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Building Strong Partnerships to Improve Clinically Oriented Teacher Preparation

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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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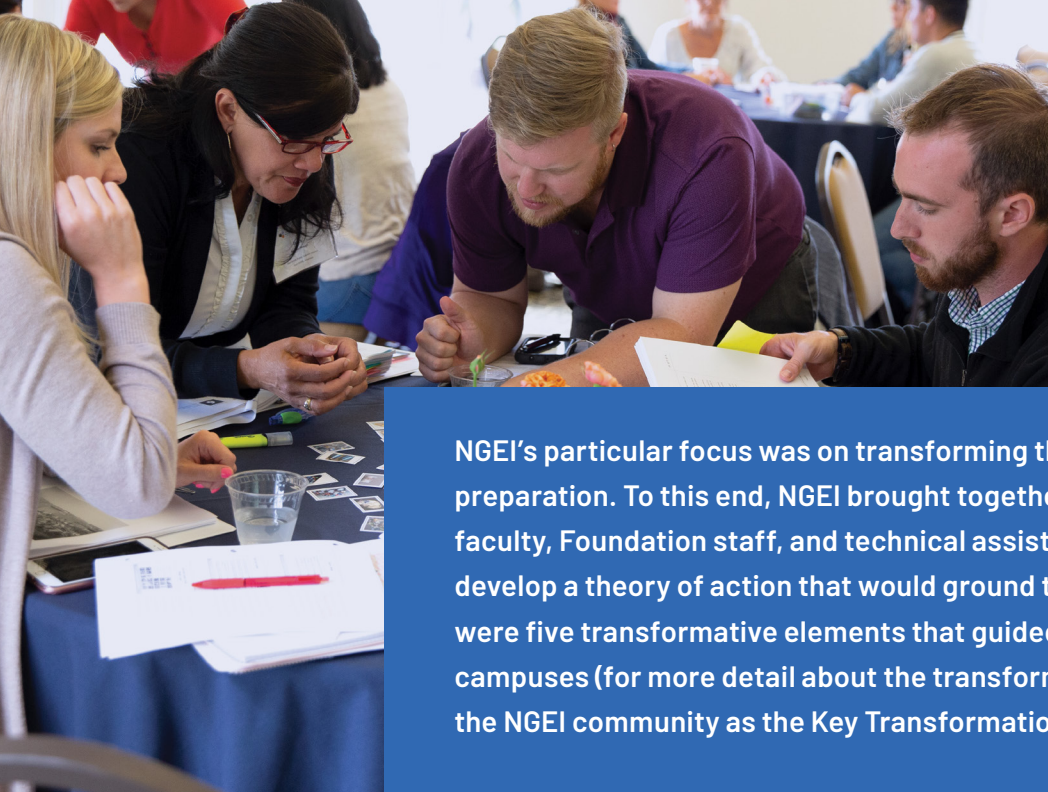


Overview of New Generation of Educators Initiative

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.⁴ 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.⁵ Launched in 2016, NGEI was a four-year, \$27 million initiative. It engaged 11 universities⁶ 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.⁷ 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 second topic, campus-district partnerships.

Introduction

Wide agreement exists that teacher preparation programs (TPPs) must be redesigned to better prepare educators to teach rigorous standards to an increasingly diverse student population.⁸ Educators and researchers have called for TPPs to shift to a more clinically oriented model in order to graduate more effective new teachers.⁹ Clinically oriented TPPs require that universities and local school districts share the responsibility for supporting teacher candidates. While candidates participate in coursework taught by university faculty and receive feedback from university-employed supervisors, a critical component of their preparation occurs in district classrooms where they receive hands-on experience and real-time, regular feedback from district-employed mentor teachers.¹⁰

By forming strategic partnerships, districts and university-based TPPs foster the collaboration that is fundamental to ensuring that teachers are trained and prepared for the job on their first day. Through these partnerships, the institutions purposefully combine efforts to achieve their shared goal of strengthening the teacher pipeline — that is, producing more new teachers who are ready to teach in a particular district context.¹¹ As distinct from transactional relationships, strategic partnerships are identified by several characteristics: a shared vision; active support of committed leadership; dedicated staff at both the university and the school district, working together toward mutually beneficial goals; intentional structures that support and foster both the work and relationships; and shared data and measurement systems to drive decision-making.¹² They also focus on creating cohesion between the district context and the campus-based programs through context-dependent and responsive curricula, training, and roles.¹³

Promising evidence on the effectiveness of strategic partnerships comes from the literature on teacher residencies — typically, postbaccalaureate programs wherein prospective teachers engage in a clinically rich curriculum and a year-long teaching residency in a public school under the guidance of a mentor teacher.¹⁴ A hallmark of the model is strong partnerships between university-based TPPs and partner districts. Commonly, districts make a financial investment in residents who commit to teaching in that district. Emerging research shows that retention rates are higher for graduates of residency programs than for teachers prepared in traditional programs. Residency programs are also more effective at recruiting and retaining teachers of color.¹⁵

Under California’s New Generation of Educators Initiative (NGEI), the S. D. Bechtel, Jr. Foundation (“the Foundation”) identified developing strategic partnerships between campuses and districts as a key tenet of its theory of action and as the foundation for achieving other elements and activities. NGEI campuses were required to engage in at least one partnership with a local district but could choose to partner with more. Several NGEI campuses added partners over time. By the spring of

2019, there were 27 partnerships (Exhibit 1), and several campuses were actively scaling NGEI in partnership with additional districts.

Exhibit 1. List of NGEI campuses and district partners

CSU Campus	School District Partner
Bakersfield	Bakersfield City School District ^{a, b}
Channel Islands	University Preparation Charter School
Chico	Chico Unified School District
Fresno	Sanger Unified School District ^{a, b} Fresno Unified School District ^{a, b} Central Unified School District ^{a, b}
Fullerton	Anaheim Union High School District Orange Unified School District Placentia-Yorba Linda Unified School District
Long Beach	Garden Grove Unified School District Little Lake City School District Long Beach Unified School District Los Angeles Unified School District Magnolia School District Ocean View School District Paramount Unified School District Savannah Elementary School District Santa Ana Unified School District
Monterey	Monterey Peninsula Unified School District Salinas City School District ^{a, b} Salinas Union High School District ^b
Sacramento	Sacramento City Unified School District ^{a, b}
Cal Poly San Luis Obispo	Lucia Mar Unified School District San Luis Coastal Unified School District
Stanislaus	Turlock Unified School District ^b Ceres Unified School District ^b

^a Indicates partnership received TA support from the National Center for Teacher Residencies.

^b Indicates partnership with the National Center for Teacher Residencies.

The NGEI vision was for California State University (CSU) campuses and their neighboring K-12 districts to establish and deepen partnerships to ensure that (1) graduating CSU candidates would enter classrooms in the partner district ready to teach in that context on their first day, and (2) the teacher pipeline would be strengthened¹⁶ – that is, alignment would increase between district hiring needs and the number and types of TPP completers produced by the partner CSU. Partnerships were to be rooted in a shared vision of high-quality instruction and strengthened through the development of a “cohesive learning experience for candidates” that lasted from preservice through induction.¹⁷ Neither the campus nor the district could achieve these outcomes on its own.

In this report, we describe four key levers through which the CSU campuses and school districts participating in NGEI designed, built, and strengthened their relationships to develop more strategic partnerships and progress toward NGEI goals. Campuses and districts acted to

- create and operationalize a shared vision;
- identify key roles;
- ensure space and time to collaborate; and
- share data to identify needs and monitor progress.

We detail the partnerships’ work within each lever and address the impact on partnership strength and on progress toward the goals. Finally, we offer recommendations for campus and district leaders, policymakers, and technical assistance providers on building effective TPPs.

Lever 1: Create and Operationalize a Shared Vision

A shared vision is an essential starting point for developing a strong and mutually beneficial partnership. A productive shared vision serves multiple purposes, including outlining the values and purposes of the partnership as well as setting the stage for productive goals and tasks.¹⁸

NGEI partnership members worked together to articulate their shared vision. They operationalized that vision by identifying key goals and tasks to ensure that partnership activities were meaningful and productive. Both partners also explicitly committed to work together toward their goals and tasks and, as needed, to modify existing structures and processes and allocate resources to enact the goals. Partnership success was predicated on those commitments.

Developing a shared vision

Shared visions, by definition, are not developed by one partner but instead through collaborative action.¹⁹ To create a shared vision, program leaders from NGEI partner campuses and districts met, often several times, to consider their joint priorities and translate them into a vision statement. For example, in one NGEI partnership, campus faculty recognized that preservice teachers needed more hands-on experience implementing the relatively new Next Generation Science Standards (NGSS). District representatives articulated a similar need for district-employed science teachers. Together, then, they established a vision focused on providing support – in the form of professional development and curricular materials – for Multiple Subject (i.e., elementary) preservice teachers participating in the NGEI program as well as all district in-service science teachers.

NGEI helped partnerships develop their visions by providing time and space to begin the work and technical assistance to support their efforts.²⁰ During the first annual NGEI convening, for example, as partners began their collaborative work, the National Center for Teacher Residencies (NCTR) – an NGEI technical assistance partner – presented evidence that a shared vision is one of the key elements of a strong partnership²¹ (see Box 1 for more detail about NCTR’s support throughout NGEI).

Box 1. Tools and support for successful partnership

The National Center for Teacher Residencies (NCTR) works with TPPs to develop or strengthen residency and clinically oriented programs.²² The Foundation engaged NCTR to provide optional technical assistance to support NGEI partnerships in strengthening their TPP’s clinical orientation.

Establishing and nurturing a strong campus–district partnership was a foundational goal of NCTR support. Partnerships that chose to work with NCTR received intensive support via a four-part institute as well as ongoing implementation support via monthly coaching calls and annual site visits.²³ To establish the partnership and shift the direction of the program, each stage of NCTR’s support included a set of concrete deliverables that campus and district partners completed collaboratively.

Important early deliverables included a vision of effective teaching, a mission statement, and a theory of change, which supported partnerships to decide on the shared values that would drive their work together (Exhibit 2). Partners also established SMART (specific, measurable, agreed upon, realistic, and time-bound) goals to codify the steps to achieving their vision and identify relevant outcomes. The vision, mission statement, and SMART goals underpinned the work of partners throughout the NGEI grant period.

NCTR experts also provided specific guidance to the partnerships they worked closely with to help them develop vision and mission statements that detailed how the partnership would work to solve issues specific to their context. (NCTR distinguishes between a vision, which is an idealized scenario that uplifts and inspires, and a mission, which is how a program can solve prioritized problems. See Exhibit 2 for 2016 vision and mission statements from select campuses.)

Exhibit 2. Selected NGEI vision and mission statements

Partners	Vision Statement Dream statement that uplifts and inspires	Mission How the program is a solution to a set of perennial challenges
<p>CSU Bakersfield Bakersfield City School District</p>	<p>The Kern Urban Teacher Residency is dedicated to excellence in preparing educators with distinguished pedagogical skills, cultural competency, and connection to community for the Bakersfield City School District. The Kern Urban Teacher Residency will actively recruit talented and passionate future educators, provide systematic support, and foster a sustainable partnership between CSU Bakersfield and the Bakersfield City School District.</p>	<p>The Kern Urban Teacher Residency will be a model program for teacher preparation, committed to ensuring that students in the Bakersfield City School District will be provided with the highest-quality educational experience and become successful and productive leaders that will impact positive change.</p>
<p>CSU Stanislaus Ceres Unified School District Turlock Unified School District</p>	<p>Teaching in diverse classrooms relies on professionals who have deep and flexible content and pedagogical knowledge combined with equity consciousness needed to include all students in the learning process. In addition to relevant coursework, teacher candidates need to observe and work alongside such experts as they meaningfully develop their instructional skills in CCSS-M and NGSS. This partnership will develop high-quality clinical placements where carefully selected and trained mentor/cooperating teachers in close collaboration with faculty demonstrate dynamic instruction and provide feedback that helps refine candidates' fluency with prioritized skills.</p>	<p>This initiative will transform current teacher preparation at multiple levels: (1) build access to high-quality clinical mentoring through trainings addressing co-teaching, cognitive coaching, equity consciousness, mathematics/science content, and pedagogy; (2) establish anchor schools where methods classes are taught in conjunction with early clinical experiences; (3) redesign methods courses and fieldwork opportunities in collaboration with K-12 partners; (4) develop a data sharing and assessment system that provides actionable formative and summative information to candidates and teacher preparation programs.</p>

Partners	Vision Statement Dream statement that uplifts and inspires	Mission How the program is a solution to a set of perennial challenges
CSU Sacramento Sacramento City Unified School District	The joint work of our partnership is to ensure that our students are critical thinkers who achieve at a high academic level and are prepared to actively participate in creating a society based on social justice tenets, while also attaining their individual potential.	Through aligning our understanding and execution of prioritized skills for mentor teachers, university supervisors, and faculty, candidates will receive a focused program, with purposefully integrated components. Through a focus on social justice teaching, we prepare our teachers to understand and use best practices for teaching in urban, diverse settings. By placing our candidates in high-need districts, candidates learn from experienced mentor teachers how to teach in such settings. We continue to grow in the number of candidates entering our program and are making sustained efforts to recruit candidates of color and from low-income backgrounds.

Across NGEI partnerships, vision statements varied in their specificity, focus, and the extent to which they mentioned both the district and the campus. However, all focused on the shared goal of improving student achievement by increasing teaching quality. Several vision statements specified what actions should be prioritized by identifying a focus area for the work – for example, building a residency, transitioning to a co-teaching model, training teachers in new standards, or meeting chronic teacher shortages. Other vision statements focused more on the purpose of the partnership and articulating core values, such as promoting culturally sustaining and social justice-oriented practices.

Regardless of their statement’s focus, participants reported that the vision-setting process – the coming together to reach collaborative agreement on the program’s direction and educational framework – established the working relationships and sense of common purpose that laid the groundwork for partnerships’ sustained NGEI efforts. Said one district partner, “Everything else comes and goes, but that collaboration and the larger framework are what’s important for keeping things going.”

Identifying concrete goals and tasks

NGEI partnership teams operationalized their visions by developing well-defined goals that addressed many of the following:

- Establishing roles, structures, and communication processes for managing the partnership
- Identifying a set of prioritized skills that candidates would learn, enact, and receive feedback on throughout their program
- Selecting or creating a rubric to assess teacher candidates' mastery of these prioritized skills
- Training university supervisors and cooperating teachers to support candidates to gain mastery in the prioritized skills
- Developing data systems and using protocols to inform decision-making and continuous improvement²⁴

Partnerships then used these goals to backward-map the specific tasks and processes that would be needed to achieve them as well as to plan meaningful and productive partnership activities. Exhibit 3 provides an example of one partnership's vision and goals, which were used as the foundation for subsequent program activities.

Exhibit 3. CSU Chico aligning goals with the vision

Vision Statement
To prepare preservice and in-service teachers to teach Next Generation Science Standards
Goals
<p>1. Professional development. Develop a continuum of opportunities, aligned with project goals, leading to increased effectiveness of both preservice and in-service teachers.</p> <p>2. Hiring. Strengthen the partnership and teacher preparation pipeline so that 75 percent of newly hired CUSD teachers are Triad Project* completers and all are well-prepared to teach the content of the NGSS and CCSS-Mathematics.</p> <p>3. Preparation. By June 1, 2019, Triad candidates will effectively develop and teach NGSS-aligned units that support students in three-dimensional learning to make sense of phenomena or design solutions as measured by an average score of 3 or above in Three-Dimensional Learning on the Triad Unit Plan Rubric, and an average score of 3 or above in Essential Content on the TNTP core observational rubric.</p> <p>4. University coursework. Transform the Multiple Subject program through the realignment of methods courses around the themes of investigation and problem solving.</p> <p>5. Co-teaching. Establish co-teaching as the clinical placement model in 80 percent of classroom placements made by the School of Education in collaboration with the district.</p>

**The Triad Project builds university and school district partnerships to create the next generation of science educators. Each Triad consists of science teacher candidates, cooperating teachers, and science education professors who simultaneously engage in professional development around the NGSS.*

For some NGEI partnerships, the process of getting under way went fairly smoothly. They set goals and developed work plans clearly aligned with the articulated vision, and then both partners proceeded with their work accordingly. For other partnerships, however, competing priorities in one or both organizations overshadowed the partnership’s vision or goals and hampered the NGEI work. For example, one partnership’s stated vision focused on preparing teacher candidates to teach the NGSS. The district, however, was focused on a foundational K–12 literacy initiative. At least at the beginning of the initiative, this meant that the district was orienting its resources and staff toward improving foundational reading skills, not necessarily science instruction, the focus of the NGEI work.

This kind of misalignment sometimes signaled that one side of the partnership, typically the CSU campus, had more influence than the other in crafting the NGEI vision and agenda. Other times it indicated a lack of collaboration by the partners on the development of goals and related tasks. As one project director explained, “Those goals that were built upon joint needs, such as the need for increased support for NGSS, led to a joint vision, actions, and results. Those goals not built upon the needs of both sides of the partnership fell to the wayside.”

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Conflicting priorities also stemmed from the scale of most NGEI programs, which was relatively small compared to the total enrollment of each campus’s TPP. That is, most NGEI programs considered only a minority of the campus’s teacher candidates to directly benefit from NGEI reforms (see Exhibit E7 in Appendix E). Similarly, in most partnerships, NGEI candidates represented a small subset of the total number of teachers hired in partner districts each year (see Exhibit E8 in Appendix E). For example, during the 2017–18 school year, one NGEI campus graduated 238 teacher candidates, 16 of whom were hired by the partner district in 2018–19, and only three of whom had been prepared in an NGEI program (see Campus E, Exhibits E6 and E7 in Appendix E). While the overarching goal of NGEI was to launch systemic changes among partners and not necessarily to graduate a large number of teacher candidates, the relatively small number of NGEI candidates hired into partner districts likely affected the alignment, operationalization, and influence of NGEI work.

Priorities also shifted over time, making it important to routinely revisit goals and tasks throughout the initiative. Partnerships that did so helped ensure that their work resulted in productive, mutually beneficial, and sustainable outcomes. Conversely, where diverging priorities remained unaddressed, intended results became more elusive. For example, one partnership’s original vision focused on reforming math and science methods courses and developing anchor school sites. But sustainable reforms related to that vision were uncertain at the end of the grant because there was little faculty

buy-in for course reforms. Instead, the campus leadership's vision expanded beyond their original aims to focus on building a regional teacher residency, starting with one of their NGEI partner districts.

To prevent such shifts from derailing the partnership, some partners intentionally included opportunities to reflect on the shared vision and goals, often during regular partnership meetings. This routine allowed them to assess how well the work was addressing both partners' priorities and contexts, flag any tensions, and, if necessary, change course. For example, one campus used annual advisory meetings to evaluate the partnership and share relevant data with campus and district leaders. At one such meeting, faculty presented data from a survey of new teachers in the partner district that showed teachers wanted more support in their first year. Together, the partners identified a broader goal: to improve new teacher retention by strengthening supports for early career teachers. They allocated NGEI resources to develop a learning community specifically for new teachers, thus re-centering the work on what was most responsive to partnership needs.

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Lever 2: Identify Key Roles

Partnership teams that successfully navigated across institutions to effectively enact reform typically included two types of members: (1) core members who were consistently involved in partnership activities, and (2) key leaders who were involved strategically, as needed. This configuration provided partnerships with both the structure and flexibility to purposefully execute the work.

Core members were responsible for the day-to-day planning and implementation of NGEI activities (see Exhibits D1 and Exhibit D2 in Appendix D for an example of the campus and district roles in one NGEI partnership). They attended regular team meetings, strategically planned the work, developed shared products, planned and led professional development sessions, tracked candidate data, and managed clinical staff. On the campus side, core teams typically consisted of campus faculty or staff who served as project directors, program/grant coordinators, continuous improvement leads,²⁵ or partnership liaisons. In most partnerships, one faculty member held several roles – for instance, as project director leading all NGEI activities, as well as campus liaison in charge of communicating regularly with district staff.

On the district side, some core team members (e.g., teachers on special assignment, induction coordinators, curriculum coordinators) served as partnership liaisons. District leaders at the director or superintendent level were sometimes brought in to authorize decisions.

While all core team roles were important to the health of the partnership, the partnership liaison role was particularly so. This was a grant-funded 0.5 full-time employee (FTE) position at each campus and district, meaning that each partnership had at least two liaisons. In practice, the distribution of liaison responsibilities varied among partnerships. Half of the partnerships established 0.5 FTE liaison roles, as envisioned, at both the campus and district. In other partnerships, liaison responsibilities were distributed among multiple district or campus staff.

Partnership liaisons were responsible for maintaining their specific partnership. They were expected to attend regular NGEI partnership meetings and semiannual convenings, coordinate partnership activities within their organization, and seek necessary buy-in, approval, or funding (see Exhibit 4 for the job description one partnership created for the liaison role).

Exhibit 4. CSU Long Beach job description for induction and program graduate effectiveness coordinator (district liaison) position

CSU Long Beach District Liaison Job Description

The induction and program graduate effectiveness coordinator, under the direction of the clinical supervision faculty director, will serve as a bridge between the College of Education at CSU Long Beach and the Long Beach Unified School District. This position, housed in the College of Education (CED), is responsible for

- conducting a case study of CSU Long Beach graduates currently teaching in the Long Beach Unified School District to determine data sources that can be used to assess the impact of graduates on K-12 student achievement;
- using the results of the case study to assist the college in building a comprehensive plan for obtaining data on program completer impact on K-12 student achievement;
- helping the Multiple Subject Credential Program revise the student teacher formative and summative evaluation tool and develop an induction transition plan as required by the new standards;
- designing a universal lesson planning tool, in coordination with the Multiple Credential Program coordinator, to be used across the program and into student teaching. Provide professional development for faculty and program candidates on lesson design that is compatible with district expectations and the Common Core Standards; and
- designing and implementing a comprehensive classroom management module that will be implemented during the extended student teacher boot camp experience.

Across partnerships, the partnership liaison position proved pivotal. Without the liaison role, “it doesn’t work,” said one project director. Liaisons ensured that the voices of both institutions were represented in NGEI work and drew upon personal relationships to facilitate the work (see Box 2 for an example of the importance of cross-institutional relationships in coordinating residencies). In one case, the campus liaison – a former leader in the partner district and a current university supervisor – was able to work closely with NGEI campus leaders in shaping reforms and then

build districtwide buy-in through regular meetings with district administrators and weekly visits to schools where candidates were placed. Another partnership had two district liaisons, one for each partner district. Both were also induction coordinators in their districts, and they became key assets in identifying cooperating teachers and embedding NGEI reforms into induction supports.

Across partnerships, the partnership liaison position proved pivotal. Without the liaison role, “it doesn’t work,” said one project director.

The most effective liaisons had some decision-making power or clout within their institutions. For example, in most partnerships, the campus liaison responsibilities were handled wholly or in part by the project director — typically, a midcareer faculty member with relationship capital and support from department leads. Support from a departmental lead or a dean was particularly important for securing faculty buy-in and engagement for course adjustments.

Likewise, district liaisons who worked closely with a superintendent or director-level district lead could more easily obtain approval for program components like teacher professional development or rubric implementation in district classrooms. Those lacking positional authority sometimes found their impact limited. One district liaison, for example, reported an inability to establish buy-in from the superintendent for using the classroom observation rubric for induction support and for in-depth training of mentor teachers on prioritized skills. That lack of support from the top dampened the potential impact of the NGEI reforms.

Recognizing the value of a dedicated liaison position, three partnerships decided to sustain funding for district liaison positions by way of existing district resources or new grants. Two campuses, where funding for a dedicated liaison role could not be sustained, redistributed the tasks across existing campus faculty.

Core partnership teams brought in key leaders, including campus department chairs or deans and school district assistant superintendents or superintendents, as needed. Partnership team members noted the importance of including these leaders selectively, because leaders had limited time, and also strategically, because leaders were needed to authorize decisions. In some cases, partnerships chose to include leaders in meetings at more regular intervals to keep them apprised of partnership progress and get their input on the arc of the work and how it aligned with institutional priorities.

Box 2. CSU Fresno faculty-in-residence and teacher-in-residence working together to coordinate residencies

Over the course of the grant, CSU Fresno partnered with three different districts – Sanger Unified School District, Fresno Unified School District, and Central Unified School District – to create unique residency programs. Teacher residents who progressed through their courses in a cohort were placed in a full-year co-teaching clinical setting and had the option to earn a master’s degree. In the case of Fresno Unified, residents received a stipend in return for a commitment to teach in that district. In each partnership, the district and campus liaisons, called the teacher-in-residence (TIR) and faculty-in-residence (FIR), respectively, enabled the partnership team to work across diverse contexts to design residency programs that aligned with specific district needs.

Each of the three FIRs was selected by CSU Fresno in collaboration with the district where that FIR would work. Each district, in turn, selected a district leader to serve as their TIR. University and district staff oversaw creation of the residencies but the FIR and TIR were given autonomy to run the day-to-day activities. FIR/TIR pairs were responsible for recruiting, selecting, and guiding residents through the process, while also making decisions about placements and providing support to residents and mentors.

Within each partnership, FIR/TIR pairs maintained regular communication with each other and facilitated communication between stakeholders at the campus and in the district, including other campus faculty, mentor teachers, and university supervisors. One pair initiated a monthly newsletter to provide mentor teachers and residents with news, due dates, and program information. As the TIR explained, “The more communication, the smoother the program ran.”

To further improve communication as well as collaboration across the three residencies, CSU Fresno launched a FIR/TIR learning community so that all FIR/TIR pairs could meet together every two months to share ideas and problems of practice.

NGEI leaders at the districts and on campus recognized the FIR/TIR roles as “non-negotiable” features of each residency, as one leader put it – roles fundamental to ensuring the residencies’ day-to-day functioning. At the end of the grant, the districts agreed to continue funding these roles to ensure the sustainability of the partnership work.

One challenge that emerged across multiple partnerships was effectively planning for turnover among core team members or key leaders. While turnover among staff and, to a lesser extent, faculty is unavoidable, it can be extremely disruptive, particularly if exiting team members had been champions of the work or if the team was heavily reliant on their contributions. One partnership, for example, lost a key staff person on the district side who had been a strong voice of support within district leadership. This person's level of authority was not replaced on the team, contributing to a progressive decline in the strength of the relationship between the campus and the district.

To prevent turnover from affecting partnership progress, a couple of partnerships invested the time and effort to document roles, protocols, and processes. The NGEI project director of one of these partnerships explained that institutionalizing team knowledge helped ensure that partnership success would not hinge on one or two members. "We have a protocol for how we want placements to be made, a calendar, and characteristics [sought]. The document will help new staff who take over a new cohort. We're trying to create a legacy that includes the voices of everybody. It's so simple but it took a lot to get to that."

Lever 3: Ensure Space and Time to Collaborate

Enacting a shared vision is hard and complex work, even after identifying a team and establishing a roadmap for getting there. Moving the work forward required ongoing collaboration via effective structures for meetings and communication. Team meetings provided the time and space that partners needed to build strong working relationships, learn about one another's contexts, plan each stage of the work, and ensure that the work was evolving in a way that met both partners' needs. Meetings enabled effective collaboration when they

- occurred regularly and involved the right people at strategic times; and
- used structures that supported shared ownership and collaborative norms.

Scheduling regular meetings

Partnerships scheduled their meetings with a frequency that enabled them to continue making progress toward their goals. For most partnership teams, this meant meeting at least once per month, although some teams met multiple times per week and others only two to three times per year. While frequent meetings were not essential for an effective partnership, they generally

signaled its strength (see Box 3 for an example of how regular meetings led to effective collaboration between CSU Monterey Bay and Monterey Peninsula Unified School District).

Box 3. CSU Monterey Bay regular meetings for effective collaboration

The CSU Monterey Bay and Monterey Peninsula partnership held weekly two- to three-hour meetings throughout the life of the grant. In the beginning, these meetings involved project team members who met to establish the plan for enacting the shared vision and to co-develop a central feature of their partnership work – the classroom observation rubric for measuring prioritized skills. While campus and district leaders did not attend, NGEI leads regularly updated their respective leadership to ensure alignment of activities with broader goals.

Once these elements were in place, NGEI leaders, including the NGEI project director from CSU Monterey Bay and the district teacher on special assignment (TOSA), continued meeting regularly to co-develop activities or products (e.g., planning professional development for mentor teachers). Partners also made efforts to learn about one another’s contexts – for example, by having NGEI campus faculty attend and co-facilitate teacher professional development sessions at the district. Both district and campus partners reported high levels of trust, shared ownership of the work, and camaraderie both inside and outside of their formal meetings. A campus leader stated, “We have standing meetings, but sometimes we might, impromptu, come together and make sure that we’re all on the same page. I want to keep that going as we move forward.”

As the partnership entered the last two years of the grant, many of their shared products were already in place, requiring only ongoing tweaks to keep them relevant. At this point, each member of the partnership team also had a defined role and set of responsibilities. One faculty member largely led supervisor trainings; the project lead worked with another faculty member to develop and lead cooperating teacher training; and the district lead developed and led STEM-focused professional development with teachers.

As the work evolved, the partners adjusted the way they used their standing meetings. The focus shifted to maintaining the multiple aspects of the reforms and to exploring ways to sustain the work – for example, by writing proposals to secure additional funding.

The driver of meeting frequency for most partnerships was purpose, which also determined who was involved. For example, one partnership team held three types of recurring meetings related to its NGEI partnership work. Exhibit 5 describes each of these meetings, who attended, and how frequently they occurred.

Exhibit 5. Cal Poly’s partnership meetings – types of attendees and frequency

Name of Meeting	Purpose	Attendees	Frequency
Liaison Meeting	<ul style="list-style-type: none"> • Check in on district partnership activities (e.g., cooperating teacher selection and trainings, support for new teachers). • Review and approve materials. • Share learnings across districts. 	<ul style="list-style-type: none"> • 0.5 FTE university liaison • 0.5 FTE district A liaison • 0.5 FTE district B liaison • Members of NGEI leadership team 	Biweekly
NGEI Grant Meeting	<ul style="list-style-type: none"> • Revisit the health of the partnerships. • Review data. • Discuss changes in district/ campus priorities that may impact partnership activities. 	<ul style="list-style-type: none"> • Core NGEI team (project directors, grant coordinator, partnership liaisons) • Other faculty, district administrators, and campus leads as needed, depending on agenda 	Biweekly
Advisory Meetings	<ul style="list-style-type: none"> • Campus convenes district leads to share partnership progress and get feedback. 	<ul style="list-style-type: none"> • Core NGEI team, district cabinet, principals, campus dean 	Three times a year

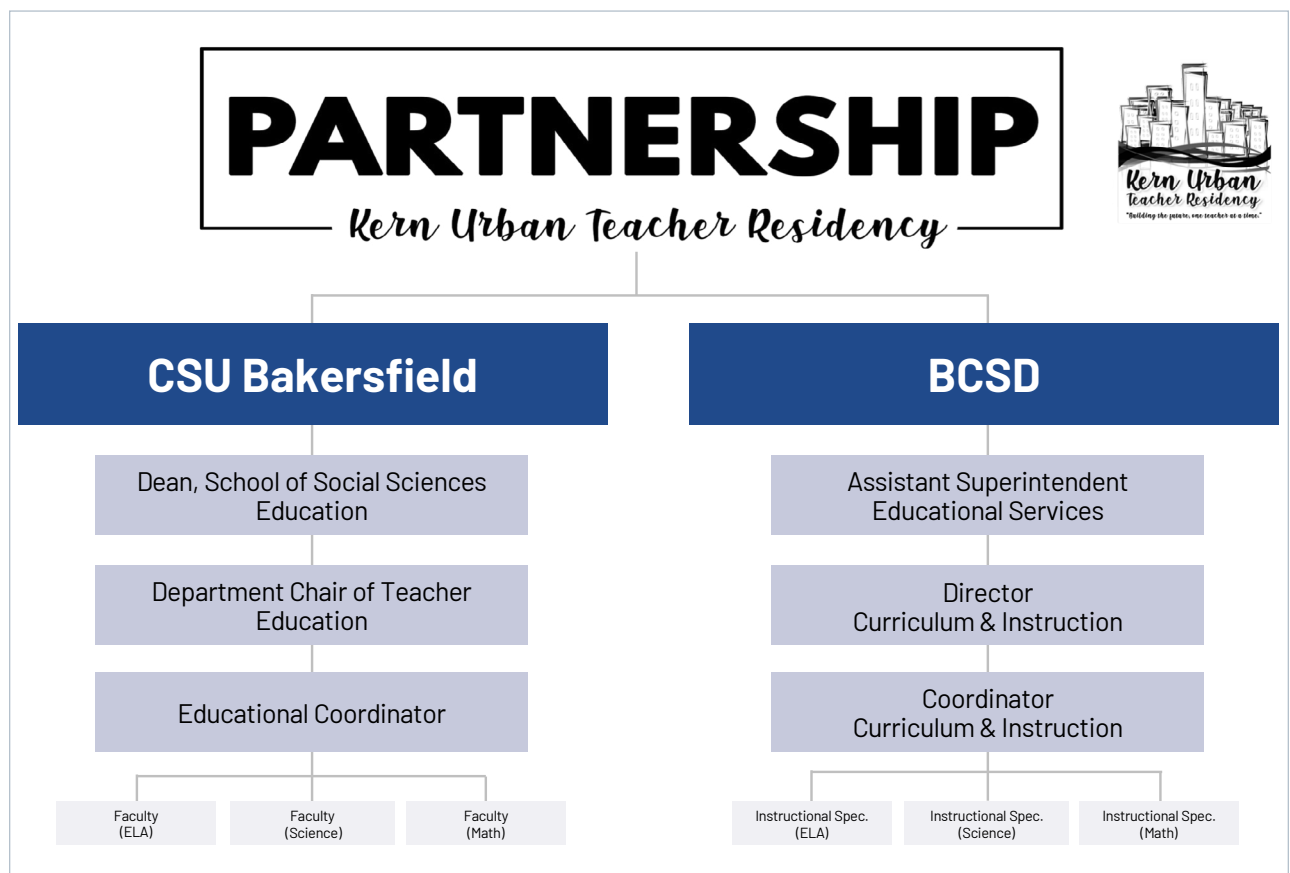
In partnerships operating strategically, however, communication did not wait for meetings. For example, the partnership of CSU Bakersfield and Bakersfield City School District was working to develop and implement a residency program. The campus had been placing candidates in the district for years, and the campus and district liaisons had a long history of working together. With the liaisons now working closely together to run residency activities (e.g., professional development for mentor teachers, supervisors, and candidates), they communicated daily via text and phone.

The depth of communication between the Bakersfield campus and district liaisons did not extend to the partnership’s entire team, however. Despite a strong prior relationship, the campus and district lacked familiarity with each other’s organizational structures and decision-making processes, a gap further complicated by turnover at the district. The campus team discovered that they were leaving key district stakeholders out of some meetings and, thus, out of some key decisions. To address

the problem, the partnership team developed an organizational chart that clarified key roles at both institutions. This chart helped the team visualize who needed to be included in key meetings and decisions as well as in other communications (Exhibit 6). Once these actions were taken, team members reported strengthened levels of trust across the partnership.

In contrast, a few other NGEI partnerships did not adequately address communication gaps, which negatively impacted team cohesion and progress. In a different NGEI partnership, for example, district partners reported a sense that university work seemed to shift between meetings, leaving them feeling disoriented and out of the loop.

Exhibit 6. CSU Bakersfield and Bakersfield City School District partnership organizational chart



Meeting and communicating regularly, while essential, was not sufficient for an effective partnership if the partners had not done the foundational work of creating a shared vision, setting related goals, and committing to revisiting and adapting the goals over time to ensure they met each partners' needs. A third NGEI partnership team, for example, was unable to sustain many of the NGEI reforms due to differences in campus and district priorities despite meeting twice per month. While

the NGEI work improved the relationship and strengthened the hiring pipeline between the two institutions, the reforms and partnership activities were not poised to continue beyond the grant.

While most of the essential partnership work took place during regular and strategic team meetings, the Foundation also provided structured formal opportunities for NGEI partnerships to collaborate within and across teams. These included annual convenings (attendance required of all partnerships) and semiannual NCTR meetings (attendance required for the six partnerships working with NCTR).²⁶ Campus–district partnerships participated in these sessions as a condition of their grantee status.

Using meeting structures to support shared ownership and collaborative norms

To work effectively together, the campus–district partnerships needed to establish collaborative norms and joint ownership of the work. Universities and school districts are large, complex, hierarchical organizations. Not surprisingly, as one district partner explained, “Sometimes, we don’t understand each other’s worlds, how things happen. It’s hard, because we both need things to happen in certain ways.”

A key was recognizing early that joint meeting planning was integral to defining “how we work together.” In contrast, some partnerships found that whomever organized the activities tended to own the work. In partnerships where only the campus scheduled, planned, and facilitated partnership meetings, for example, campus leads reported feeling a lack of investment or buy-in from their district counterparts, while district stakeholders reported feeling that they were contributing to a “campus initiative.”

To address this problem, a couple of partnerships established meeting practices that supported joint ownership – for example, by intentionally splitting the location of their standing meetings, holding half at the campus and the other half at district offices. Alternating their meeting location built trust among partners by demonstrating a mutual investment of time and effort. It was also a simple way for the partners to learn about each other’s context. Some partnerships alternated meeting and agenda planning, providing both partners with regular opportunities to decide how to use meeting time. In partnerships where one group planned partnership activities from the outset, the perception of one-sided ownership later proved difficult to overcome.

Establishing collaborative norms like these meeting practices was a first step

As partners continued working together, they often implicitly or explicitly agreed on a set of assumptions – for example, that there was room for improvement at both the campus and district, that partners could both gain through collaboration, and that each partner was essential to meeting the shared vision.

toward bridging the disconnect between the campus and district worlds. As partners continued working together, they often implicitly or explicitly agreed on a set of assumptions – for example, that there was room for improvement at both the campus and district, that partners could both gain through collaboration, and that each partner was essential to meeting the shared vision.

Successful partnerships were then able to move past any initial concerns between the partners and establish trust and teamwork. One project director reported: “When we started, the district had a defensiveness, a chip on their shoulder – they didn’t want to be told where they needed to improve. I don’t feel like that is now the case. There’s more open communication. They no longer feel like we’re only in this for us.”

Lever 4: Share Data to Identify Needs and Monitor Progress

All partnership work was geared to reaching the NGEI-wide goals of (1) ensuring that CSU candidates were prepared to teach in partner districts, and (2) strengthening the hiring pipeline between the CSU and the district. Candidates’ preparedness to teach was measured by each partnership’s classroom observation rubric. The strength of the hiring pipeline was measured by progress toward the goal that at least 75 percent of teachers a district hired from its partner CSU be teachers prepared via NGEI.

To monitor progress toward these goals and understand outcomes, partners needed to routinely collect, analyze, and share data related to hiring, placements, teacher shortage areas, and teaching quality. Doing so promoted a stronger culture of data use, thus supporting one of the transformational elements that undergirded NGEI program reform: transforming partnerships into data-driven organizations.

While all of the NGEI campuses and partner districts were collecting multiple forms of data prior to the initiative, participating campuses and districts had not typically developed processes or data sharing agreements that would enable them to share and use the data to align programming, coursework, and supports for candidates and mentor teachers. To improve how campuses and districts shared and used data, partnerships

- established data sharing agreements;
- used data to plan partnership activities; and
- used data to understand progress toward partnership goals.

Establishing data sharing agreements

To facilitate data sharing between NGEI campuses and partner districts, the grant required that all partnerships develop data sharing agreements. The rationale was that by sharing individual student, candidate, or mentor teacher data, each partner could better understand the needs and assets of the other. Specifically, partnerships would aim to share (1) district hiring, retention, and placement data; (2) student achievement and teaching effectiveness data from the district; and (3) campus specific data, including from surveys, interviews, and classroom observation rubric ratings of candidates.

Establishing a data sharing agreement was relatively straightforward; all partnerships adopted such agreements. Much more difficult was establishing processes that would, over time, create a culture where partnerships routinely shared and used data for decision-making. The evidence that this happened was mixed. Only four NGEI partnerships reported that they regularly shared data (e.g., hiring data, employment data, teacher effectiveness ratings, classroom observation rubric data) between the campus and the district. This sharing typically occurred during regular NGEI project team meetings.

One explanation for the lag was that data sharing agreements often ran up against constraints that, for various reasons, limited the kinds of data shared. In principle, the agreements allowed campuses and districts to share individual candidate, teacher, or student level data. In practice, however, concerns about privacy, lack of interest, and/or difficulty in accessing individual level data kept some partnerships from sharing data of this type. Instead, it was more common for partners to share aggregated data related to candidates, completers, and mentor teachers.

Using data to plan partnership activities

NGEI partners shared data to identify needs and plan for partnership activities. In several partnerships, the campus, the partner district, or both in tandem provided professional development for candidates or mentor teachers based on data showing a particular professional development need for achieving partnership priorities. Partnerships also shared and used data for candidate placements and mentor teacher selection.

In one partnership, CSU staff and the district liaison created and delivered regular professional development, designed for administrators and mentor teachers employed by the district, that focused on using instructional units aligned to the NGSS. This professional development supported the partnership's goals to better prepare STEM teachers and to alleviate the district's teacher shortage. To ensure that the professional development was relevant and targeted, the partnership team would occasionally review data and then adjust the program accordingly. In this case, they reviewed candidate ratings based on the STEM-focused classroom observation rubric to identify areas where mentor teachers could better support candidate development. They then adjusted professional development plans accordingly.

Box 4 describes how another partnership also used data to tailor professional development and provide feedback to both in-service and preservice teachers about instructional practices.

Box 4. CSU Fullerton sharing data to improve math practice for teacher candidates and in-service teachers

CSU Fullerton and the Anaheim Union High School District (AUHSD) established a vision for their partnership centered on improving the capacity for preservice and in-service teachers to implement standards-aligned, rigorous math instruction. They supported this vision with shared data collection and analysis. Both partners adopted the MCOP2 (Mathematics Classroom Observation Protocol for Practices), a classroom observation rubric designed to assess math instruction.

A benefit of this mutual adoption of the MCOP2 was that both AUHSD and CSU Fullerton could use a common source of data and language to gain insight into how well math candidates and in-service teachers were implementing lessons that engaged all students in mathematical reasoning and collaborative problem solving. The MCOP2 indicators allowed for more targeted conversations and interventions with candidates and in-service teachers. AUHSD, for example, generated MCOP2 data based on several classroom walkthroughs across multiple school sites and found three areas in which there was room for growth: focus on students' understanding of key math concepts; students' use of multiple representations; and attention to precision in the use of mathematical vocabulary and notation. This information was used to plan their professional development efforts related to NGEI.

Similarly, CSU Fullerton analyzed MCOP2 ratings and found that preservice teachers' average scores were lowest on three of the nine student engagement indicators (i.e., students can persevere, critical assessment of math strategies, and peer-to-peer communication). That finding revealed that university supervisors needed additional training related to how to provide high-quality feedback and coaching in those areas.

Using data to understand progress toward partnership goals

To understand the teaching quality of NGEI's newly prepared teachers and/or of mentor teachers supported through NGEI, many partnerships reported a desire to analyze student outcome data. Yet most districts did not share individual-level student achievement data during the grant period due

to lack of availability, will, or capacity. In several partnerships, districts were uncomfortable sharing either student or mentor teacher data with campuses because local unions would not be amenable to it. In one partnership, however, the district was able and willing to share individual student data with the campus for a preliminary analysis investigating the effect of NGEI professional development on student outcomes (these partners planned to do additional analyses in the future).

More often, the campus shared data about individual candidates with district partners. One campus regularly shared results of CSU's systemwide One-Year-Out Survey of Employers of Year One Teachers – another source of data on the teaching quality of NGEI completers. Though these efforts were limited during the grant period, a data dashboard showing CSU campus-specific data on CSU teacher candidates and completers – developed by CSU's Educator Quality (EdQ) Center – could, in the future, enable similar analyses to become more widespread.²⁷

At least half of districts shared data with campuses that was relevant for the NGEI goal of helping strengthen the teacher hiring pipeline – for example, data on hiring, retention, and induction. This helped campuses understand district hiring needs and track how many NGEI completers the partner district hired and retained. Other data that districts shared included number of open positions available and information about NGEI completers participating in district-provided induction.

Campuses, meanwhile, shared reports on numbers of NGEI completers who accepted positions in the district as well as results from CSU EdQ Center's systemwide perception surveys.²⁸ In at least one partnership, the campus would sometimes share information with districts about particular candidates to inform their hiring decisions.

A major obstacle to sharing teacher pipeline-related data was that it was not systematically available to all partners. For example, campuses knew who completed their programs, but they did not always have a systematic way to track which districts hired the completers. Likewise, districts knew who they hired but did not always know where those new teachers were prepared, much less if new teachers had participated in a specific program like NGEI.²⁹

Nonetheless, the partnerships' efforts had an impact on the pipeline. Data collected for the evaluation, in partnership with the Educator Quality Center, showed that from 2017–18 to 2018–19, the number of candidates hired into partner districts who were prepared via NGEI increased across eight partnerships (see Exhibit E8 in Appendix E). One partnership reported that nearly all candidates who participated in NGEI and had been placed in the partner district for their clinical experience were subsequently hired by the district.

NGEI project leads reported several strategies that contributed to pipeline improvement. These included increasing the number of clinical placements in the partner districts; creating residency commitments

between the campus and districts; and revising hiring policies to benefit NGEI completers (e.g., allowing NGEI completers to apply as internal candidates before jobs were posted publicly).

Conclusion

Prior to NGEI, most campuses and their partner districts worked with one another in a limited capacity to coordinate clinical placements for teaching candidates. The NGEI work prompted campuses and districts to come together as strategic partners who jointly created a vision for more effective teacher preparation and then worked in collaboration toward achieving that vision.

To support strategic partnership development, participants focused their efforts on four levers for action. Accomplishments within each lever strengthened the partnerships' capacity. In combination, the levers powered progress on the reforms.

Individually, each lever contributed to the partnerships' effectiveness as follows:

- **Create and operationalize a shared vision.** Partnerships worked collaboratively to articulate a vision and a set of aligned goals and tasks to accomplish it. The process required to do so established working relationships and mutual trust that were foundational for success. In the face of inevitable conflicts and challenges over time, the key to sustained effort was commitment – to the partnership and its agreed-upon vision and work and, especially, to regularly revisiting and adapting goals to ensure that the work was meeting mutual needs.
- **Identify key roles.** The leadership team comprised core members and strategically involved system leaders. Its most critical members were the liaisons – one for the campus, one for each district involved – whose job was to maintain the partnership. The most effective liaisons were those with strong professional relationships and decision-making clout in their respective institutions. Given the inevitability of turnover, successful partnerships documented processes and protocols that captured team knowledge to support successful transitions.
- **Ensure space and time to collaborate.** Effective collaboration required regularly scheduled meetings as well as informal communication. Critical was each partner's sense of ownership of the work, something partnerships achieved in part by alternating meeting locations at each other's sites and/or alternating responsibility for agenda planning. Such actions helped establish trust and enabled development of norms for effectively working together.
- **Share data to identify needs and monitor progress.** Data sharing between campuses and districts – on candidate progress toward prioritized skills; teacher hiring, retention, and

placement; and student achievement – was sometimes challenging to accomplish but essential. Data provided the roadmap for knowing where to intervene – for example, with professional development – and revealed whether each intervention was effective.

In tandem, the levers allowed the partnerships to do the following:

- **Align campus and district understanding about what constitutes high-quality teaching.** The NGEI reforms began with campus and district representatives collaborating to identify a vision for preparing new teachers to be ready to teach on their first day. To enact this vision, partners created new roles, processes, and programming. The conversations required for this collaborative work helped to clarify each partner’s priorities – for themselves and for each other – and created a common understanding and language across stakeholders that improved the quality of preparation and, ultimately, improved the cohesion between teacher preparation and induction.
- **Strengthen the hiring pipeline.** In the last three years of the grant, 2016–17 to 2018–19, 1,461 new teachers, or 18 percent of all CSU completers, were prepared in an NGEI program (see Exhibit E4 in Appendix E). In no case did the NGEI program become the main source of new teachers for any partner district (see Exhibit E6 in Appendix E). But in all cases, NGEI provided the partner district a source of new teachers who had been specifically prepared to meet the needs of the students in their context. Partnerships that created a residency program were able to increase the likelihood that completers would be hired in partner districts. However, many non-residency programs were also successful in improving the teacher pipeline in that they increased the number of clinical placements in the partner district and created policies or programs that made NGEI completers more desirable teachers.
- **Build more sustainable partnerships.** Partnerships that engaged in the four levers were more likely to have trusting, meaningful, and enjoyable working relationships among the partners, which contributed to more productive reforms. Asked to name one priority that would sustain progress going forward, one superintendent said, “I really think it’s the idea of collaborating and having a shared vision for where education is going.” These partnerships put plans in place to maintain their strong working relationship into the future. Plans included continuing to fund campus and district liaison positions, articulating explicit plans for how to delegate the role of the liaison to other staff, continuing to find time to meet regularly, and iterating their shared vision as the work moved on to a new phase.

Asked to name one priority that would sustain progress going forward, one superintendent said, “I really think it’s the idea of collaborating and having a shared vision for where education is going.”

Recommendations

We offer the following recommendations to policymakers, funders, and institutional leaders involved in planning, implementing, or supporting similar reform efforts:

- 1. Provide space and time at the outset for partners to agree on the vision, and time along the way for partners to pivot if priorities shift.** To ensure that the vision addresses everyone's needs, partners need time and space in the initial stages to learn about one another's institutions and priorities, think through goals and tasks that address the needs of both partners, and build trusting relationships. Encourage partners to share data from their organization, such as teacher hiring needs or candidate proficiency with prioritized skills, that demonstrate their needs and assets. To guarantee that the vision is aligned with institutional priorities, ensure that key leaders who are positioned to secure broad buy-in from stakeholders at their institutions participate in vision-setting conversations.
- 2. Encourage partners to identify a team that has the authority and capacity to engender change.** Partnerships are more successful when team members are committed to the vision and well-positioned to make progress toward it. NGEI partnerships made progress toward their goals when the team included appropriate staff from each partner organization. Give partners time to identify who needs to authorize decisions and who has time and willpower to attend to the logistics of implementation. Suggest or require that partnership teams involve key leaders, such as deans or superintendents, on a regular basis.
- 3. Create opportunities for collaboration and a regular meeting structure.** Ensure that teams have adequate time to collaborate, including learning about one another's organizational structures and priorities. The process of relationship building was particularly important between NGEI campuses and partner districts that had previously limited or negative experiences working with one another. Embed opportunities for reflection and cross-pollination of ideas both within the partnership and across partnerships for greatest learning.
- 4. Help partners protect against turnover by codifying roles and processes.** Staff turnover is inevitable and in many school districts and campuses frequent. Partners can buttress the potential negative impact of turnover by shifting from a reliance on people to a reliance on roles. Encourage partners to document roles and responsibilities so that these can be readily conveyed to new team members.

5. Support partners in using data to demonstrate progress toward their vision and monitor the quality of the work. Working across organizations to change institutional practices is difficult. By using data as a gauge, partnerships can ensure that their partnership is functioning as intended as well as ensure that the joint work is responsive to needs and priorities. Importantly, they can also use data to show where reforms are having the most impact and where further effort is needed, thus helping institutions maintain and build buy-in for reform efforts. Providing coaching or other kinds of support can help guide partners to adopt a continuous improvement, rather than an accountability, mindset as they use data to monitor progress and course correct. Further, make data that can inform the work of the partnership more accessible by linking datasets, developing dashboards, and disseminating resources.

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 stakeholders 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

^a Rubric available on the [Educator Quality Center website](#) or [CSU 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

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

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

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,

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 CI also laid the groundwork for teacher residencies with two new partner districts in Ventura County. CSU CI 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

^a Rubric available on the [Educator Quality Center website](#) or [CSU NGEI website](#).

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.

^b Rubric available on the [Educator Quality Center website](#) or [CSU NGEI website](#).

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:

- 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 understand 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,ⁱ 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.

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

^c Rubric available on the [Educator Quality Center website](#) or [CSU NGEI website](#).

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:

- 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-quality 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 [Educator Quality Center website](#) or [CSU NGEI website](#).

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

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

^b Rubric available on the [Educator Quality Center website](#) or [CSU NGEI website](#).

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.

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), ^a 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 member ⁱⁱ

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.^v 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):^{vi}

- 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
Other ^a	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.

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: Issues emerging from classroom observation rubric data submitted in August 2017*. SRI International and WestEd.

Appendix D: NGEI Partnership Artifacts

Exhibit D1. CSU Chico Roles and Responsibilities for Campus Staff

Role	Duties
Project director	<ul style="list-style-type: none"> • Communication and reporting with NGEI, WestEd, and SRI • Participation in CI workshops • NGSS workshops held each semester • Recruitment of content area specialists • Recruitment of supervisors and candidates (secondary) • Content specialist for some Triad teams • Scaling and sustainability • Participation in leadership team meetings
Continuous improvement lead project co-director	<ul style="list-style-type: none"> • Communication and reporting with NGEI, WestEd, and SRI • Participation in CI workshops • Recruitment of supervisors and candidates (elementary) • TNTP Core Rubric – communication, monitoring norming course, and calibration • University supervisor for some Triad teams • Data collection • Scaling and sustainability • Participation in leadership team meetings
District liaison	<ul style="list-style-type: none"> • Budget tracking • Meeting scheduling and recording • Documentation collection and file organization • Participant orientation • Triad unit presentation event

Exhibit D2. CSU Chico Roles and Responsibilities for District Staff

Role	Duties
Continuous improvement co-lead	<ul style="list-style-type: none"> • Liaison with union representatives • Participation in leadership team meetings
District project lead	<ul style="list-style-type: none"> • Coordination of NGSS workshops • Organization of leadership meetings • Recruitment of cooperating teachers • Participation in leadership team meetings
Elementary education liaison	<ul style="list-style-type: none"> • Recruitment of cooperating teachers • Participation in leadership team meetings
Member, leadership team	<ul style="list-style-type: none"> • Recruitment of cooperating teachers • Participation in leadership team meetings
Member, leadership team	<ul style="list-style-type: none"> • District budget management • Participation in leadership team meetings

Appendix E: NGEI Completer and Hiring Data

One of the stated goals of the New Generation of Educators Initiative (NGEI) was that at least 75 percent of teachers a district hired from its NGEI partner CSU be teachers prepared via NGEI. To assess that goal, the evaluation team collected credential program completion data from the Educator Quality (EdQ) Center and post-completion employment data from the California Department of Education (CDE). Over the course of multiple years, a team from WestEd worked with the EdQ Center and CDE to establish the necessary data-sharing agreements to allow for analysis of employment patterns of CSU completers, both for the purpose of the formative evaluation conducted by WestEd and SRI and, importantly, to help build long-term data capacity at the EdQ Center.

After securing the necessary access to data, the evaluation team from WestEd merged credential program completion data with post-completion employment data from CDE to create a dataset that included data on CSU completers beginning in their teacher preparation program (TPP) through the first two years of employment (one year of employment for those who completed their teacher preparation programs in 2017–18 and two years of employment for those who completed their teacher preparation programs in 2016–17). The evaluation team then analyzed this data descriptively to understand the percentage of NGEI completers who took employment in any partner district. The following provides more detail on the data sources and methods used for these analyses and shows relevant results.

Data sources

We drew from three data sources for this analysis: (1) the CSU completer list, (2) NGEI participation data collected from NGEI project directors, and (3) CDE employment data.

CSU completer lists: All 23 CSU campuses, including the 10 CSU campuses participating in NGEI, submit completer lists to the EdQ Center each fall. The lists contain all candidates who completed their teacher preparation programs in the prior academic year (the academic year includes the fall through spring terms). This dataset included a unique identifier for every CSU completer, the CSU campus the completer attended, the year the completer completed the teacher preparation program, the type of program (intern, residency, traditional), and the completer’s credential type (Education Specialist, Multiple Subject, or Single Subject).

NGEI participation lists: As part of reporting required by the S. D. Bechtel, Jr. Foundation, funded NGEI partnerships annually submitted a list of NGEI participants for the prior academic year. The EdQ Center matched them to the CSU completer each year using first name, last name, and date of birth.

CDE teacher employment records: The CDE annually collects information about all California public school employees in teaching positions, which includes data about the schools in which they are teaching, including a county–district–school code. The CDE employment data provided for this analysis included teacher preparation program completers (NGEI and non-NGEI) from all 23 CSU campuses who completed between 2014–15 and 2017–18 and a took a teaching position (including certificated teacher and charter school noncertificated teacher positions) in a California public school.

Dataset creation

For the purpose of identifying which CSU completers participated in NGEI reforms, the EdQ Center used the first two data sources: annual campuswide completer lists and annual NGEI participant lists. The following is the process for creating this dataset (for more detail, see the section “EdQ Center matching of CSU completer data and NGEI participation data”):

1. CSUs submitted completer list data to the EdQ Center.
2. NGEI project directors submitted NGEI participant list data to the EdQ Center.
3. The EdQ Center merged the CSU completer list and NGEI participant list using name and date of birth to determine which CSU completers participated in NGEI reforms.
4. The EdQ Center provided the evaluation team with the merged dataset.

For the purpose of examining CSU completers’ employment, the EdQ Center and the evaluation team used the third data source: employment data collected from the CDE. The following is the process for requesting this data:

1. CDE provided the EdQ Center a data file with all annual teacher employment records but with only a subset of variables. The data file included the personally identifiable information needed for matching (name and date of birth) but did not include employment information.

2. The EdQ Center matched CSU completer data with CDE data to determine the list of individuals for whom to request full CDE employment data (for more detail on this process, see the section “CDE employment data and EdQ Center dataset matching”).
3. CDE provided the EdQ Center and the evaluation team with full employment records for the matched sample.

The evaluation team collected completer and employment data for three NGEI cohorts, 2016–17, 2017–18, and 2018–19, shown in Exhibit E1. At the time of this report, employment data was only available from CDE for the first two NGEI candidate cohorts. The 2016–17 NGEI cohort (Cohort 1) had two years of CDE employment data available (2017–18 and 2018–19), and the 2017–18 NGEI cohort (Cohort 2) had one year of CDE employment data available (2018–19). All three cohorts had CSU completer data available.

Exhibit E1. NGEI candidate cohort timeline, 2016–17 to 2018–19

Candidate Cohort	Grant Year 1 2016–17	Grant Year 2 2017–18	Grant Year 3 2018–19
1	Enrolls in TPP/Completes TPP	Completes first year of teaching*	Completes second year of teaching
2		Enrolls in TPP/ Completes TPP	Completes first year of teaching
3			Enrolls in TPP/ Completes TPP

EdQ Center matching of CSU completer data and NGEI participation data

The EdQ Center merged the CSU completer list data with the NGEI participant lists. For each NGEI participant, the EdQ Center looked for matches in their participation year and each subsequent year. For example, for a 2017–18 NGEI participant, the EdQ Center looked for completion records in 2017–18 and 2018–19. (See match rate details in Exhibit E2). Not all candidates in the NGEI participant lists were matched in the CSU completer lists, possibly because those candidates had not yet completed the teacher preparation program (e.g., some programs have a spring–fall schedule instead of a fall–spring schedule and so some would not have completed them when CSU completer lists were submitted in the fall). For instance, several campuses listed candidates as NGEI participants one year before they appeared in the completer lists.

Exhibit E2. Match rate between NGEI participant roster year and subsequent CSU completer lists, 2016-17 to 2018-19

Campus Completer List	NGEI Participant Roster Year: 2016-17	NGEI Participant Roster Year: 2017-18	NGEI Participant Roster Year: 2018-19
Campus A	93.3%	95.7%	69.9%
Campus B	100.0%	93.9%	93.3%
Campus C	90.9%	97.5%	86.9%
Campus D	70.6%	88.2%	76.5%
Campus E	100.0%	96.0%	61.9%
Campus F	80.8%	69.5%	39.1%
Campus G	93.0%	90.0%	57.4%
Campus H	-	90.9%	100.0%
Campus I	84.2%	95.7%	86.4%
Campus J	-	79.3%	19.6%

Note: 2016-17 was a pilot year for campuses H and J and they did not enroll any candidates.

The EdQ Center provided the evaluation team with the merged data file with the 2016-17, 2017-18, and 2018-19 completer lists across the 10 NGEI CSU campuses (i.e., not for all 23 CSU campuses) for all TPP completers (i.e., NGEI and non-NGEI completers). The merged data file included an indicator for whether the completer participated in NGEI, the year the completer participated in NGEI, as well as the full list of variables in the CSU completer data (described previously in the “Data sources” section).

CDE employment data and EdQ Center dataset matching

To understand where CSU completers, including NGEI participants, take teaching jobs, the EdQ Center matched the CSU completer lists (2016-17 and 2017-18) with CDE employment data (2017-18 and 2018-19) using name and date of birth in the CDE employment file. The CDE employment data file that the EdQ Center used to conduct matching included first name, middle initial, last name, alias last name if available, and alias first name if available. Although CDE’s dataset contained employment data for all California public school employees in teaching positions, CSU completers may not have had CDE records for the following reasons: (1) they were employed out of state, (2) they were employed in a private school, (3) they were employed in a public school but not in a teaching position,

or (4) they were not employed. Exhibit E3 presents the match rate between the CSU completer lists across the 23 CSU campuses and CDE employment data.

Exhibit E3. Match rate between CSU completer lists and CDE employment data for 2017-18 and 2018-19

CSU Completion Cohort	2017-18 CDE Employment Data	2018-19 CDE Employment Data	Total
2016-17 Cohort of CSU Completers	64.0%	74.8%	75.5%
2017-18 Cohort of CSU Completers	—	58.1%	—

Analytic sample

For the purpose of the NGEI evaluation, the evaluation team examined whether the 2016-17 and 2017-18 CSU completers from CSUs participating in NGEI were employed in the year immediately following completion of their program and any subsequent years for which they may have been employed (i.e., 2016-17 completers' employment in 2017-18 and 2018-19; 2017-18 completers' employment in 2018-19).

Many CSU campuses added new partner districts to the NGEI work over the course of the grant, and some campus-district partnerships ended before the grant concluded. The evaluation team took into account when the campus-district NGEI partnerships started and ended to calculate employment in NGEI partner districts. The evaluation team created a list of each CSU's partner NGEI districts, years the campus-district partnership took place, and the CDE county-district-school code of each NGEI district partner. If a campus-district partnership was in place in year one of the grant (2016-17), completers could potentially be placed in the partner district in 2017-18 (or, if a partnership was not yet in place in 2016-17, a completer's employment in that district in 2017-18 would not be counted as employment in an NGEI partner district because the candidate was not prepared via an NGEI program in that district). If a partnership was in place in year two of the grant (2017-18), completers could potentially be placed in the partner district in the following year, 2018-19 (likewise, if a campus-district partnership ended in 2017-18, employment in that district in 2018-19 would not be counted as being placed in an NGEI partner district). New campus-district partnerships that began in year three of the grant (2018-19) were not included in the NGEI partner district employment analyses because the evaluation team only had employment data up to 2018-19 at the time of this report (the 2018-19 candidates would be placed in 2019-20).

Analysis

Using the analytic dataset, the evaluation team calculated for each CSU campus-district partnership the

- number/percentage of completers from the partner CSU campus who were hired as teachers by the partner NGEI district; these completers may or may not have participated in NGEI; and
- number/percentage of completers prepared via the NGEI program from the partner CSU campus who were hired as teachers by the partner NGEI district.

Results

The following sections summarize the results of the analysis described previously. The exhibits show the percentage of CSU completers prepared via an NGEI program and the percentage of teachers hired by partner districts prepared via NGEI.

From 2016–17 to 2018–19, 1,461 completers (18 percent) at the 10 CSU campuses participating in NGEI were prepared via an NGEI program.

In year one of the grant (2016–17), of the 2,624 program completers at the 10 NGEI CSU campuses, 239 (9 percent) were prepared via an NGEI program (Exhibit E4). The percentage of TPP completers who were prepared via an NGEI program increased in year two (475 of 2,738; 17 percent) and year three (747 of 2,825; 26 percent). Overall, a total of 1,461 (18 percent) of the completers at the 10 CSU campuses were prepared via an NGEI program by the end of the grant.

Exhibit E4. Number and percent of TPP and NGEI completers, 2016–17 to 2018–19

Completers at 10 NGEI CSU Campuses	2016–17	2017–18	2018–19	Total
All TPP Completers (N)	2,624	2,738	2,825	8,187
NGEI Completers (N)	239	475	747	1,461
Percent of Total (%)	9%	17%	26%	18%

The number, but not the percent, of CSU completers prepared by NGEI programs and hired into NGEI partner districts increased from 2017–18 to 2018–19 from 40 to 156. The increase was driven by an expansion in the number of NGEI partnerships in 2018–19.

Exhibit E5 summarizes NGEI completers' employment across all campus–district NGEI partnerships. For 2017–18, across all NGEI district partners, 211 completers were hired as new teachers in California public schools. These hires were from the CSU campus that the district partnered with for NGEI but who did not necessarily participate in NGEI (e.g., a CSU Channel Islands completer who was hired by Fresno Unified School District would not be counted in the group of 211 because CSU Channel Islands did not partner with Fresno Unified School District in NGEI; a non-NGEI completer at CSU Fresno who was hired by Fresno Unified would be counted in the 211). Of these 211 hires, 40 of those hires (19 percent) were prepared via the campus–district NGEI partnership.

In 2018–19, across all NGEI district partners, 669 completers were hired as new teachers in California public schools. These hires were from the CSU campus that the district partnered with for NGEI (and may or may not have been prepared via NGEI). This number is much higher than the previous year because many campuses added new district partners in the second year of the NGEI grant (e.g., one campus added Los Angeles Unified School District, the second largest district in the United States, as a partner district in 2017–18). Of these 669 hires, 118 (18 percent) were from the CSU campus the district partnered with for NGEI and prepared via NGEI.

From 2017–18 to 2018–19, 158 (18 percent) of teachers hired by the partner districts were prepared via an NGEI program; thus, the goal that 75 percent of teachers hired by the partner district from the partner CSU will have been prepared via an NGEI program was not met.

Overall, 158 unique CSU completers who were hired as new teachers in 2017–18 or 2018–19 were prepared via the campus–district NGEI partnerships. Thus, 158 of the 880 new teachers, or 18 percent, hired by the partner districts between 2017–18 and 2018–19 were prepared via NGEI (Exhibit E5). This is substantially lower than the 75 percent goal established by NGEI. Exhibit E6 shows how many NGEI completers were hired in partner districts by campus–district partnership. No partnership met the 75 percent goal.

Exhibit E5: NGEI completers hired as teachers in partner districts for 2017–18 and 2018–19

All NGEI Campus–District Partnerships	Hired as Teacher in 2017–18	Hired as Teacher in 2018–19	Total
All teachers hired from partner CSU by partner district (N)	211	669	880
NGEI-prepared teachers hired from partner CSU by partner district (N)	40	118	158
Percent of Total (%)	9%	17%	26%

Exhibit E6: NGEI completers' employment in partner districts by campus–district partnerships for 2017-18 and 2018-19

NGEI Campuses	NGEI Partner Districts	Teachers Hired by Partner District in 2017-18 (N)	NGEI-Prepared Teachers Hired by Partner District in 2017-18 ^a (N)	NGEI-Prepared Teachers Hired by Partner District in 2017-18 (%)	Teachers Hired by Partner District in 2018-19 (N)	NGEI-Prepared Teachers Hired by Partner District in 2018-19 ^a (N)	NGEI-Prepared Teachers Hired by Partner District in 2018-19 (%)	Total Teachers Hired by Partner District (N)	Total NGEI-Prepared Teachers Hired by Partner District ^a (N)	Total NGEI-Prepared Teachers Hired by Partner District (%)
Campus A	District 1	18	9	50%	15	10	67%	33	19	58%
Campus B	District 2	13	2	15%	7	2	29%	20	4	20%
Campus B	District 3	—	—	—	17	1	6%	17	1	6%
Campus B	District 4	—	—	—	26	3	12%	26	3	12%
Campus C	District 5	17	3	18%	21	7	33%	38	10	26%
Campus D	District 6 ^b	48	11	23%	21	11	52%	69	22	32%
Campus E	District 7	18	1	6%	16	3	19%	34	4	12%
Campus F	District 8	30	8	27%	25	16	64%	55	24	44%
Campus F	District 9	10	2	20%	14	6	43%	24	8	33%
Campus G	District 10	—	—	—	4	0	0%	4	0	0%

NGEI Campuses	NGEI Partner Districts	Teachers Hired by Partner District in 2017-18 (N)	NGEI-Prepared Teachers Hired by Partner District in 2017-18 ^a (N)	NGEI-Prepared Teachers Hired by Partner District in 2017-18 (%)	Teachers Hired by Partner District in 2018-19 (N)	NGEI-Prepared Teachers Hired by Partner District in 2018-19 ^a (N)	NGEI-Prepared Teachers Hired by Partner District in 2018-19 (%)	Total Teachers Hired by Partner District (N)	Total NGEI-Prepared Teachers Hired by Partner District ^a (N)	Total NGEI-Prepared Teachers Hired by Partner District (%)
Campus G	District 11	22	2	9%	66	19	29%	88	21	24%
Campus G	District 12	–	–	–	113	4	4%	113	4	4%
Campus G	District 13	–	–	–	1	0	0%	1	0	0%
Campus G	District 14	–	–	–	24	4	17%	24	4	17%
Campus G	District 15	–	–	–	17	1	6%	17	1	6%
Campus H	District 16	–	–	–	3	0	0%	3	0	0%
Campus I	District 17	35	2	6%	33	11	33%	68	13	19%
Campus J	District 18 ^b	–	–	–	29	0	0%	29	0	0%
Campus J	District 19 ^b	–	–	–	187	11	6%	187	11	6%
Campus J	District 20 ^b	–	–	–	32	10	31%	32	10	31%

Note: Dashes (–) indicate that the campus–district partnership began in 2017–18; thus, the earliest NGEI completers can be hired by the partner district is in 2018–19.

^a Note that one of the stated goals of NGEI is that 75 percent of teachers a district hired from its NGEI partner CSU be teachers prepared via NGEI.

^b Indicates residency programs.

Some CSU campuses (campuses A, C, F, H, and J) had large increases in the proportion of TPP completers who were prepared by NGEI over the course of the grant.

Exhibits E7 and E8 provide completion and employment results, respectively, for each NGEI CSU campus. Across the 10 NGEI campuses, Campus F had the largest number of NGEI completers as well as the largest proportion of TPP completers who were prepared by NGEI from 2016–17 to 2018–19. Campuses such as A, C, F, H, and J had large increases in the proportion of TPP completers who were prepared by NGEI in the last two years of the grant.

Exhibit E7: Number and percent of TPP and NGEI completers by CSU campus, 2016–17 to 2018–19

Number and Percent of TPP and NGEI Completers	2016–17	2017–18	2018–19	Total
Campus A TPP completers (N)	107	124	106	337
Campus A NGEI completers (N)	21	23	51	95
Campus A completers prepared by NGEI (%)	20%	19%	48%	28%
Campus B TPP completers (N)	417	460	430	1,307
Campus B NGEI completers (N)	74	102	115	291
Campus B completers prepared by NGEI (%)	18%	22%	27%	22%
Campus C TPP completers (N)	153	167	130	450
Campus C NGEI completers (N)	10	33	47	90
Campus C completers prepared by NGEI (%)	7%	20%	36%	20%
Campus D TPP completers (N)	244	207	245	696
Campus D NGEI completers (N)	11	13	16	40
Campus D completers prepared by NGEI (%)	5%	6%	7%	6%

Number and Percent of TPP and NGEI Completers	2016-17	2017-18	2018-19	Total
Campus E TPP completers (N)	220	238	288	746
Campus E NGEI completers (N)	9	11	26	46
Campus E completers prepared by NGEI (%)	4%	5%	9%	6%
Campus F TPP completers (N)	244	259	266	769
Campus F NGEI completers (N)	49	127	147	323
Campus F completers prepared by NGEI (%)	20%	49%	55%	42%
Campus G TPP completers (N)	489	626	546	1,661
Campus G NGEI completers (N)	52	89	99	240
Campus G completers prepared by NGEI (%)	11%	14%	18%	14%
Campus H TPP completers (N)	96	72	85	253
Campus H NGEI completers (N)	0	30	38	68
Campus H completers prepared by NGEI (%)	0%	42%	45%	27%
Campus I TPP completers (N)	302	238	252	792
Campus I NGEI completers (N)	13	21	23	57
Campus I completers prepared by NGEI (%)	4%	9%	9%	7%
Campus J TPP completers (N)	372	347	477	1,196
Campus J NGEI completers (N)	0	26	185	211
Campus J completers prepared by NGEI (%)	0%	7%	39%	18%

Of the NGEI candidates who completed their programs in 2016–17 or 2017–18, 158 NGEI completers, or 22 percent of NGEI completers, were hired as new teachers by the partner districts.

Regarding the percentage of NGEI completers who were hired as teachers by the partner districts, 158 of the 714 NGEI completers (239 NGEI completers in 2016–17 and 475 NGEI completers in 2017–18; see Exhibit E8), or 22 percent, were hired as new teachers by the partner districts between 2017–18 and 2018–19. Note that the analysis examines new teachers hired by the partner districts; thus the 2018–19 counts do not include teachers who were hired by the partner district in 2017–18 and retained in the district in 2018–19.

The majority of NGEI completers at campuses D and J – the only two residency programs – were hired as teachers by partner districts.

The final column in Exhibit E8 shows the percent of NGEI completers who were hired by partner districts. The majority of NGEI completers at campuses D and J – the only two residency programs that were established by the 2017–18 academic year – were hired as teachers by the partner districts (92 percent and 81 percent, respectively). As mentioned previously, across all partnerships, 22 percent of NGEI completers were hired as teachers by the partner districts.

Exhibit E8: 2016–17 and 2017–18 NGEI completers’ employment by partner districts for 2017–18 and 2018–19

Campuses	NGEI Completers in 2016–17 (N)	NGEI Completers in 2017–18 (N)	Total NGEI Completers (N)	NGEI-Prepared Teachers Hired by Partner District(s) in 2017–18 (N)	NGEI-Prepared Teachers Hired by Partner District(s) in 2018–19 (N)	Total NGEI-Prepared Teachers Hired by Partner District(s) (N)	Total % of NGEI-Prepared Completers Hired by Partner District(s) (%)
Campus A	21	23	44	9	10	19	43%
Campus B	74	102	176	2	6	8	5%
Campus C	10	33	43	3	7	10	23%
Campus D*	11	13	24	11	11	22	92%
Campus E	9	11	20	1	3	4	20%
Campus F	49	127	176	10	21	31	18%
Campus G	52	89	141	2	28	30	21%
Campus H	0	30	30	–	0	0	0%
Campus I	13	21	34	2	11	13	38%
Campus J*	0	26	26	–	21	21	81%
Total	239	475	714	40	118	158	22%

Note: Dashes (–) indicate that the campus-district partnership began in 2017–18; thus, the earliest NGEI completers can be hired by the partner district is in 2018–19.

*Indicates residency programs.

Endnotes

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20. For more information on how NGEI supported partnerships with creating their visions and the technical assistance NGEI provided to partners, 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.
21. For more information on NCTR's findings about the importance of creating a shared vision between partners, see the first paper in this series: White, Milby, Hirschboeck et al. (2020).

22. For more information on how NCTR worked with teacher preparation programs to develop or strengthen residency and clinically oriented programs, see the first paper in this series: White, Milby, Hirschboeck et al. (2020).
23. For more information on how NCTR worked to establish strong campus–district partnerships through the institute and ongoing implementation support, see the first paper in this series: White, Milby, Hirschboeck et al. (2020).
24. For more on the second, third, and fourth goals, see the third paper in this series: Torre Gibney, Rutherford-Quach, Hirschboeck et al. (2020). For more on the fifth goal, see the fourth paper in this series: White, M., Donahue, C., Hirschboeck, K., & Torre Gibney, D. (2020). *Strengthening the data use and continuous improvement capacity of teacher preparation programs*. WestEd.
25. The continuous improvement lead (CIL) was a formal role designated by each campus, as required by NGEI, to be a key member of the project team. The CIL drove and organized processes around data collection, analysis, and use. For more information about the CIL, see the fourth paper in this series: White, Donahue, Hirschboeck et al. (2020).
26. For more information on these opportunities, see the first paper in this series: White, Milby, Hirschboeck et al. (2020).
27. The EdQ Center developed a series of data dashboards to display candidate and completer information by CSU campus. The dashboards are available at <https://www2.calstate.edu/impact-of-the-csu/teacher-education/educator-quality-center/edq-dataview-dashboards>. For more information, see the *Systems of Support* paper.
28. For more information about the EdQ Center’s surveys, visit <https://www2.calstate.edu/impact-of-the-csu/teacher-education/educator-quality-center/Pages/research.aspx>.
29. The Foundation funded an effort to make completion and hiring data more readily available, and by early 2020 – after the grant had ended – it was possible to track where NGEI completers were hired. See Appendix E for more information.