Abstract

This brief is based on a case study of the MAT program at Trinity University, one of seven cases examined by the Learning Policy Institute (LPI) as part of its study Preparing Teachers for Deeper Learning. The study sought to explore how leading programs are creating ways to prepare future teachers for deeper learning and equity and to understand the policies needed to transform teacher education systemwide. LPI research teams collected data in 2015–16 through site visits, interviews, observations of university and school classes, reviews of program documents, and surveys of teacher candidates in each program.

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

Acknowledgments

The case study on which this brief is based benefited from the insights and expertise of two external reviewers: Misty Sato, Associate Professor and Head of School in the College of Education, Health, and Human Development at the University of Canterbury, Christchurch, New Zealand; and Pia Wong, Associate Dean for Research and Engagement at the College of Education at California State University, Sacramento.

This research was supported by the Carnegie Corporation of New York and the William and Flora Hewlett Foundation. Core operating support for the Learning Policy Institute is provided by the Sandler Foundation.

Helen is a 3rd-grade teacher and mentor at Lamar Elementary and an alum of Trinity University’s MAT program. She is teaching a lesson focused on selecting and weighing fruit at a grocery store and determining costs within a given budget.

As the lesson begins, Helen is sitting on a chair, and the students are on the floor. “Today you are going to be measuring at Lucas Grocery Store,” she says. “The goal is, by the end of your visit, I want you to be able to explain how to measure metric weight. We talked about grams and kilograms. There’s a couple of things you have to keep in mind.” Helen turns on the projector and reviews the worksheet and instruction for the activity.

The worksheet says, “Welcome to the Lucas Grocery Store! You are ready to shop and create your very own fruit salad. Your fruit salad must have the following: a variety of fruits (Eating the rainbow is healthy!), as close to 350 grams of fruit as possible, [and a] cost [of] no more than $14. Browse the store first and decide what you’d like to place on your fruit salad.”

The worksheet includes a list of fruit, their amounts, and their prices. There is also a rubric for students to self-assess on their grocery store manners, teamwork, persistence, and measuring weight. On the back of the worksheet, there is a table in which students can track their shopping lists and record the type and amount of each fruit, the weight of the fruit, and the price of the fruit. Once they find their total price, they are to check out at the register with Helen.

After reviewing the instructions, Helen adds, “Things you have to keep in mind: Have to have variety of fruits. Remember when we went to the museum. They said if you ate lots of different color things, your diet is healthy. You want to eat the rainbow. You want to get as close to 350 grams of fruit as possible. How many?”

The students respond, “350.”
Helen says, “You have to get the price. It can cost no more than $14.” She then provides additional instructions, saying that they have to score themselves on four things that are on the rubric for the activity: grocery store manners, teamwork, persistence, and measuring weight. The inclusion of persistence in the rubric is intentional, as it is one of the five constellations of growth mindset that students at Lamar are learning about.

Helen adds, “So when you’re trying to get 350 grams, and you don’t get it, are you going to quit? Your goal is to get as close as you can to 350 grams. This whole lesson is about measuring weight.... There are some tools over by Dr. Norman. When I call you and your partner, you’re going to get up, get your tool, [and] pick an area to go to. I’ll make sure containers are open. I’ll get everybody a bowl. Then we’ll get started. The first partnership I have is Kristina and April. Can you get sheets and containers?”

Helen walks around and gives bowls to pairs of students. They are to collect fruit from the back of the room and weigh the fruit using the scales that are at the tables. Several students are in the back of the room putting fruit in their bowls. They have lots of options to choose from: red and green grapes, mandarin oranges, kiwi, pineapple slices, apple slices, bananas, blackberries, and strawberries. Helen shows students how to use the scales. As they begin weighing, there is a high level of engagement in the activity.

Introduction

Trinity University is an independent private liberal arts and sciences university in San Antonio, TX. Trinity’s three-semester, school-embedded Master of Arts in Teaching (MAT) program aims to develop teachers who view themselves as advocates in promoting equity and opportunity for all students and their families, who continually reflect on and refine their practice, and who actively engage in collaborative learning communities. The MAT program enrolls 30 to 40 teacher candidates a year, the majority coming directly from their Trinity undergraduate degree program.

In the classroom scene just described, a graduate of Trinity University’s MAT program incorporates concepts of measurement and budgeting, along with teamwork and persistence, into a hands-on activity using real-world examples. This inquiry-based, experiential lesson required significant planning, including anticipation of students’ questions and responses and preparation for issues that might arise in their work with scales and fruit. Such features of the lesson demonstrate the deeper learning–aligned practices and dispositions with which Trinity equips its graduates. (See “What Is Deeper Learning?”) Trinity’s commitments to preparing educators to teach for deeper learning, and for equity, are encapsulated in the program’s core beliefs about principled practice: knowledge of content and pedagogy, leadership of self and others, ethical responsibility, and cultural responsiveness. The MAT program instantiates these core values, which are grounded in established teacher preparation research, through coursework that is tightly aligned with well-developed clinical practice experiences. Candidates are prepared to construct learning experiences that create complex and transferable knowledge, seek opportunities for transformative teaching to address political and systemic sources of inequity, work as collaborative colleagues and leaders in the teaching profession, and consider students’ developmental needs and contextualized experiences to personalize learning.
What Is Deeper Learning?

Deeper learning is both a new and an old idea, rooted in the findings of research on learning over the past century yet also aligned with the needs of 21st-century students. Deeper learning experiences allow students to apply challenging academic content to real-world problems and contexts that engage them in communication, collaboration, and critical thinking. Such experiences equip students with the skills to find, analyze, and apply knowledge in new contexts and situations, preparing them for college, work, civic participation in a democratic society, and lifelong learning in a fast-changing and information-rich world. We identified five dimensions that define the practices and the vision that enable deeper learning for both students and prospective teachers:

- 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

Trinity’s educator preparation program has an excellent local reputation, and principals, district leaders, and local partners interviewed for the study all noted that Trinity graduates are far more prepared for teaching than candidates coming out of other local teacher preparation programs. The principal of a local professional development school (PDS) called Trinity candidates “my most effective teachers,” and he attributed this effectiveness to:

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, the way that they plan for more complex thinking in the classroom, [and their] ability to take on different challenges outside of their classroom instruction.

Trinity’s effectiveness in educator preparation is backed up by other sources. Between 2010 and 2017, Trinity candidates had a 100% institutional pass rate on Texas certification exams. On a required state principals’ survey on first-year teachers, Trinity graduates’ scores have exceeded the statewide average scores in every category over multiple years, and Trinity candidates consistently report feeling more prepared than candidates across the state on the Texas Educator Preparation Program (EPP) candidate exit survey. In LPI’s own survey of Trinity candidates, 96% of respondents reported that Trinity’s program was preparing them “well” or “very well” for teaching, and over 90% reported these levels of preparation in methods aligned with deeper learning, such as developing curriculum that helps students learn content deeply and builds on their experiences (94%), meeting a variety of student needs (97%), promoting active student learning (93%), and helping students to think critically and solve problems (93%).
Key Program Elements Support Teacher Preparation for Deeper Learning

The experiences of Trinity candidates, which introduce them to teaching for deeper learning and leave them well prepared to take over their own classrooms, are made possible by program structures that support Trinity’s approach to educator preparation.

The MAT course of study provides coursework strongly linked to field experiences. The program begins with a summer session that includes coursework in pedagogy, curriculum development, and professional leadership. The fall and spring semesters build upon the foundations laid during the summer session, as candidates delve more deeply into the science of learning, the broadening of their teaching repertoires, the teaching of diverse learners, and the translation of theory to practice through a teaching inquiry course as well as a course in pedagogics. Fall also brings the beginning of their 8-month teaching internship, during which candidates participate in over a thousand hours of clinical experience in two placements, one from August to February and a shorter one afterward. Trinity candidates and alumni shared the view that the program’s extensive clinical learning experiences, combined with their coursework, provided excellent preparation for teaching. As one candidate put it:

I feel like the extra time we get to spend actually teaching and practicing what we learn in our Trinity coursework is so beneficial. I am able to relate what we read and talked about to what I am doing in the classroom. I am able to see results and reflect on my teaching in an actual classroom context.

These clinical experiences provide candidates with scaffolded and supported practice in teaching in a learning community made up of their cohort as well as university faculty and mentor teachers at PDS sites. Trinity has made institutional commitments to maintain mutually beneficial relationships with PDS schools. Faculty are required to support mentor teachers and supervisors at PDS sites and to advise candidates, and they provide professional development for all teachers on PDS campuses. The university hires district teachers to work as half-time PDS coordinators, and Trinity also provides PDS sites with access to its own campus facility for various activities and events attended by k–12 students. The long-standing and ongoing engagement with the five PDS sites has allowed for the development of common philosophies and practices across preservice and in-service teaching. A PDS principal described the closeness of the partnership and its value for the school:

Pat [Dr. Pat Norman, Trinity MAT elementary coordinator] and I work really closely together. We co-plan our staff development; we work on budget—whether it’s [Trinity’s] budget or our budget. I have a half-time assistant principal, but I do most of the planning with Pat. I think it’s changed the conversation on campus…. [The Trinity partnership] raised the bar of what we hope to accomplish. It’s changed the conversation from test scores to practice and growth in teaching and learning.

Candidates’ experiences in their two clinical placements are enhanced by close relationships with faculty supervisors and mentor teachers. Each candidate has a supervisor from the university and a mentor
teacher from a PDS, and the university provides strong support for them. Faculty advising and support for mentors is acknowledged in Trinity’s tenure and promotion process. Trinity faculty and PDS principals work together to choose mentors, and faculty often have firsthand knowledge about potential mentors’ practice through their time in the schools. When we asked about the skills, knowledge, and dispositions Trinity looks for in prospective mentors, a program leader told us:

Mentors’ openness to learning is what we hope they possess. We want them to have a commitment to continued growth, including an interest in learning about the program and the practice of mentoring. We think that being a good teacher is necessary but not sufficient to being a good mentor. So, are they willing to come to mentoring training and develop their practice? And are they going to make space for a novice to learn and grow with and from them, as well as find their own voice in the process?

Mentors receive support and training, including a mentor-candidate orientation before the start of the school year, information on courses the candidates are taking, and monthly study groups on the practice of mentoring. Mentors also see their practice benefiting, as one described:

That’s one of the neat things about being a mentor in this program, because the mentees bring fresh-off-the-block stuff to us. That’s phenomenal. [My mentee] is bringing new technology, so now my lesson is going to be improved because of her. Which is awesome. She’s learning from [Trinity] all this best teacher stuff and brings that in.

A core part of Trinity’s preparation of candidates to teach for deeper learning is having faculty model student-centered practices, such as reflection, collaboration, and guided inquiry. Through this modeling, faculty show these practices in action, scaffolding candidates’ participation. Modeling also helps candidates learn how to establish a strong assessment practice as they are introduced to the types of rubrics that fit with the inquiry-based emphasis of their training. The use of these rubrics is modeled in the assignments the candidates themselves are required to complete, and they have the chance to discuss just what it means to meet levels of performance, as well as how to have the same kinds of conversations about performance expectations with their students. Candidates practice this sort of goal-oriented, reflective assessment by completing two self-assessments. They assess their performance against Trinity’s teacher preparation standards, as well as their understanding of how they have grown and in what areas they want to continue to develop. They also complete a dispositional assessment that addresses areas for professional work in educational settings. After reflecting on the self-assessment and feedback from peers and faculty, candidates write a reflection in which they prioritize three goals they have for growth: one academic goal, one professional goal, and one collegial-growth goal. Candidates must develop a visual to remind them of their visions and goals; candidates share the visual with their mentors and with the members of the cohort.

Throughout this experience, Trinity takes stock of candidates’ teaching practice through portfolio- and performance-based assessments. Trinity has integrated performance assessment of teachers into its programs in a number of ways, both aligning with and going beyond Texas teacher evaluation requirements, allowing candidates to engage in deeper learning practices even as they demonstrate
their own learning. Candidates complete a portfolio based on the Texas Teacher Evaluation and Support System (T-TESS) rubric. Every candidate has a midyear and end-of-year conference with his or her clinical faculty advisor and mentor teacher, the first led by the clinical faculty advisor and the second led by the candidate. Candidates must show evidence of their practice, meet proficiency on the T-TESS, invite clinical faculty and mentor feedback, and discuss how their perspectives and biases affect their instruction and how they have worked to address them. In addition, candidates must pass the Praxis Performance Assessment for Teachers (PPAT), a rigorous, four-phase, nationally benchmarked, performance-based assessment. The PPAT allows for external benchmarking of candidates, which Trinity values as an indicator of program success, and as a performance assessment, it allows candidates another opportunity to apply what they are learning in their coursework and field experiences.

**Program Features Align With Teacher Preparation for Deeper Learning**

While Trinity’s program can be seen, as a whole, as supporting deeper learning, some particular aspects of the program can be singled out to demonstrate essential connections to the five dimensions of teacher preparation for deeper learning.

During the summer session, candidates are introduced to the Understanding by Design (UbD) model,1 which is at the heart of Trinity’s approach to instruction and curriculum design due to its alignment with Trinity’s emphasis on inquiry and knowledge of content, self, and students. UbD enables candidates to develop lessons linked to the conceptual understanding of content and to authentic activities, both essential to creating learning that is applicable and transferable. The UbD framework starts with the selection of goals and then designing curriculum backward to attain those goals, and candidates learn to use essential questions to drive their planning while considering what it means for students to be engaged. Candidates work on unit design during the summer semester and then continue this focus in the fall, further developing their understanding and use of the UbD framework and giving them more assessment tools that are consistent with the UbD approach. During the fall semester, all candidates must design one UbD unit to be taught within the first weeks of their spring semester. A mentor teacher commented on the benefits of this process:

[Candidates] are really good about thinking through the UbD template because that’s what they use to design an interdisciplinary unit during the summer, and that’s what they design for their lead teaching piece in spring.

Along with preparing a UbD unit, candidates prepare a pedagogy portfolio and a classroom management playbook that they will use throughout their field experiences, bringing their own learning to bear on real-world settings while working collaboratively with their mentors in productive communities of practice. The pedagogy portfolio is an assessment that shows candidates’ abilities to plan instruction that uses a variety of teaching strategies and that creates opportunities for candidates to apply these strategies in collaboration with their mentors. Students develop a chart that provides an overview of teaching strategies that are used to create classroom lessons that candidates can employ with their students and to produce
lesson plan sample sets of four lessons. Candidates develop at least one lesson plan for each family of strategies, and they also include differentiation notes, added to the portfolio of materials before the end of the summer session. Candidates use the portfolio as a resource in real classrooms, as one secondary mentor shared:

After their summer semester, before they actually come into the classroom, they are coming in with so much more knowledge than other first-year teachers…. By the time they’ve gone through that summer semester, they’ve looked at 10 to 15 different teaching strategies that they can pull from.

The classroom management playbook that candidates prepare consists of a detailed worksheet, divided into sections according to classroom activity, with specific strategies listed under each activity section. Candidates use this sheet to record all the classroom management practices and procedures that they observe mentors and other teachers implement and that they learn about at professional development sessions and conferences, through readings, and through conversations with other teachers. Aside from creating opportunities for observation and discussion of management practices, this detailed and practical assignment gives candidates a way to take this collaborative experience with them after the program: It is structured so that, at the end of their course of study, candidates have essentially created a plan for classroom management practices they can implement the following year in their own classrooms.

The racial autobiography assignment, created by faculty, is an important assignment in candidates’ preparation for learning that is equitable and social justice oriented. Drawing on Singleton and Linton’s 2006 book Courageous Conversations About Race: A Field Guide for Achieving Equity in Schools, this assignment is intended to help candidates to dig into their own identities as teachers, to consider how knowledge of self and students affects the educational experience, and to move toward equitable learning experiences by thinking about how to reach and support all students. Candidates write about their engagement with and understanding of race during their lives and over the course of the program, and they are assessed on their descriptions of their experiences, their analyses of these experiences’ significance, and the development of their understanding over the course of the work. They share all or part of their racial autobiographies with their cohorts at the end of the program.

Candidates also develop their abilities to engage with equity and social justice issues over the summer session through the Self-Exploration Experiences = Culturally Competent Change (SEEC3) project, a long-term, multistage assignment that has three objectives: self-exploration, experiences with others, and culturally competent change. Candidates develop a graphic organizer reflecting the beliefs and values that inform their worldviews, an aesthetic representation meant to synthesize and express the ideas presented in the graphic organizer, and a digital presentation of the aesthetic representation. They then prepare a reflection on how their own biases will impact their personal and professional interactions. In the reflection, candidates must identify cultural features that they possess that will help them relate to their students and help students relate to them, cultural features they possess that students might not be able to relate to, and cultural features of students that they might not be able to relate to.
Conclusion

Trinity shows how alignment with core values, themselves aligned with deeper learning and equity, can prepare candidates with an ambitious vision of teaching that they carry into their classrooms. Trinity graduates have a solid local reputation, are sought after by schools and districts, and outperform other new teachers on a range of statewide measures. Trinity’s faculty have constructed a program marked by integrated coursework and clinical experiences, enhanced by close relationships with PDS sites, faculty supervisor and mentor support, faculty modeling of practice, and performance-based assessments. A continual emphasis on backward design and inquiry-based instruction, as well assignments in which candidates engage with issues around race, identity, and equity, provide candidates with opportunities to prepare to teach for deeper learning and equity in productive communities of practice. Teacher educators and policymakers can study this program as both a model for such program practices and structures and as a guide for policy initiatives that can support them.

Endnote