of interactions is that of connections with students as individuals.			

2c: Managing Classroom Procedures

Unsatisfactory – 1	Basic – 2	Proficient – 3	Distinguished – 4	Resident	Coach	Mentor Input
Much instructional time is lost through inefficient classroom routines and procedures. There is little or no evidence that the teacher is managing instructional groups, transitions, and/or the handling of materials and supplies effectively. There is little evidence that students know or follow established routines.	Some instructional time is lost through only partially effective classroom routines and procedures. The teacher's management of instructional groups, transitions, and/or the handling of materials and supplies is inconsistent, the result being some disruption of learning. With regular guidance and prompting, students follow established routines.	There is little loss of instructional time because of effective classroom routines and procedures. The teacher's management of instructional groups and the handling of materials and supplies are consistently successful. With minimal guidance and prompting, students follow established classroom routines.	Instructional time is maximized because of efficient classroom routines and procedures. Students contribute to the management of instructional groups, transitions, and the handling of materials and supplies. Routines are well understood and may be initiated by students.			

DIRECTIONS:

- For each item, Resident and Coach will indicate a score (from 1 to 4) and provide justification for that score.
- Mentors will provide additional feedback if any scoring discrepancies arise.

CRITERION 5: Fostering and Managing a Safe, Positive Learning Environment						
2d: Managing Student Behavior						
Unsatisfactory – 1	**Basic – 2**	**Proficient – 3**	**Distinguished – 4**	**Resident**	**Coach**	**Mentor Input**
There appear to be no established standards of conduct and little or no teacher monitoring of student behavior. Students challenge the standards of conduct. Response to students' misbehavior is repressive or disrespectful of student dignity.	Standards of conduct appear to have been established, but their implementation is inconsistent. Teacher tries, with uneven results, to monitor student behavior and respond to student misbehavior. There is inconsistent implementation of the standards of conduct.	Student behavior is generally appropriate. The teacher monitors student behavior against established standards of conduct. Teacher response to student misbehavior is consistent, proportionate, respectful to students, and effective.	Student behavior is entirely appropriate. Students take an active role in monitoring their own behavior and that of other students against standards of conduct. Teachers' monitoring of student behavior is subtle and preventive. Teacher's response to student misbehavior is sensitive to individual student needs and respects students' dignity.			
2e: Organizing Physical Space						
Unsatisfactory – 1	**Basic – 2**	**Proficient – 3**	**Distinguished – 4**	**Resident**	**Coach**	**Mentor Input**
The physical environment is unsafe, or many students don't have access to learning resources. There is poor coordination between the lesson activities and the arrangement of furniture and resources, including computer technology.	The classroom is safe, and essential learning is accessible to most students. The teacher's use of physical resources, including computer technology, is moderately effective. Teacher makes some attempt to modify the physical arrangement to suit learning activities, with partial success.	The classroom is safe, and learning is accessible to all students; teacher ensures that the physical arrangement is appropriate to the learning activities. Teacher makes effective use of physical resources, including computer technology.	The classroom is safe, and learning is accessible to all students, including those with special needs. Teacher makes effective use of physical resources, including computer technology. The teacher ensures that the physical arrangement is appropriate to the learning activities. Students contribute to the use or adaptation of the physical environment to advance learning.			

ADDITIONAL COMMENTS:

_____

_____

_____

_____

- Resident must earn a score of at least 2 (Basic) in all categories in order to meet expectations for Gateway #2.
- Progress will be evaluated at each Gateway and any additional Resident attempts of the Gateway.
- Resident has met expectations for Gateway #2

  Yes _____ No _____

If no, next steps for second attempt:

_____

_____

_____

_____

_____

Appendix C

CSU Northridge Department of Special Education

Education Specialist Mild/Moderate Evaluation Form

Adapted from the Framework for Teaching, Charlotte Danielson and aligned with elements of the California Standards for the Teaching Profession and the Teacher Performance Expectations.

Date_____ School District_____ School_____

Name of Candidate_____ Student ID_____

CSUN Supervisor_____ Mentor/Cooperating Teacher_____

Course 403/579ACT_____ 580MM_____ 580ACT_____ 506 Seminar 1 2 3 4

Midterm Evaluation _____ Final Evaluation _____ Class Designation: RSP _____ SDP _____

RATING SCALE

Ratings represent a cumulative evaluation of candidate competencies based on observations, professional conversations, and artifacts. Please note that during the initial field experience candidates must obtain an overall average of 2.0. For the final field experience/student teaching, candidates must obtain an overall average of 2.5 with no 1s on any item.

IE	1	2	3	4
Insufficient Evidence	**Does Not Meet Expectations**	**Approximates Expectations**	**Meets Expectations**	**Exceeds Expectations**

1. PLANNING FOR INSTRUCTION: Knowledge of Content, Pedagogy and Students							
Items	**Description**	**Rating**					
		IE	**1**	**2**	**3**	**4**
1.1 Standards-Based Instruction	Plans lessons that are aligned with the Common Core and English Language Development State Standards.					
1.2 Content/Discipline Knowledge	Demonstrates knowledge of the concepts in the lesson and how concepts build upon and to one another when planning instruction.					
1.3 Subject-Specific Pedagogy	Demonstrates evidence-based, subject-specific pedagogical approaches in the discipline when planning instruction.					
1.4 Students' Skills, Knowledge and Language Proficiency	Uses information about individual students' skills, prior knowledge, and language proficiency when planning instruction.					
1.5 Age-Appropriate Instruction	Plans instruction appropriate for the grade-level curriculum and interests of the age group.					
1.6 Students' Culture and Interests	Uses knowledge of students' home language, family culture, life experiences, and interests to plan instruction that will engage students.					

2. PLANNING FOR INSTRUCTION: Establishing Instructional Objectives and Designing Instruction						
Items	Description	Rating				
		IE	1	2	3	4
2.1 Instructional Objectives	Designs instructional objectives that are measurable, aligned with the Common Core and English Language Development State Standards and at an appropriate level of challenge.					
2.2 Instructional Activities	Designs instructional activities that are aligned with the instructional objectives, evidence-based, at an appropriate level of challenge and anticipate student difficulties.					
2.3 Sequenced Instruction	Plans logically sequenced instruction using task analysis and purposeful connections across lessons.					
2.4 Individual Student Needs	Designs instructional adaptations that are evidence-based and address individual student needs, including Universal Design for Learning.					
2.5 Direct Instruction Lesson Structure	Designs lessons with a direct instruction lesson structure (opening, modeling, guided practice, independent practice, closure and assessment).					
2.6 Instructional Materials and Resources	Selects instructional materials and resources that are suitable for students, support the instructional objectives and provide access to content.					
2.7 Instructional Technology	Selects instructional technology that is suitable for students, supports the instructional objectives and provides access to content.					
2.8 Instructional Groups	Designs a variety of flexible instructional groupings to meet students' individual needs.					

3. ASSESSING STUDENT LEARNING						
Items	Description	Rating				
		IE	1	2	3	4
3.1 Design of Formative Assessments	Designs formative assessments to determine strengths and gaps in students' knowledge and skills and mastery of instructional objectives.					
3.2 EL Assessment	Adjusts assessments to enable English learners to demonstrate their knowledge and skills and mastery of instructional objectives.					
3.3 Monitor Student Learning	Gathers and analyzes formative assessment data to determine strengths and gaps in students' knowledge and skills and mastery of instructional objectives.					
3.4 Assessment Informs Instruction	Uses formative assessment data to plan future instruction.					
3.5 Summative Assessment	Uses formal and informal summative assessments to document student learning.					
3.6 IEP Goals and Objectives	Uses assessment data to describe students' present levels of performance and develop long and short term IEP goals and objectives.					

4. MANAGING CLASSROOM PROCEDURES AND STUDENT BEHAVIOR							
Items	Description	Rating					
		IE	1	2	3	4
4.1 Academic Expectations	Promotes a classroom environment that reflects high academic expectations.					
4.2 Management of Instructional Time	Manages instructional pace, classroom procedures, routines and transitions to maximize instructional time.					
4.3 Materials Preparation	Prepares and gathers materials in advance and distributes them in a way that does not interrupt instructional time.					
4.4 Paraprofessionals	Provides clear direction to paraprofessionals to productively engage them in supporting student learning.					
4.5 Expectations for Behavior	Develops and maintains expectations for behavior.					
4.6 Monitoring Student Behavior	Is alert to and monitors student behavior.					
4.7 Positive Behavior Support	Implements positive behavior support techniques to prevent or address inappropriate behavior.					
4.8 Social Development	Promotes social skill development and responsibility.					

5. DELIVERING INSTRUCTION THAT ENGAGES STUDENTS IN LEARNING							
Items	Description	Rating					
		IE	1	2	3	4
5.1 Lesson Purpose, Directions and Procedures	Communicates purpose of lesson, directions and procedures to students.					
5.2 Instructional Activities	Provides instructional activities that are aligned with the instructional objectives, evidence-based, at an appropriate level of challenge and anticipate student difficulties.					
5.3 Explanation and Modeling	Provides explanations and modeling that support student learning.					
5.4 Questions and Discussion	Uses higher-order questions that encourage extended responses and promote student discussion.					
5.5 ELD Instructional Strategies	Uses ELD instructional strategies to support EL student learning.					
5.6 Academic Language	Models and provides instruction on essential academic language, including vocabulary.					
5.7 Lesson Structure and Pacing	Models and provides instruction on essential academic language, including vocabulary.					
5.8 Checks for Understanding	Checks for understanding and corrects student misunderstandings.					
5.9 Review and Practice	Provides opportunities for review and practice.					
5.10 Instructional Grouping	Arranges a variety of flexible instructional groupings that meet individual student needs.					
5.11 Individual Student Needs	Uses evidence-based instructional strategies and adaptations including Universal Design for Learning to address individual student needs.					
5.12 Instructional Materials and Resources	Uses instructional resources and materials that are suitable for students, support the instructional objectives and provide access to content.					
5.13 Instructional Technology	Uses instructional technologies that are suitable for students, support the instructional objectives and provide access to content.					

6. DEMONSTRATING PROFESSIONALISM AND REFLECTING ON PRACTICE						
Items	**Description**	**Rating**				
		IE	**1**	**2**	**3**	**4**
6.1 Initiative and Responsibility	Shows initiative and responsibility for classroom tasks and assignments.					
6.2 Timeliness	Meets deadlines and completes tasks in a timely manner.					
6.3 Professional Appearance and Demeanor	Demonstrates professional appearance and demeanor.					
6.4 Professional Ethics	Upholds laws, regulations and policies; maintains confidentiality and shows sound judgment.					
6.5 Reflective Practice	Reflects on teaching practices to improve teaching effectiveness.					
6.6 Response to Feedback	Uses constructive criticism and suggestions to improve teaching practice.					
6.7 Seeks Assistance	Identifies challenges and seeks assistance to resolve them.					
6.8 School and Community Resources	Identifies school and community resources to support student learning.					
6.9 Collegial Relationships	Demonstrates respectful communication and cooperative relationships with colleagues.					
6.10 Collaboration	Collaborates with colleagues to integrate students across instructional settings.					

Please summarize the candidate's strengths. _____

_____

_____

_____

_____

Please indicate areas to be developed. _____

_____

_____

_____

_____

Evaluation completed by:

University Supervisor Signature _____ Date _____

Or

Mentor/Cooperating Teacher Signature _____ Date _____

I have reviewed this evaluation with my University supervisor or mentor/cooperating teacher

_____ I accept this evaluation or, _____ I wish to submit an addendum

Candidate Signature _____ Date _____

Appendix D

CSU Chico Rural Teacher Residency Cooperating Teacher vs. Mentor Teacher

Role Comparison – Cooperating Teacher/Mentor Teacher

	Cooperating Teacher	Mentor Teacher
Training	Training provided through web-based and print materials and meetings with university supervisors.	Summer training workshop and ongoing professional development events throughout academic year.*
Mentoring	**Hierarchical** Focuses on preparation for student teachers to teach independently.	**Collaborative** Focuses on co-teaching and reflection on practice to improve both teaching and student achievement.
Collaboration	Primarily occurs within classroom and with university supervisors.	Occurs between general and special education and English learner teaching teams. Focus on professional learning communities and tiered interventions.
Community	Helps acculturate student teacher to local school and community characteristics/needs with positive focus.	Engages with TR to examine local school and community characteristics and needs to help define best practices.
Self-Reflection; Professional Growth	Is considered an "expert" who imparts information to candidate regarding pedagogy, subject matter knowledge, and classroom management. Models reflective practice for candidate.	Enters into mentorship role prepared to teach and to learn; is willing to reflect on his/her own practices and grow professionally from the mentoring process
Action Research	No responsibility in this area.	Works with the TR to identify research focus, gather and analyze data.
Evaluation	Shares responsibility with university supervisor. Participates in mid-term and final evaluations of candidates.	Shares responsibility with university supervisor. Participates in mid-term and final evaluations of candidates.

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