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Strengthening the Clinical Orientation of Teacher Preparation Programs

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The New Generation of Educators Initiative (NGEI) at California State University (CSU), funded by the S. D. Bechtel, Jr. Foundation, sought to strengthen the teacher preparation system in California so that new teachers would enter the workforce prepared to implement the Common Core State Standards and the Next Generation Science Standards. From January 2015 through June 2019, NGEI provided grants to CSU campuses and their district partners to improve their teacher preparation programs. The foundation developed a theory of action to guide reform that focused on five Key Transformational Elements: partnership with districts, prioritized skills, practice-based clinical preparation, formative feedback on prioritized skills, and data-driven continuous improvement.

WestEd and SRI International conducted a formative evaluation of NGEI implementation and outcomes at the grantee sites, and delivered technical assistance to strategically support data-driven program reform efforts.

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Overview of New Generation of Educators Initiative

Educators and policymakers across the United States recognize a growing urgency to improve the nation's systems of teacher preparation.¹ Schools in every state need teachers who are prepared to teach diverse student populations and to meet new and rigorous academic standards, but existing research demonstrates that there is variation in how teachers are trained for the profession, both within and across programs.² In the face of nationwide teacher shortages, better-prepared teachers are more likely to stay and thrive in the profession.³

Research on university-based teacher preparation programs, which prepare the majority of the nation's teachers, identifies key aspects of these programs that need strengthening in order to prepare teachers to teach to rigorous standards and engage in more student-centered, culturally responsive, pedagogical practices. For one, programs can clearly define a set of prioritized skills that teachers must master to teach effectively. Next, they need to improve the quality, coherence, and consistency of both coursework and clinical experiences. Finally, they should provide opportunities for teacher candidates to practice in a clinical setting and receive high-quality feedback on their teaching.

The S. D. Bechtel, Jr. Foundation ("the Foundation") and the California State University (CSU) system partnered to launch California's New Generation of Educators Initiative (NGEI) in an effort to support CSU teacher preparation program reform. CSU prepares the largest number of California's teachers, by far, and about 8 percent of teachers nationwide. Launched in 2016, NGEI was a four-year, \$27 million initiative. It engaged 11 universities throughout the CSU system to bolster their teacher preparation programs (TPPs) by enacting practice-based reforms (for an overview of each teacher preparation each program's partnership and reform activities, see Appendix A). Its vision was to increase the number of teachers who entered the profession prepared to deliver instruction aligned to the Common Core State Standards (CCSS) and the Next Generation Science Standards (NGSS).



NGEI's particular focus was on transforming the nature and quality of clinical preparation. To this end, NGEI brought together a group of core CSU deans and faculty, Foundation staff, and technical assistance providers who collaborated to develop a theory of action that would ground that transformation. What emerged were five transformative elements that guided implementation of reforms across campuses (for more detail about the transformative elements, referred to within the NGEI community as the Key Transformational Elements, see Appendix B):

- Forming deep partnerships between CSU campuses and their partner school districts
- Collaboratively defining a set of prioritized skills that teachers must master
- Ensuring practice-based clinical preparation supported by high-quality mentors
- Creating a culture of formative feedback centered on prioritized skills
- Using data to drive continuous improvement

Throughout NGEI's implementation, WestEd and SRI International conducted an evaluation to help support continuous improvement and to provide a summative assessment of progress toward the five transformative elements (for more detail about our data and methods, see Appendix C). We report our findings in a series of four papers focused on lessons learned as participating campuses enacted reforms anchored in the transformative elements. The papers' topics include the following: (1) the system of supports to bolster reform implementation; (2) campus–district partnerships; (3) strengthening of clinical orientation; and (4) data use and continuous improvement. This paper focuses on the third topic, strengthening of clinical orientation.

Introduction

Clinical experience — that is, the opportunity to practice the work of teaching in classrooms — is one of the most consequential aspects of teacher preparation for graduate effectiveness and student success. Research has shown, however, that teacher preparation programs across the country provide far fewer clinical opportunities than other practice-based fields, such as health care or trades. When provided, clinical experiences are often inconsistent in terms of the frequency with which candidates are able to observe and practice high-quality teaching and the quality of support they receive from mentor teachers and university supervisors. These inconsistencies are partly due to a lack of consensus regarding the essential skills that teacher candidates must master and enact to be effective teachers. Moreover, there is variable capacity on the part of mentor teachers to effectively model essential teaching skills. It is therefore unsurprising that graduates' teaching effectiveness varies considerably.

These problems provide justification and impetus for strengthening the clinical components — or, more broadly, the clinical orientation — of teacher preparation programs. Clinically oriented teacher education programs position clinical experience and practice at the center of candidate preparation.¹³ Proponents of clinically oriented programs assert that because "complex clinical practice" is the very definition of teaching, the skills that make up that practice should ground novice preparation.¹⁴ Those skills are acquired primarily through candidates' experiences learning and teaching in classrooms.

Strengthening a program's clinical orientation, therefore, does not only mean improving the components of candidates' field experiences in PK-12 classrooms. It also requires reconceptualizing and strengthening the connections between those experiences and campus-based coursework.¹⁵

To support clinical orientation efforts, researchers and teacher educators have identified sets of core instructional practices or skills that occur frequently in teaching, are supported by research, can be enacted across different curricular or instructional contexts, and have the potential to improve student learning. Research suggests that these practices may be best learned through cycles that involve observation of a modeled practice and then rehearsal and enactment of that practice and reflection on it. Aligning systems of clinical support, such as mentor and supervisor feedback, with these core practices can ameliorate inconsistency across clinical experiences. Teacher residencies and other structural reforms, such as co-teaching and strategic placements at partner districts and schools, can also increase the quantity and quality of candidates' clinical experiences.

This report describes five key levers that our evaluation identified through which the New Generation of Educators Initiative (NGEI) partnerships strengthened their clinical orientation to improve the overall quality of their teacher education programs. The partnerships consisted of California State University (CSU) teacher preparation programs and their partner school districts, with the support of technical assistance providers. The five levers, derived from NGEI's transformative elements (listed in the previous overview section), are as follows:

- Identify a distinct set of observable and measurable prioritized skills that ground both coursework and clinical experiences
- Select or create a classroom observation rubric to assess candidate proficiency with these prioritized skills
- Integrate and expand opportunities to practice prioritized skills in both clinical practice and coursework
- Reconceptualize clinical roles, selection process, and support for supervisors and mentor teachers
- Define and implement processes to provide formative feedback to candidates on prioritized skills

These levers were the focus of the NGEI reforms that CSU campuses implemented throughout the initiative and plan to sustain beyond the grant period. The following sections discuss each lever in detail.

Lever 1: Identify Prioritized Skills

Prioritized skills are a limited set²¹ of observable and measurable instructional skills that partnerships identified as those most important for candidates to learn during their teacher preparation programs. These should be skills that occur frequently across content areas and that research suggests are correlated with improved student outcomes. For NGEI teacher preparation programs, prioritized skills became the basis for what candidates learned and practiced in coursework, enacted in their clinical placements, received feedback on from supervisors and mentor teachers, and worked to master throughout their programs.

The ultimate purpose of designing the teacher preparation programs around prioritized skills was to increase consistency and coherence. Without such a foundation in agreed-upon priorities, the knowledge and skills that a candidate is exposed to during preparation risk being inconsistent and influenced by the prior experiences and perspectives of faculty, supervisors, and mentor teachers.²²

To ground their programs in prioritized skills, the NGEI campuses and their partner districts took two key actions:

- Selecting a limited set of observable skills
- Building buy-in among relevant stakeholders, including campus faculty and district staff

Selecting a limited set of observable skills

At the outset of the initiative, all NGEI campuses had a set of competencies they believed most important for candidates to learn. At many campuses, these included some combination of the California Teacher Preparation Expectations (TPEs)²³ and desirable dispositions (e.g., social-justice orientation, self-reflection). Prioritized skills differ from TPEs, however, in both number and focus.

Research suggests that prioritized skills are the skills most critical for the effectiveness of new teachers and provide a foundation for further development of practice as teachers become more experienced. Moreover, these skills should be "articulated at a useful grain size," meaning that each skill is "small enough to be clearly visible in practice, but not so small as to atomize "it." ²⁴ While a larger number of skills and dispositions, such as the 45 TPEs, may ensure a broad representation of what candidates will ultimately need to be able to do as teachers, trying to cover too many competencies precludes in-depth learning. In practice, therefore, NGEI partnerships selected between 4 and 20 prioritized skills.

With priorities in place, candidates and faculty leading coursework at NGEI campuses were able to focus on key skills, and mentor teachers and supervisors were able to provide deeper, more incisive feedback and support. As one mentor teacher explained, "We've gotten much more specific and strategic, zoning in on certain things in our supervision."

One overarching NGEI goal was for campuses to train teachers in ways that met the specific needs of their local district partners. Inviting districts to collaborate on developing prioritized skills was key in addressing that goal. To do so, the majority of campus and district partners convened regular (i.e., at least monthly) meetings to discuss the NGEI work. In addition, the partners met at several workshops organized by the Foundation and the NGEI technical assistance partners, which included the National Center for Teacher Residencies (NCTR) and TeachingWorks. During these workshops, district and campus partners had dedicated time to learn about the purposes of prioritized skills from experts, draft prioritized skills, hear how other campuses were developing prioritized skills, and begin the work of aligning prioritized skills to coursework and planning for how to train clinical staff to provide feedback on prioritized skills.

Box 1. CSU Stanislaus: Collaborating with district partners to create a limited set of prioritized skills

Identifying a limited set of observable skills required most campuses to shift from a relatively long list of skills, knowledge, and dispositions to a shorter list of skills that were observable, measurable, and attainable for a novice teacher. Such was the case with CSU Stanislaus. Having relied on the TPEs as indicators of the valued set of competencies before NGEI, the campus now collaborated with its district partners to identify a list of six prioritized skills. These skills aligned with district priorities (including particular approaches to classroom management and a focus on science, technology, engineering, and mathematics (STEM) and instructional technology) as well as with the TPEs and with high-leverage instructional practices from the University of Michigan TeachingWorks.

The partnership's prioritized skills were as follows:

- Ensure opportunity and support for participation and meaning making
- Implement instructional norms and routines for classroom discourse and work
- Build positive student relationships to manage student behavior
- Explain and model content, practices, and strategies
- Design single lessons and sequences of lessons
- Interpret results of student work to inform instruction and to provide effective student feedback

Support from the NCTR, an NGEI technical assistance provider, in the form of time for collaboration and coaching, propelled the work of identifying these six prioritized skills. During a convening organized by NCTR, campus and district representatives heard from colleagues at other NGEI partnerships about their processes for identifying prioritized skills. Campus and district representatives then had time to begin developing their own process. The campus and district partners continued this work during regularly scheduled NGEI meetings, and, after several revisions, landed on their final set of prioritized skills.

Over the next several years, the work of identifying the prioritized skills led to a series of actions that increased the alignment of coursework and clinical experiences and strengthened the clinical orientation of the program.

For example, with the prioritized skills as a foundation, partnership leaders implemented changes that increased the alignment between coursework and the clinical experience and strengthened the program's clinical orientation. These included revising program materials (e.g., the mentor teacher handbook), as well as coursework and candidate assessment materials, to align with the six prioritized skills. Leaders also selected a classroom observation rubric (the $5D+^{26}$), identified the rubric subcomponents that aligned with each prioritized skill, and provided training to mentor teachers and university supervisors to provide feedback on those subcomponents.

Building buy-in among relevant stakeholders, including campus faculty and district staff

Building buy-in across campus and district stakeholders was a key strategy for ensuring the sustainability of the prioritized skills. NGEI leaders sought buy-in from district staff by inviting them to co-create the prioritized skills. For campus staff, an important tactic for developing buy-in — and for reducing the burden on staff — was for NGEI campuses to align their prioritized skills with the TPEs. Most NGEI campuses were able to do this, thus ensuring that they could identify where in their program both the TPEs and the prioritized skills were introduced, practiced, and assessed. Several campuses also crosswalked the prioritized skills with other important frameworks, including the California Standards for the Teaching Profession (CSTPs), Universal Design for Learning, or high-leverage instructional practices.²⁷ This alignment was important to NGEI campus staff not only for accountability purposes but also because it ensured that the prioritized skills were part of a cohesive set of guiding principles, rather than an additional layer of burden for faculty.

Another way NGEI project directors developed buy-in from program faculty — as well as from campus leadership, including deans or department chairs — was by enlisting their support for revising components of the teacher preparation program, including coursework and signature assignments, to align with the prioritized skills.

Despite these efforts, building buy-in was a slow process for several partnerships. Over time, however, as faculty, supervisors, mentor teachers, and district staff gained more familiarity with prioritized skills by attending ongoing trainings, using documents that institutionalized the prioritized skills, and using the adopted observational rubric aligned to the prioritized skills (explained in the following section), they often became more amenable to change. Further, the Foundation organized mini-convenings specifically designed to provide support that was more explicit around prioritized skills, after receiving feedback from NGEI leaders that the purposes of these skills was not clear. At the conclusion of the grant, sustainability of the prioritized skills was threatened at a few campuses where key faculty or district staff had not wholly bought into the changes required to alter courses to align with the prioritized skills.

Lever 2: Select a Rubric to Assess Candidate Proficiency with Prioritized Skills

Across all NGEI campuses, the most important lever for bringing the prioritized skills to life was to adopt an observational rubric to measure them. At most NGEI campuses, the rubric components became the common language that stakeholders used to discuss what was important for candidates to learn, and provided a focus for mentor teacher and supervisor training. Since the rubric was such a pivotal lever for shifting toward a more clinically oriented approach, it was important that campuses be intentional with selection. During the selection process, campuses prioritized ensuring that the rubric

- · was well aligned to the prioritized skills; and
- provided valid and reliable measures.

Ensuring that the rubric was well aligned to the prioritized skills

If the prioritized skills laid out the vision for what candidates should know and be able to do when they begin teaching, the rubric provided stakeholders with a teaching and assessment tool to help operationalize that vision. Adopting the rubric resulted in change at every level, from curriculum changes to mentor teacher calibration, thus supporting focus and cohesion across the program.

Most critically, the rubric provided a common, shared set of expectations across multiple stakeholders, including candidates, supervisors, mentor teachers, and faculty. As one university faculty member said, "Having a rubric which was so well developed and defined made expectations crystal clear for our candidates and for everyone who supports them — master teachers, university supervisors."

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~ University Faculty

Unsurprisingly, NGEI leaders at nearly every campus pointed to the rubric as a reform element that was highly likely to be sustained by the partnerships.

Given the central role that the rubric played in teaching and assessing prioritized skills, it was important that the rubric and the prioritized skills be tightly coupled: ideally, NGEI partnerships would select a rubric that provided a valid and reliable measure of each prioritized skill and that also described what different levels of proficiency with that skill looked like in practice. (See the following section for more on rubric reliability and validity.) While many partnerships made progress on

this front, some NGEI campuses selected rubrics that did not measure each distinct prioritized skill. It later became clear across campuses that candidates and other stakeholders were less familiar with prioritized skills not assessed by the rubric. By contrast, where the rubric and prioritized skills were tightly coupled, the prioritized skills were more widely recognized across stakeholders and more likely to be sustained.

In most NGEI partnerships, campuses typically led the work of selecting or developing a rubric, incorporating district input and feedback. (There was one notable exception where the campus adopted the district rubric.) NGEI campuses used several strategies, each with various tradeoffs, to ensure alignment between the rubric and prioritized skills. For example, a few campuses selected an off-the-shelf rubric for the sake of efficiency, then developed their prioritized skills based on that rubric's indicators. The downside of this approach was that the skills in the rubric did not always reflect the specific priorities of the campus or their partner district. By contrast, other campuses selected the prioritized skills in collaboration with district partners and then developed a rubric to perfectly align with and reflect those skills. But developing a rubric was a time-intensive process, and, at the conclusion of the grant, there was little concrete evidence that the homegrown rubrics were valid or reliable.

One issue that arose was that most NGEI district partners declined to adopt the NGEI rubric. In some cases, this was because districts had already invested in using a different observational rubric and had limited interest or bandwidth for adopting a new one. In other cases, the local union had concerns with the rubric in question. Given this, some NGEI campuses worked to ensure that the rubric reflected specific district priorities that were not already captured by the prioritized skills, so that candidates later seeking employment there would be familiar with the district's standards and expectations. As previously noted, one NGEI campus adopted the observational tool that the district already used for teacher evaluation. In other NGEI partnerships, the university partner did not use or adopt the district rubric, but, rather, indicated how the rubric components were aligned to district priorities.

Ensuring that the rubric provided valid and reliable measures

The NGEI grant required that each participating campus select an observational rubric that would measure its prioritized skills and be used for multiple purposes, including

- · measuring individual candidate proficiency on particular skills;
- providing a common language among candidates, feedback providers, and faculty;
- identifying candidates in need of targeted support or who may need to be counseled out of the program; and

 measuring, in the aggregate, how well a program was preparing a group of candidates to enact particular skills.

For NGEI campuses to develop and sustain processes for using rubric data for decision-making, the rubric needed to be both valid (i.e., measuring what it was supposed to measure) and reliable (i.e., providing a consistent measure, across observers, of a particular construct). Validity and reliability were particularly important when the rubric was used for high-stakes decisions, such as assessing a candidate's readiness to progress to the next stage of the program.

To ensure their rubrics' validity and reliability, NGEI campuses tended to choose one or both of the following strategies:

- 1. Select a validated, off-the-shelf rubric. Creating a valid and reliable rubric is a burdensome process that requires development, piloting, and improvement. Given faculty and staff's limited time and resources, nearly half of the NGEI campuses opted to select an off-the-shelf rubric (e.g., the Danielson, 29 MCOP2, 30 or the 5D+31). All of these campuses eventually refined or tweaked the rubric to make it more relevant to their particular context. For example, one campus altered the rating scale to make it more appropriate for measuring the progress of novice teachers. While altering the rubric aligned the measure more closely with local priorities, it also had the potential to affect the reliability and validity of rubric components.
- 2. Calibrate and/or norm observers to use the rubric. Without a focus on norming, calibration, and rubric reliability, feedback and candidate performance ratings were likely to be contingent on the perceptions of their individual mentor teachers and supervisors, rather than on a program-wide standard of what enacting prioritized skills meant. For these reasons, and to avoid common observation pitfalls such as rater inflation and rater bias,³² nearly all NGEI

campuses considered investment in training essential for supervisors and mentor teachers on how to use the rubric. "The closest you can get [to quality control] is having a rubric and training," explained one university faculty member.

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~ University Faculty

Two of the five campuses that selected off-the-shelf rubrics were able to take advantage of reliability training provided by the rubric's developers to ensure that their observers were normed and/or calibrated. While training was a necessary step for ensuring valid and reliable data, our study found mixed evidence related to whether NGEI partnerships were able to provide effective training to that end.³³ (For more on how one partnership supported clinical staff to calibrate observation scores, see "Box 7. CSU Fresno: Moving beyond norming to calibration.")

Lever 3: Integrate and Expand Opportunities to Practice Prioritized Skills

Research suggests that teaching practices can be learned through a "learning cycle" that includes opportunities to observe models of skills, the rehearsal and practice of skills, and the chance to reflect on that rehearsal and practice.³⁴ A key lever for strengthening the clinical orientation of NGEI partnerships was designing systematic opportunities for candidates to experience this learning cycle. To enable these opportunities, partnerships worked towards

- expanding time in clinical settings;
- mapping prioritized skills onto candidate coursework; and
- developing systematic opportunities for candidates to practice and receive feedback on prioritized skills in clinical settings.

Expanding time in clinical settings

An important assumption in shifting toward a more clinically oriented teacher preparation program is that candidates will graduate better prepared to teach if they spend more time in effective class-rooms. There they are able to see models of effective teaching, practice teaching skills, and receive feedback on mastery of prioritized skills from both mentor teachers and university supervisors. As a first step, a number of NGEI sites revised the structure and timing of their programs to provide candidates with additional time in classroom placements or other clinical settings (e.g., Saturday school or after-school programs). Beyond increasing clinical practice opportunities, these structural adjustments allowed candidates to integrate more fully into their placement school's culture and to form stronger relationships with students, mentor teachers, and other staff.

To increase the amount and/or consistency of time that candidates spent in clinical settings, NGEI sites used the following strategies:

Increase the time in the clinical setting from one to two semesters and align the placement schedule to the district calendar. In many teacher preparation programs, the clinical component takes place during the second half of the program, with the first half dominated by coursework. Several NGEI campuses extended student teaching to span the full academic year, providing candidates with early and ongoing opportunities to observe and practice prioritized skills in clinical settings. Some of these campuses also adjusted the student teaching schedule to align with their partner district's, rather than the university's, academic calendar.

This allowed candidates to experience a full school year, including the critical expectation setting and culture building that occur during the first weeks of school, before most university terms have officially started. Notably, although several campuses moved to full-year placements, they did not require candidates to teach full-time. Instead, they allowed candidates a day or more away from their clinical placement to complete coursework.

- Place candidates at one school site for the duration of their clinical placement. Many campuses made adjustments to keep candidates at the same school site throughout their clinical placements, rather than shifting placement sites halfway through. This allowed candidates to integrate more fully into their school sites and to develop stronger relationships and routines with their mentor teachers. At the same time, many programs (especially Multiple Subject programs of provide candidates with clinical experience across multiple grade levels. Several sites approached this by making an effort to keep candidates at the same placement school, even if they switched classrooms mid-year (for example, from a lower-elementary placement to an upper-elementary placement).
- Candidates, mentor teachers, and principals often valued this consistency. As one principal
- explained, "When we get a teacher candidate now, they're typically here for a full year, and their placement just changes within the school. That's such a powerful thing. They get to see the school culture, get involved in parent conferences, get a little more experience about what a typical year looks like."

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• Expand opportunities for clinical placements. Several campuses looked beyond the typical student teaching schedule to provide candidates with more clinical time through Saturday school or after-school programs. For example, one NGEI campus worked with an existing after-school science enrichment program at a partner elementary school. There, over a semester, candidates worked with their mentor teachers to co-plan and co-teach two inquiry-based science lessons aligned with the NGSS. University faculty were onsite to coach and provide feedback to candidates, and this clinical experience was incorporated as a formal assignment in the science methods course.

• Create anchor schools to increase alignment between coursework and clinical experiences. Several partnerships increased candidates' exposure to clinical settings through "anchor schools" — a few strategically selected placement sites that hosted the majority of candidates from a program. Clustering candidates at anchor schools increased clinical practice opportunities in two key ways. First, programs were often able to hold university coursework at those school sites. This allowed instructors to build clinical opportunities into their coursework, including teacher observation and practice with small groups of students. Second, by reducing the back-and-forth between university coursework and the placement site, candidates were able to more fully integrate into the daily and weekly rhythms of the school.

Box 2. CSU Bakersfield's Kern Urban Teacher Residency: Adapting the clinical experience to meet candidate needs

CSU Bakersfield wanted residents participating in its teacher residency program to experience extended stays in high-quality placements. At the same time, the program needed to provide both an elementary and middle school clinical experience, as well as keep workloads sustainable for residents. To balance these priorities, the program team experimented with changes to placement structure and timing.

In the grant's first year, candidates spent two days in an elementary placement and one day in a middle school placement, with Saturdays spent on coursework at CSU Bakersfield. Monday and Friday were set aside for subbing in district schools, as a way to supplement candidates' income and increase candidates' time in classroom settings. However, the program team soon realized that the weekly time split made it hard for the candidates to fully integrate into either school site. Moreover, missing Monday meant missing the site's setup for the week's learning. Candidates lost opportunities to work with mentor teachers and practice prioritized skills.

As a result, in the grant's second year, candidates spent Monday through Thursday at their elementary placement, subbed on Fridays, and completed coursework on Saturdays. In January, they spent four consecutive weeks in a middle school placement. Although it was condensed, the time exclusively in a middle school placement allowed candidates to form stronger relationships with their mentor teachers and students and better adapt to the school's rhythms and culture.

Still, candidates struggled with the time demands. Recognizing that relatively few candidates took advantage of the opportunity to sub, and that subbing did not necessarily provide a high-quality clinical learning experience, the program eliminated it. In the final year, then, candidates taught four days a week and took coursework on Fridays.

CSU Bakersfield was able to balance candidate needs for high-quality clinical practice and work-life balance, as well as placement site needs for consistent resident presence, but striking the right balance took several iterations.

Mapping prioritized skills onto candidate coursework

Most programs had some success in identifying and aligning TPP elements around a set of prioritized skills, thereby creating a foundation for integrating candidates' coursework and clinical experience. Program leads acknowledged, however, that building coherence across the program was a challenge. It required collaboration among multiple instructors to reorient coursework, often in university cultures of faculty autonomy, while simultaneously building out opportunities for high-quality practice in clinical settings.

Several partnerships that made progress started with efforts to systematically track where and how candidates learned and practiced prioritized skills in the teacher preparation program. They generally began by examining coursework — developing or revisiting the program's scope and sequence (that is, the ideas, concepts, and topics to be covered across all the courses that candidates complete as part of the program), reviewing syllabi, and mapping the courses and assignments in which each prioritized skill was introduced, practiced, and assessed. For several programs, this was a collaborative process involving program leadership and faculty.

Once teams understood where prioritized skills were covered in coursework, they could identify gaps and opportunities for increasing coherence in how and when these skills were covered across instructors and courses, as well as when candidates would be expected to practice and receive feedback on these skills in their placements.

Based on their findings, several programs adjusted their scopes and sequences to better align the introduction of prioritized skills in coursework with what candidates could be expected to experience in their clinical settings. For example, one program compared the major events of the school year with the program's scope and sequence. The team realized that the start of the school year was a critical time for candidates to practice skills connected to relationship building and expectation setting. However, the program's initial scope and sequence did not emphasize these skills until later in the year. As a result of this analysis, the program revised coursework sequencing so that candidates would have

chances to engage in course assignments relevant to creating a positive classroom culture earlier in the year, at the same time that they were practicing those skills in their clinical placement under the guidance of their mentor teachers. Deliberately involving program faculty in identifying and mapping prioritized skills led to faculty being more willing to adapt their courses to ensure coherent learning opportunities for candidates. This often meant a shift from "I've always taught that way in my class" to asking, collectively, "Is that what's best for our students and program?"

As one program lead explained, "We do really pride ourselves on having a collaborative decision-making process. But these are hard conversations. Articulation requires really rolling up your sleeves and being willing to get messy."

Developing systematic opportunities for candidates to practice and receive feedback on prioritized skills in clinical settings

Instructors at NGEI campuses developed various ways to link candidates' coursework and clinical experiences. As a starting place, some instructors worked to adopt elements of the learning cycle — modeling, rehearsal, practice, and reflection — into their coursework. Including opportunities for reflection was common across instructors prior to NGEI, but for many faculty, modeling prioritized skills, providing space and time for candidates to rehearse those skills with other candidates before attempting to implement them in the classroom, and providing opportunities for candidates to practice those skills with students in a clinical setting were novel elements of the learning cycle.

Seven NGEI partnerships worked with TeachingWorks, a program that supports university instructors to adopt these elements of the learning cycle. The TeachingWorks approach emphasizes providing candidates with opportunities to observe live and recorded instructional models, practice and rehearse the modeled skills, receive feedback on their attempts at enacting those skills, and engage in complex and continuous reflection, both as a group and individually. Candidates often credited their TeachingWorks-supported instructors for providing them with the most opportunities for targeted modeling, rehearsal, practice, and feedback.

Faculty at some NGEI campuses used video to support modeling, feedback, and reflection. Video recordings allowed candidates to observe and discuss models of instructional practice, enabled instructors to provide targeted feedback on candidates' own recorded practice, and supported reflection and learning as candidates observed and reflected on one another's attempts.

Box 3. Cal Poly, San Luis Obispo: Linking coursework and the clinical experience through prioritized skills modules

Cal Poly, San Luis Obispo, developed seven prioritized skills modules over the course of the grant. Each module was a webinar-style video, focused on a specific

prioritized skill, that candidates, supervisors, and mentors could access on the web. The modules were designed to link candidates' coursework and clinical experience by focusing on the learning, application, and assessment of and feedback on that prioritized skill.

To standardize how the modules were used, the NGEI team developed a protocol for the "module learning cycle," including the following steps:

- 1. View the module. Candidates, mentor teachers, and supervisors view a 15-minute video presentation that introduces and gives examples of the prioritized skill.
- **2.** Practice the skill. Candidates and mentor teachers work together to provide opportunities for the candidate to practice the skill in the candidate's clinical placement.
- **3.** Conduct formal observation. The supervisor visits candidates and assesses them on their execution of the skill. This visit counts as one of the four formal observations required each semester.
- **4.** Provide feedback and a chance to reflect. A post-observation conversation occurs with each candidate, mentor teacher, and supervisor.
- **5.** Document the experience as a coursework assignment. Candidates reflect on the experience through a written assignment.

Several modules were embedded in the yearlong seminar courses that all candidates were required to take, thereby explicitly connecting coursework and clinical practice. Other modules were designed to be used on an as-needed basis by the clinical triad (candidate, mentor teacher, and supervisor) to provide candidates with remediation or reinforcement of specific skills as needed.

In addition to providing candidates with targeted, structured opportunities to practice prioritized skills, the modules have had other benefits. Notably, they enable a shared understanding of prioritized skills among candidates, mentor teachers, supervisors, and faculty, who are all involved in the execution of the modules.

Finally, many NGEI campuses created new opportunities for candidates to practice prioritized skills in classrooms outside of their regular clinical placement. Instructors whose methods courses were held at partner school sites — that is, at partnership anchor schools — were often able to incorporate the learning cycle by designing opportunities for candidates to "push in" to classrooms to practice skills with small groups of students. Onsite location allowed for rapid cycles of skill modeling, rehearsal,

practice, feedback, and reflection. Several partnerships also expanded structured clinical practice opportunities through after-school or weekend enrichment programs where candidates could observe models of prioritized skills and rehearse with small groups of students under the guidance of university instructors.

Box 4. CSU Channel Islands: Bridging methods coursework and clinical practice

At CSU Channel Islands, the math methods instructor collaborated with her candidates' mentor teachers at partner school sites to provide candidates with structured opportunities to observe, rehearse, and practice the skills emphasized in the math methods course. For example, at one partner school site, the math methods instructor brought her methods class into the classroom of a willing mentor-candidate pair. Each candidate had an opportunity to sit with an individual student and ask questions to understand students' mathematical thinking. Then, as a class, the math methods instructor and the candidates discussed how to plan targeted instruction for the following lesson, based on what candidates had seen working with their individual students.

Candidates had the chance to rehearse these strategies with the math methods instructor before returning to the classroom again to implement these new strategies with their students. One candidate explained, "Even before we taught students, we were practicing all those different strategies." Mentor teachers, too, appreciated the insight into the approaches that the math methods instructor emphasized with her candidates. "It opened my eyes to more of what my students are capable of," observed one mentor teacher.

Lever 4: Reconceptualize Clinical Roles, Selection, and Support

To strengthen a teacher preparation program's clinical orientation, ensuring that key clinical staff are willing and prepared to provide consistent, high-quality support to teacher candidates is essential.³⁶ In NGEI partnerships, mentor teachers and supervisors also needed to be thoroughly prepared to help candidates develop competency in the prioritized skills. Thus, **selecting and training supervisors and mentor teachers was a transformative lever.** The following actions helped NGEI partnerships to quarantee that high-quality clinical staff were recruited and prepared to support candidates:

- Reconceptualizing the supervisor role
- Reconceptualizing the mentor teacher role
- Revising the mentor teacher selection processes
- Providing ongoing, aligned training for supervisors and mentor teachers

Reconceptualizing the supervisor role

NGEI participation prompted several campuses to reconceptualize the university supervisor role from being primarily evaluative to being increasingly formative. Prior to the initiative, supervisors conducted classroom observations and provided summative evaluations of candidates' instructional practice, which would be used in matriculation decisions. However, supervisors typically received limited training on how to provide feedback. Several supervisors at one NGEI campus recalled that, prior to NGEI, they just had a "blank page" for observation and feedback guidance. Further, supervisors were often isolated from other aspects of the candidates' preparation, including coursework. As one supervisor expressed the problem, "How can we possibly evaluate their lesson-writing skills if we don't know what they're taught?" As a result, the formative feedback from supervisors prior to NGEI was mostly informal and idiosyncratic.

With NGEI, campuses demanded more from supervisors and provided new training and guidance to support them to meet those demands. In their reconceptualized role, supervisors were expected to observe candidates more frequently than before; provide candidates with supportive, evidence-based, and aligned formative feedback; collaborate with candidates' mentor teachers; and coordinate with faculty regarding program expectations and focus.

A few campuses institutionalized the revised expectations for supervisors by formally changing the title of the role from "university supervisor" to "clinical coach." The semantics mattered. While "university supervisors" had overseen candidates' performance, "clinical coaches" were formally tasked with coaching candidates to develop instructional and professional capacities, guided by the prioritized skills and the observational rubric. Campuses created guiding documents and provided training. Candidates and clinical personnel at several campuses also reported that the role shift to clinical coach correlated with a stronger sense of trust and collaboration, increasing the likelihood that these particular reforms would be sustained.

NGEI campuses also took various steps to better integrate university supervisor support throughout the program. In several cases, faculty directly invited supervisors to attend methods courses to see the lessons and activities in which candidates were engaged. On one campus, NGEI leadership organized a "deep dive" with clinical coaches, presenting the overall arc of the program as well as details about specific courses or expectations. Supervisors appreciated efforts to involve them in other

aspects of candidates' preparation experience. "It's helpful to know what they're doing in class," said one, who spoke of gaining a stronger basis for candidate evaluation and support. "We're getting more information, so we know what to expect."

A few NGEI partnerships strongly amplified the impact of this role shift by combining it with an anchor-school approach. With fewer assigned schools, clinical coaches/supervisors could visit candidates more often and serve as a more tangible connection between the school, the candidate, and the CSU campus.³⁷

Reconceptualizing the mentor teacher role

In traditional teacher preparation programs, clinical placements are typically structured as follows: candidates observe a single mentor teacher for a prolonged period, occasionally teach lessons, and then, at the end of the year, are expected to "solo teach" for a prolonged period. Research has demonstrated that within traditional TPPs, the skills that mentor teachers model and the feedback that they provide are often, like those of supervisors, idiosyncratic and dependent on the teachers' individual experiences and styles. Further, mentor teachers' conception of their role and mentor teachers' expectations of candidates can vary significantly. Some mentor teachers expect candidates to ramp up to independent teaching quickly with minimal support. Others see their role as primarily overseeing and evaluating candidates. Some have difficulty relinquishing control in their classrooms.

Recognizing the limitations of this model, NGEI partnerships reconceptualized and revised the clinical structure, redefined the role of the mentor teacher, and clarified expectations for the role. These revisions aimed to engender more opportunities for candidates to practice prioritized skills in their placement while receiving purposeful coaching from mentor teachers. Partnerships' most common action toward these goals was to explicitly implement co-teaching practices in clinical placements. Co-teaching had been taken up by the CSU teacher preparation system as an alternative model of clinical practice shortly before NGEI began. It encourages mentor teachers and candidates to share responsibility for teaching and assessing students throughout the clinical placement, including planning collaboratively, making joint decisions, and executing lessons together or separately.

All partnerships thus incorporated CSU's nascent interest in co-teaching into their mentor teacher expectations. To systematize mentor teachers' expectations about how they should work with teacher candidates, NGEI campuses provided support in the form of professional development, including guidance on how and when to implement specific co-teaching practices (e.g., parallel teaching, station teaching, team teaching). While some mentor teachers had not previously co-taught, for others the redefined role simply solidified their commitment to practices they had already begun to implement. Partnerships found their investment in supporting mentor teachers to adopt co-teaching to be a significant, impactful, and positive change for both candidates and

mentor teachers, one likely to be sustained. As one district partner noted, "It's become part of the student teaching culture in terms of what we expect from our teacher candidates [and mentor teachers]." (See section below on *Providing ongoing, aligned training for supervisors and mentor teachers* for more about the supports that partnerships provided to mentor teachers.)

The NGEI partnerships expected mentor teachers to understand the identified prioritized skills so that they could model the skills and guide candidates to enact them. Mentor teachers were required to use the rubric to assess candidate performance, a strategy that proved effective for deepening the integration of the prioritized skills into clinical practice. Based on our interviews with mentor teachers and teacher candidates, it appeared that mentor teachers who most often used the rubric to assess candidates throughout the year were more knowledgeable than others about the rubric's role in their partnership's NGEI reforms and the skills that candidates were expected to develop and demonstrate.

In some partnerships, frequent use of the rubric to assess candidate performance was required — and also appreciated. Mentor teachers found the rubric to be an objective guidepost that allowed the mentor

and the candidate to examine evidence of prioritized skills and critique performance together, as an instructionally focused team, thus deflecting concerns about subjective criticism. "It's not personal, it's on the rubric," explained one mentor. "I give [the rubric] to my candidates and tell them to evaluate me. That way, they internalize it better. It helps show them that we're a partnership — a great talking point when I have to say something that's more constructive."

Mentor teachers found the rubric to be an objective guidepost that allowed the mentor and the candidate to examine evidence of prioritized skills and critique performance together, as an instructionally focused team, thus deflecting concerns about subjective criticism.

Teacher candidates concurred, reporting that mentor teachers who used the rubric frequently provided feedback that was evidence-based and that aligned with the prioritized skills. In contrast, candidates whose mentor teachers were not familiar with the rubric or did not use it frequently were more likely to report that mentor feedback was less aligned to the prioritized skills than was feedback they received from university supervisors. This suggests that mentor teachers who were asked to use the rubric to assess candidates only one or two times during a placement did not become intimately familiar with it.

Box 5. CSU Long Beach: Integrating the Rubric into Mentor Teacher Practice

Candidates at CSU Long Beach (CSULB) completed two different grade-level assignments during their 15-week clinical placement. CSULB required the mentor teachers assigned to the candidates in each placement to use the prioritized skills

rubric to assess candidate development approximately weekly — more frequently than any other NGEI campus — so that candidates received 10–12 evaluations over the course of the semester. CSULB's efforts to use the prioritized skills and the corresponding rubric as guideposts for all aspects of the clinical experience began long before this requirement. The homegrown rubric itself originally came from a collaboration between CSULB teacher preparation faculty and two staff members from its partner district, Long Beach Unified School District (LBUSD).

This long-standing, deep collaboration helped pave the way for adoption and integration of the rubric by mentor teachers and across the district at large. Its institutionalization across both CSULB and LBUSD, along with users'

belief that it has changed clinical practice for the better — to everyone's benefit — has ensured its sustainability beyond the grant. As a university leader explained, "The rubric has been invaluable at multiple levels, culminating in curriculum changes; clear expectations for master teachers, university supervisors, and candidates; and indirect benefits on master teacher calibration."

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~ CSU Assistant Vice Chancellor

Revising the mentor teacher selection processes

Research has shown that increasing the rigor of the mentor teacher selection processes is a necessary complement to the reconceptualization of clinical staff roles. ⁴⁵ Before the NGEI initiative, mentor teachers across campuses were selected primarily based on principal election and teacher availability. Principals would recruit teachers, typically veterans, who they thought might be successful in the role and available. Expectations for mentors were often loose and not necessarily in line with reform goals or clearly communicated.

To revise mentor teacher selection processes, NGEI campuses created or modified mentor teacher applications, improved communication about applying, and incorporated procedures for tracking the quality of existing clinical staff.

Nearly half of the NGEI campuses reported creating or revising their application or selection process. Details differed, but all campuses required potential mentor teachers to submit an application demonstrating their instructional and advisory competence and explaining how they met mentor teacher requirements. Some partnerships drew guidance and even selection criteria from organizations such

as NCTR. In many cases, mentor applicants still had to be recommended, or at least approved, by a principal. In one partnership, applicants were required to submit a peer recommendation.

Clearly communicating and applying the revised selection and application parameters required cooperation and coordination among both campus and district-based staff. In about half of the partnerships, these revisions were campus-led. In other cases, application processes were developed collaboratively, or the partner district(s) led the process. Coordination of these processes was sometimes challenging. In a couple of cases, campuses and districts each created their own mentor teacher criteria and application process, not necessarily in sync. In one instance, a partner district decided not to use the updated criteria and application process that its partner CSU campus had created.

Even when the new, more rigorous application processes were implemented, ensuring the effectiveness of recruited mentor teachers in modeling prioritized skills and guiding candidates to enact them proved difficult. Some sites introduced processes for gathering feedback on mentor teachers' performance throughout the year, as a check on quality and consistency and a means of refining mentor selection. Varying in formality, these efforts often involved campus faculty and/or staff, typically placement coordinators, meeting with teacher candidates to elicit feedback about their experience with their mentors. These reforms, which not only generated vital information regarding mentor teacher quality but also provided candidates with a platform through which to provide feedback, were received positively by candidates and are likely to be sustained.

Box 6. CSU Stanislaus: Providing Feedback on Mentor Teacher Practice

While many NGEI partnerships elicited informal feedback about the quality and fit of mentor teachers, CSU Stanislaus, created a formal survey process for both candidates and supervisors to reflect on the quality of mentor teachers. Near the end of their placement, Stanislaus candidates completed a "Student Teaching Experience Survey," which posed a set of questions about the quality of support and mentoring that the candidates received from their mentor teachers. Around the same time, supervisors also completed a short complementary survey, "Supervisor Perceptions of Cooperating Teacher."

The assessment coordinator analyzed the survey data, and then the university faculty and the district liaison used the results to inform placement decisions for the next cohort of teacher candidates. If, for example, both a teacher candidate and a supervisor expressed concerns about a mentor teacher's capacity to model high-quality teaching practices or to mentor candidates, partnership staff would recommend to a principal that the teacher not return as a mentor.

Providing ongoing, aligned training for supervisors and mentor teachers

Nearly all NGEI partnerships had previously offered some type of training for supervisors and mentor teachers, but these trainings had often been minimal or inconsistent, or had occurred only at the beginning of their tenure as mentor or supervisor. At some campuses, and particularly for mentor teachers, training was optional, making attendance unpredictable. In the absence of a unified training strategy, supervisors and mentors largely approached candidate support based on their own varied experiences, resulting in inconsistency for candidates — a problem exacerbated by a shortage of highly qualified clinical staff, which constrained selectivity in some partnerships.

To ensure that candidates received high-quality, consistent clinical experiences, NGEI partnerships saw providing key clinical staff with relevant and ongoing training aligned with the prioritized skills as critical.

Supervisor training

Campuses provided training for supervisors on a variety of key topics, including

- revised roles and expectations, particularly if campuses had transitioned the supervisor role to a clinical coach role;
- · prioritized skills and the rubrics that measured them; and
- processes for providing aligned feedback.

Because university supervisors (reconceptualized as clinical coaches at some campuses) were the primary users of the rubrics that measured each program's prioritized skills, it was essential that they understand and be calibrated on these tools. Most NGEI campuses, therefore, required intensive rubric-focused trainings for supervisors, both prior to the start of the school year and as part of the supervisor onboarding process. Supervisors were introduced to, or reviewed, the prioritized skills; examined how the skills were operationalized in the rubric; practiced scoring; and discussed how to provide aligned and actionable feedback. More than half of the participating campuses continued this type of rubric-focused norm development into the school year, digging deeply into specific rubric elements and formative feedback. A few also held "calibration sessions" for supervisors and other faculty, described in more detail in Box 7 below.

Box 7. CSU Fresno: Moving beyond norming to calibration

Norming is a process wherein users of a particular rubric come to consensus on what each level of proficiency looks like and develop a shared understanding of

key constructs and dimensions. Calibration requires that all observers rate the same performance within a specified threshold.

Norming usually precedes calibration and can be sufficient in ensuring reliability if a rubric is used only for formative feedback. However, when rubric scores will be used to make high-stakes decisions or aggregated to make decisions about program improvement, observers should be calibrated to ensure that decisions are based on valid and reliable data.

Most NGEI campuses focused their training for supervisors and mentor teachers on norming — around the various levels of performance described by the rubric — rather than on calibration. For instance, on one campus, mentor teachers and supervisors met approximately twice a year to watch a video of classroom practice, use the rubric to provide a rating, and then discuss the rating as a group.

A few campuses, such as CSU Fresno, set up systems to ensure that their raters were calibrated. At CSU Fresno, supervisors attended an in-person training, followed by independently watching videos, scoring the video observations, and collectively reaching a calibration score. While the calibration process resulted in observers who could provide valid and reliable rubric scores, it was also perceived by many supervisors as burdensome and time consuming. Moreover, it was optional; supervisors did not have to be calibrated to observe candidates. These problems led project leaders to consider how they might streamline the process and build in incentives to participate.

Mentor teacher training

Mentor teacher training, provided by all partnerships by the final grant year, addressed a variety of NGEI-relevant topics. The most common foci included

- roles and expectations;
- co-teaching guidelines and strategies;
- instruction related to the prioritized skills;
- · training on particular pedagogical strategies;
- introduction to and training on the aligned rubric; and
- overviews of candidate coursework.

Whether led by the CSU campus or by the district, scheduling and delivery of training was a collaborative effort. Some partnerships addressed multiple topics, but most ongoing training centered on co-teaching, an approach that marked a significant shift for most programs and that required a new way of thinking, for most mentor teachers, about how to structure the clinical experience. Campuses invested heavily in co-teaching training during the initiative, in order to generate deep change quickly.

Nearly all of the partnerships trained mentors on their common rubric, the key tool for supporting candidate growth on prioritized skills. Ideally, given its importance, rubric training would be in-depth and ongoing. However, the scopes and depths of the trainings differed markedly. Post-training, mentor teachers in some programs expressed frustration at feeling insufficiently knowledgeable about the rubric and its connection to the prioritized skills, or underprepared to use it to support or assess teacher candidates.

Several constraints hampered partnerships' ability to provide extensive rubric training. Even with the NGEI grant, funding for training was limited — as was mentor teachers' availability. Moreover, since mentor teachers were expected to engage daily in co-teaching, training in co-teaching was often prioritized over rubric training.

Joint training for supervisors, mentor teachers, and candidates

Research suggests that increasing the quality and consistency of candidate support from mentor teachers and university supervisors requires strengthening communication and establishing professional, trusting relationships across these providers. ⁴⁶ To improve communication, several NGEI partnerships brought together mentor teachers, supervisors, and, in some cases, teacher candidates for joint training.

Introductory trainings were typically held in the summer, before candidates began their clinical experience, and served as an opportunity for supervisors and mentor teachers to get to know each other and to develop shared understandings of strong instruction and expectations. These trainings helped build relationships and lay the groundwork for other joint endeavors, such as the clinical triad meetings (of supervisors, mentor teachers, and candidates) held occasionally throughout the placement.

Because it is often difficult for mentor teachers who teach full-time to attend trainings, NGEI partnerships offered incentives or support to encourage attendance at essential trainings. One common incentive was monetary — either a stipend or an hourly wage. Another was accrual of professional development hours that could then be used toward annual PD requirements or salary increases. Several partnerships also provided substitutes to cover mentor teachers' classes during trainings. Often, those substitutes were teacher candidates, who thereby gained more classroom experience. Occasionally, in lieu of incentives, campuses and districts framed the trainings as

leadership opportunities for mentor teachers looking to move their careers forward and carve out niches for themselves. No campuses offered onsite support for mentor teachers, which research suggests could be an effective means of developing mentor teacher capacity.⁴⁷

Lever 5: Define and Implement Processes to Provide Formative Feedback to Candidates on Prioritized Skills

Targeted, high-quality feedback on the execution of prioritized skills in clinical settings is crucial for candidate learning. It encourages candidates to reflect on their practice and can help them formulate what to attempt next and what changes they might introduce to improve their practice.⁴⁸ To support high-quality feedback, NGEI partnerships changed their feedback systems by

- putting in place standard observation processes and tools; and
- developing processes for delivering effective feedback.

Putting in place standard observation processes and tools

Prior to NGEI, many programs lacked a standard process for observation and for recording feedback. As a result, the quantity, quality, and consistency of the observation process varied. Supervisors and mentor teachers were often unsure what the focus of an observation should be, or made decisions about focus on an ad hoc basis. Some programs used multiple forms, with coaches unclear when to use which forms for which purposes.

With NGEI, some programs developed a standard observation protocol, accompanied by a single form and aligned to both their rubric and their prioritized skills, to be used across all supervisors. The standardized protocols included a list of prioritized skills where an observer could indicate the focus of the observation, space to record observation data, and prompts to guide follow-up feedback conversations with candidates. The protocols also included fields that helped the program team track the frequency, types, and foci of observations across candidates. Several sites automated these forms so that feedback could be entered and sent directly to a database. Developing standard observation processes and tools helped programs institutionalize observation routines that they could sustain even as new supervisors and mentor teachers came on board.

Box 8. CSU Fullerton: Implementing a standard observation form

CSU Fullerton consolidated multiple feedback tools and forms into a single form for clinical coaches to use with all observations (see Appendix D). The form rooted observations in the program's prioritized skills and provided guidance on how to follow up with candidates to offer feedback and encourage candidate reflection.

The first section of the protocol asked the clinical coach to record standard information, including names (of the candidate, the mentor teacher, and the clinical coach); date of the observation; subject area; and type of observation (ranging from a quick, targeted visit to the formal summative observation at the end of the semester). This standardized collection of information helped the program team track observation frequencies and types across candidates.

The second section listed the "Program Outcomes" (a set of desired candidate dispositions) and the TPE related to each outcome. It provided a limited menu of prioritized skills and asked clinical coaches to choose the skill(s) that were the focus of the observation. Laying out such a menu ensured that observations targeted skills critical to candidate progress, rather than leaving the observation focus up to ad hoc clinical coach discretion — or having no focus at all.

The third section contained blank space for the clinical coach to record observation data. The fourth section was structured to guide post-observation feedback with the candidate. It contained suggested prompts for candidate reflection (e.g., "What do you think went well? How do you know?"), as well as space to indicate next steps and targets co-identified by the candidate and the clinical coach.

Finally, the form asked clinical coaches to indicate whether they had a follow-up conversation with the candidate's mentor teacher. The clinical coaches then recorded the date the form was converted to PDF and sent to the candidate, to provide a record that the observation process had taken place.

Having a clear process for how and when supervisors were expected to conduct observations was an important first step. However, feedback needed to be aligned with both the prioritized skills and what candidates were learning in coursework. Supervisors thus also needed to understand what skills candidates were expected to execute in their clinical placements, when they were supposed to implement them, and the level of mastery candidates should demonstrate at different points in the year.

To provide this guidance, some programs developed timelines that took into account which prioritized skills were emphasized in coursework as well as the program's "gradual release of responsibility" processes — that is, what placement responsibilities candidates were expected to take on at given points in the year. These timelines facilitated the alignment of observations with targeted skill sets and levels. They also supported cohesion in the feedback candidates received from different clinical staff. Additionally, they allowed programs to make an explicit link between what candidates learned in their coursework and what they focused on during clinical placements.

For example, CSU Bakersfield provided mentor teachers and candidates a week-by-week table that provided a synopsis of their roles and responsibilities for each quarter (see Exhibit 1). For each two-week period, the document indicates the mentor teacher roles, resident roles, suggested co-teaching strategies, prioritized skill focus, rubric focus (incorporating the prioritized skills), and how mentor teachers and candidates should work together during their collaboration time.

Exhibit 1. Kern Urban Teacher Residency at CSU Bakersfield phase-in schedule, detail from weeks 1-2

Weeks 1-2		
Mentor Teacher Roles	 Welcome the RT and create a "space" for them to coexist in the classroom. Instructional lead for planning and during all lessons. Share lesson plans with RT and code them for co-teaching strategies. Decide on which co-teaching strategies are used at which times, with input from the resident. Send resident's introduction letter home to inform families. Set a co-planning time (ex.: Tuesdays from 3:00 - 4:00). 	
Resident Roles	 Observe and get acquainted with the school, classroom, MT, and students. Take notes regarding classroom policies and procedure. Write and share an introduction letter home to the parents. Become familiar with daily schedule. General classroom management support. 	
Suggested Co-Teaching Strategies	 One Teach/One Assist One Teach/One Observe MT leads core instruction and includes resident in planning sessions. 	
Prioritized Skill(s)	 Relationship building (rapport) and respectful interactions building (rapport) and respectful interactions. 	
Danielson Observation	 Domain 2 - Classroom Environment 2a: Creating an environment of respect and rapport 2b: Establishing a culture for learning 	
Time Together	 (1 hour weekly) Discuss observations and procedures. Explain PLC sessions, schedules, and feedback. Decide on "hours of operation" and classroom duties (attendance, pick up/drop off times, etc.). 30 minute meeting of protected time. Take notes regarding classroom policies and procedure. 	

Source: CSU Bakersfield.

Developing processes for delivering effective feedback

Even when observations were carried out consistently, candidate learning depended on receiving timely, high-quality, and actionable feedback, post-observation. With awareness of this, several programs focused on developing effective feedback processes.

One program introduced "focused visits" — frequent brief observations providing targeted feedback on specific prioritized skills. During four such visits each semester, the supervisor observed the candidate for approximately 15 minutes, focusing on a small number of skills the candidate was working on. Immediately afterward, the candidate and the supervisor stepped outside to discuss. This strategy allowed for more consistent and deeper feedback, which supported the candidate in continuously fine-tuning key skills.

Another program implemented a "pre-observation, observation, post-observation" cycle to improve formative feedback. The cycle occurred at four intervals during student teaching placements. Before each observation, candidates identified up to four skills that would be its focus. At least two needed to be prioritized skills. The pre-observation included discussion among the clinical coach, the mentor teacher, and the candidate, to ensure a common understanding about the lesson's goals, content, and approach. In the post-observation debrief, immediately following the observation, the supervisor and mentor teacher delivered feedback on the candidate's mastery of the prioritized skills. After the debrief, the supervisor and mentor teacher reflected on the process to identify ways to improve their feedback. This system helped ensure that the observation and feedback process was grounded in the prioritized skills and was aligned across multiple observers.

Conclusion

Each NGEI partnership began the initiative with different resources, priorities, and contextual factors, but all made progress toward developing more clinically oriented teacher preparation programs. In a testament to the initiative's effectiveness, the practices and processes put in place

have largely become integrated into the partner-ships' way of operating — suggesting that most will be sustained. The CSU assistant vice chancellor reported her belief, shaped by her conversations with deans, "that the work of NGEI has been transformative. It has allowed us to develop structures that can be maintained and used. It has changed how faculty do work on campuses."

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~ CSU Assistant Vice Chancellor

The five levers outlined in this paper mattered for success — individually and in tandem. Taken separately, each lever helped move most partnerships toward a more clinical orientation by instigating one or more of the following changes:

- Establishment of an agreed-upon set of prioritized skills. Aligned with district and faculty priorities, the prioritized skills served to center all other program reforms. Faculty leading coursework were able to narrow their courses to focus on the prioritized skills. An observation process guided by a skills-based rubric allowed for evidence-based feedback, enabling supervisors and mentor teachers to go deeper with their support. These changes encouraged higher-quality instruction and more reflective practice, but did not always come easily. NGEI leaders benefited from targeted technical assistance that both clearly defined prioritized skills and explained how focusing on prioritized skills was different from "covering" the TPEs. Also important was the time and space that NGEI afforded to partnership team members to collaborate on developing prioritized skills relevant to each partnership's context.
- Adoption of an observation rubric aligned with the prioritized skills. Across partnerships, the rubric proved to be the most instrumental lever for creating a more clinically oriented teacher preparation program. The rubric made the prioritized skills clear and provided a common language for talking about them. By delineating differing levels of effectiveness for each prioritized skill, the rubric became a tool for giving candidates feedback, based on concrete evidence, addressing how well they were doing relative to rubric-defined expectations. It also helped shift programs toward a more practice-based approach. NGEI campuses that adopted a validated, off-the-shelf rubric, rather than creating their own, were able to integrate rubric use into the feedback process more guickly.
- Opportunities for candidates to see models, rehearse, and enact teaching skills. Strategies such as extending time in the same placement allowed candidates to integrate more fully into the placement sites and to develop stronger relationships and routines with mentor teachers. Locating coursework in anchor schools and establishing extracurricular opportunities for candidates to practice also provided more clinical time. Additional practice with teaching in clinical settings enabled candidates to gain skills that were necessary for effective teaching in their first year. In some cases, faculty benefited from technical assistance focused on shifting their pedagogy to prioritize opportunities for candidates to practice prioritized skills. Across partnerships, changing structures to increase clinical opportunities required sustained commitment from campus and district leaders.
- A system for selecting and training high-quality supervisors and mentor teachers. The
 NGEI partnerships reconceptualized expectations for supervisors and mentor teachers. The
 supervisor role became less evaluative and more formative. Mentor teachers strategically
 shared teaching, planning, and assessment responsibilities with candidates by implementing

- co-teaching strategies, which led to greater levels of trust and teamwork among mentor teachers and candidates. These changes were supported by more rigorous selection criteria for mentor teachers and supervisors, and, importantly, by ongoing training and support.

 Training, driven by the skills-focused rubric, was crucial for effective candidate support.
- Targeted observation processes that led to relevant, timely, and actionable feedback. Each
 partnership put in place processes that ensured that observations occurred regularly and
 frequently, focused on prioritized skills, and included post-observation conversations with
 candidates. Guided by the rubric and supported by training for clinical staff, the observation
 process became a catalyst for continuous improvement by supporting deeper, more meaningful instructional conversations with candidates. NGEI campus leaders collected and analyzed
 observation data not only to assess candidate and program progress, but also to understand
 how to improve the feedback process to make it more consistent across candidates.

Working in tandem, the five levers fundamentally changed the NGEI teacher preparation programs' ways of doing business. They helped bolster the clinical orientation of the programs by creating the following:

- An intense focus on prioritized skills. By guiding each partnership's coursework, clinical
 experiences, and clinical staff selection and training, the agreed-upon skills infused focus,
 consistency, and coherence programwide. Brought to life by the rubric, prioritized skills
 clarified expectations and provided a systematic way for many NGEI partnerships to
 support candidate growth.
- A culture of teamwork, partnership, and capacity building. Alignment of programs around
 prioritized skills required collaboration among multiple stakeholders for example, to
 reorient campus coursework. This created greater program coherence, and, as most faculty
 willingly participated, prompted a cultural shift away from autonomous and disconnected
 instruction. Joint trainings wherein supervisors and mentor teachers worked together to
 build a shared understanding of how to use the skills-driven rubric to foster high-quality
 instruction also facilitated stronger partnerships and more collaborative cultures among
 campus and district staff.
- A partnership-wide commitment to the sustained implementation of high-quality processes. Combined action on the five key levers changed the ways in which campus-district partnerships operated. Working together over a sustained period of time to develop prioritized skills and rubrics helped the partnerships establish new teamwork norms as well as stronger and more trusting relationships. Seeing results that is, seeing that stronger clinical orientation resulted in better-prepared candidates galvanized interest in sustaining and institutionalizing the reforms.

Recommendations

Devising, implementing, and improving strategies for increasing the clinical orientation of a teacher preparation program is complex work. It takes intentional planning, collaboration, and dedication to continuous improvement. To increase the clinical orientation of TPPs, institutional policymakers must take specific actions. We offer five concrete recommendations to policymakers, funders, and other stakeholders taking the lead on designing and implementing clinically oriented reforms:

- Provide time and space for campus and district partners to work together to identify prioritized skills. Campus and district partners need time to identify a set of prioritized skills that all stakeholders believe in and are willing to impart. Leaders can create time and space by hosting meetings where the partners can collaborate and network with one another. Leaders should leverage these meetings to support the partners' understanding of what prioritized skills are and how they function to increase cohesion across candidates' preparation experiences.
- Support campus-district partnerships to align coursework with clinical experience practice. Prioritized skills can help create coherence across the program experience. Additionally, coursework can be sequenced so that it supports candidates' practice in the classroom.
 Leaders can provide models or guidance for how teacher preparation programs can develop coursework that aligns with prioritized skills and with predictable milestones in the school year. Funders can support conversations between campus and district partners to jointly develop deeper knowledge of what candidates need to know throughout the school year.
- Provide campus and district partners with guidance around choosing an observational tool.

 Observational tools should be valid and reliable, aligned with the partnership's prioritized skills and/or with the observational tool used in the partner district, and aligned with state-mandated teacher preparation standards. These elements will ensure that the tool is useful for providing feedback to teacher candidates, and will prompt greater buy-in from both partners' stakeholders. Program and policy leaders can provide guidance, in the form of manuals or training, on what campus and district partners should look for when choosing an off-the-shelf rubric. Leaders might also consider providing options for valid and reliable rubrics aligned to state standards, or crosswalks between common rubrics and state standards. Finally, funders can support training in understanding the rubric and using it to provide feedback to candidates.

- Offer tools and resources to support mentor teacher and supervisor training. In clinically oriented programs, candidates learn daily from observing and co-teaching with their mentor teachers and receiving critical feedback from both their mentor teachers and university supervisors. These professionals need support to meet new expectations for interacting with and providing feedback to teacher candidates. Leaders can offer tools that staff can use when training mentor teachers and supervisors; examples include videos modeling high-quality co-teaching in action or guidance around how to assume a coaching stance when providing feedback. Leaders should consider providing monetary or other incentives to compensate mentor teachers and supervisors for time spent learning new skills and deepening their mentoring and coaching abilities.
- Encourage teacher preparation programs to increase the time that candidates spend
 teaching in classroom settings. Evidence from NGEI and, more broadly, from the literature
 demonstrates that novices need to practice teaching to become expert teachers. Program
 and policy leaders can encourage campus and district partners to create structures that
 enable teacher candidates to get more practice by providing incentives and supports. These
 incentives and supports may include providing grants to teacher preparation programs that
 adopt co-teaching in clinical placements, or removing barriers that prevent candidates from
 teaching in alternative placements, such as substitute teaching, after-school programs, or
 summer school.

Appendix A: NGEI Partnership Overviews

Partnership overviews are derived from data collected primarily in the final year of the three-year New Generation of Educators Initiative (NGEI) grant, including interviews with partnership stake-holders and reports to the S. D. Bechtel, Jr. foundation. Each overview below consists of an exhibit (numbers 1-10) that lists the name of the campus and district partner, the credential program(s) targeted by the NGEI reforms, the rubric adopted by the NGEI partnership, and any technical assistance partners with whom the partnership worked. Following each exhibit is a narrative description of the partnership. The descriptions are not meant to be exhaustive, detailing all activities supported by NGEI funds; rather, they describe partnerships' major activities and accomplishments toward the reform's five Key Transformational Elements (detailed in Appendix B). Because data about what would be sustained beyond the grant was incomplete, and largely based on stakeholder predictions, we did not include it in the following descriptions.

Exhibit A1. CSU Bakersfield (CSUB)

Partner District(s)	Bakersfield City School District (BCSD)				
Credential Program(s) Targeted by Reforms	Multiple Subject and Single Subject (residents have the opportunity to earn both)				
Partnership Rubric	Adapted from the Danielson Framework for Teaching ^a				
Technical Assistance Partners	National Center for Teacher Residencies (NCTR), TeachingWorks fellowship, continuous improvement coaching, WestEd Continuous Improvement Fellowship				

 $^{^{\}it a}$ Rubric available on the <code>Educator</code> Quality Center website or <code>CSU</code> NGEI website.

CSUB partnered with BCSD to create the Kern Urban Teacher Residency (KUTR), thereby expanding CSUB's pre-existing residency program with three rural school districts. KUTR focused on preparing preservice teacher residents to integrate standards-aligned STEM education into TK-8 by co-teaching alongside mentor teachers. CSUB and BCSD began by co-selecting a rubric to measure their prioritized skills, the Danielson Framework for Teaching. The rubric was adapted and used to assess candidate progress and guide feedback. The half-time district and university partnership coordinators co-led key partnership activities:

• Establishing processes for co-selecting mentor teachers who demonstrated exemplary standards-aligned instruction and placing residents with them in yearlong co-teaching placements

- Increasing opportunities for residents to practice and get feedback on clinical skills by
 hosting a BCSD-funded Saturday STEM lab school for fifth and sixth grade students. During
 the lab school, residents could practice delivering Next Generation Science Standards
 (NGSS) and Common Core State Standards: Mathematics (CCSS-M) lessons with enrolled
 students, under the guidance of mentor teachers and faculty
- Co-planning and co-teaching math and science methods courses
- Providing training to mentor teachers, supervisors, and candidates on the rubric, including strengthening tools and processes for capturing mentor teacher and supervisor rubric feedback and sharing it with candidates in a timely manner
- Establishing a pathway for all KUTR residents to earn both a Multiple Subject credential and a Single Subject credential in math or science
- Improving the frequency and quality of supervisor feedback to candidates, with continuous improvement coaching support. The coordinators developed a Google Form for supervisors to enter their feedback after each observation and routinely analyze the data to assess how often candidates were being observed and the quality of the feedback they received

As of spring 2019, KUTR was poised to be sustained in BCSD, and CSUB was working to expand its model to three additional districts in California's Central Valley.

Exhibit A2. CSU Channel Islands

Partner District(s)	Ocean View School District (OVSD) ^a University Preparation Charter School (UPCS)		
Credential Program(s) Targeted by Reforms	Multiple Subject		
Partnership Rubric	In development by spring 2019 ^b		
Technical Assistance Partners	NCTR		

^aOcean View School District withdrew from the NGEI partnership in 2018.

Early in the grant, CSU Channel Islands (CSU CI) partnered with UPCS and OVSD to strengthen integration of the coursework and clinical experiences in Multiple Subject science and math. The science methods faculty member from CSU CI, in collaboration with the science specialist at UPCS, worked to develop a new approach to training mentor teachers. The training included both Multiple Subject teacher candidates and their mentor teachers, provided foundational NGSS knowledge,

^b Partnerships could choose to develop their own classroom observation rubric, or to select a pre-existing, validated instrument.

and supported the mentor teachers and candidates to co-plan an NGSS-aligned unit. Both the science and math methods teachers took strides to make their courses more clinically oriented. For the math methods professor, this included collaborating with mentor teachers to give candidates in-classroom opportunities to practice with students.

In the last two years of the grant, CSU CI moved beyond its NGEI partnership work to cultivate relationships with stakeholders outside of UPCS and OVSD. They did this by holding focus groups, town hall meetings, and work groups with a wide range of community stakeholders across Ventura County, with the purpose of identifying broader community priorities. It was with these partners that CSU CI collaboratively identified a single prioritized skill, differentiated instruction, and decided to explore the Danielson Framework as its classroom observation rubric. In the last year and a half, CSU CI worked with the Danielson Group and its community partners to adapt the rubric, which it planned to pilot in 2019–20.

Through its work with NCTR, CSU Cl also laid the groundwork for teacher residencies with two new partner districts in Ventura County. CSU Cl made progress toward strengthening its data infrastructure, using a new data management system called Via by Watermark, which it planned to use for managing signature assignments and candidate evaluations.

Exhibit A3. CSU Chico

Partner District(s)	Chico Unified School District (CUSD)				
Credential Program(s) Targeted by Reforms	Most reforms geared toward Multiple Subject credentialing program; rubric implemented with all credentialing programs				
Partnership Rubric	Adapted from The New Teacher Project (TNTP) Core Teaching Rubric ^a				
Technical Assistance Partners	NCTR, TeachingWorks fellowship, data support, continuous improvement coaching				

 $^{^{\}rm o}$ Rubric available on the <code>EducatorQualityCenterwebsite</code> or <code>CSU NGEI website</code>.

The partnership between CSU Chico and CUSD focused on preparing preservice and in-service teachers to teach NGSS through an initiative called the Triad Project. Triad was open to all Multiple Subject (elementary) and Single Subject (middle school) candidates enrolled in a science methods course and placed in CUSD. The partnership began by identifying a rubric to measure their prioritized skills, which were the dimensions of the TNTP Core Teaching Rubric. Each participating candidate was paired with a mentor teacher and a science "content specialist" from CSU Chico (together known as the Triad), with whom they collaborated throughout the semester to develop and implement a science unit aligned to the NGSS. Triad supports included the following:

- Initial training for candidates and mentor teachers on co-teaching strategies and the NGSS
- Ongoing professional development for mentor teachers and candidates as they co-planned, and prepared to co-teach, their lessons

By spring 2019, the Triad Project had produced nearly 70 NGSS-aligned science units that were published online and incorporated into CUSD teachers' trainings, or given to district teachers to implement. In addition to these partnership reforms, the campus executed additional reforms to improve the clinical orientation of their teacher preparation program. These included the following:

- Implementing a modified version of the TNTP Core Teaching Rubric for observations across all credentialing programs in the School of Education
- Integrating NGSS-aligned, practice-based instruction across science methods courses
- Making practice-based reforms to a Multiple Subject math methods course with support from TeachingWorks
- Strengthening processes for collecting and analyzing rubric data to inform candidate progress, with coaching support from WestEd and SRI International

Exhibit A4. CSU Fresno

Partner District(s)	Central Unified School District (CUSD) Fresno Unified School District (FUSD) Sanger Unified School District (SUSD)				
Credential Program(s) Targeted by Reforms	Most reforms geared toward Multiple Subject				
Partnership Rubric	Partnership-developed ^a Continuum of Reflective, Engaging, and Accessible Teaching (CREATe) rubric ^b				
Technical Assistance Partners	NCTR, data support, continuous improvement coaching, WestEd Continuous Improvement Fellowship				

^a Partnerships could choose to develop their own classroom observation rubric, or to select a pre-existing, validated instrument.

Through NGEI, CSU Fresno deepened three existing district partnerships by establishing a clinical school in FUSD and Teacher Residency Programs (TRPs) in Sanger and CUSD for Multiple Subject candidates. The partnership started by developing and implementing a shared observation rubric, Continuum of Reflective, Engaging, and Accessible Teaching (CREATe). A teacher in residence and faculty in residence assigned to each partnership executed major partnership activities, including the following:

^b Rubric available on the Educator Quality Center website or CSU NGEI website.

- Establishing processes for the teacher in residence and faculty in residence to collaboratively recruit, select, place, and guide residents through residency processes, while providing support to mentor teachers
- Providing candidates with ongoing (six times per semester) rubric-based, formative feedback
- Providing mentor teachers and supervisors with rubric training

In addition to these partnership reforms, the campus executed additional reforms to improve the clinical orientation of its teacher preparation program by

- updating Multiple Subject courses to include co-teaching components, including a revamped teacher preparation curriculum with a focus on social justice, culturally and linguistically sustaining pedagogy, teacher inquiry, developmentally appropriate practice, and universal design and universal access;
- strengthening the processes for reviewing and making decisions based on clinical data, by
 (1) hiring a faculty member to be continuous improvement lead, (2) incorporating rubric
 feedback into midterm and end-of-semester conversations with candidates, (3) reviewing
 candidate rubric data at monthly faculty meetings, and (4) surveying candidates to under stand the quality of feedback they received from mentor teachers and supervisors. With
 data support from WestEd, the partnership also worked to conduct a validation study
 comparing the CREATe rubric to TNTP Core Teaching Rubric.

Exhibit A5. CSU Fullerton (CSUF)

Partner District(s)	Chico Unified School District (CUSD)				
Credential Program(s) Targeted by Reforms	Most reforms geared toward Multiple Subject credentialing program; rubric implemented with all credentialing programs				
Partnership Rubric	Adapted from The New Teacher Project (TNTP) Core Teaching Rubric ^a				
Technical Assistance Partners	NCTR, TeachingWorks fellowship, data support, continuous improvement coaching				

^a Rubric available on the Educator Quality Center website or CSU NGEI website.

The NGEI partnership between CSUF and its partner districts focused on strengthening a residency program established in the first phase of the grant, Titan EDUCATOR, in AUHSD, and expanding it to two additional partner districts, OUSD and PYLUSD. The residency program benefitted candidates in the Multiple Subject, Education Specialist, and Single Subject programs. With input from partner districts, CSU Fullerton chose to adopt the Mathematics Classroom Observation Protocol for Practices (MCOP2) rubric. Notably, faculty from all three credential areas were engaged with the NGEI reforms, which supported the implementation of residency elements across the School of Education, including two new roles: professional development facilitators and clinical coaches. Professional development facilitators were faculty members from the credentialing programs who supported partnership activities in each partner district, including trainings for mentor teachers. Clinical coaches were a reconfigured university supervisor role that provided clinical support to both candidates and master teachers. Campus and district leaders worked to sustain key clinical reforms in AUHSD and expand them to OUSD and PYLUSD, including

- continuing and scaling key clinical structures into OUSD and PYLUSD: (1) anchor schools;
 (2) professional development facilitator and clinical coach roles; and (3) yearlong placements following the district calendar;
- offering Multiple Subject methods courses and reflective learning walks at partner district anchor schools:
- training mentor teachers and clinical coaches on the MCOP2 rubric and co-teaching; and
- implementing "focused visits" (when a coach conducts an observation of a candidate with one to two of the California Teacher Preparation Expectations as the focus of the observation) for coaches in all three credentialing programs.

In addition to these partnership reforms, the campus executed reforms to improve the clinical orientation of its teacher preparation program by

- streamlining processes for collecting and sharing feedback with candidates by developing a single observation form for coaches to use during clinical observations;
- making practice-based reforms to math methods courses across all three credential programs with support from TeachingWorks; and
- establishing new data routines, including (1) reviewing rubric data every semester; (2) working with the continuous improvement team to develop and begin administering an end-of-semester survey; and (3) beginning to conduct end-of-semester focus groups with teacher candidates,

i. For more detail, see the first paper in this series: White, M., Milby, A., Hirschboeck, K., Tejwani, J., & Torre Gibney, D. (2020). The NGEI approach to improving teacher preparation in the CSU through a system of supports. WestEd.

clinical coaches/university supervisors, and mentor teachers to assess all aspects of the teacher preparation program.

In the last year of the grant, CSU Fullerton took lessons learned during MCOP2 implementation and began developing a science classroom observation protocol (SCOP) to provide feedback specific to science instruction.

Exhibit A6. CSU Long Beach (CSULB)

Partner District(s) ^a	Garden Grove Unified School District (GGUSD) Little Lake City School District (LLCSD) Long Beach Unified School District (LBUSD) Los Angeles Unified School District (LAUSD) Magnolia School District (MSD) Ocean View School District (OVSD) Paramount Unified School District (PUSD) Santa Ana Unified School District (SAUSD) Savanna Elementary School District (SESD)
Credential Program(s) Targeted by Reforms	Multiple Subject; Urban Dual Credential Program (UDCP)
Partnership Rubric	Partnership-developed rubric ^{b,c} based on the California Teaching Performance Expectations (TPE) and California Standards for the Teaching Profession (CSTP)
Technical Assistance Partners	Data support, continuous improvement coaching

^a LBUSD joined the NGEI partnership team in phase 1. All other districts joined in 2017–18 except for Magnolia, Savanna, and Garden Grove, which joined in 2018–19.

CSULB's NGEI reforms spread across the Multiple Subject credential program and Urban Dual Credential Program (UDCP), so reforms impacted all nine partner school districts where candidates were placed. However, LBUSD has been CSULB's primary district partner since phase 1 of the NGEI grant. Through NGEI, CSULB worked with partner districts to provide all Multiple Subject preservice candidates with an integrated yearlong clinical experience alongside a high-quality mentor teacher in the Clinical Practice Network (the network of high-quality mentor teachers who received training and support in mentoring, co-teaching, and the NGEI rubric). A major focus was establishing and integrating its rubric, which was based on the TPE and California Standards for the Teaching Profession (CSTP). Leaders from CSULB and its partner districts executed key partnership activities:

^b Partnerships could choose to develop their own classroom observation rubric, or to select a pre-existing, validated instrument.

[°] Rubric available on the Educator Quality Center website or CSU NGEI website.

- Developing and implementing the clinical 1, 2, and 3 sequence (which included early field experience, early field experiences as they relate to methods courses, and student teaching, respectively) for Multiple Subject candidates' clinical practice
- · Establishing anchor schools and recruiting a cadre of mentor teachers
- Providing mentor teachers with training for mentoring, co-teaching, and using the rubric

The anchor schools, the clinical 1–3 sequence, and training for mentor teachers were first implemented in phase 1. Phase 2 focused on integrating the rubric into these structures and throughout the preservice teacher experience. In addition to these partnership reforms, the campus executed reforms to improve the clinical orientation of its teacher preparation program:

- Establishing an Office of Clinical Practice (OCP) at the School of Education to oversee anchor school selection, mentor teacher selection, and candidate placements at anchor schools
- Integrating the rubric into trainings for Multiple Subject and UDCP mentor teachers and university supervisors
- Using the rubric to assess Multiple Subject candidates' progress during their clinical placement and to determine whether candidates could progress through the program
- Streamlining its system for collecting and analyzing rubric data by working with the data support team from WestEd and SRI to develop and refine regular routines for analyzing rubric data

As of spring 2019, the partnership planned to expand rubric implementation to the Education Specialist program as well.

Exhibit A7. CSU Monterey Bay (CSUMB)

Partner District(s)	Monterey Peninsula Unified School District (MPUSD) Salinas City School District (SCSD) Salinas Union High School District (SUHSD)		
Credential Program(s) Targeted by Reforms	Multiple Subject, Single Subject, Education Specialist		
Partnership Rubric	Partnership-developed ^a STEM prioritized skills rubric ^b measures high-quali STEM instructional "moves"		
Technical Assistance Partners	NCTR, TeachingWorks fellowship, continuous improvement coaching		

^a Partnerships could choose to develop their own classroom observation rubric, or to select a pre-existing, validated instrument.

^b Rubric available on the <u>Educator Quality Center website</u> or <u>CSU NGEI website</u>.

CSUMB partnered with three districts for NGEI, although the bulk of reforms were implemented in their partnership with MPUSD. Leaders from CSUMB and MPUSD collaborated to provide MPUSD teachers with STEM-based professional development and to improve preservice supports to better prepare candidates to teach science in the district. Their work started by developing a STEM rubric that defined high-quality STEM instructional behaviors, based on the California Teaching Performance Expectations (TPE). Specific partnership activities focused on

- increasing opportunities for candidates to practice STEM skills by implementing an after-school program called Stone Soup, during which candidates delivered science lessons to MPUSD students;
- implementing two new residencies with partner districts: (1) an Education Specialist residency with Salinas City School District, and (2) a Single Subject residency with Salinas Union High School District;
- implementing new clinical structures and processes, including (1) identifying anchor sites,
 (2) creating mentor teacher and school selection criteria, and (3) developing a gradual release of responsibility document specifying how mentor teachers should support candidates throughout the year; and
- providing training and coaching to MPUSD teachers and candidates; major topics included high-quality STEM instruction, co-teaching, NGSS, and an MPUSD-adopted curriculum (STEM Scopes).

In addition to these partnership reforms, the campus executed reforms to improve the clinical orientation of its teacher preparation program by

- incorporating the STEM rubric into the feedback and assessment of Multiple Subject candidates during observations of science lessons and during science and math methods courses;
- providing training to supervisors (called "clinical coaches") focused on how to give high-quality feedback that is aligned to the rubric;
- making practice-based reforms to Multiple Subject math and science methods courses with support from TeachingWorks. By the end of the grant, coursework reforms had also spread to Single Subject English language arts (ELA), math, and science methods courses; and
- implementing new processes for capturing rubric-aligned feedback and using data to assess candidate progress.

Notably, the partnership's early STEM-focused work lay the groundwork for the later development of a content-agnostic TPE-based rubric that was implemented across the Multiple and Single Subject credentialing programs.

Exhibit A8. CSU Sacramento

Partner District(s)	Sacramento City Unified School District (SCUSD)				
Credential Program(s) Targeted by Reforms	Multiple Subject credential students placed in SCUSD				
Partnership Rubric	Partnership-developed rubric, ^{a,b} derived from the California Teaching Performance Expectations (TPE), and a district tool aligned to the Common Core State Math Standards (CCSS-M) and used in classroom observations				
Technical Assistance Partners	NCTR, TeachingWorks fellowship, continuous improvement coaching				

^o Partnerships could choose to develop their own classroom observation rubric, or to select a pre-existing, validated instrument.

CSU Sacramento and SCUSD's partnership focused on strengthening the clinical orientation of their program for all Multiple Subject candidates placed in SCUSD. The partnership engaged in a collaborative process to identify prioritized skills; through this process, they co-developed a partnership rubric, called the Prioritized Skills Profile (PSP). Faculty from the campus worked with district leads to execute partnership activities by

- extending clinical placements to be yearlong rather than semester-long;
- leading trainings for mentor teachers and supervisors about prioritized skills, co-teaching, clinically oriented preparation, and feedback;
- leading trainings for university faculty focused on how to create assignments incorporating
 the prioritized skills into their courses as well as how to observe and give feedback on the
 prioritized skills in course and clinical experience contexts;
- establishing an application process for all SCUSD teachers seeking to be mentor teachers;
- strengthening the pipeline of candidates hired to the district by establishing an early decision timeline for candidates coming from CSU Sacramento; and
- developing and beginning to implement standard processes for supervisors and mentor teachers to give consistent feedback aligned to prioritized skills; although the PSP was no longer in use by spring of 2019, four of the prioritized skills were embedded into the midterm and final clinical evaluations to collect formative data on candidate progress.

In addition to these partnership reforms, the campus made practice-based reforms to English Language Arts and math methods courses through participation in the TeachingWorks fellowship.

^b Rubric available on the Educator Quality Center website or CSU NGEI website.

Exhibit A9. California Polytechnic University, San Luis Obispo (Cal Poly SLO)

Partner District(s)	Lucia Mar Unified School District (LMUSD) San Luis Coastal Unified School District (SLCUSD)				
Credential Program(s) Targeted by Reforms	Mostly geared toward candidates placed in K-8 classrooms (this included Multiple, Single, and Special Education programs). Coursework reforms and use of the observation rubric were implemented across all credentialing areas.				
Partnership Rubric	Clinical Observation Rubric (called the School of Education Observation Tool), inspired by the Danielson Framework for Teaching				
Technical Assistance Partners	TeachingWorks fellowship, continuous improvement coaching, WestEd Continuous Improvement Fellowship				

^a Rubric available on the Educator Quality Center website or CSU NGEI website.

Cal Poly SLO worked with two partner districts throughout the grant. The first, LMUSD, was the pilot site for the partnership model that Cal Poly later replicated with its second partner district, SLCUSD. The partnership's rubric was inspired by the Danielson Framework for Teaching; however, the partnership modified it for the preservice context by aligning it to the California Teaching Performance Expectations and adding skills focused on supporting emergent bilinguals and students with disabilities. To facilitate campus–district collaboration, each partnership included an advisory board of campus and district leaders and both a partnership liaison (a university faculty member) and a district liaison (a district teacher on special assignment). Together, campus leads, the partnership liaison, and the district liaison at each partner district worked to execute key partnership activities, including:

- · selecting mentor teachers;
- providing mentor teachers with training for giving high-quality, rubric-based feedback;
- providing district teachers with other needs-based professional development supporting standards-aligned instruction; and
- launching the New Teacher Learning Community (NTLC) in LMUSD to provide early career teachers with professional development and support.

In addition to these partnership reforms, the campus executed reforms to improve the clinical orientation of its TPP:

- Establishing a standard observation tool for supervision across the entire School of Education
- Making practice-based coursework reforms to ELA and math methods courses through participation in the TeachingWorks fellowship

- Integrating the prioritized skills throughout the candidate experience by (1) developing seven
 online learning modules describing the prioritized skills, (2) embedding the modules into coursework expectations, and (3) focusing candidate observations and feedback on prioritized skills
- Improving data structures and routines by (1) implementing new processes for using rubric data for program improvement, and (2) developing a data review protocol to integrate data-driven conversations into program meetings

Notably, the university NGEI team included faculty representation from the three main credentialing programs, which helped the campus faculty implement reforms schoolwide. The partnership also improved its use of data to drive decision-making via participation in continuous improvement coaching. The continuous improvement work surfaced a need to improve supports for early career teachers, which prompted the partnership to create the NTLC.

Exhibit A10. CSU Stanislaus

Partner District(s)	Ceres Unified School District (CUSD) Turlock Unified School District (TUSD)				
Credential Program(s) Targeted by Reforms	Multiple Subject				
Partnership Rubric	5D+ Dimensions of Teaching and Learning ^a				
Technical Assistance Partners	NCTR, TeachingWorks fellowship, continuous improvement coaching, data support				

^a Rubric available on the Educator Quality Center website or CSU NGEI website.

CSU Stanislaus partnered with CUSD and TUSD to strengthen the clinical preparation of Multiple Subject candidates as defined by their prioritized skills. The campus and partner districts co-selected the 5D+ Dimensions of Teaching and Learning rubric for supervisors and mentor teachers to use when giving candidates feedback. Campus leads and the induction coordinator at each partner district worked together to execute key partnership activities:

- Creating the Warriors Teach! residency pathway in the final year of the grant for Multiple Subject candidates placed in CUSD and TUSD
- Developing new processes for selecting anchor schools and placing candidates
- Leading trainings for mentor teachers on co-teaching strategies
- Leading trainings for university supervisors on the 5D+ rubric and providing rubric-aligned feedback

- Establishing more defined and developed processes for supervisors to provide rubric-aligned feedback throughout their clinical placement
- Strengthening the link between candidate preparation and hiring/induction in the partner district
- Launching the Next Generation Science Standards (NGSS) Collaborative that gave district teachers the opportunity to receive professional development on the NGSS and develop an NGSS-aligned science unit in partnership with a science university faculty memberⁱⁱ

In addition to these partnership reforms, the campus executed reforms to improve the clinical orientation of its teacher preparation program:

- Making practice-based reforms to three English Language Arts and math methods courses with support from the TeachingWorks fellowship
- Improving data-driven decision-making through continuous improvement coaching work, which included (1) engaging a data manager to handle and process all NGEI data, (2) developing a data management plan to systematically collect survey feedback from candidates about mentor teacher and supervisor quality, and (3) using data from these surveys to make decisions about mentor teacher and supervisor selection

ii. This initiative was inspired by CSU Chico's Triad Project.

Appendix B: NGEI Key Transformational Elements

The New Generation of Educators Initiative (NGEI) Key Transformational Elements (KTE) grounded all grant activities and were the framework for partnership reform efforts. The NGEI steering committee developed the original KTEs in 2015 prior to phase 1 of the NGEI grant, then updated the KTEs in 2016 based on learnings from phase 1. The following lists each KTE and its related goal.

KTE #1 Partnership

Maintain and deepen partnerships between the CSU campus and the K-12 districts that hire the teachers trained by funded pathway(s), using data about student populations, instructional practices, and hiring projections to align programming as much as possible to local needs.

KTE #1 goal: By the 2018–2019 school year, at least 75 percent of teachers hired by the partner district from the partner CSU will have been prepared via a partnership program. The campus and district will each have at least one staff member spending at least 0.5 full-time equivalent (FTE) on maintenance of the partnership, with sustainable funding in place to continue these roles.

KTE #2 Prioritized Skills

Identify, in partnership, the key skills, knowledge, and dispositions ("prioritized skills") of a well-prepared new teacher. Ensure that this set of prioritized skills is aligned to the requirements of the Common Core and Next Generation Science Standards (NGSS). Select an appropriate rubric to measure progress toward these prioritized skills. Where appropriate, demonstrate alignment with Teaching Performance Expectations and district-identified teaching effectiveness frameworks.

KTE #2 goal: By the 2018–2019 school year, teachers prepared in a partnership program will be required to demonstrate competency with prioritized skills. These skills will be determined in partnership and drawn from the TPE and an instructional rubric, for example, Danielson Framework for Teaching, TAP Instructional Rubric, the district's own rubric, or a different approved rubric.

KTE #3 Practice-Based Clinical Preparation

Build and refine opportunities for candidates to gain fluency with prioritized skills during clinical preparation.

KTE #3 goal: By the 2018–2019 school year, teacher candidates prepared in partnership programs will be placed in clinical settings explicitly designed to allow them to build facility with prioritized skills. Ideally, these clinical settings will include well-designed co-teaching opportunities that span a full school year. Clinical experiences will include multiple opportunities to demonstrate competency with prioritized skills.

KTE #4 Formative Feedback on Prioritized Skills

Identify and continue to strengthen opportunities for candidates to receive feedback on their mastery of prioritized skills during clinical preparation. Structure opportunities for feedback from faculty as well as from strategically selected, well-supported cooperating teachers.

KTE #4 goal: By the 2018–2019 school year, partnerships will establish protocols for selecting and preparing cooperating teachers, field supervisors (or similar role), and faculty such that all parties can give feedback on the same prioritized skills. Candidates will receive feedback on their competency with prioritized skills multiple times throughout the clinical experience.

KTE #5 Data-Driven Continuous Improvement

Collect data on candidate progress toward facility with prioritized skills during preparation and after graduation, building data-sharing partnerships where necessary to ensure access to information. Use this data to effect changes at the college, department, pathway, course, and coaching relationships levels. Continue to use data to refine definition of the prioritized skills new teachers must master.

KTE #5 goal: By the 2018–2019 school year, partnerships will establish routines for reviewing data on individual candidates' progress toward competency with prioritized skills to inform coaching and teaching during the school year. In addition, partnerships will have routines to review longitudinal data on year-end candidate surveys, one-year-out candidate and supervisor surveys, district ratings of new teacher effectiveness, and other data that can continue to inform the partnership. Partnerships will be able to identify meaningful programmatic changes made as a result of this data.

Appendix C: Evaluation Data and Methods

WestEd and SRI International conducted a formative evaluation to track New Generation of Educators Initiative (NGEI) implementation at 10ⁱⁱⁱ campus–district partnerships that participated in NGEI, which spanned fall 2016 through spring 2019.^{iv}

NGEI aimed to introduce clinically oriented reforms to teacher preparation across the California State University (CSU) system, thereby increasing the number of new teachers in California prepared to deliver standards-aligned instruction. Each of the 10 grantee campuses partnered with one or more school districts to implement reforms grounded in the Foundation's reform framework, operationalized by five key transformational elements (KTEs):

- · Partnership between campus and district
- · Identification of prioritized skills
- Development of practice-based clinical preparation
- Provision of formative feedback on prioritized skills
- Engagement in data-driven continuous improvement

To evaluate progress toward these five KTEs and provide formative feedback to the grantee partnerships and the S. D. Bechtel, Jr. Foundation, evaluators from SRI and WestEd collected qualitative data and artifacts from each campus-district partnership twice annually between fall 2016 and spring 2019.

iii. NGEI began with 11 campuses, but one campus chose to end its participation in 2017. We focus on findings for the 10 campuses who participated for the entire grant period.

iv. The first phase of NGEI, which lasted from winter 2015 to summer 2016, included partnerships that continued into phase 2; however, this paper series focuses primarily on outcomes and lessons learned from the evaluation of phase 2 reforms (hereafter known as "NGEI"), unless specifically noted.

v. The phrase "standards-aligned instruction" refers to instruction aligned with California's Common Core State Standards (CCSS) and Next Generation Science Standards (NGSS).

vi. Detailed in Appendix B.

Data sources

The findings in this report series were distilled primarily from interviews conducted with stakeholders from the 10 partnerships in spring 2019, the final year of the evaluation. The evaluation team supplemented spring 2019 data with interviews, artifacts, reporting documents, and ongoing communications with project directors, foundation staff, and technical assistance staff throughout the three-year initiative. Sample artifacts included documentation of the partnerships' prioritized skills, classroom observation rubrics, training materials used to norm observers on each site's classroom observation rubric, and documentation of structures and processes.

To develop the findings, researchers collected and triangulated perspectives of various stakeholders from spring 2019 interviews, including principal investigators or project directors, continuous improvement leads, university supervisors, methods professors, district partners or liaisons, K–12 school administrators, mentor teachers, preservice teacher candidates, and others, including high-level campus and district leaders. Spring 2019 interviews were semistructured and role-specific; the evaluation team drew on partnership-specific program information collected throughout the initiative to tailor spring 2019 interviews. Interviews included questions about the KTEs, the sustainability of NGEI reforms, the implementation of NGEI activities, and how those activities supported progress toward the five KTEs.

The authors and their research teams interviewed or conducted focus groups with 238 informants in spring 2019, as summarized in the following table. We include interview counts from all three years of the evaluation to represent the full range of qualitative data collected.

Exhibit C1. Interviews conducted between 2016 and 2019

Role	Spring 2019 Interviews	Spring 2018 Interviews	Spring 2017 Interviews	Spring 2016 Interviews
Principal Investigators/ Project Directors	19	22	76 university-based staff/faculty	14
Continuous Improvement Leads	11	12	76 university-based staff/faculty	N/A
University Supervisors	35	30	76 university-based staff/faculty	18
Methods Professors	23	24	76 university-based staff/faculty	N/A
District Partners/ Liaisons	24	23	51 district-based staff	N/A
K-12 School Administrators	17	11	51 district-based staff	7
Mentor Teachers	42	43	44	20
Preservice Teacher Candidates	58	60	66	18
Othera	24	28	N/A	N/A
Total	238	253	237	77

a Including high-level leaders at the campus (e.g., dean or department chair) and district (e.g., superintendent or chief academic officer).

Spring 2019 analysis

The research team analyzed spring 2019 interview transcripts by coding them for responses relating to each KTE and then synthesizing findings by KTE at the partnership level. The research team met several times to discuss emerging findings and identify trends across partnerships. Researchers then identified cross-cutting themes and generated analytical summaries specific to each KTE area. These analytical summaries were used in conjunction with other data (detailed previously in the "data sources" section) to distill paper-specific findings. The collaborative and iterative nature of the data analysis allowed the research team to minimize bias and rely on themes and ideas that emerged directly from the data.

Extant data and other analyses

Periodically, throughout the evaluation, the research team also collected and analyzed extant data sources, including the annual survey administered by the Educator Quality (EdQ) Center to all CSU teacher preparation program completers, vii classroom observation data submitted to the Foundation by most programs, viii classroom observations of in-service teacher practice from one partnership, and K-12 student surveys from one partnership.

Some of these extant data have been reported on in other publications, but the research team chose not to include them in this paper series due to data limitations that would inhibit the utility of the analysis. For example, we did not include analysis of the EdQ Center's completer survey data because the EdQ Center is not yet able to link NGEI participants with their completer survey records.

Included in the final reporting is analysis of participation, completion, and employment patterns using a merged dataset created by the WestEd team in partnership with the EdQ Center that included NGEI participation data collected for the evaluation; completer records collected by the EdQ Center; and completer employment records from the California Department of Education. This analysis is described in Appendix E of the the second paper in this series: Torre Gibney, D., Rutherford-Quach, S., Milby, A., Lam, A., & White, M. E. (2020). Building strong partnerships to improve clinically oriented teacher preparation. WestEd.

vii. See the following for more detail on our methods and findings: Torre, D., White, M., & Gallagher, A. (2017). Examining teacher preparation program feedback from CSU systemwide survey data: Using the CTQ completer survey to support data-driven continuous improvement. SRI International and WestEd.

viii. See the following for more detail on our methods and findings: Torre, D., Gallagher, A., & White, M. E. (2017). Examining classroom observation rubric data submitted in August 2017. SRI International and WestEd.

Annandiy D. NGFI Partnership Artifacts

Appendix D.	NOLITA		ilb Ai	macts	
CALIFORNIA STATE UNIVERSITY	JLTIPLE SUBJECT nical Practice Obser		PROGRAM		
TEACHER CANDIDATE	CLINICAL COACH/SUPERVISO	OR GRADE	SEMESTER	DATE OF VISIT	
MENTOR TEACHER	SCHOOL/DISTRICT	SUBJECT	ADEA	LESSON TOPIC:	
MENIOR TEACHER	SCHOOL/DISTRICT	SUBJECT	AKEA	LESSON TOPIC:	
Observation Type:		Previously Identifie	ed Target(s) and/o	or Outcome/TPE Foci:	
☐ Fieldwork ☐ Focused Visit ☐ MCOP2 ☐ SCOP2	Classroom Observation				
	PROGRAM	OUTCOMES			
Instructions: For Fieldwork Visit, only	y Program Outcomes are add	lressed. Continued comp			
Asterisked items are related to priori the candidate:	tized knowledge, skills, and	dispositions in Titan ED	JCATOR. In resp	ect to Program Outcomes,	
Outcome I: Knowledgeable and Comp	netent Outcome II: Reflect	ive and Resnonsive	Outcome III: C	ommitted and Caring	
demonstrates an interest in learning a students and teaching.	bout 5. shows respect for	Outcome II: Reflective and Responsive 5. shows respect for multiple aspects of diversity in work with students and		arrives on time and follows through on commitments.	
2. takes initiative in practicing teaching	adults. *	adults. *		10. dresses appropriately.	
skills.		6. reflects on and evaluates own work. *		ofessional demeanor.	
3. participates in classroom routines.4. uses appropriate and correct oral and		7. communicates and collaborates with		age of opportunities for growth.	
written language.	others.	others. * 8. responds to professional feedback in a		growth	
	positive manner.				
	TEACHING PERFOR	MANCE EXPECT	ATIONS		
Instructions: For Focused Visit, sele	•	2.3			
broad combination of TPEs. Asteris					
☐ TPE 1: Engaging and Supporting Students in Learning	g All	ing and Maintaining		erstanding and Organizing	
a. relates material to student interests		ients for Student		for Student Learning knowledge of subject *	
experiences	a. establishes and a	maintains positive		n plan that organizes the	
b. provides comprehensible input for		climate for all students *		curriculum to promote student	
1 1 2 2 2		b. effectively communicates and enforces		understanding	
		routines, procedures and norms *		c. makes appropriate instructional adaptation	
meaningful and relevant experiences that c. encourages positive i					
promote critical and creative thinking * social-emotional grow d. uses instructional strategies, resources, d. uses strategies that er				uction and improve student	
d. uses instructional strategies, resources, and assistive technologies to support collaboration.		iai engage students in	learning *	action and improve student	
access to the curriculum for all students e. connects students to a		ts to appropriate supports	f. uses technolo	ogy to support learning and	
e. communicates achievement expectations f. maintains high expect		expectations with support		al citizenship	
and progress to students and famil	ies for all students				
☐ TPE 4: Planning Instruction at	nd ☐ TPE 5: Assessir	ng Student Learning	☐TPE 6: Devel	oping as a Professional	
Designing Learning Experiences for	All a. involves students	s in self-assessment	Educator	0 . 11	
Students	b. uses different typ		a. establishes p	rofessional learning goals	

- a. applies knowledge of students to plan, design, implement, and monitor instruction *
- b. makes cross-disciplinary connections
- c. accommodates different learning needs and develops student self-awareness of their learning needs
- d. utilizes instructional time effectively
- e. uses digital tools and technologies to support learning and digital citizenship
- f. plans instruction that incorporates a range of communication strategies and activity modes
- g. uses adaptations to remove barriers and increase access for all students

- assessment to sources to plan and modify instruction and document students' learning over time
- c. uses technology to support assessment administration, analysis, and communication ofresults
- d. uses assessment data to establish learning goals and to plan, differentiate, make accommodations and/or modify instruction
- e. communicates assessment results in a timely manner to students and families

- and makes progress to improve practice
- b. demonstrates professional responsibility for student learning and class management
- c. communicates and collaborates effectively with colleagues *
- d. reflects on one's teaching practice and level of subject matter & pedagogical knowledge to improve student learning *
- e. reflects on own values, biases and exhibits positive dispositions to students, families, and colleagues *
- f. conducts themselves with integrity and models ethical conduct

OBSERVATION DATA Observation Notes, Constructive Feedback, and Suggestions from Clinical Coach/Supervisor			
POST-OBSERVATION			
Lesson Planning: MT Planned TC Planned Co-Planned			
Feedback/Notes regarding planning (optional):			
Candidate reflection on the lesson (Suggested prompts: "What do you think went well?" "What might you might do differently next time?"):			
Next steps and targets (identified by the Teacher Candidate and the Clinical Coach/Supervisor):			
Clinical Coach/Supervisor Conversation with Mentor Teacher (Please check to confirm that a conversation occurred.)			
— Check here if the lesson was video recorded. Teacher Candidate will watch video and email the Clinical Coach/Supervisor a typed reflection within 48			
hours. Clinical Coach/Supervisor will copy and paste the Teacher Candidate's comments here.			
CO-TEACHING STRATEGIES USED DURING THE LESSON			
■ ONE TEACH, ONE OBSERVE	<i>■ ONE TEACH, ONE ASSIST</i>	■ TEAM TEACHING	⇒ PARALLEL TEACHING
■ SUPPLEMENTAL TEACHING	➡ ALTERNATIVE TEACHING	➡ STATION TEACHING	→ NONE OR NOT APPLICABLE
Form saved as PDF and emailed to Teacher Candidate on:			

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