

Preparing Teachers for Deeper Learning

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Abstract

Preparing Teachers for Deeper Learning, summarized by this brief, describes the work of seven pioneering programs of teacher education that have organized themselves to meet the dual challenge of teacher preparation for deeper learning and equity. This study examined how teacher candidates learn to create personalized, inquiry-based learning opportunities for all children and how their programs create such opportunities for the candidates themselves. Through interviews, on-site observations, candidate surveys, and document review, the study describes the curriculum, practices, and institutional structures that make teacher preparation for deeper learning possible.

Additional briefs related to this research can be found at <https://learningpolicyinstitute.org/product/preparing-teachers-deeper-learning>.

Acknowledgments

We are grateful to the external peer reviewers who provided feedback on the individual cases, which are available at <https://www.hepg.org/hep-home/preparing-teachers-for-deeper-learning-cases>. This research was supported by the Carnegie Corporation of New York and the William and Flora Hewlett Foundation. California case studies were also supported by the S.D. Bechtel, Jr. Foundation. Core operating support for the Learning Policy Institute is provided by the Sandler Foundation and the Ford Foundation.

Introduction

In this second decade of the 21st century, knowledge and new technologies are growing exponentially, the economy is changing rapidly, and education matters more than ever for individual and societal success. Policymakers, educators, and the public are calling on schools to provide more powerful learning experiences focused on the demands of life, work, and citizenship—deeper learning—which will enable students to think critically, solve problems, use knowledge for new purposes, and learn how to learn. At the same time, school populations are becoming more diverse, school segregation is intensifying, and economic inequality is heightening divisions within educational systems, making it vital to prioritize equity and to adopt a social justice orientation in order to provide deeper learning experiences for every student in every school.

These conditions have created an ever-increasing demand for teachers who can meet the needs of today's students, and so a vital question confronts teacher educators amid these rapid changes in society and schooling: How can we prepare candidates entering the profession to **teach for deeper learning**—and, in so doing, to **teach for equity and social justice** as well?

Preparing Teachers for Deeper Learning, the book on which this brief is based, describes how seven pioneering teacher preparation programs are designing ways to equip future teachers with the skills and mindsets needed for 21st-century student learning. These programs were chosen based on references from experts in the field as well as a review of documents, prior studies, evaluations, and evidence about practices and outcomes. Among the dozens of excellent programs identified through this process, these seven were selected with programmatic and geographic diversity in mind. Located across the nation, they include public and private institutions and recently

launched innovative alternatives as well as long-standing models of teacher education, and they range in size from small to very large. The seven institutions are:

- Alverno College in Milwaukee, WI
- Bank Street College of Education in New York, NY
- High Tech High's Intern Program in San Diego, CA
- Montclair State University in Montclair, NJ
- San Francisco's Teacher Residency (SFTR), in collaboration with the University of San Francisco and Stanford University in San Francisco, CA
- Trinity University in San Antonio, TX
- University of Colorado, Denver, in Denver, CO

Over the course of the study, the choice of these seven programs as exemplars of teacher preparation for deeper learning was borne out as data were gathered on graduates' experiences and effectiveness. In a survey conducted of candidates across all programs, 87% of respondents replied that their program prepared them well or very well for teaching, and they also had positive answers when asked about how their programs had done in preparing them for particular aspects of teaching associated with deeper learning. Nearly 90% of candidates across programs said they were well or very well prepared to "use instructional strategies that promote active student learning," to "engage students in cooperative group work as well as independent learning," and to "set norms for building a productive classroom community." Candidates were also prepared to teach *all* students using these strategies, as the same high percentage replied that they were well or very well prepared to "teach students from diverse ethnic, linguistic, and cultural backgrounds," as well as to "understand how factors in the students' environment outside of school may influence their life and learning."

These programs' successes were not only illustrated by survey data, however. Candidates and local principals also noted their strengths. A principal in San Antonio, TX, called Trinity graduates "my most effective teachers" as measured by

the quality of their instruction in terms of their precision around planning, their ability to execute those plans, their ability to work with students who weren't making the progress they expected, [and] the way that they plan for more complex thinking in the classroom.

Similarly, a Milwaukee, WI, principal asserted, "As I look for teachers, I most immediately look for Alverno applicants," because of

their high ability to be self-reflective, their personally wide experiences with performance assessment at the college level, and their ability to apply critical research bases to their classroom experiences. They are highly collegial, unafraid to seek out all they need to know from mentors and staff around them.

Of Bank Street graduates, a New York City elementary school principal claimed, "I think they are the best trained teachers in progressive education that I can find."

As the Milwaukee, WI, principal indicated, candidates from the programs in this study are sought after when schools are hiring. “Fifteen of the 28 teachers on my staff are CU Denver alums,” the principal of a Denver, CO, school explained, noting that University of Colorado, Denver (CU Denver) graduates have “the desire to be an urban teacher, a strong work ethic, [passion] about wanting to learn, a need to get better every day, [and an] open mind about practice.” A principal at a San Francisco, CA, school that hosts SFTR residents told researchers that “all of the [SFTR] residents we’ve trained, if we had an opening, we ... hired them. That’s not always true of other student teachers we’ve had.” He also shared that his fellow principals were eager to hire the same teachers: At a meeting of principals, “I was getting swarmed at the end of the meeting because they wanted to hire them all!”

The reputations of these programs, and of their sought-after graduates, are based on what those graduates learn in their preparation experiences. A principal in Newark, NJ, said that Montclair State graduates “are very sensitive to the needs of diverse learners and students of diverse backgrounds. I have seen them to be very well prepared for that sort of challenge in a classroom. They quite honestly embrace it.” Another Newark principal added, “They are very motivated about creating a classroom culture that is positive and a classroom community that extends to parents as well.”

Along similar lines, a principal in San Diego, CA, described how “High Tech High interns work hands-on with students in a context of deep inquiry,” which “allows them to establish progressive methods to support the academic and social-emotional needs of children while being immersed in the language and practice that best supports students.”

Dimensions of Teacher Preparation for Deeper Learning

Classrooms in which deeper learning is the goal are ones in which challenging academic content is paired with engaging, experiential, and innovative learning experiences. Such experiences equip students with the skills to find, analyze, and apply knowledge in new and emerging contexts and situations and prepare them for college, work, civic participation in a democratic society, and lifelong learning in a fast-changing and information-rich world. In describing how these programs enact teacher preparation for deeper learning and prepare the classroom-ready teachers described above, this study focused on five dimensions that are built on knowledge from the learning sciences, rooted in the findings of research on learning over the past century, and consistent with the needs of 21st-century students. The five dimensions of teacher preparation for deeper learning, which create goals for both teaching and teacher education, are:

- Learning that is developmentally grounded and personalized
- Learning that is contextualized
- Learning that is applied and transferred
- Learning that occurs in productive communities of practice
- Learning that is equitable and oriented to social justice

Preparing Teachers for Deeper Learning describes how each of these teacher preparation programs enables candidates to teach for deeper learning in developmentally grounded and personalized ways, contextualize and apply learning to real-world problems, and do so in productive learning communities that explicitly address issues of equity and social justice.

A key finding of this work is that these features of deeper learning are as applicable to teacher education as they are to the learning of children and youth. Effective programs teach

and support their candidates in the same ways they want the candidates to teach and support children.

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This brief provides a preview of this work, beginning with a description of the core curriculum concepts that guide programs in their preparation of teachers and a quick sketch of the program practices that put these concepts into action. Next comes an account of how the programs are addressing each of the five dimensions of deeper learning, with examples from across the study. Finally, the institutional structures that support this work are laid out, showing how teacher preparation for deeper learning is made possible at the program level.

Program Content and Practices Are the Basis of Teacher Preparation for Deeper Learning

The Knowledge Base

Each of the programs we studied helps candidates develop a **clear vision** of what it means to become a teacher who teaches for deeper learning. They also are very deliberate in constructing a coherent curriculum of studies that emphasizes the development of deep knowledge of **learners** and the social contexts that shape their development and learning; a deep and flexible understanding of **content and content pedagogy**, including key concepts and modes of inquiry from the disciplines and ways to represent content that allow others to learn effectively; and a wide repertoire of **teaching strategies** that allow them to differentiate and personalize instruction, teach in culturally and linguistically responsive ways, create productive learning communities, and assess learning in order to guide ever more effective teaching.

At the center of the work of each of these programs is a **vision for practice** that integrates knowledge about learners, curriculum, and teaching. The embodiment of such a vision in practice relies on a fusion of coursework and clinical work, which enables candidates to develop their knowledge and skills in meaningful ways. From the very beginning of these programs, candidates are in k-12 classrooms and in program courses connected to those classrooms, and they are observing, experiencing, and using the practices they are learning about in both settings. This strong coherence is characteristic of effective teacher education programs, and it stands in contrast to the fragmented approach to teacher education that once predominated, when courses were disconnected from each other and from the clinical experience and when neither was tied to a common vision of teaching.

All of the programs studied place a **deep understanding of how children develop and learn** at the heart of the curriculum, forming a foundation upon which candidates build their knowledge and proficiency in designing activities; addressing student learning needs; and teaching social, emotional, and academic skills. The coursework is infused with a developmental perspective and augmented by structured opportunities for candidates to observe learning and development firsthand in field placements. Candidates are prepared to appreciate, and build upon, children’s varied developmental experiences as well as their unique social contexts, to account for diversity, and to differentiate instruction to meet individual children where they are. Understanding the critical role of culture and language in shaping development and learning is the foundation for a culturally and linguistically responsive and competent practice, and such practice is also a major component of each of the programs we studied.

These programs also focus considerable attention on developing **knowledge of content and content pedagogy**, refining and strengthening candidates’ flexible and deep understanding of the disciplines they plan to teach. By approaching content and pedagogy together, the programs ensure that candidates revisit their understanding of content with curriculum goals in mind while also examining students’ developmental and social needs in subject-specific contexts. Although candidates enter with knowledge in their content areas, the programs emphasize that this content knowledge must incorporate disciplinary modes of thought and inquiry that translate to content-specific pedagogies. Teaching methods courses include activities and assignments through which candidates experience content-specific deeper learning strategies that they can then apply to their own classrooms as they design tasks that allow all learners to demonstrate competency and growth.

Knowledge of learners and of content is supported by **knowledge of teaching**, of how to reach students, organize instruction, and promote learning, informed by assessment and supported by a productive classroom environment. The programs in this study seek to ensure that their candidates acquire this knowledge in ways that build their capacity to teach for deeper learning in diverse classrooms and communities. These developmentally grounded programs approach classroom management as constructing a community of learners, organized around the promotion of student responsibility and agency so as to develop students’ social, emotional, and cognitive skills. As candidates learn to plan and assess curriculum around the demands of the content and their knowledge of learning, they also learn to plan and implement personalized approaches that meet the distinctive needs of students, creating a link to social justice values by explicitly ensuring that all students are supported.

Practicing What They Teach

Program graduates are able to use the knowledge they have gained about learners and learning, subject matter, curriculum, and teaching because of the many ways these programs put that knowledge into practice in every aspect of their work. If the curriculum represents the “what” of teacher education, the practices used to accomplish curriculum goals represent the “how.” The key practices the seven programs engage in that allow them to achieve their goals and that distinguish them from traditional teacher education programs include:

- mission-aligned processes for **recruiting and selecting** candidates;
- **integration** of coursework and clinical work;
- **modeling** of deeper learning pedagogies;

- **applying** knowledge in practice;
- engaging in **inquiry** and **action research**;
- **collaboration** in productive learning communities;
- **feedback** that supports **reflection** on teaching;
- **authentic assessments** of progress; and
- well-designed **clinical apprenticeships**, developed in partner schools.

With the goal of teaching for deeper learning within an equity framework, each of the programs is concerned about **recruiting and selecting** a diverse pool of candidates who bring both the intention to engage in this kind of practice and the dispositions and experiences to support it. Programs communicate with potential candidates about their values, including student-centered teaching and education for equity and social justice. While programs include prior academic accomplishments and test scores in admissions and selection processes, these are supplemented with evidence of the potential teachers' foundational attitudes and experiences. Programs look for prior experience with children, require essays about educational goals and views, and bring in recruits for interviews, including group and interactive sessions intended to assess dispositions toward teaching and learning, attitudes toward students, and cultural competence.

Each program **integrates coursework with fieldwork** to support the deeper learning of candidates. The coursework is designed around research-based teaching and learning theories that are explored and applied in fieldwork experiences. This intentional and systematic integration enables candidates to understand the practical relevance of theory and how to theorize practice. Candidates also learn to teach for deeper learning by experiencing that kind of learning themselves, as their instructors, supervisors, and cooperating teachers **model practices** they expect candidates to use. Teacher educators name their strategies, explain why they are powerful, and make suggestions for how they could be applied. Programs also select and train supervisors and cooperating/mentor teachers who provide strong and effective modeling and exemplify high-quality practices that are well connected to candidates' course content.

The integration of coursework and clinical work provides authentic opportunities for candidates to practice what they learn, **applying their knowledge** to real-world problems in classrooms. Coordinated learning opportunities between courses and clinical settings include class assignments as well as the structured planning and implementation of instruction, with time to reflect on teaching outcomes. This approach supports the type of self-assessment and metacognition the teacher candidates will ultimately encourage their own students to explore so that they, too, can become self-directed learners. Putting teaching ideas into practice is further supported by **inquiry and action research**. Inquiry strategies guide reflection and application, preparing candidates to ask questions when they encounter novel teaching challenges, diverse student populations, and different school and community contexts. Across programs, candidates carry out case studies of individual students, conduct action research on topics about which they are puzzled, and examine how children learn language and learn differently, as well as how schools and communities are organized, or could be organized, to support children and families. These experiences also act as models for candidates' use of inquiry-based approaches with their own students.

The conviction that both teaching and learning to teach take place in **collaborative** communities of practice permeates all aspects of these programs. Programs create professional communities in which teachers observe

one another, share practices, develop plans together, and solve problems collectively. They emphasize authentic relationships among adults, and between adults and young people, as the foundation of deeper learning. These communities are themselves characterized by instructional conversations that provide candidates with ongoing **feedback and support for structured reflection** on teaching. Reflective practice is the goal of all programs, and reflection allows candidates to direct their own learning by collecting data; gaining perspective from faculty, supervisors, and cooperating teachers; and making adjustments as needed. A range of **authentic assessments** allows for the application of skills and knowledge and offers opportunities for feedback and reflection. These include regular formal and informal supervisory evaluations of clinical practice and formal benchmark assessments that evaluate progress on specific skills. They also include culminating assessments that reflect candidates' ability to put teaching principles into action and performance assessments in which candidates bring together theory and practice to demonstrate their learning.

Finally, these seven programs all work to structure extended clinical placements so that **candidates become apprentices** to accomplished teachers. By working in classrooms that instantiate the practices described in their connected coursework, candidates experience excellent modeling of instruction and learn how to emulate it. To facilitate this, all programs have established deep partnerships with schools, creating communities of practice focused on deeper learning and equity. As part of these efforts, the programs carefully and deliberately select, train, and support cooperating teachers. Program faculty also engage as members of these school-based learning communities, and all programs provide intensive support from faculty supervisors who visit, observe, and meet with the candidates regularly in their schools.

Applying the Five Dimensions of Teacher Preparation for Deeper Learning

Learning to teach successfully for the social demands of the 21st century requires learning how to support **developmentally grounded approaches** that are both personalized to individual learners' needs and **contextualized in learners' experiences**; applying knowledge so that it can be **transferred to real-world problems**; enabling collaboration in **productive communities of practice**; and creating **equitable practices** that produce more socially just opportunities and outcomes among students. The connections across these five dimensions of deeper learning are clear in the work of these seven programs and show the importance of organizing educator preparation around the whole concept. They are reviewed below.

Learning That Is Developmentally Grounded and Personalized

All of the programs have proven strategies to help candidates learn to think deeply about student needs in creating developmentally grounded and personalized learning experiences. Teacher candidates learn how to build lessons and activities based in students' prior knowledge and cultural experiences, attending to both cognitive and social-emotional realms to create safe, nurturing learning environments for critical thinking. Candidates learn to plan for how students can learn content, as well as thinking, reasoning, and social-emotional skills, by considering what each child brings to the classroom from home as well as what he or she has learned in school. They also learn to plan and implement personalized approaches that meet the distinctive needs of students. For instance, Trinity's strong programmatic focus on differentiation pervades every aspect of candidates' experience. As one candidate explained:

There's a focus on differentiated instruction both in our classes at Trinity and in what's required when we're writing our first lesson plans.... It's also the nature of the campuses we're at. We're at PDS [professional development school] campuses, so that puts us in situations where we're able to get support on campus for that type of instruction.... It wasn't like we were just learning this at Trinity, but we are also at campuses that are supportive of that type of instruction.

Candidates also learn to help students develop the social and emotional skills, habits, and mindsets they need to be successful in school and life. As one Bank Street teacher candidate told us:

You have a strong sense of child development: You know about the specific age you're working with, what they're cognitively able to manage and understand; emotionally and psychologically, what they are feeling; and how to nurture the skills that they need to handle the challenges they face at that point in their life. There's also a lot of emphasis on the variety of different types of learners. There is not a one-size-fits-all approach to teaching.

One common strategy for preparing teacher candidates to consider individual student needs is the child case study. Case study assignments give teacher candidates an opportunity to experiment with the methods that a teacher might deploy to make a lesson more challenging, more accessible, or more engaging for a particular student and to practice their process for differentiating their instruction—something they eventually will do for all students in their classroom. Child case studies are also used for English learners, students with disabilities, and young learners working on literacy skills in order to help candidates carefully observe and see how all children develop and learn.

Learning That Is Contextualized

The concept of contextualized learning, our second dimension of teaching for deeper learning, manifests when teachers draw on their knowledge of students' pre-existing experiences to create powerful connections from what students already know to what they want to learn. One example comes from a CU Denver teacher candidate and an experienced mentor teacher co-teaching biology to 10th- and 11th-graders. This classroom is in one of the nation's few International Baccalaureate programs at high schools located in low-income communities of color. The teachers connected biology to students' everyday lives through an engaging Socratic Seminar, in which students deepened their understanding of natural selection by using skin color as an example of how evolution has unfolded. Set up as a text-based conversation, the seminar was grounded in a video on the biology of skin color and an article about an anthro-biologist who studied skin color, but also in the students' own experience with, and connection to, the topic.

The seven teacher preparation programs also contextualize the learning of teacher candidates through their clinical experiences in partner schools and the integration of clinical work with coursework. Several programs (e.g., Montclair State, Trinity, Alverno) hold teacher preparation courses on-site in partner district schools, while Bank Street's courses are in the same building as the Bank Street School for Children. The residency programs—San Francisco Teaching Residency (SFTR), the Newark Montclair Urban Teacher Residency, the CU Denver Teaching Residency and its NextGen pathway—and the High Tech High intern program provide the most specific contextualization of teacher candidate learning in the school districts in

which they are embedded. Programs also use the expertise of partner district teachers to teach or co-teach what are traditionally thought of as university courses. Through these connections, teacher candidates get to know their schools, districts, and communities, just as they get to know their students' backgrounds and experiences.

Candidates' learning is further contextualized when programs prioritize field experiences in schools that serve low-income communities of color, bring a strong equity focus to teaching, and enact effective deeper learning practices. SFTR has identified a set of teaching academies in San Francisco, CA, that illuminate deeper learning practices in low-income communities, and CU Denver recently readjusted its group of partnership schools to ease out schools in more affluent communities and add those in low-income communities. Contextualized field experiences focused on equity and social justice also extend beyond candidates' placements in schools and classrooms. Bank Street's Council of Students facilitates dialogue between Bank Street's graduate students and the larger community, and Alverno leverages the diversity of its surroundings in Milwaukee, WI, by partnering with local organizations to provide experiences that help candidates consider how they might advance social justice as educators.

Learning That Is Applied and Transferred

In our third dimension of teaching for deeper learning, candidates learn to create meaningful tasks within an inquiry-based style of pedagogy that stimulates critical thinking, problem-solving, the application of knowledge, and authentic assessments. For example, Understanding by Design (UbD)¹ is a planning framework used at most of the programs. It focuses on backward design of units, from goals expressed as Essential Questions and encapsulated in performance assessments to the activities that can achieve these goals. Backward planning helps teacher candidates understand the ideas of scope and sequence for planning and instruction and ensures that assessments are meaningful, relevant, and well aligned with instructional goals. During the fall semester, all Trinity candidates must design one UbD unit to be taught during their lead teaching in the spring. Elementary candidates told us how they were able to develop a variety of pedagogical strategies in the process of implementing their UbD units, including getting students engaged in constructing knowledge together, applying knowledge to real-world problems, and using questioning strategies for group discussions. As one candidate explained:

We're always encouraged to have developed PBL [project-based learning], particularly UbD, to track our growth. Like how we were taught to think about essential questions and understandings first, and how students are not only needing to be able to understand what's written on paper, but also apply it to the real world—that's the final step you start with. In doing that, you're forced to make adjustments, modifications, and differentiations based on the students in your class.

Teacher candidates also focused on developing assessments through backward planning processes that include understanding learners' prior knowledge and skills, building on knowledge of development, and taking

into account students' backgrounds and prior experiences. A Montclair State faculty member highlighted how she focuses on helping students understand such authentic assessments:

We spend a lot of time thinking about “what does it really mean to have an authentic assessment?” and then they have to design an authentic assessment, and/or a performance-based assessment.... They have to map back each assessment to a learning goal.... [T]hey have to say what assessment works for which piece of knowledge, which piece of understanding, which piece of skill.... There should be enough assessments, and a variety of assessments, that all of those are being assessed. Otherwise, there's no point in having them.

Inquiry-based learning is not only the goal for candidates' eventual classrooms, but also the approach used by program instructors themselves. Candidates experience what it feels like to be students, and coursework and fieldwork provide them with active learning opportunities, along with time and support to self-assess and reflect on the meaning and learnings from their experience. At CU Denver, teacher candidates we spoke to universally agreed that the modeling faculty use is perhaps one of the most useful ways to learn because the candidates “feel what it's like to experience a lesson as if they are the students themselves.” These powerful experiences help candidates learn how to structure their own lessons for deeper learning.

Learning That Occurs in Productive Communities of Practice

The fourth dimension, learning in productive communities of practice, occurs through the interaction of people, problems, ideas, and tools within specific contexts as people get feedback on their actions and about their ideas. Programs support teacher candidates in recognizing and building on the social nature of learning in coursework and clinical experiences and through program structures and cultures. Teachers learn to plan for and manage classroom interactions so that students engage in extended discussions with the teacher and their peers to improve understanding. As this occurs, teachers learn to support, or scaffold, students as they acquire knowledge and skills that they cannot learn on their own but can learn with targeted assistance, making sure that all students have access to resources appropriate to their needs. As one teacher candidate characterized it, teachers learn to “focus on student learning, which means we're the guide.... We facilitate students working together and we ask critical questions to help them delve deeper.”

Teachers also skillfully organize peer interaction in small groups, creating social learning opportunities that enable students to serve as experts as well as novices and to help their peers stretch beyond their current levels of understanding and skill. In one example, a teacher candidate at Alverno shared how, in addition to engaging the students in mathematics learning through peer interaction, she also helped her students think about the learning process itself. As she explained:

For the kids, the communication and collaboration piece is very important to their learning and college and career readiness standards at this school. So, you notice when I asked about what it means to collaborate, they knew what it means to collaborate in a group. Whether it works out that way or not is something else—they're 10 and 11 years old—but they understand what it means, that everyone's got to have some sort of say, and that we've got to be working together for a common goal.

All of this occurs within classroom communities constructed by the teacher to reflect an ethic of care, trusting relationships, and clear norms of cooperation and sharing. Building classroom relationships that are supportive and nurturing is considered foundational for teaching for deeper learning for every student. One teacher candidate at CU Denver expressed his convictions about the centrality of relationships as follows:

Why would a kid who saw their mom arrested last night [care] about math? You can talk about growth mindset and grit and that's all nebulous, but when you get down to it, why should a 9-year-old really have that intrinsic motivation to say, "I really want to be an astronaut, so I am going to learn my math facts." It's more about the relationships and creating a place where they *want* to be.

Learning That Is Equitable and Oriented to Social Justice

In the fifth dimension of teacher preparation for deeper learning, programs prioritize equity and social justice through learning experiences designed to meet diverse students' needs, to reach all students, and to teach them well. Teachers consider students' unique identities as strengths and resources, and they link social justice values to principles of learning and development by supporting all students, taking a critical stance, and avoiding deficit thinking. Each program helps candidates understand the social, historical, and political contexts of race and inequality in America and how they are reflected in schools and classrooms. The programs also frame equity, social justice, and deeper learning as mutually reinforcing concepts. High Tech High Academic Dean Ben Daley articulated such a connection:

We think that constructivist, progressive, project-based learning ... is inherently an equity argument.... That's why we're trying to have high-quality projects that engage all learners. That's why we were doing it, the whole time.

Each program is loud and clear about commitments to social justice and equity in the pronouncements of program leaders, in mission statements, in program descriptions, and in ongoing conversations about program improvement. The programs are also intentional about making their commitment to social justice and equity a critical criterion in their recruitment and selection practices. For example, the heart of High Tech High's candidate selection process engages prospective teachers in a variety of activities designed, in part, to assess how they view issues of equity in relation to education. Similarly, SFTR's website calls for applicants who want to "learn to teach for social justice," and from their initial contact with the program, candidates are engaged with SFTR's mission and values. In the words of SFTR's Executive Director,

As important as anything we do is to prepare people to be successful in culturally diverse communities and in schools that are serving historically marginalized students and high-needs populations; if we're not doing that, then we shouldn't exist, in my opinion.

Across the programs, courses focus on the historical patterns and day-to-day routines of schooling that help construct and maintain inequalities so that teacher candidates can understand the context of their work and ensure that their instruction is culturally relevant for their students. Programs often begin with courses on equity, diversity, and democracy so as to establish recurring themes for candidates, who examine how schools reflect and often perpetuate inequalities related to race, social class, gender, ethnicity, sexual identity, politics, and social dynamics of power and privilege. Candidates also explore how culturally responsive teaching,

grounded in our knowledge of how people learn, can result in far more equitable schooling, and a culturally responsive frame of reference has also inspired many of the programs to integrate restorative practices in their approaches to classroom management and discipline.

Program Structures Support Teacher Preparation for Deeper Learning

These five dimensions and associated values, knowledge, and practices make teacher preparation for deeper learning what it is, yet there is more to the story of how these programs do what they do. It is equally important to attend to the deep organizational structures that support these features and practices and that distinguish them among teacher education programs.

- Each program designs and articulates a set of **well-established program values** that are squarely and unambiguously focused on deeper learning and equity. These values are instantiated through a closely aligned program culture, structures, and practices.
- **Leaders have prioritized teacher preparation for deeper learning** at the institutional and program levels, across campuses and with outside partners, providing guidance and ongoing support.
- Leaders and programs have also **dedicated resources** to support teacher preparation for deeper learning, making values and goals real and concrete through investments of both time and money; creating spaces for deeper learning among faculty and candidates; and enabling planning, inquiry, reflection, and iteration toward program goals.
- Finally, these programs have undertaken the effort to build serious **partnerships with k-12 systems and schools**, opening up opportunities and spaces for shared and mutually beneficial work while ensuring that candidates can experience and engage in pedagogies focused on deeper learning and equity while participating in educative communities of practice.

These structural supports are not merely coincidentally helpful features of programs but are the result of deliberate choices and sustained effort by faculty and administrators who are committed to preparing teachers for deeper learning.

Conclusion

The seven programs described here provide examples for teachers, teacher educators, and policymakers who have an interest in making preparation for deeper learning the standard for today's teachers. All the programs featured here are determined that their graduates will create classroom learning experiences that reflect the increasing scientific knowledge on how people learn and that they will make those deeper learning experiences available to *all* students. They seek to practice what they preach, and they are impressively successful in doing so.

Endnotes

1. The UbD framework was created by Grant Wiggins and Jay McTighe. See also: Wiggins, G. P., & McTighe, J. (2005). *Understanding by Design*. Alexandria, VA: ASCD.