Making it Real: Sim-School© a Backdrop for Contextualizing Teacher Preparation

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Researchers and teacher educators have called for contextualizing the learning of pedagogy and content within the complex context of schools. This account provides an overview of a web-based simulation called Sim-School © that provides a realistic framework for students to contextualize curricular decisions, differentiate instruction, and reflect on their practice. The Sim-School© project addresses the question: What new opportunities can technology provide to help education programs better prepare preservice teachers for the diversity of school settings and the array of challenges they will face in the future? Qualitative and quantitative results are discussed in the investigation of the project's effectiveness.

The three components: the simulated high school, working within a department and interdisciplinary group, and Webb enhancement were great and positive experiences to be a part of. These components are the ingredients of the culture of education.…Jabulani High School has given me an understanding of a community system.…The whole experience in this class has given me the value and the ability to think as a professional teacher. [29sCE] [1]

Researchers and teacher educators have called for contextualizing the learning of pedagogy and content within the complex context of schools (Oakes, Franke, Quartz, & Rogers, 2002). Field experiences have been viewed as an important learning context for teachers to develop effective teaching skills. Preservice teachers need to have increased reflection on practice, increased time in classrooms, as well as a "reality check" (Brown, 1999). However, students in their field based classrooms may experience various levels of responsibility for decision-making that may not give them opportunities to struggle with complex issues, to make mistakes and to replay those decisions (Ball & Cohen, 1999). The purpose of this article is to share the Sim-school© project, a simulated school district, and its usefulness to create a reality based context for the students to "practice" their teacher skills, reflect on decision-making, and make connections between theory and practice.

CONTEXT

The Sim-School© project is a classroom based simulation that integrates an interactive website in which preservice teachers become faculty members in a K-12 low-income diverse school. Four years ago, three faculty members with the aid of a web-designer, developed a technology supported school district. In this simulation, students experience preservice education courses through a hands-on approach in which they must apply to a school, receive a classroom with simple profiles of their students, and then complete a series of assignments as a member of a grade level team and school faculty.

Currently, students experience the curricula through a website titled the Jabulani School District. On this page, students will choose links to Jabulani Elementary School or Jabulani High School. Students enter the website of their choice and apply for a teaching position online. Once the preservice teachers have a position in the school, they are given a classroom of students and then begin the process of creating a teacher's webpage. Once the preservice teachers have their students, education course content is taught, a collegial faculty community is developed, and course assignments are administered through the simulation. All assignments and readings are completed and discussed in the context of their Jabulani classrooms. Also on the current site is a "teacher's lounge," a virtual discussion board, which has been used to foster reflection and discussion across our classes and even

across the country between students teachers in Pennsylvania and secondary preservice teachers at NAU. The site contains links to the Arizona department of education standards, readings on the library reserve, and other links to teacher resources.

Though such face-to-face simulations have been used in Colleges of Education (Zuckerman, 1979), the Sim-School© project advantages students by more closely approximating the complex nature of schools through web enhancement. This simulation provides the preservice teachers with the opportunity to contextualize curricular decisions in a simulation that approximates life in the classroom and school. In the simulation, preservice teachers interact with the sim-school website where they are responsible for their own virtual classroom of diverse students and are part of a faculty team.

SCENARIO

A fictitious scenario involving Ramona and Sherry, students in the secondary and elementary teacher preparation programs, weave a background for better understanding the multiple uses and possible outcomes to be found from this project. As these characters experience the web enhanced simulated classroom, they tell a story that provides a context for the reader. Quotes, from qualitative research data collected during the secondary and elementary web enhanced courses, are included throughout the scenario.

Ramona is a third year college student. She has completed all of her liberal studies requirements and 24 credit hours in history. The Bachelor of Science in Social Science Education degree is very close to completion. She has been accepted into the Teacher Education Program and is ready to take her first "real" education course. Ramona wants to be a high school history teacher. Rumors have circulated throughout the history department about the quality and usefulness of most education courses. The epithets reel in her mind; "They're lame," "Repetitive," "Waste of time." Ramona feels competent and capable in her content area. She has a passion for history and has done well in all of her classes. However, the idea of teaching in front of 30 or so bored high school students frightens her. She is hoping that the rumors are false and that the education courses will provide what she needs to be successful in a classroom. Ramona holds the vision of herself as a

thriving teacher whose students are flourishing under her inspirational and creative guidance. However, it is a mystery to her how these education courses might help her along the journey to becoming an effective teacher.

At the first class meeting in ECI322 Curriculum for Secondary Teachers, Ramona takes her seat with healthy skepticism bordering on bad attitude. The professor explains that with the aid of a web-designer, she and two faculty members have developed a technology supported simulated school district (McAllister, Foley, Manley, & Fierros, 2001). They believed that a virtual or web-based simulated classroom might be an effective and engaging context for the preservice teachers. These educators are interested in making the learning experiences in their teacher preparation classes more immediate and compelling (Ball & Cohen, 1999). The professor went on to explain that simulating aspects of teaching children and other school-based activities are not new in education, and more recently some simulations have been computer based or generated (Strang, 1989). However, this particular simulation strives to create a total school context. The professor hopes the simulation will provide an opportunity for the students to experience a more realistic curricular framework.

Ramona was excited after hearing this overview of the course. It sounded as if she would get to practice being a teacher in a safe environment before the more high stakes field experiences and student teaching where real students could be injured by an oversight or inaccuracy on her part. A virtual high school, with virtual students, and students playing faculty seemed ideal for trying on the role of teaching professional and making it real. She rushed home to share this information with her roommate, Sherry, who was also in her third year and studying to be an elementary teacher.

Sherry is in the elementary program where the web enhanced curriculum is being implemented. Sherry and Ramona discussed the particulars of their education courses that were being delivered within a context of a simulated school. They would experience the curricula through a website named the Jabulani School District. Within the district there is a Jabulani Elementary school and Jabulani High School. Their first assignment was to enter the website and apply for a teaching position online. Once they had a position in the simulated school, they would create a teacher's web page to communicate to their students and parents a little bit about themselves; their interests, hobbies, and education.a   In the high school simulation, the students would also create a departmental webpage which would require discussion among

department members regarding education values and beliefs. The faculty had to negotiate educational philosophies to write a department mission statement.

> I thought it (ECI 322) gave our class the opportunity to come together under the umbrella of Jabulani High School and see what it might be like to work in our own departments and with other departments.…I enjoyed being in departments, it gave cohesiveness to our discipline specific objectives that I could not have seen in another situation. [32sCE]

After they had their personal websites online, they would be assigned a classroom with virtual students that come from a computer database of 800 profiles. These profiles, though static, would reflect a variety of characteristics such as race, language, culture, interests, learning styles, family backgrounds, academics, and others.

> I was an acting member in a school. I influenced decisions made by my department, as well as in my interdisciplinary group. I would go to the Jabulani website and see my class. "MY CLASS" This really made me feel the identity of a teacher, because everything that I was doing was related to my discipline and Jabulani High School.…I have only started the beginning stages of becoming a teacher. I can not wait until that day comes when it is real, but now all I can do is practice being a teacher, so that when I am, I will be as prepared as possible because of my experiences.[42sTI]

Sherry pointed out that in her curriculum course, the professor emphasized being responsive to the cultural diversity and special needs of the virtual elementary students. The Jabulani faculty was required to consider the learning styles, ethnicity, and special needs when developing lesson plans, field trips, and even the configuration of desks, bulletin boards, and supplies in the learning environment.

> I found that the most beneficial parts of the simulation were those that required me to look at my students as individuals. Even though these students weren't real I found myself really looking hard at what it was that he or she was good at, disabilities, learning styles, etc. This

> really came into play when I was sorting my students into groups
> (pods) I found myself making many changes and at times it was very
> frustrating because I didn't really know the students. [76eCD]

By the fourth week in her class, Ramona began to see that the Jabulani
simulation appeared to create a context for the preservice teachers to
expose some of their tacit values and beliefs related to teaching and
education. She noted that some of her classmates were resistant to attempt-
ing to meet the needs of the diverse population of students profiled on the
Jabulani website.

> This class is simply too challenging for a single teacher.…All in all I
> feel that this classroom is a waste of a school room, a teacher, and an
> educational opportunity for the individual students. [08sCD]

Sherry agreed that the simulation seemed to bring out some passionate
feelings about teaching and learning that probably would have remained
veiled without the virtual classroom. She shared a comment that she
overheard in the halls following a class period.

> I really like the idea of this (the simulation). I am excited to really
> get into it, but only if I can do it my way. I will follow standards and
> any rules, but in real life I am going to push to get what I want for
> my class. [63eCD]

Once Ramona and Sherry had their classroom of students, the professors
began to teach course content, community building, and course assignments
through the simulation. All assignments and readings would be completed
and discussed in the context of their Jabulani classrooms.

> In general, I feel that the practical features of creating curriculum
> within a high school context were very helpful in understanding the
> overall concept of secondary curriculum. The real-life setting helped
> put things into perspective, and allowed me my first taste of what it
> feels like to be a teacher and faculty member.… [30sCE]

> I would have to say the class profiles helped to think about specific
> students, but every assignment that pertained to the classroom dealt

> with students and I was constantly thinking about their ability, accessibility and different modifications. [13eCE]

> Throughout the process, it was important to keep in mind that each of your decisions affected the class as a whole. [57eCE]

The professors in both the secondary and elementary courses continued to emphasize the purpose behind the simulation. They were using the simulation to force students to continually contextualize their decisions in regards to the specific children in their virtual classrooms and the other stakeholders (i.e., administration, departments, parents) of the simulated school. Such a level of contextualization has been seen as necessary to shift teachers to differentiate instruction and individualize learning (Oakes et al., 2002). For each assignment and class discussion, the simulation served as a backdrop.

Simulations, such as Sim-School©, can offer important learning experiences that give preservice teachers opportunities to try out a role and various tasks that they will need to do later in the "real" situation. Such experiences offer the preservice teachers opportunities to build greater efficacy around those tasks (Brown, 1999; Ormrod, 1995) as well as time to reflect on their decision making. As Moore (2003) noted "it is common knowledge that the expectations and demands of the everyday classroom schedule do not encourage reflective and systematic evaluation of many daily teaching and learning situations" (p. 32). Hence, as "Ramona and Sherry's" teacher educators, the professors were interested in examining the preservice teachers' efficacy and how the simulation fostered their thinking about curriculum. Specifically, the goals to be assessed included: (a) creating a reality based learning context in which students connected theory to practice (Agee, 1997; Huling, 1998; Laird, 1998); (b) fostering opportunities for students to contextualize and reflect on their curricular decisions, and (c) nurturing students' teacher identities. A mixed method approach was used to examine students' experiences. Written reflections on students' experiences with the simulation were collected and Bandura's (1997) teacher efficacy instrument was administered. This next section will describe in more detail the data sources and data analysis, as well as the findings from these sources.

DATA SOURCES

To foster reflection on the simulation, students were asked to reflect on various topics and prompts such as their experiences working in their secondary departments or grade level teams; how the simulation made them think of the field of teaching; and the process of developing, delivering, and assessing curriculum. These reflections took place the last two weeks of the semester. The elementary students also maintained a reflection journal that provided some insights into their experiences with the Sim-school, as well as verification of the various themes found in the reflections (Mueller & Skamp, 2003). A total of 49 secondary students and 77 elementary students wrote reflections on their experiences with the simulation. These students came from three consecutive semesters and were enrolled in elementary and secondary curriculum courses. These reflections ranged from 1-2 pages, usually one, some typed and some handwritten. In addition, some of the responses were more detailed and provided supporting examples while others did not.

The constant comparison method was used to analyze emerging categories and then those categories were subsumed to arrive at themes (Glazer & Strauss, 1967; Lincoln & Guba, 1985; Strauss & Corbin, 1990). Data were examined within each category for internal consistency across each semester and across the two preservice teacher levels (elementary and secondary). Triangulation was performed on what was found in the students' journal reports, instructor field notes, and reflection papers. The journals provided insights as well as verification of the various assignments and reflections on those assignments given in the elementary courses, while the instructor reflections and field notes provided verification of the discussions and verbal reflections throughout the semester for both the secondary and elementary classes.

In addition to the qualitative sources, the teacher efficacy scale (Bandura, 1997) was administered to eight classes of preservice teachers, of which four will be included in this discussion. The results from this instrument provided information on our students' teacher efficacy, and also served as another data source with which to corroborate or challenge the themes found in the qualitative data. The instrument consisted of 27 total questions divided into four subgroups of questions that formed four efficacy factors. These constructs included instructional efficacy, disciplinary efficacy, ability to create a positive school climate, and ability to enlist community

involvement. We administered the instrument pre and post course. The total number of the participants completing both pretest and posttest questionnaires was 27 of the four classes, with an alpha of .05. Due to coding problems, many questionnaires within our first group of four classes could not be matched with either the pre or post instrument and had to be excluded from analysis. Our final number of included questionnaires was 27.

Findings

In the next section, qualitative findings will be discussed, followed by the results from the efficacy instrument. The qualitative results revealed four themes: teacher identity, decision making, complexity of diversity, fostering a positive school ethos.

Teacher identity. One of the strongest themes among the data concerned the development of teacher identity. More than half of the elementary preservice teachers and about one-third of the secondary level teachers believed that the simulation, in conjunction with the various assignments, helped them to "feel" more like a teacher. Many of the elementary teachers focused on the element of "realism" that the simulation or context provided. One student commented, "looking back I think it is the only solution [referring to the simulation] to help soon to be teachers visualize a classroom setting without actually being in one" [74eTI]. The virtual students and the website, modeled after actual school district sites, helped to create the realism. The assignments also played an important role in supporting the element of reality.

In adopting the role of teacher in the Sim-School© simulation, the preservice teachers constructed their teacher identity through numerous planned and unplanned activities (Brown, 1999; Holt-Reynolds, 2000). In the elementary classes, students had to complete a scope and sequence for an elementary grade level, design a classroom management plan and develop a budget and design for her classroom, while in the secondary classes, the assignments focused on curriculum development within interdisciplinary and departmental teams. A secondary student commented on how the personal and departmental web pages helped her in forging a teacher identity. She wrote,

> The Jabulani website was unique experience for all of us to create our own identity with each of the classes we were over, as well as the departmental and school identities. This site forced us to buckle down and become personal for all to see....Each teacher had the opportunity to distinguish himself or herself as a professional in our simulated world. [41sTI]

The elementary teachers listed various activities and commented on how they did not know the scope of their work, for example one student stated, that:

> …every part of the simulation like the class budget, classroom design, scope and sequence, cover letter, resume, etc. has given me perspective on what I need to know when I begin teaching. I never really considered any of this before....This simulation has prepared me for my future in dealing with kids. [31eTI]

The assignments, often assessed in a mastery paradigm, provided opportunities for students to make mistakes, practice, try out theory, and to replay decisions (Brown, 1999; Heflich & Putney, 2001). They also provided opportunities for continuous reflection on the connection between theory and practice, which has been seen as an essential trait among teachers (Bean & Stevens, 2002; Buysse, Sparkman, & Wesley, 2003; Darling-Hammond, 1999; Kapitzke, 2000; Moore, 2002; Mueller & Skamp, 2003; Nieto, 2003). Assignments were a key vehicle for fostering teacher identity. Preservice teachers had to practice making decisions about their students and about curriculum. The actual practice of having to think through curriculum and classroom management cultivated a sense of realism, but with the safety net of being able to make mistakes or poor choices.

Through a constructivist approach students were encouraged and guided to reflect (Ball, 2000; Bean & Stevens, 2002) on their particular strengths and weaknesses in the classroom, content area department, or school. As students progressed through the semester they developed and strengthened their teacher identity (Moore, 2003; Van Gorp, 1997). Not only did the students take on the role of teacher, they also experienced department, and school-level dynamics that are so important in preservice placements (Schwebel, Schwebel, Schwebel & Schwebel, 2002). By playing the teacher role in the virtual setting prior to their placement in an actual school, students had a better chance of success when faced with their real placements and the multiplicities of concerns that beginning teachers must tackle

in their classrooms, departments, and schools (Shocker-von Ditfurth & Legutke, 2002).

Reflective decision making. Effective instructional decision-making must occur in conjunction with the act of reflection. Almost half of the elementary students and a quarter of the secondary, believed that the simulation provided opportunities for them to think about decisions within the context of their classrooms, departments, or school. The preservice teachers believed that reflecting in light of the simulation was a very useful process.

> The entire simulation made me constantly think about dealing with the students. If they were not the main focus of a particular project, they always had to be considered throughout each project as everything a teacher does in a classroom directly affects the students in one way or another. Even something as simple as setting up my classroom ends up becoming "about the students." I used to think before this class, that setting up my room would be a fun, decorating experience and that I could set it up however I wanted to each year. However, I learned that the students need to be taken into consideration when setting up my room since I may have a handicapped student or a student with special needs or even depending on my teaching philosophy and how I want my students to learn and where I want my students' main focus to be. [1eDM].

We structured these reflections so that students would have to justify their decision-making. "The simulation made me put what I had learned in class into action, especially, classroom management and procedures, educational philosophy and scope and sequence." [25eDM].

Dilworth (1992) pointed out that, "teachers must be able to develop the ability to reflect on their own actions, observations and responses to experiences and apply these reflections and their academic knowledge to the design and implementation of new approaches to teaching." (p. 11). Reflection is a key element in making increasingly effective instructional decisions (Ball, 2000; Bean & Stevens, 2002; Buysse, Sparkman, & Wesley, 2003). It is an important practice of any good teacher, and particularly of culturally responsive teachers to practice reflective teaching (Gay, 2000; Villegas & Lucas, 2002).

Field notes and responses to assignments reflected preservice teachers' varying levels of ability to provide a rationale for their decisions. Findings

revealed that those students who were dual majors—elementary education and special education, were much more able and confident about justifying their decision-making in terms of their particular set of students. The struggle as instructors to foster such reflection has led to productive conversations and reflections on our own practice as teacher educators.

Complexity of diversity. One difficult and challenging aspect of the simulated context was the make up of the virtual students. When preservice teachers first received their virtual class they were often struck by the degree of diversity that included racial, cultural, linguistic, and special needs in their classroom. This diversity served as an important backdrop to all assignments in the class. As previously discussed students must continually contextualize decision making against the backdrop of these virtual students. About one third of the elementary and one quarter of the secondary preservice teachers commented positively and negatively on the diversity that they faced in their virtual classroom. Initial responses varied between the elementary and secondary students, sometimes to extreme. For example, secondary students wrote such comments as: "Overall, my class is frustrating and I think if I were presented a class like this in real life it would drive me crazy"[11sCD]. Another stated, "This class is simply too challenging for a single teacher" [08sCD]. These responses were in regards to the several special needs students in their respective classrooms. Elementary teachers tended to express recognition without the frustration. One student wrote, "the class was very eclectic in learning styles and race. Many of them had disabilities, which really make it challenging" [26eCD]. Another stated, "I had not really thought about the difference among the students in a classroom and the challenge they will provide when teaching" [28eCD].

More elementary students discussed the issues of diversity in their virtual class than their peers in the secondary classes. This may be due to the individual nature of assignments in the elementary courses with each pre service teacher having their own classroom, versus a focus on content and departmental concerns among the secondary preservice teachers. Elementary teachers tended to focus first on the children and secondary on the content, and the secondary teachers focused on the content than the children. The following two comments illustrate the focus on the student versus the content.

> I found that the most beneficial parts of the simulation were those that required me to look at my students as individuals. Even though these students weren't real I found my self really looking hard at what it was that he or she was good at, disabilities, learning styles, etc. This really came into play when I was sorting my students into groups (pods). I found my self making many changes and at times it was very frustrating because I don't really know the students [76eCD].

A secondary student comments on the influence of diversity on learning the content, an important issue, but one that shifts from the earlier elementary student's focus on the student to acquisition of the content material.

> I believe my class has much more to offer than challenges. I worry that I will have the patience and insight to lead those students with learning disabilities down a meaningful learning path. I fear that I am not familiar enough with these particular types of learning disabilities to be an effective teacher to these kids. I also worry that I will not be able to challenge my gifted students enough to keep their interest and more importantly to push them to their fullest potential. [09sCD]

The simulation was organized to provide the preservice teachers with the opportunity to contextualize curricular decisions in a classroom that reflects the diversity, linguistic, economic, and racial, of a low-income school. One key finding has been preservice teachers' increased knowledge and understanding of diverse perspectives. It was found that most students commented with surprise at the type and wide variety of learning needs in their classrooms, as well as the racial, linguistic and cultural diversity. Often this led to preservice teachers' realization that they have a lot more to learn about teaching children from diverse backgrounds. A secondary student commented, "I like the realism of the simulation. There is quite a shock realizing that I will have to deal with such diversity, but it's real. I have a feeling I will feel more prepared to teach because of this" [21eCD]. Students found having a "real" class of their own pushed them to continuously consider the different instructional needs of their students. Although there were discussions on differentiated learning, having their own classroom required students to think about how they might actually organize learning to meet the students' various needs. An elementary student stated in her reflection,

> The simulation helped me to think about dealing with students in many ways. Creating the classroom profile and classroom design

> allowed me to keep in mind that there will be many students with
> many backgrounds and personalities, and I must take their differences
> into consideration when designing my classroom and creating
> learning groups...I found the simulation to be extremely useful
> because it helped me to keep in mind students' differences with the
> classroom [07eCD].

Almost all the elementary preservice teachers remarked that they had to struggle with forming learning groups, such as cooperative groups. Students commented that they wanted to create the best learning environment and situations for their students and they raised thoughtful reflective questions concerning how to structure differentiated learning and how to structure conducive learning environments for diverse students.

Although it appeared the simulation was successful providing a useful context for decision making, the professors frequently recorded in their field notes a feeling of frustration. The preservice teachers acknowledged the need to differentiate instruction and take into account the diversity in their classroom, but they often lacked the practical knowledge as to how to respond to it. For example, a secondary preservice teacher wrote at the end of the semester,

> I am wondering how I am doing to reach each student. I feel that
> some of the students and I have a gap/barrier between us. How do I
> communicate with the students that have special needs like the ESL
> students? How do I make sure they are understanding the lessons,
> test, and lectures? How do I accommodate to the other students with
> special services and specific needs? What is the most successful
> approach and results? [13sDM].

Instructors realized in the classes that the simulation provided opportunities to slow down aspects of the course. By problematizing the differentiation students could be provoked to think about the possible practices needed to address their students' needs.

Fostering collegial ethos. The simulation allowed the instructors to purposefully foster a community of educators, as students became teachers in the virtual school district. This occurred on different levels depending on whether it was an elementary or secondary course. In the elementary version students became part of a grade level team and then completed assignments

in the context of those teams, while in the secondary courses, students built relationships and conducted curriculum planning primarily within their content area departments. Student reflections in this theme came predominately from the secondary preservice teachers, 80% of the secondary students commented about this theme, while only 10% of the elementary preservice teachers responded on this topic. Again, it's not known if this is because of the nature and expectations of the different levels.

An aspect of building a community of educators is learning to share and collaborate with one another. Through these teams students provided feedback to one another, problem solved together, and challenged one another. The discussions and collaboration often led to increased understanding of different perspectives. These insights might be about the diversity of teaching styles or philosophies that can exist within a department or school, or the surprise that not all people view curriculum design and instruction in the same way.

A secondary student commented that,

> Working within a department and interdisciplinary group helped me to see a lot of things about myself and others. Working with my department allowed me to see into my specific discipline from another's eyes, but working from the same knowledge. [48sCE]

An elementary preservice teacher discussing what she gained from this process stated,

> I feel that by working with other members of my group who were interested in teaching at that level was very beneficial. By working in teaching groups I was able to learn more from them how I could deal with certain situations. We gave each other good feedback on our classroom profiles and I felt as though I, as a teacher, can approach education in different ways [7eCE].

The discussions also led to greater understanding of one's discipline as students for the first time would discuss educational issues with colleagues in their content areas. Previously in other courses, the focus was on the content, while in the secondary courses the focus shifted to the pedagogy of teaching the content. For example one secondary teacher commented,

> I enjoyed being in departments, it gave cohesiveness to our discipline specific objectives that I could not have seen in another situation. That rooting experience greatly helped when it was time to go to the interdisciplinary groups (project) [32sCE].

The field and observation notes point to preservice teachers' enhanced cooperative skills. Teams of teachers who were once tentative about discussing difficult topics or being frank with another were able to move to a place of comfort where they could have the more difficult conversations where everyone does not think the same way. One student remarked, "An unknown factor is how we as teachers and faculty interacted and I think [the simulation] helped me to realize the difference in faculty members and how to deal with them"[24eCE]. In addition, students recognized many of the skills they were able to practice such as listening to differing viewpoints, articulating a position, building coalitions, relate to different content areas and grade levels, and their role in creating a school community.

Quantitative Result

Bandura's teacher efficacy instrument provided another lens to view the student's experiences of the simulation. Descriptive statistics were analyzed and paired sample t-tests were conducted on each of the domains from the teacher efficacy scale (Bandura, 1997). There were significant increases, though small, in disciplinary efficacy, and ability to create a positive school climate. The ability to create positive school climate supports what was found in the theme of fostering collegial ethos, while the disciplinary efficacy may reflect the preservice teachers' increased sense of understanding and confidence of dealing with challenging issues in their classrooms. One of the assignments requires them to think through their classroom management plan. This act of having to think through this process fosters confidence around that task (Guskey, 1989). There were no significant differences found in the pre and posttest means of instructional efficacy or on the efficacy to enlist community involvement. The lack of change in instructional efficacy may be due to students' increased awareness of the complexity of teaching in schools. For example students commented that they did not know they had to construct year long plans, scope and sequence, plan the layout of their classroom using a budget, and address the needs of a diverse group of students.

Together, these qualitative and quantitative results suggest that the Sim-School© web enhancement is a successful use of technology as a tool for contextualizing teacher preparation courses. With its lists of virtual student profiles, teacher/departmental web pages, teacher lounge chat rooms, and links to educational resources, Sim-School© engages the preservice teachers in a simulated school and promotes contextualized decision making.

Overall, students in the last two years have reported that the simulation helped them feel prepared and more confident about their student teaching. In addition, they reported that they feel more engaged in the content of the courses, because they are continuously applying the theories and course information to their simulated school.

In the classroom, teacher educators have found that the simulation has provided an important learning context to struggle with key questions around working with students from diverse linguistic and cultural backgrounds; fostering a collegial ethos; and making effective instructional decisions. Results note that the simulation (a) problematizes the complex task and nature of diverse classrooms; (b) requires students to synthesize and apply their cumulative knowledge to the simulation; (c) introduces students to the tensions between the ethos of the school and the goal of meeting students' individual needs; (d) builds a community of learners fostering dialogue about teaching and learning within a diverse school context, and (e) fosters reflective practice—key to responding effectively to the needs of diverse students.

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Note

After each quote we have included the source code. The first number refers to the student, the *s* refers to secondary and *e* to elementary, and the last two letters refer to the category the quote was coded. These include TI: Teacher Identity, DM: Decision making, CD Complexity of Diversity; CE: Collegial Ethos