

Preparing Teachers for Deeper Learning at Alverno College

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Abstract

This brief is based on a [case study](#) of Alverno College's teacher preparation program, 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>.

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Lily, an Alverno College teacher candidate in her last semester of studies, is working as an intern in her student teaching placement in the 4th-grade classroom at Walker School in West Allis School District outside of Milwaukee, WI. Walker's 4th-grade classroom includes approximately 60 students, with three teachers. All students in the school have their own computer tablet.

Lily is engaging a group of 20 students in a mathematics lesson. In this lesson, Lily supports her students' growth as mathematical thinkers by helping them see how quantitative thinking can solve a real-world technology problem. Because her students frequently use technology, Lily focused the lesson on a common mathematical question for tablet users.

*Lily explains to her students, "Mrs. Lily is out of storage on her iPad. She needs to delete 157 MB to upload her newest lesson on problem-solving." She makes the problem concrete by using a box with pictures, a lesson-planning book, a DVD, and papers to ensure that students understand what "storage" means when talking about technology. She explains that on her iPad, a picture is 10 MB, an old lesson is 47 MB, a video is 171 MB, and a document is 5 MB. Lily provides a framework, known as CUBE, for her students to actively read the instruction (**C**ircle numbers that are important to the problem, **U**nderline the question, **B**ox math words, and **E**valuate).*

The students work in pairs to read the question on their iPads, using the CUBE strategy to read and evaluate the question. After a few minutes, Lily calls the class back together and asks the students what they know about Lily's iPad. "It's full!" one student exclaims. Another calls out, "You need to delete 157 MB."

Students continue to share the key numbers, questions, and mathematical concepts in the question. As the students share, Lily synthesizes their insights by drawing a visual representation of the

problem on the board, drawing her iPad, with an arrow pointing from a drawing of her lesson planning notebook to the iPad, and then an arrow pointing away from her iPad to all the things she could remove, such as a video, a picture, or old lessons. Before students split into groups of four to work on the problem together, Lily asks, “What does it mean to work in a group? What is one thing we need to do when we’re in a group?”

“Be collaborative,” Emma eagerly shares.

Lily inquires, “What does collaborative mean?”

Emma explains, “Be quiet and respectful to others.”

Dylan adds, “Just what Emma said, but collaborative is also involving everyone and not leaving anyone out.”

Lily concludes, “And making sure that everyone has a chance to add their thinking.” Lily continues, “You will all be responsible for your own thinking because in a Google Doc, when you share it, I can see who did the adding of information. You are all responsible for the thinking of the group. You have the remainder of time today to work on this. Tomorrow the goal is that you present your solution to the group because not everyone is going to solve it the same way.”

Introduction

Alverno College is a small, women’s liberal arts Catholic school in Milwaukee, WI, that offers undergraduate programs for women, as well as co-educational graduate and teacher licensure programs for both women and men. Alverno’s teacher preparation program is designed to prepare teachers who can think creatively and critically, communicate and collaborate, and persist through challenges so they can continue to grow. This brief, and the case study from which it is drawn, describe Alverno’s undergraduate early childhood/middle childhood program, which provides 4 years of study that leads to a teaching credential.

Alverno’s approach to teacher preparation aligns with the educational concept known as deeper learning (see “What Is Deeper Learning?”), and as Lily’s classroom illustrates, Alverno candidates have the opportunity to apply deeper learning–aligned pedagogies in classrooms. In the above vignette, Lily engages her students in applied learning, supports their ability to transfer their knowledge, and encourages them to work collaboratively. She makes sure that all students have opportunities to make valuable contributions to classmates’ work and to have their work appreciated by others, emphasizing the importance of the problem-solving process while building students’ awareness of social behavior. At Alverno, teacher candidates’ preparation to teach for deeper learning is enabled not only by key elements of the teacher preparation program, but also by the college’s approach to educating students. Alverno’s “ability-based” curriculum requires all students, including teacher candidates, to demonstrate abilities as evidence of their learning, with assessment focused on the application of knowledge and skills. By providing teacher candidates with model learning experiences, including project-based activities, Alverno helps candidates understand how to create similar experiences for their students.

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

Alverno produces teachers who enter the classroom feeling prepared. According to a survey conducted by the Learning Policy Institute in 2016, 100% of Alverno teacher candidates in the last semester of their program reported feeling well or very well prepared for teaching. All candidates also replied that they felt well or very well prepared to employ a variety of deeper learning-aligned strategies, including identifying and addressing special learning needs with appropriate teaching strategies, understanding how factors in the students' environment outside of school may influence their life and learning, developing a curriculum that helps students learn content deeply so they can apply it in new situations, using a variety of assessments, and setting norms for building a productive classroom community. Employers share Alverno's teacher candidates' views on their preparation to support students in the development of deeper learning competencies.¹ A Milwaukee principal had this to say about Alverno candidates:

As I look for teachers, I most immediately look for Alverno applicants. Integrating new teachers into the staff from Alverno is so much easier 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. I'll take ten more teachers like the two I've had this year.²

Key Program Elements That Support Deeper Learning

Alverno has a long history of using an “**ability-based**” curriculum, which requires teacher candidates to demonstrate the application of knowledge and skills as evidence of their learning. The links between these teacher preparation abilities and deeper learning are strong, and so the ability-based curriculum is a key feature in candidates’ engagement in, and preparation to teach for, deeper learning. This curriculum, which is applied across all areas of study at Alverno, includes eight abilities that guide teaching and learning: Communication, Analysis, Problem-Solving, Valuing in Decision-Making, Social Interaction, Developing a Global Perspective, Effective Citizenship, and Aesthetic Engagement. Alverno’s teacher preparation program has refined these abilities to meet the current demands of preparing teacher candidates, and it has developed additional abilities expected of teaching candidates. These include:

- **Conceptualization:** Integrating disciplinary knowledge with educational frameworks and an understanding of human development to plan and implement learning
- **Diagnosis:** Using frameworks when observing students’ behavior to foster learning
- **Coordination:** Managing resources effectively to support learning
- **Integrative Interaction:** Demonstrating professional responsibility in the learning environment
- **Communication:** Using oral, written, and media communication to structure and reinforce learning

To evaluate candidates’ progress in this unique curriculum, faculty rely on **performance assessments** and student **self-reflection**. These assessments, which include clear criteria that connect expectations for candidates’ achievement to the Alverno abilities, are designed around what works for learners, serving as models for candidates’ own classrooms. As one candidate described this modeling:

One of the things that helps us to learn how to assess students is that we get assessed in numerous different ways. So we don’t ourselves ... get assessed with just paper tests. We get assessed through speaking and through observations and through talking with our professors and [through] projects and group projects.... [That] shows the real world, so we want to prepare students for the real world.

Faculty evaluate candidates through in-person observations, videos of teaching, and reviews of classroom artifacts, such as lesson plans and student work, giving candidates opportunities to demonstrate the dispositions and pedagogical theories garnered through their courses and fieldwork. Candidates themselves not only experience these assessments but also put them into practice. As one candidate shared:

We’ve learned about so many different types of assessments, like performance-based assessments, written assessments, worksheets that students do, things like that. And then you get to go out and try those assessments in the classroom and see what the students kind of take to. And then you have this whole back pocket full of all these assessment techniques, and you have to go deeper and analyze why your assessment worked, the data you collected from it, and how it can help you to teach what the students are ready to learn next.

Another critical strength of Alverno's teacher preparation program is its small, collaborative, and experienced faculty who **model deeper learning pedagogies** for candidates, including the examples of assessment mentioned above. As one Alverno instructor described this modeling:

Everything we do in our classes we're expecting them to put into practice. It's learning and assignments so that you can incorporate it into your classroom when you become a teacher because we know, and you learn, that this is an approach that works for kids' learning. This is an approach based on their development. We design our teaching around what we know works for children, and we expect our students to implement [this approach].

Faculty model not only instructional content and form but also the dispositions teachers must adopt to create a high-achieving and supportive learning environment. For example, multiple Alverno graduates explained that, even though the program does not give letter grades, it is expected that candidates will earn the equivalent of an "A" grade, with anything less requiring candidates to revise and improve their work. This expectation helps teacher candidates develop mastery and internal motivation to learn because it changes the focus from a letter grade to the mastery of a skill that will have real-world implications.

Faculty also **model the collaboration** that is integral to Alverno's teacher preparation program. Teacher candidates work together to improve each other's teaching skills, and Alverno sets this as a community value by providing opportunities for faculty themselves to work together. There are no classes on Friday afternoons so that faculty can meet with their departments or participate in workshops. College faculty also meet weekly to discuss and coordinate learning objectives and activities. One faculty member praised "the value of collaboration among faculty within and across disciplines," and added that "the time set aside for the significant and sustained dialogue about the kind of learning we expected of our students was instrumental in developing our curriculum." The collegial atmosphere at Alverno gives faculty the space to design challenging deeper learning activities for candidates and provides a foundation for teacher candidates to engage deeply in their coursework and field placements and to carry those experiences into the classroom.

Through the **integration of coursework and fieldwork**, candidates develop pedagogies and professional dispositions that support their ability to teach for deeper learning. Courses are designed and sequenced to build a tight connection between theory and practice, give candidates the opportunity to observe and apply strategies learned in their studies, and prepare them to craft developmentally appropriate lessons in which students construct their own knowledge. Their first course focuses on human development, learning, and motivational theories and provides opportunities for them to study and practice a variety of instructional strategies and design unit and lesson plans. At the same time, they are taking a second course in which they spend 20 hours in a classroom observing and reflecting on their mentor teachers' practice. By taking the two courses simultaneously, the theory from the first course is woven into their field placement in the second. Undergraduate candidates participate in four integrated course and field experiences before their student teaching, scaffolding them into their eventual roles as primary instructors.

The **frequency and quality of observations and feedback** from Alverno faculty support candidates' development of deeper learning pedagogies in their fieldwork. Faculty are responsible for observing between four and twelve candidates each semester but generally have no more than six. Faculty look for candidates to be practicing some of the project-based, student-centered strategies from their coursework, and both Alverno faculty and teacher candidates explained how specific feedback on candidates' performance in their field placement helps them refine their practice. One Alverno teacher candidate described the value of faculty feedback and Alverno's tools for supporting feedback during her student teaching:

My faculty supervisor knows me as a student, and he is able to push me.... He knows how to tailor his feedback so that I have something to work on.... Over the course of the semester [my faculty supervisor] fills out the same rubric. It's for me to fill out as a self-assessment, and it is the same one my cooperating teacher fills out. [It is] important that I'm getting feedback on the exact same criteria so that I can see different perspectives on how I can improve.... I think this is a much more robust way to look at someone going into this profession because you can give me an A on your observation, but what does your A mean? So this [rubric] is very clear.

Close relationships among faculty, candidates, teachers, and administrators at their student teaching placements also allow faculty to support mentor teachers in their development of deeper learning approaches. Alverno recently changed the title of “cooperating” teachers to “mentor” teachers to convey that they are looking for teachers who do more than just cooperate; they also are willing and able to invest their time and energy in helping candidates improve and to model deeper learning pedagogies and assessments, explain instructional choices, and take the time to understand their students and know their backgrounds. Because Alverno faculty are frequently on-site, observing the classrooms in which candidates have been placed, they can support mentor teachers in improving their own instruction as well as that of candidates.

Program Learning Opportunities Align With Teacher Preparation for Deeper Learning

Ensuring that teacher preparation is a deeper learning experience for candidates requires that deeper learning become the prevailing way of being and thinking for both faculty and students. Along with key program elements that contribute to candidates' preparation to teach for deeper learning, Alverno's learner-focused values are enacted to make deeper learning central to the actions of faculty and to the experiences of candidates.

At Alverno, faculty and candidates value **knowledge of students**. Knowing each learner and valuing his or her unique strengths is a foundation of contextualized learning and is vital to personalized learning. Alverno faculty prioritize getting to know candidates well, which enables them to differentiate their instruction and make it culturally relevant for the diverse learners in their courses. This modeling of

activities in fieldwork and coursework focused on knowing students well translates into the development of a similar focus in candidates. As one Alverno alumni described:

I can look back to any of my professors in my experience here and they will probably still remember me by name and know where my interests and passions lie, and know, “Oh hey, I heard about this opportunity, and it would be perfect for you.” And it wouldn’t be arbitrary because they would mean it. Having those mentors and role models instilled that in me as a teacher: [I wanted] to get to know my students and their strengths in the same way.

This learner-centered practice is then developed in teacher candidates through the already-described linking of their courses and field placements. For example, in the “Exceptional Learner” course, each candidate selects one learner from his or her field placement and identifies that learner’s strengths, needs, and other characteristics that should be considered when developing a lesson. Candidates then review their lessons, modify them so that their selected learners will be successful and challenged by the lessons, teach their lessons, and reflect on the experience. This exercise, with its focus on individual learners, helps candidates learn to structure opportunities for entire classes that are likely to include diverse students with a range of knowledge, skills, and social abilities.

The commitment to knowledge of students contributes to another key value, a **focus on diversity**, both in terms of valuing the diversity each student brings to the classroom and of understanding how this diversity can enrich all students’ experiences, both of which are essential to equitable and socially just teaching. By building close relationships with teacher candidates, Alverno’s faculty learn about the range of diversity each candidate brings to the classroom and model the use of that knowledge in their courses. Additionally, fostering candidates’ awareness of their own backgrounds, as well as the diversity of their peers, helps candidates realize the wealth of experiences within a classroom and view diversity as an asset. One Alverno-prepared teacher described how her experience in the program contributed to her realization of how she can learn from her students’ diverse experiences:

My best teaching moments were ... because I had knowledge of where I was, who I was, my strengths, my weaknesses.... I had to position myself in the classroom where I was, too, a learner.... It is getting to know a kid and really trying to find what ... you have in common and ... positioning yourself on that same continuum with the student: “I’m learning from you, you’re learning from me.”

In candidates’ coursework, Alverno incorporates information about special education, universal design for learning, and teaching English learners so that they learn about the diverse strengths and needs of students, as well as strategies for meeting their needs and building on their strengths.

Alverno faculty’s knowledge and appreciation of each teacher candidate connect to how candidates enact the value of **social and emotional awareness** in their own classrooms. Faculty teach how to create classrooms in which learners experience developmentally grounded and personalized learning by modeling their learner-focused values for teacher candidates. At Alverno, teacher candidates experience

a caring and collaborative environment in which they explore social and emotional competencies and learn to foster developmentally appropriate and engaging learning environments. Faculty also support candidates in developing similarly committed and inclusive approaches and techniques with their own students. As one faculty member described her course, “Every assignment was based upon the cognitive, social, emotional, physical, and moral domains of a middle school child.” When developing lesson plans for their field placements, candidates include “affective objectives” that take into account their students’ emotional responses to the content. Alverno faculty also push their students to empathize with the social and emotional needs of their students through strategic reflection.

Conclusion

Alverno builds on the foundation of its ability-based curriculum to create a unique environment that allows teacher candidates to observe and experience a variety of student-centered, inquiry-based methods and to consider how to adopt or refine them for their own classrooms. The focus on the abilities and on performance assessments and reflection, along with faculty modeling of deeper learning pedagogies, gives candidates opportunities to participate in and practice the types of teaching and evaluation they will be expected to engage in with their own students. This candidate learning is reinforced and expanded through the integration of coursework with well-supported fieldwork. By encompassing all these features, Alverno serves as a model for educator preparation in which values carry over into a faculty focus on knowledge of students, diversity, and social and emotional awareness, which shapes program practice as well as candidates’ experiences and their preparation to teach for deeper learning.

Endnotes

1. Alverno College Educational Research and Evaluation. (2015). *Follow-Up Surveys of Alverno Prepared Teachers and Their Employers*. Milwaukee, WI: Alverno College.
2. Zeichner, K. (1997). “Ability-Based Teacher Education: Elementary Teacher Education at Alverno College” in Darling-Hammond, L. (Ed.). *Studies of Excellence in Teacher Education: Preparation in the Undergraduate Years* (pp. 1-66). Washington, DC: American Association of Colleges for Teacher Education.